PUBLIC VERSION

OCC EXHIBIT _____

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to §4928.143, Revised Code, in the Form of an Electric Security Plan	)	Case No. 13-2385-EL-SSO
In the Matter of the Application of Ohio Power Company for Approval of Certain Accounting Authority	)	Case No. 13-2386-EL-AAM

[redacted]

DIRECT TESTIMONY
OF
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On Behalf of
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I. INTRODUCTION

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

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

Q2. PLEASE DESCRIBE YOUR EXPERIENCE AND QUALIFICATIONS.

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

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

Q3. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO ("PUCO")?

A3. Yes. I testified in Case No. 12-426-EL-SSO (the Application of The Dayton Power and Light Company for approval of a Market Rate Offer); Case No. 12-1230-EL-SSO (the application of The Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for approval of an Electric Security Plan); and Case No. 09-906-EL-SSO (the application of the FirstEnergy Companies for approval of a Market Rate Offer).

Q4. WHAT IS THE PURPOSE AND SCOPE OF YOUR TESTIMONY?

A4. In this proceeding AEP Ohio seeks approval of a new electric security plan ("ESP") for the period June 1, 2015 through May 31, 2018 (the "ESP Period"). My assignment was to review AEP Ohio's application, supporting testimony, workpapers and discovery in this proceeding, focusing on the proposed Power

Purchase Agreement Rider ("PPA Rider"). Under that rider, AEP Ohio would collect from customers the costs (net of market revenues) associated with its contractual arrangement ("ICPA")[1] with the Ohio Valley Electric Corporation ("OVEC"). I was asked to review AEP Ohio's estimate of the cost to customers under the proposed PPA Rider; to evaluate its potential impact on customer price stability; to evaluate the PPA Rider as a regulatory mechanism for collection of these costs; and to make recommendations with respect to the proposed PPA Rider and the treatment of OVEC costs.

II. SUMMARY AND RECOMMENDATIONS

Q5. PLEASE DESCRIBE THE OVEC ASSETS.

A5. OVEC (together with a wholly-owned subsidiary) owns a transmission system and two coal-fired power plants: the 1,086 MW Kyger Creek Plant at Cheshire, Ohio, and the 1,204 MW Clifty Creek Plant located near Madison, Indiana.[2] Both plants began operation in 1955.

[1] Amended and Restated Inter-Company Power Agreement ("ICPA"), OCC INT-1-10 attachment 3 pp. 36-89, available at http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12594881.

[2] OVEC Annual Report – 2012 p. 1, available at http://www.ovec.com/AnnualReport-2012-signed.pdf.

Q6. PLEASE DESCRIBE AEP OHIO'S RELATIONSHIP WITH OVEC.

A6. Under the ICPA, AEP Ohio, as a "Sponsoring Company," is entitled to a share (19.93%) of the capacity and energy provided by the OVEC plants, and is also allocated this same portion of OVEC fixed and variable costs. In Case No. 12-1126-EL-UNC, AEP Ohio requested and received the PUCO's approval to transfer its existing generating units and contractual entitlements to its affiliate, AEP Generating Resources, Inc. However, AEP Ohio was unable to obtain the consent necessary from the other OVEC sponsoring companies to transfer the OVEC entitlement to its affiliate.

Other companies in the AEP family are also parties to the ICPA and Sponsoring Companies; AEP's total share of OVEC output is 43.47 percent.[3] In addition, AEP companies own 43.47 percent of OVEC's stock.[4]

[3] ICPA Article 1. In addition to AEP Ohio and its affiliates Appalachian Power Company and Indiana Michigan Power Company, the Sponsoring Companies under the ICPA are: Allegheny Energy Supply Company LLC, Buckeye Power Generating, The Dayton Power and Light Company, Duke Energy Ohio, Inc., FirstEnergy Generation, LLC, Kentucky Utilities Company, Louisville Gas and Electric Company, Monongahela Power Company, Peninsula Generation Cooperative, and Southern Indiana Gas and Electric Company. OVEC 2012 Annual Report, p. 1.

[4] OCC INT-1-10 attachment 3 (FERC filing of Amended and Restated Inter-Company Power Agreement), p. 10 of 115, footnote 3, available at http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12594881.

Q7. PLEASE EXPLAIN HOW AEP OHIO PROPOSES TO TREAT THE OVEC ENTITLEMENT UNDER THE PROPOSED ELECTRIC SECURITY PLAN.

