OCC EXHIBIT NO.____

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 Authority to Provide)Cafor a Standard Service Offer Pursuant toR.C. 4928.143 in the Form of an Electric)Security Plan.)

Case No. 14-1297-EL-SSO

SUPPLEMENTAL TESTIMONY OF RAMTEEN SIOSHANSI, Ph.D.

Jointly Sponsored

On Behalf of the Office of the Ohio Consumers' Counsel 10 West Broad Street, Suite 1800 Columbus, Ohio 43215

and

Northeast Ohio Public Energy Council 31320 Solon Road Cleveland, OH 44139

May 11, 2015

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1 I. INTRODUCTION

3	<i>Q1</i> .	PLEASE STATE YOUR NAME, POSITION, AND BUSINESS ADDRESS.
4	<i>A1</i> .	My name is Ramteen Sioshansi. I am an operations researcher who focuses on
5		issues related to electricity industry economics, market design, regulation,
6		operations, planning, and policy. My business address is 60 East Spring Street,
7		Suite 121, Columbus, OH 43215.
8		
9	<i>Q2</i> .	HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN THIS CASE?
10	<i>A2</i> .	Yes. On December 22, 2014, the OCC submitted direct testimony I prepared that
11		provided my analysis and recommendations supporting rejection of the proposed
12		Retail Rate Stability Rider ("Rider RRS") contained in the fourth electric security
13		plan ("ESP IV") of the Ohio Edison Company ("Ohio Edison"), The Cleveland
14		Electric Illuminating Company ("CEI") and The Toledo Edison Company
15		("Toledo Edison") (together the "FE Utilities").
16		
17	<i>Q3</i> .	ON WHOSE BEHALF ARE YOU PROVIDING THIS SUPPLEMENTAL
18		TESTIMONY?
19	<i>A3</i> .	I am providing this supplemental testimony on behalf of the Office of the Ohio
20		Consumers' Counsel ("OCC") and the Northeast Ohio Public Energy Council
21		("NOPEC").

04. CAN YOU OPINE ON WHETHER THE ECONOMIC STABILITY 1 2 PROGRAM AND THE RETAIL RATE STABILITY RIDER BENEFIT 3 CUSTOMERS AND ARE IN THE PUBLIC INTEREST?

A4. 4 Yes. As I state in my Direct Testimony, the Economic Stability Program ("the 5 Program") through the Retail Rate Stability Rider ("Rider RRS") assessments to 6 captive customers directly subsidizes the operating and capital costs of the plants 7 and the entitlement of FirstEnergy Solutions Corporation ("FES") to the Ohio 8 Valley Electric Corporation ("OVEC"). Such a potential subsidy has no place in a 9 competitive wholesale market, such as those operated by PJM, because the market 10 is intended to provide revenues for economic efficient assets to recover their 11 costs. Allowing subsidized generators to participate in the wholesale market is 12 anti-competitive, as the subsidized generators would have a competitive 13 advantage over unsubsidized assets. It is not in the public interest to interfere 14 with the competitive market that appears to be functioning well for customers. 15 Re-regulating in the form of the Rider RRS assessments is also contrary to the 16 General Assembly's plan for Ohioans to receive electric service through a 17 competitive market.

- 18
- 19 HAS YOUR RECOMMENDATION ON THE PROPOSED RIDER RRS *Q*5. 20 CHANGED SINCE THE PUCO ISSUED THE AEP ORDER AND ADOPTED 21 FACTORS TO CONSIDER FOR FUTURE PURCHASE POWER 22
- 23 *A5*. No. I continue to recommend that the Rider RRS proposal be rejected. As

AGREEMENT FILINGS?

1	outlined in my responses to Q15, Q16, Q17, and Q18 of my Direct Testimony, the
2	Program inherently subsidizes the Program Plants, ¹ by ensuring a guaranteed
3	profit to FES and recovery of all of the FE Utilities Purchase Power Agreement
4	("PPA") costs. As such, neither the FE Utilities nor FES have strong incentives to
5	recover the capital or operating costs of these assets in the PJM-operated markets
6	into which the FE Utilities propose to offer their generation, ancillary services,
7	and capacity. This means that the FE Utilities could adopt any number of offer
8	strategies into the PJM-operated markets that would have the effects outlined in
9	my responses to Q15 and Q16 of my Direct Testimony on the short- and long-run
10	efficiency of the market. As outlined in my response to Q18 of my Direct
11	Testimony, the inclusion of generation assets owned by affiliates that operate in
12	PJM markets and the treatment of bilateral transactions further complicate matters
13	in terms of what type of offer strategy the FE Utilities may employ under the
14	Program.
15	
16	In addition to affecting the short- and long-run efficiency of the PJM-operated
17	markets, the potential subsidy and guaranteed profit in the Program and their
18	effect on the FE Utilities' offer strategies can have anti-competitive effects on the
19	PJM-operated markets. To see one example of this, consider a case in which the
20	FE Utilities deliberately adopt a strategy in which the Program Plants are offered
21	into the market above cost to prevent them from being committed and dispatched

¹ "Program Plants" include the following: Davis-Besse, W. H. Sammis, and the FES' OVEC entitlement as set forth in the FE Utilities' application in this case.

1		or reduce the extent to which they are committed and dispatched. Such a strategy,
2		which is often referred to as "economic withholding," can tend to increase prices
3		in the PJM-operated energy, ancillary service, and capacity markets. Such a
4		strategy reduces the competitiveness of the market, because market prices would
5		be higher than in a case in which generation is not withheld and offered at prices
6		that are reflective of true costs. As outlined in my response to Q17 of my Direct
7		Testimony, such a strategy could enhance shareholder value due to the
8		participation of affiliated generation in the PJM-operated markets. Moreover,
9		because the costs and profits of the Program Plants are guaranteed through the
10		Program and Rider RRS, there would be no financial cost to the FE Utilities or
11		FES if such a strategy is adopted.
12		
13	Q6.	WHAT IS THE PURPOSE AND SCOPE OF YOUR SUPPLEMENTAL
14		TESTIMONY?
15		
10	<i>A6</i> .	While this case was pending, and after my Direct Testimony was filed, the Public
16	<i>A6</i> .	
	<i>A6</i> .	While this case was pending, and after my Direct Testimony was filed, the Public
16	<i>A6</i> .	While this case was pending, and after my Direct Testimony was filed, the Public Utilities Commission of Ohio ("PUCO") issued an order on February 25, 2015, in
16 17	<i>A6</i> .	While this case was pending, and after my Direct Testimony was filed, the Public Utilities Commission of Ohio ("PUCO") issued an order on February 25, 2015, in a related case, Ohio Power Company's application for an electric security plan
16 17 18	<i>A6</i> .	While this case was pending, and after my Direct Testimony was filed, the Public Utilities Commission of Ohio ("PUCO") issued an order on February 25, 2015, in a related case, Ohio Power Company's application for an electric security plan ("ESP) in Case No. 13-2385-EL-SSO ("AEP Ohio Case"). The AEP Ohio Case

21

1	In the AEP Ohio Case, the PUCO approved the PPA proposed by the Ohio Power
2	Company ("AEP Ohio") as a placeholder rider, at an initial rate of zero, for the
3	term of the ESP. The PUCO determined that AEP Ohio must show that the PPA is
4	reasonable, in the public interest, and benefits customers. The PUCO instructed
5	AEP Ohio to make a future filing to justify any requested cost recovery and
6	offered advice on what that future filing should address.
7	
8	Specifically, the PUCO listed four additional factors ("AEP Ohio PPA Factors") to
9	include in a future filing, which are:
10	
11	1) Financial need of the generating plant;
12	2) Necessity of the generating facility, in light of future
13	reliability concerns and, including supply diversity;
14	3) Description of how the generation plant is compliant with all
15	pertinent environmental regulations and its plan for compliance;
16	and
17	4) The impact that a closure of the generating plant would have on
18	electric prices and the results' effect on economic development.
19	
20	In response to the order in the AEP Ohio Case, the Attorney Examiner issued a
21	procedural Entry in this proceeding that allowed additional discovery and
22	supplemental testimony addressing the AEP Ohio PPA Factors, as they pertain to
23	the FE Utilities' case.

1		For purposes of my Supplemental Direct Testimony, I was asked to evaluate
2		whether the AEP Ohio PPA Factors established by the PUCO are appropriate and
3		exhaustive factors upon which to evaluate whether the Program and Rider RRS
4		benefit customers and are in the public interest.
5		
6	Q7.	ARE THE AEP OHIO PPA FACTORS FOR THE PUCO TO CONSIDER
7		WHEN EVALUATING THE PROGRAM AND RIDER RRS APPROPRIATE
8		AND EXHAUSTIVE?
9	A7.	No. The PPA is unjust, unreasonable, and unlawful for all the reasons presented
10		by OCC in the Direct Testimony of witnesses Rose, Sioshansi, Wilson and Kahal.
11		Therefore, the factors should not be looked upon by the PUCO as a means for
12		justifying PPA approval.
13		
14		If the Commission, however, authorizes some form of a PPA, the AEP Ohio PPA
15		Factors are not appropriate; nor are they exhaustive because they fail to consider
16		whether the PPA benefits customers and is in the public interest. Specifically, the
17		factors that have been established are biased toward building a case that would
18		support approval of the Program by focusing solely on their benefits to the FE
19		Utilities and FES and do not enable the PUCO to evaluate the net benefits of the
20		Program. In order to determine whether the Program benefits the FE Utilities'
21		customers and is in the public interest, the PUCO must evaluate additional factors
22		beyond the four identified. This would allow a more complete assessment of the
23		Program to be carried out in an evaluation of its net benefits to customers.