A7. AEP Ohio does not propose to use the OVEC output to serve the loads of non-shopping customers who remain under the Standard Service Offer ("SSO"). Instead, AEP Ohio plans to offer its share of the OVEC capacity and energy into the PJM markets, consistent with the corporate separation plan approved in Case No. 12-1126-EL-UNC.

Under the proposed PPA Rider, AEP Ohio would collect from customers, on a non-bypassable basis, its portion of the OVEC costs net of the energy and capacity market revenues earned from selling its share of the OVEC output in the PJM markets. Thus, the PPA Rider could increase or decrease customer bills, depending upon whether the OVEC costs turn out to be greater or less than the associated market revenues.

Q8. WHAT DOES AEP OHIO STATE AS THE REASON FOR TREATING THE OVEC ENTITLEMENT IN THIS MANNER?

A8. AEP Ohio witness Pablo A. Vegas states, "The Company is seeking to stabilize customer rates by providing a hedge against market volatility."[5] AEP Ohio

[5] Direct Testimony of Pablo A. Vegas in Support of AEP Ohio's Electric Security Plan, p. 13.

witness William A. Allen states that "the primary function of the PPA rider is to provide added price stability for customers through this ESP period."[6]

Q9. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING THE POTENTIAL NET COST TO CUSTOMERS FROM THE PROPOSED POWER PURCHASE AGREEMENT RIDER.

A9. AEP Ohio provided an estimate of the monthly net cost to customers under the proposed PPA Rider through the ESP Period.[7] Under AEP Ohio's estimate, the cumulative net cost over the ESP Period would be $52 million, or about $1.4 million per month. AEP Ohio's estimate amounts to [redacted] of OVEC output during the ESP Period. That is, OVEC's cost would exceed the market value of the output by [redacted] on average, and AEP Ohio's share of this net cost would be collected from customers through the PPA Rider.

I reviewed AEP Ohio's estimate and identified three assumptions that are outdated or insufficiently supported. I revised these values to produce an estimate that I believe is likely to be much closer to the future outcome if the proposed PPA Rider is authorized by the PUCO. Specifically, I updated the projected Energy Market Prices based on recent futures prices; revised the projected

[6] Direct Testimony of William A. Allen in Support of AEP Ohio's Electric Security Plan, p. 11.

[7] IEU INT-2-001, Competitively-Sensitive Confidential Attachments 1, 2, and 3.

Demand Charges to use the actual forecasts provided by OVEC; and revised the projected OVEC plant generation to be more consistent with recent results. Based on these adjustments I estimate the cost to customers under the PPA Rider to be $117 million over the ESP Period, considerably higher than AEP Ohio's estimate. Under these assumptions, the cost of the OVEC output exceeds its market value by $19.22 per MWh on average over the ESP Period.

Q10. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING THE POTENTIAL IMPACT OF THE PPA RIDER ON THE STABILITY OF CUSTOMER RATES.

A10. Customers under the proposed Standard Service Offer will be served under one- and two-year full requirements contracts established through periodic auctions, and, therefore, would not be exposed to substantial market price volatility.

The proposed PPA Rider would be updated on an annual basis, so the net cost incurred in one year would appear in customers' bills the next year. Due to the one-year lag, the PPA Rider could potentially move contrary to, or in the same direction as, market prices. In any case, the OVEC entitlement corresponds to about five percent of AEP Ohio's customer load, and generation is about half the customers' bill, so to the extent the PPA Rider affects the trajectory of the rates customers pay, it would be a very modest impact.

Customers choosing competitive retail electric service would select among the available offerings according to their preferences, and presumably would choose offerings that hedge prices and provide greater stability to the extent that is desired.

I conclude that the potential for the proposed PPA Rider to contribute to price stability is directionally doubtful (due to the one-year lag), and insignificant in magnitude.

Q11. PLEASE SUMMARIZE YOUR CONCLUSIONS REGARDING THE PPA RIDER AS A REGULATORY MECHANISM.

A11. The proposed PPA Rider is an example of a "cost tracker" – a regulatory mechanism through which the actual costs of a function performed or undertaken by a utility are periodically passed through to customers, outside of a rate case. State regulatory commissions typically approve cost trackers under extraordinary circumstances, for costs that are largely outside the control of the utility and unpredictable and volatile, such as fuel costs. However, AEP Ohio proposes to recover all OVEC costs, including fixed costs and variable operations and maintenance costs, net of market revenues, through the PPA Rider. This is not an appropriate regulatory mechanism for such costs, which are neither outside utility control, nor especially unpredictable.