1		The AEP Ohio PPA Factors are not sufficient because they do not enable the
2		PUCO to make such a determination.
3		
4	II.	ADDITIONAL PPA FACTORS FOR PUCO CONSIDERATION
5		
6	<i>Q</i> 8.	SHOULD THE PUCO HAVE IDENTIFIED OTHER FACTORS TO
7		DETERMINE WHETHER A PPA ARRANGEMENT IS REASONABLE AND
8		BENEFITS CUSTOMERS?
9	<i>A8</i> .	Yes. If the PUCO chooses to move forward with its PPA review, the PUCO
10		should consider additional factors not identified in the AEP Ohio Case.
11		Specifically, the AEP Ohio PPA Factors should include whether the arrangement
12		is reasonable and provides <i>net</i> benefits to customers.
13		
14		There are two important considerations that should be included to provide a more
15		comprehensive assessment of the net benefits of the Program to customers. The
16		first consideration is potential costs or detriments to customers. These costs and
17		detriments should be accounted for to assess whether the program is reasonable
18		and benefits customers. The second is the cost of achieving the same benefits that
19		the Program provides compared to alternatives. These factors are important to
20		consider even if the Program provides net benefits to consumers. This is because
21		alternatives may exist that could provide greater benefits to customers at the same
00		

22

1		or lower cost	s. If so, those alternatives should be considered when examining
2		whether the p	proposal benefits customers and is in the public interest.
3			
4	Q9.	CAN YOU P.	ROVIDE A LIST OF ADDITIONAL FACTORS THAT THE
5		PUCO SHO	ULD INCLUDE IN ASSESSING WHETHER THE PROGRAM IS
6		REASONAB	ELE AND BENEFITS CUSTOMERS?
7	<i>A9</i> .	The followin	g is a list of nine additional factors that, if added to the AEP Ohio
8		PPA Factors,	would allow for a more comprehensive evaluation of whether the
9		Program is re	easonable, benefits customers, and is in the public interest.
10			
11		1)	The total cost of the potential subsidy and guaranteed profit
12			that the FE Utilities' captive customers would fund during
13			the ESP period and the full PPA period under a variety of
14			independently produced future price scenarios.
15		2)	The effect of the potential subsidies on the PJM-operated
16			markets and the related effects those offer strategies would
17			have on customers' rates vis a vis market efficiency and
18			competitiveness.
19		3)	Incentives for FES to control the operating and capital costs of the
20			Program Plants, which customers will be required to fund under
21			the program.
22		4)	Incentives for the FE Utilities and FES to make rational retirement

1		decisions pertaining to generating assets protected by the PPA.
2	5)	Economic impacts of imposing higher retail rates on the FE
3		Utilities' captive customers.
4	6)	A detailed accounting of what reliability benefits the
5		Program Plants provide that are not already captured in
6		PJM-operated wholesale markets.
7	7)	The cost of using a least-cost combination of new and
8		existing generation and transmission assets to deliver the
9		purported benefits of the Program to the FE Utilities'
10		customers.
11	8)	The cost of achieving the same price stability for the FE
12		Utilities' customers through a combination of physical and
13		financial contracts entered into with affiliated and/or
14		unaffiliated entities through a competitive solicitation, such
15		as the competitive auctions used to meet the supply needs
16		of SSO customers.
17	9)	The cost of meeting current and expected future
18		environmental regulations with the Plants and FES's
19		entitlement to OVEC compared to the cost of meeting these
20		with other generation assets and/or transmission
21		alternatives.
22		

Q10. WHY DO YOU SUGGEST THAT THE FE UTILITIES PROVIDE
 ASSESSMENTS OF THE PROGRAM AND RIDER RRS UNDER A VARIETY
 OF FUTURE PRICE SCENARIOS?

4 *A10*. In their ESP application and supporting testimony, the FE Utilities have provided 5 an assessment of the cost of the potential subsidy and guaranteed profit that FES 6 would earn through the Program. Specifically, they provided estimates of how 7 much of a charge or credit Rider RRS would impose on the FE Utilities' captive 8 customers. However, this analysis was conducted using one set of energy, 9 ancillary service, capacity, and fuel price assumptions provided by the FE 10 Utilities' witness, Judah L. Rose. Using these assumptions, the Program and 11 Rider RRS were shown to result in a small net credit to the FE Utilities' customers 12over the term of the PPA.

13

14 OCC/NOPEC joint witness Wilson conducted an additional independent analysis 15 of the Program and Rider RRS using, among other factors, fuel prices produced 16 by the U.S. Energy Information Administration ("EIA"). The EIA is an 17 independent statistical division of the U.S. Department of Energy that provides, 18 among other information, forecasts of future energy and fuel prices in its Annual 19 Energy Outlook ("AEO"). The AEO forecasts are generated using the National 20 Energy Modeling System ("NEMS"). Using the fuel price forecast generated by 21 the NEMS, OCC/NOPEC joint witness Wilson demonstrates that the Program 22 could yield a net charge to the FE Utilities' captive customers over the term of the 23 PPA.