Q12. PLEASE SUMMARIZE YOUR RECOMMENDATIONS REGARDING THE PROPOSED PPA RIDER AND THE TREATMENT OF OVEC COSTS.

A12. I recommend that the PPA Rider be rejected. The PPA Rider would impose the net cost and risk associated with AEP Ohio's contractual relationship with OVEC onto customers. This net cost could be considerable; by my estimate, $117 million. In addition, to the extent this cost is passed through to customers, the incentive to manage the costs is eliminated. And any incremental price stability the arrangement might provide, which I consider very doubtful, would be insignificant compared to the expected net cost, and risk of even higher cost.

If, instead, the PUCO chooses to approve the PPA Rider in some form, then I recommend that it be modified to reduce the cost and risk to customers and restore some incentive to control costs. This could be accomplished by setting a benchmark for the PPA Rider net cost and using a sharing mechanism for net costs or benefits relative to the benchmark, rather than collecting 100% of the net cost from customers. I describe how such an incentive mechanism could be designed in the last section of my testimony.

Q13. HOW IS THE REMAINDER OF YOUR TESTIMONY ORGANIZED?

A13. The next section of my testimony develops an estimate of the net cost to customers under the proposed PPA Rider, revising AEP Ohio's estimate. In Section IV, I evaluate the AEP witnesses' claim that the proposed PPA Rider

would contribute to customer price stability. Section V discusses the proposed PPA Rider as an example of a cost tracker, and evaluates whether this is an appropriate regulatory mechanism for the OVEC costs. The final section of my testimony presents my recommendations for treatment of the OVEC costs.

III. ESTIMATED COST TO CUSTOMERS OF THE PROPOSED PPA RIDER

Q14. HAS AEP OHIO PREPARED AN ESTIMATE OF THE DOLLAR AMOUNTS THAT WOULD BE COLLECTED FROM CUSTOMERS UNDER THE PROPOSED PPA RIDER?

A14. Yes. AEP Ohio provided an estimate of the monthly amounts under the proposed PPA Rider for the ESP Period in its response to IEU INT-2-001, Competitively-Sensitive Confidential Attachments 1, 2, and 3.

Q15. PLEASE DESCRIBE HOW AEP OHIO ESTIMATED THE PPA RIDER AMOUNTS.

A15. IEU INT-2-001 Competitively-Sensitive Confidential Attachment 1 ("PPA Rider Estimate") shows estimated OVEC cost, revenue, and net cost on a monthly basis, reflecting amounts allocated to AEP Ohio. Specifically, the PPA Rider Estimate includes the following on a monthly basis:

i. The OVEC MW capacity, and a forecast of capacity prices and revenues based on PJM's Reliability Pricing Model ("RPM") capacity construct;

ii. The forecast OVEC Demand Charges;

iii. The forecast OVEC energy output;

iv. The forecast average Energy Market Prices earned for the output;

v. The forecast OVEC Costs of generation, including fuel and non-fuel costs;

vi. The resulting energy gross margin;

vii. The total PPA Rider, reflecting all revenues minus all costs.

Q16. WHAT IS THE COST TO CUSTOMERS FROM THE PPA RIDER UNDER AEP OHIO'S ESTIMATE?

A16. The estimated cost varies month to month, with the PPA Rider increasing customers' bills in some months and reducing them in other months during the ESP Period. Cumulatively, AEP Ohio estimates that the PPA Rider will cost customers just over $52 million during the 36 months of the ESP Period.

Q17. HAVE YOU REVIEWED THE ASSUMPTIONS AND CALCULATIONS AEP-OHIO USED IN THE PPA RIDER ESTIMATE?

A17. Yes. I reviewed the assumptions and calculations underlying AEP Ohio's estimate based on the PPA Rider Estimate and additional information provided in response to data requests.

Q18. BASED ON YOUR REVIEW, WHAT DO YOU CONCLUDE ABOUT AEP OHIO'S PPA RIDER ESTIMATE?

A18. Most of the assumptions appear to be accurate and reliable. A few assumptions, such as the capacity price forecast, could be updated but would have only a small impact on the results. However, three important assumptions appear to be overly optimistic and lead to substantially understating the likely cost of the PPA Rider to customers. Specifically, the following three assumptions have large impacts on the estimated cost, and do not appear to be sufficiently supported:

i. $10 million in annual demand charge savings based on "lean improvements/process optimization;"

ii. The Energy Market Price assumptions; and

iii. The OVEC Energy (generation) assumptions.