1		The dichotomy of the results using price forecasts generated by the FE Utilities'
2		witness and those produced by an independent statistical agency demonstrates that
3		the net impact of the Program on customers is highly sensitive to input
4		parameters. For the PUCO to be able to more fully assess the impacts of the
5		Program on customers, an analysis of its impacts using a variety of independently
6		produced price forecasts is necessary. That is, the PUCO cannot simply consider
7		one set of assumptions to assess the impacts of the Program.
8		
9		Moreover, an analysis of the Program must consider its impact on customers' rates
10		and bill impacts, especially due to the potential for anti-competitive subsidies.
11		Furthermore, even if the PUCO chooses to consider the financial need of the
12		Program Plants (which it should not consider in a vacuum), ² any alleged need
13		must be weighed against the impacts on customers' rates to determine if any
14		potential price increases are just and reasonable.
15		
16	<i>Q11</i> .	WHY DO YOU SUGGEST THAT THE EFFECT OF THE PROGRAM ON
17		HOW THE PLANTS WILL BE OFFERED INTO THE PJM-OPERATED
18		MARKETS BE INCLUDED AS A PPA FACTOR?
19	<i>A11</i> .	If the competitive market does not function properly, customers may lose the
20		benefits they are entitled to under the law, including the benefits of reasonably

² In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan, Case Nos. 13-2385-EL-SSO, 13-2386-EL-AAM, Opinion and Order at 25 (February 25, 2015).

1	priced retail electric service. ³ Active PJM market participation by the involved
2	generation units is crucial if the Program is to provide any benefits to consumers.
3	The state of Ohio has demonstrated a commitment to allowing competitive
4	wholesale markets, such as those operated by PJM, to provide lower-cost, more
5	reliable, and more efficient electricity service to the benefit of customers
6	throughout the state. The state of Ohio's commitment has been demonstrated
7	through the adoption of S.B. 3^4 and subsequently through S.B. $221.^5$
8	The potential subsidy and guaranteed profit inherent to the Program could result
9	in the FE Utilities adopting offer strategies into the PJM-operated markets that
10	could undermine the markets' ability to ensure the short- and/or long-run
11	efficiency of the electric power system. Moreover, the participation of affiliated
12	generation assets in the PJM-operated markets and the lack of clarity surrounding
13	the treatment of bilateral transactions in the calculation of Rider RRS charges
14	further complicates the choice of offer strategy employed by the FE Utilities. The
15	offer strategies that the FE Utilities could employ that may undermine the short-
16	and/or long-run efficiency of the PJM-operated markets could be anti-competitive
17	and harmful to customers. For instance, the FE Utilities could choose to adopt an
18	offer strategy that would result in the Program Plants being economically
19	withheld from the PJM-operated markets.

³ Ohio Revised Code 4928.02(A), Competitive Retail Electric Service.

⁴ Am. Sub. S.B. 3, 123rd General Assembly, 1999.

⁵ Am. Sub. S.B. 221, 127th General Assembly, 2007-2008.

1		It should be noted that I am not advocating that the FE Utilities publicly disclose
2		their offer strategies. Doing so could also harm the wholesale markets and be
3		seen as a form of collusion among market participants. Instead, I am stating that
4		it is difficult, with the way that the Program is structured, to guarantee that it
5		would not have inefficient and anti-competitive effects on the PJM-operated
6		wholesale markets, which would be detrimental to customers. Given the state of
7		Ohio's commitment to allowing competitive wholesale markets to deliver more
8		efficient and reliable electricity service to customers, the PUCO should heavily
9		factor the potentially detrimental effects of the Program on the wholesale markets
10		(and customers) in assessing the Program.
11		
12	<i>Q12</i> .	WHY DO YOU RECOMMEND THAT INCENTIVES FOR THE FE
12 13	<i>Q12</i> .	WHY DO YOU RECOMMEND THAT INCENTIVES FOR THE FE UTILITIES AND FES TO CONTROL THE COST OF THE PROGRAM
	<i>Q12</i> .	
13	Q12. A12.	UTILITIES AND FES TO CONTROL THE COST OF THE PROGRAM
13 14	-	UTILITIES AND FES TO CONTROL THE COST OF THE PROGRAM PLANTS BE CONSIDERED BY THE PUCO AS AN ADDITIONAL FACTOR?
13 14 15	-	UTILITIES AND FES TO CONTROL THE COST OF THE PROGRAM PLANTS BE CONSIDERED BY THE PUCO AS AN ADDITIONAL FACTOR? Because the Rider RRS permits 100 percent pass through of actual plant fixed and
13 14 15 16	-	UTILITIES AND FES TO CONTROL THE COST OF THE PROGRAM PLANTS BE CONSIDERED BY THE PUCO AS AN ADDITIONAL FACTOR? Because the Rider RRS permits 100 percent pass through of actual plant fixed and variable costs (net of revenues) to the FE Utilities' customers, there is no
13 14 15 16 17	-	UTILITIES AND FES TO CONTROL THE COST OF THE PROGRAM PLANTS BE CONSIDERED BY THE PUCO AS AN ADDITIONAL FACTOR? Because the Rider RRS permits 100 percent pass through of actual plant fixed and variable costs (net of revenues) to the FE Utilities' customers, there is no incentive to control these costs. In addition, FES is guaranteed to earn a profit
 13 14 15 16 17 18 	-	UTILITIES AND FES TO CONTROL THE COST OF THE PROGRAM PLANTS BE CONSIDERED BY THE PUCO AS AN ADDITIONAL FACTOR? Because the Rider RRS permits 100 percent pass through of actual plant fixed and variable costs (net of revenues) to the FE Utilities' customers, there is no incentive to control these costs. In addition, FES is guaranteed to earn a profit through the PPA terms. These passed through costs of maintaining and operating
 13 14 15 16 17 18 19 	-	UTILITIES AND FES TO CONTROL THE COST OF THE PROGRAM PLANTS BE CONSIDERED BY THE PUCO AS AN ADDITIONAL FACTOR? Because the Rider RRS permits 100 percent pass through of actual plant fixed and variable costs (net of revenues) to the FE Utilities' customers, there is no incentive to control these costs. In addition, FES is guaranteed to earn a profit through the PPA terms. These passed through costs of maintaining and operating the Program Plants and FES' guaranteed profits are fully paid by the FE Utilities'
 13 14 15 16 17 18 19 20 	-	UTILITIES AND FES TO CONTROL THE COST OF THE PROGRAM PLANTS BE CONSIDERED BY THE PUCO AS AN ADDITIONAL FACTOR? Because the Rider RRS permits 100 percent pass through of actual plant fixed and variable costs (net of revenues) to the FE Utilities' customers, there is no incentive to control these costs. In addition, FES is guaranteed to earn a profit through the PPA terms. These passed through costs of maintaining and operating the Program Plants and FES' guaranteed profits are fully paid by the FE Utilities' captive customers under the Program. The Program's design significantly reduces

1	<i>Q13</i> .	WHY DO YOU RECOMMEND THAT INCENTIVES FOR THE FE
2		UTILITIES AND FES TO MAKE RATIONAL RETIREMENT DECISIONS
3		PERTAINING TO GENERATION ASSETS PROTECTED BY THE PPA BE
4		INCLUDED AS AN ADDITIONAL FACTOR FOR PUCO CONSIDERATION?
5	A13.	When a plant no longer appears likely to recover its going forward costs over any
6		future time frame (in the short- or long-term), the owner should retire or repower
7		it. However, the guaranteed cost recovery in the Program eliminates any
8		incentives for FES to retire the Program Plants. Thus, even if the Program Plants
9		are economically unviable, in the sense that they cannot recover their costs, there
10		is no incentive mechanism within the proposed PPA for the FE Utilities or FES to
11		ever retire these assets regardless of how costly or uneconomic they may be. This
12		could result in higher costs to customers, because lower-cost alternatives may not
13		be able to enter the market because the subsidized plants are not retired.
14		Therefore, any proposed PPA should be evaluated based on whether it provides
15		incentives for owners to make sensible retirement decisions. As stated above, 100
16		percent pass-through of costs and a guaranteed profit provides no incentive for
17		rational decisions.
18		
19	<i>Q14</i> .	WHY DO YOU SUGGEST THAT THE ECONOMIC IMPACTS OF THE

HIGHER RETAIL RATES THAT MAY BE IMPOSED ON THE FE UTILITIES' CAPTIVE CUSTOMERS BE INCLUDED AS A FACTOR? A14. This factor is recommended to supplement the fourth AEP Ohio PPA Factor regarding prices and economic effects if the plants were to close. The FE

1	Utilities' interpretation of this factor may consider only the impacts of a
2	generation plant closure on electricity prices and economic development in a
3	limited manner. For example, the FE Utilities' witness, Eileen M. Mikkelsen,
4	states that the Program will provide "economic development, job retention, [and]
5	a maintained tax base." ⁶ These claims are supplemented with an analysis
6	conducted by the FE Utilities' witness, Sarah Murley, who "addresses the
7	economic and revenue impacts of the Davis-Besse Nuclear Power Station
8	("Davis-Besse") and the W.H. Sammis Plant ("Sammis") (collectively, the
9	"Plants") throughout the regions surrounding the Plants and Ohio as a whole." ⁷
10	
11	Witness Murley's analysis has two primary focuses. The first is an economic
12	impact analysis, which attempts to estimate the direct, indirect, and induced
13	economic impact of operating and maintaining the Plants on the region around the
14	Plants and throughout the state of Ohio. The second is an analysis of operating
15	and maintaining the Plants on local and state tax revenues. These analyses are
16	intended to support the claims made by the FE Utilities' witness, Eileen M.
17	Mikkelsen, regarding the economic development, job retention, and tax base
18	
	benefits of the Program. The analyses focus only on the benefits of retaining the
19	benefits of the Program. The analyses focus only on the benefits of retaining the Plants in operation.

⁶ Direct Testimony of Eileen M. Mikkelsen on Behalf of the FE Utilities, p. 3.

⁷ Direct Testimony of Sarah Murley on Behalf of the FE Utilities, p. 2.