Q19. HAVE YOU PREPARED A PPA RIDER ESTIMATE BASED ON ALTERNATE VALUES FOR THESE ASSUMPTIONS?

A19. Yes I have.

Q20. FIRST PLEASE DESCRIBE THE OVEC DEMAND CHARGES AND THE REDUCTION FOR "LEAN IMPROVEMENTS/PROCESS OPTIMIZATION".

A20. OVEC's demand charges collect the fixed costs associated with OVEC's generation and transmission assets and operations. OVEC provided AEP Ohio

with projections of future demand charges based on such costs.[8] However, AEP Ohio did not use these projections in its PPA Rider Estimate; instead, AEP Ohio reduced the OVEC demand charges by approximately $10 million per year based on assumed "lean improvements/ process optimization."

Q21. HOW DID AEP OHIO SUPPORT THE ASSUMED REDUCTION FOR LEAN IMPROVEMENTS/PROCESS OPTIMIZATION?

A21. AEP Ohio did not support this reduction. In response to a data request and request for production of documents, AEP Ohio was unable to produce any documents describing the lean improvements or process optimization.[9] Further, AEP Ohio stated that neither it nor OVEC was committed to making these cost reductions. Nor would AEP Ohio commit to reducing the PPA Rider by these cost savings even if the savings were not accomplished.

I also note, as discussed in more detail later in this testimony, that to the extent any such cost savings would be passed through the PPA Rider as AEP Ohio proposes, neither AEP Ohio nor OVEC would realize any benefit from the savings, and, therefore, neither AEP Ohio nor OVEC would have any incentive to achieve the savings.

[8] OCC INT-11-272 part a, attached hereto, with other non-confidential data responses, in Attachment JFW-2.

[9] OCC INT-11-272, OCC RPD-11048 (Att. JFW-2).

Q22. WHAT VALUES DID YOU USE FOR THE OVEC DEMAND CHARGES IN YOUR ESTIMATE OF THE COST TO CUSTOMERS OF THE PPA RIDER?

A22. I used the demand charges that were provided by OVEC, eliminating the reduction for "lean improvements/process optimization."

Q23. PLEASE EXPLAIN THE SECOND ASSUMPTION YOU MENTIONED, WHICH HAS TO DO WITH ENERGY MARKET PRICES.

A23. The PPA Rider Estimate is based on monthly Energy Market Prices, which are weighted averages based on hourly prices and a forecast of hourly OVEC generation.[10] AEP Ohio states that the hourly prices are based on forward prices retrieved from "several different exchanges" in August 2013, and converted to hourly prices using "proprietary algorithms."[11] AEP Ohio states that these prices are intended to represent the "ADHUB" (AEP-Dayton Hub) delivery location.[12] The hourly prices were provided in a data request.[13] AEP Ohio states (in responses dated April 2, 2014) that these values still represent AEP Ohio's expectations of forward energy competitive prices.[14] AEP Ohio further states (in

[10] OCC INT-11-275 part d (Att. JFW-2).

[11] OCC INT-5-090 parts a, c (Att. JFW-2).

[12] OCC INT-5-090 part b (Att. JFW-2).

[13] OEG INT-2-006 Competitively-Sensitive Confidential Attachment 1.

[14] Direct Energy Services LLC INT-1-003.c (Att. JFW-2).

responses dated April 21, 2014) that it has not updated its forecasts of OVEC generation, costs, or revenues.[15]

Q24. DOES THE OUTPUT OF THE OVEC PLANTS EARN THE AD HUB PRICE?

A24. No; OVEC is a separate pricing point in PJM, and the locational marginal prices ("LMPs") at the OVEC point are generally different from prices at other points, due to differences in losses and congestion. In response to a data request, AEP Ohio provided average monthly LMPs for the OVEC point and also for the AEP Gen Hub.[16] I accessed the underlying data directly from PJM for these points and also for the AEP-Dayton Hub aggregate point, which is the basis for AD Hub forward prices. Based on this data I was able to confirm the information provided in the data response and also compare LMPs at the OVEC point to the AD Hub values.

[15] OEG INT-8-006, OEG INT-8-007, OEG INT-8-008 (Att. JFW-2).

[16] OCC INT-5-107 Supplement Attachment 1 (Att. JFW-2).

Q25. HOW DO LMPS AT THE OVEC POINT COMPARE TO THE AD HUB LMPS?

A25. Over the past three years, LMPs at the OVEC point have averaged about $1.50/MWh lower than the AD Hub LMPs. The differential varies by month and across peak and off-peak hours, as summarized in Table 1.