1	The PUCO should consider this factor in a more expansive manner. The PUCO's
2	consideration of an economic analysis should take into account any of the costs of
3	keeping potentially inefficient plants running. In addition, such analysis should
4	take into account the economic development associated with the potential entry of
5	new generating or transmission assets if the Program Plants are retired. That is to
6	say, if the Plants are retired they may be replaced with more efficient generating
7	assets that will create employment, spur economic development, and provide a
8	strong tax base for the local region and the state that does not potentially require
9	costly customer-funded subsidies. Thus, in sum, the Program may have
10	detrimental effects on economic development, job retention, and the local and
11	statewide tax base that are not captured at all in the limited analysis provided by
12	the FE Utilities' and witness Murley's analysis.
13	
14	As one potential example of this, the Program may result in higher retail rates for
15	the FE Utilities' customers. OCC/NOPEC joint witness Wilson's analysis of the
10	

17 PPA could result in substantive net charges to the FE Utilities' captive customers.

Program and Rider RRS costs under alternative price scenarios shows that the

18 These charges ultimately mean that the FE Utilities' customers have less

16

19 disposable income available for consumption, investment, and other economic

20 activity. If Rider RRS does result in a net charge to the FE Utilities' captive

- 21 customers, the associated loss of economic activity may result in greater
- 22 economic harm, ancillary job losses, and lost tax revenues than any economic

1		benefits that may be provided by maintaining and operating inefficient plants.
2		Similarly, potentially higher retail rates could also reduce the competitiveness of
3		Ohio businesses in regional, national, and international markets.
4		
5		Indeed, the testimony of FE Utilities' witness Lawrence J. Makovich states that
6		higher electricity prices can have "negative economic impacts [that] are similar to
7		an economic downturn." ⁸ If the PUCO does wish to factor economic
8		development effects, these potentially large negative effects of the potential
9		charges and customer-borne subsidies that the Program may create should also be
10		considered.
11		
11 12	Q15.	WHY DO YOU RECOMMEND THAT A DETAILED ACCOUNTING OF THE
	Q15.	WHY DO YOU RECOMMEND THAT A DETAILED ACCOUNTING OF THE RELIABILITY BENEFITS PROVIDED BY THE PLANTS BE INCLUDED
12	Q15.	
12 13	Q15. A15.	RELIABILITY BENEFITS PROVIDED BY THE PLANTS BE INCLUDED
12 13 14	~	RELIABILITY BENEFITS PROVIDED BY THE PLANTS BE INCLUDED AS A FACTOR?
12 13 14 15	~	RELIABILITY BENEFITS PROVIDED BY THE PLANTS BE INCLUDED AS A FACTOR? As outlined in my responses to Q14 and Q21 of my Direct Testimony, the PJM-
12 13 14 15 16	~	RELIABILITY BENEFITS PROVIDED BY THE PLANTS BE INCLUDED AS A FACTOR? As outlined in my responses to Q14 and Q21 of my Direct Testimony, the PJM- operated markets have a number of mechanisms in place to ensure the reliability
12 13 14 15 16 17	~	RELIABILITY BENEFITS PROVIDED BY THE PLANTS BE INCLUDED AS A FACTOR? As outlined in my responses to Q14 and Q21 of my Direct Testimony, the PJM- operated markets have a number of mechanisms in place to ensure the reliability of the power system within its footprint. In the short-run, it operates day-ahead
12 13 14 15 16 17 18	~	RELIABILITY BENEFITS PROVIDED BY THE PLANTS BE INCLUDED AS A FACTOR? As outlined in my responses to Q14 and Q21 of my Direct Testimony, the PJM- operated markets have a number of mechanisms in place to ensure the reliability of the power system within its footprint. In the short-run, it operates day-ahead and real-time markets that include security constraints and reserve requirements to

⁸ Supplemental Testimony of Dr. Lawrence Makovich on Behalf of Ohio Edison Company, The Cleveland Electric Illuminating Company, The Toledo Edison Company, Attachment LM-2, p. 6.

1	generation assets, for providing energy, ancillary services, and flexibility.
2	Moreover, the revenues earned by providing these services are intended to ensure
3	that efficient sources of capacity and flexibility recover their costs and enter the
4	system as needed, whereas inefficient sources of capacity and flexibility exit the
5	market. The revenues earned in the day-ahead and real-time markets are
6	supplemented by capacity payments from the RPM market.
7	
8	These markets are explicitly designed with the goal of attempting to ensure that
9	customer demands are served reliably at minimum cost. One rationale provided
10	by the FE Utilities for subsidizing the full costs and guaranteeing the profits of the
11	Program Plants is that they provide "improved reliability." ⁹ If so, it would follow
12	that the reliability benefits provided by the Program Plants would be properly
13	priced and captured by the PJM-operated wholesale markets. In such a case, it is
14	not clear that the Program Plants should require any potential subsidy, given the
15	design goal of the PJM-operated wholesale markets. Otherwise, it may be the
16	case that the Program Plants provide reliability benefits that are not captured or
17	priced by the PJM-operated markets, or that they provide benefits that are not
18	properly or efficiently captured or priced by the PJM-operated markets. If this is
19	the case, it should be explicitly included as a factor that the PUCO considers in
20	evaluating the Program and Rider RRS. To my knowledge, the FE Utilities have
21	not listed any reliability benefits that the Program Plants provide, which is not

⁹ Direct Testimony of Eileen M. Mikkelsen on Behalf of the FE Utilities, p. 3.

1		captured in the design of the PJM-operated wholesale markets.
2		Furthermore, if the Program does provide reliability benefits, it should be noted
3		that these will likely accrue to customers across the PJM system footprint. Many
4		of these customers, who will enjoy reliability benefits, are located outside of the
5		FE Utilities' service territory and beyond the boundaries of the state of Ohio. In
6		such an instance, the PUCO should consider whether it is prudent and just and
7		reasonable to have the FE Utilities' customers pay a potential subsidy for
8		generation assets that provide reliability benefits that accrue to other customers.
9		This possible outcome further underscores the rationale behind having an entity,
10		such as PJM, with a large regional footprint manage system reliability. PJM is in
11		a better position to ensure that the cost of providing reliability is borne by
12		customers who enjoy the benefits.
13		
14	Q16.	WHY DO YOU SUGGEST THAT AN ANALYSIS OF A LEAST-COST
15		COMBINATION OF NEW AND EXISTING GENERATION AND/OR
16		TRANSMISSION ASSETS BE INCLUDED AS A FACTOR?
17	<i>A16</i> .	The first six factors that I have recommended to be considered by the PUCO are
18		intended to address the question of what the net benefits of the Program and Rider
19		RRS are. That is to say, whether the benefits associated with the Program
20		outweigh their costs and customer detriments. This will assist the PUCO in
21		determining whether the Program will benefit customers and is in the public
22		interest.

23

1		An equally important question, however, is whether there are alternatives
2		available that could deliver greater benefits at the same or lower costs than the
3		Program. If so, these alternatives should be pursued. This is especially true if
4		alternatives that do not rely on potentially anti-competitive and inefficient
5		customer-funded subsidies with guaranteed profits exist.
6		
7		This factor that I propose addresses this question, in part, by determining what
8		combination of existing and new transmission and generation assets could be
9		added to the system to deliver the benefits claimed by the FE Utilities of the
10		Program and Rider RRS. Moreover, as outlined in my response to Q14 of my
11		Direct Testimony, the PJM-operated markets are designed in a way that tends to
12		incent generation and transmission assets to be built to address cost stability,
13		reliability, and other issues without the need for potentially anti-competitive and
14		inefficient customer-funded subsidies with guaranteed profits to FES.
15		
16	Q17.	WHY DO YOU PROPOSE THAT THE COST OF ACHIEVING PRICE
17		STABILITY USING PHYSICAL AND FINANCIAL CONTRACTS ENTERED
18		INTO WITH AFFILIATED AND/OR UNAFFILIATED ENTITIES
19		THROUGH A COMPETITIVE SOLICITATION BE INCLUDED AS A
20		FACTOR?
21	A17.	I recommend this as a factor for the same reason as my sixth factor. It is
22		important whether there is a lower-cost, more efficient, or less anti-competitive
23		alternative than the proposed Program and Rider RRS. If such an alternative

1	exists, it will be a factor for the PUCO to consider when determining whether the
2	Program benefits customers and is in the public interest.
3	
4	SSO customers already have access to a price-stabilizing mechanism. This is
5	achieved by having the supply needs of SSO customers met through one- to three-
6	year full-requirements contracts that result from competitive auctions. By doing
7	so, the rates that SSO customers pay are established through the blending of
8	multiple auctions held months to years in advance of delivery. The rate resulting
9	from each auction tends to reflect the then-prevalent forward price plus a markup.
10	Because the forward prices for delivery months to years ahead tend to be
11	relatively stable over time, these auctions tend to stabilize prices paid by SSO
12	customers.
13	
14	It would, therefore, reason that any price stability benefit that the Program may
15	provide could instead be provided through the type of contracts that will be used
16	to supply SSO customers. The cost of doing so should be compared to that of the
17	Program to determine if it provides price stability more efficiently than other
18	contracting options available. Moreover, if price stability could be delivered
19	through such competitive auctions without the need for potential anti-competitive
20	subsidies with guaranteed profits to FES, such mechanisms should be pursued.
91	

21

1	Q18.	WHY DO YOU PROPOSE THAT THE COST OF MEETING CURRENT AND
2		EXPECTED FUTURE ENVIRONMENTAL REGULATIONS WITH
3		GENERATION AND/OR TRANSMISSION ALTERNATIVES TO THE
4		PROGRAM AND RIDER RRS BE INCLUDED AS A FACTOR?
5	A18.	I suggest this as a factor for the same reason as my sixth and seventh factors. The
6		AEP Ohio PPA Factors include a description of how the Program Plants are
7		compliant with all pertinent environmental regulations and the FE Utilities' and
8		FES's plans for compliance. Even if the FE Utilities and FES have a plan in place
9		to meet current and expected future environmental regulations, that does not mean
10		that there are not generation and transmission alternatives that could provide the
11		purported benefits of the Program Plants while also meeting current and expected
12		future environmental regulations at lower costs. If there exist transmission and
13		generation alternatives to the Program and Rider RRS that could deliver their
14		purported benefits and meet current and expected future environmental
15		regulations at lower cost, these alternatives should be considered. Again, this
16		should be a factor for the PUCO to consider in determining whether the Program
17		benefits customers and is in the public interest.
18		

19This factor that I propose addresses this issue, in part, by determining what20combination of transmission and generation assets could be added to the system to21deliver the benefits claimed by the FE Utilities of the Program and Rider RRS and22the cost of meeting current and expected future environmental regulations with

23

1		those alternatives. Proposed EPA 111(d) regulations and their impacts on the
2		proposed PPA are addressed in more detail by OCC witness Ferrey.
3		
4	Q19.	WHAT IS YOUR RECOMMENDATION FOR THIS PROCEEDING?
5	A19.	For the reasons detailed above and in my Direct Testimony, my recommendation
6		is that the Program should be denied by the PUCO. It should be denied because
7		Rider RRS does not necessarily have the effect of stabilizing retail rates. The
8		Program would serve to undermine the revealed preferences of shopping
9		customers by potentially imposing price stability on the subset of shopping
10		customers that have explicitly opted not to have price stability through their
11		contracting decisions. Furthermore, the Program directly subsidizes the operating
12		and capital costs of the Program Plants. Such a subsidy has no place in a
13		competitive wholesale market, and can threaten the efficiency and
14		competitiveness of such markets.
15		
16		If the PUCO does intend to consider the Program any further, despite my
17		recommendations otherwise, I believe that the PUCO should consider other
18		factors which bear upon the evaluation of whether the Program benefits customers
19		and is in the public interest. Although not completely exhaustive, I recommend at
20		least nine supplemental factors that would provide information with which a more
21		complete and thorough assessment of the net benefits of the Program and Rider
22		RRS could be ascertained. Moreover, the factors that I propose allow the PUCO
23		to compare the Program to alternatives that may provide the same purported

1		benefits as the Program, but without the need for potentially inefficient and anti-
2		competitive customer-funded subsidies with guaranteed profits. If such viable
3		alternatives exist, especially those that could be delivered by the competitive
4		market, they should be encouraged and pursued.
5		
6	III.	CONCLUSION
7		
8	Q20.	DOES THIS CONCLUDE YOUR TESTIMONY?
9	A20.	Yes. However, I reserve the right to supplement my testimony later in the event
10		that any party submits new or corrected information which materially affects the
11		findings and recommendations presented in my testimony.

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Supplemental Testimony of Ramteen Sioshansi on Behalf of the Office of the Ohio Consumers' Counsel and the Northeast Ohio Public Energy Council* was served via electronic transmission to the persons listed below on this 11th day of May 2015.

> <u>/s/ Larry S. Sauer</u> Larry S. Sauer Deputy Consumers' Counsel

SERVICE LIST

Thomas.mcnamee@puc.state.oh.us Thomas.lindgren@puc.state.oh.us Rvan.orourke@puc.state.oh.us mkurtz@BKLlawfirm.com kboehm@BKLlawfirm.com jkylercohn@BKLlawfirm.com stnourse@aep.com mjsatterwhite@aep.com valami@aep.com joseph.clark@directenergy.com ghull@eckertseamans.com myurick@taftlaw.com dparram@taftlaw.com Schmidt@sppgrp.com ricks@ohanet.org tobrien@bricker.com mkl@bbrslaw.com gas@bbrslaw.com ojk@bbrslaw.com wttpmlc@aol.com lhawrot@spilmanlaw.com dwilliamson@spilmanlaw.com blanghenry@city.cleveland.oh.us hmadorsky@city.cleveland.oh.us kryan@city.cleveland.oh.us mdortch@kravitzllc.com rparsons@kravitzllc.com gkrassen@bricker.com dstinson@bricker.com

burkj@firstenergycorp.com cdunn@firstenergycorp.com ilang@calfee.com talexander@calfee.com dakutik@jonesday.com sam@mwncmh.com fdarr@mwncmh.com mpritchard@mwncmh.com cmooney@ohiopartners.org callwein@wamenergylaw.com joliker@igsenergy.com mswhite@igsenergy.com Boiko@carpenterlipps.com Allison@carpenterlipps.com hussey@carpenterlipps.com barthroyer@aol.com athompson@taftlaw.com Christopher.miller@icemiller.com Gregory.dunn@icemiller.com Jeremy.grayem@icemiller.com blanghenry@city.cleveland.oh.us hmadorsky@city.cleveland.oh.us kryan@city.cleveland.oh.us tdougherty@theOEC.org jfinnigan@edf.org Marilyn@wflawfirm.com todonnell@dickinsonwright.com matt@matthewcoxlaw.com mfleisher@elpc.org

dborchers@bricker.com mitch.dutton@fpl.com selisar@mwncmh.com ccunningham@akronohio.gov asonderman@keglerbrown.com sechler@carpenterlipps.com gpoulos@enernoc.com toddm@wamenergylaw.com

Attorney Examiners: <u>Gregory.price@puc.state.oh.us</u> <u>Mandy.willey@puc.state.oh.us</u> drinebolt@ohiopartners.org meissnerjoseph@yahoo.com LeslieKovacik@toledo.oh.gov trhayslaw@gmail.com Jeffrey.mayes@monitoringanalytics.com mhpetricoff@vorys.com mjsettineri@vorys.com glpetrucci@vorys.com msoules@earthjustice.org sfisk@earthjustice.org This foregoing document was electronically filed with the Public Utilities

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