Table 1: Average LMP Differences, OVEC and AD Hub, 2011-2013

	Peak Hours			Off-Peak Hours		
	AD Hub	OVEC	Difference	AD Hub	OVEC	Difference
January	37.00	35.34	1.67	32.53	31.19	1.34
February	34.92	33.19	1.73	30.92	29.63	1.29
March	37.21	35.70	1.51	31.00	29.81	1.19
April	37.85	36.50	1.35	30.95	30.00	0.95
May	41.32	39.49	1.83	31.14	29.86	1.29
June	43.04	40.22	2.82	29.23	27.59	1.64
July	54.23	50.37	3.86	34.89	32.75	2.14
August	39.11	36.96	2.15	29.42	28.05	1.37
September	36.84	34.71	2.13	29.15	27.76	1.39
October	37.22	35.69	1.53	31.42	30.22	1.20
November	37.56	35.99	1.57	31.96	30.76	1.20
December	35.89	34.22	1.67	30.74	29.54	1.20

Source: Hourly LMP data accessed using PJM DataMiner tool.

Q26. HOW DO RECENT AD HUB ENERGY PRICES COMPARE TO THE ENERGY MARKET PRICES USED IN THE PPA RIDER ESTIMATE?

A26. The Energy Market Prices in the PPA Rider Estimate are significantly different from (and generally higher than) current AD Hub forward prices. I retrieved the AD Hub forward prices for peak and off-peak hours during the ESP Period from CME Group[17] three times: on April 9, April 23, and May 6. I used the May 6 values because they resulted in greater total value for the OVEC output over the ESP Period.

The average monthly prices used by AEP Ohio in the PPA Rider Estimate, and average monthly prices recalculated based on the recent AD Hub futures prices, are summarized in Exhibit No. JFW-1. The price patterns shown in Exhibit No. JFW-1 reflect weighted average monthly values based on AEP Ohio's forecast of OVEC hourly generation quantities.

The monthly average prices based on recent AD Hub prices are generally much lower than the Energy Market Price values that AEP Ohio used in the PPA Rider Estimate. The exception is the values for the months of January and February.

[17] CME Group is the world's leading and most diverse derivatives marketplace. The AD Hub futures prices accessed were PJM AEP Dayton Hub Day-Ahead Calendar-Month 5 MW Futures, Peak and Off-Peak (contracts D7 and R7), available at http://www.cmegroup.com/trading/energy/electricity/pjm-aep-dayton-hub-off-peak-calendar-month-day-ahead-lmp-swap-futures_contract_specifications.html and http://www.cmegroup.com/trading/energy/electricity/pjm-aep-dayton-hub-peak-calendar-month-day-ahead-lmp-swap-futures_contract_specifications.html.

The AD Hub prices for the months of January and February over the coming years reflect a much larger differential to the prices in adjacent months than they have in the past, likely reflecting the events of the last winter, when cold weather and natural gas pipeline constraints contributed to very high energy prices on some winter days.

Q27. WHAT ENERGY MARKET PRICES DID YOU USE TO ESTIMATE THE COST TO CUSTOMERS UNDER THE PPA RIDER?

A27. I used the May 6 AD Hub prices, adjusted based on the typical LMP differentials to the OVEC point shown in Table 1 above. These are prices at which the OVEC output could be sold forward at the present time, and they are a reasonable estimate of the future prices OVEC could achieve for its output.

Q28. CAN THE OVEC PLANTS EARN REVENUES IN ADDITIONAL PJM MARKETS, OTHER THAN THE CAPACITY AND ENERGY MARKETS?

A28. Some plants can sell various ancillary services, such as operating reserves and regulation. However, older coal plants generally do not have the flexible operating characteristics required to offer such services. The OVEC plants earned no ancillary services revenues in 2012 or 2013,[18] and no estimate of such revenues was included in the PPA Rider Estimate.

[18] IEU INT-2-014, IEU INT-2-015 (Att. JFW-2).

Q29. YOU HAVE UPDATED THE ENERGY MARKET PRICE ASSUMPTION BASED ON RECENT FORWARD PRICES FOR AD HUB; WHAT OTHER PRICES GO INTO THE PPA RIDER ESTIMATE, AND DID YOU UPDATE THEM?

A29. The other prices that enter into the estimate are 1) capacity prices and 2) coal prices, which determine the OVEC generation costs. I did not update these other prices as they are reasonably accurate and any update would make only a small difference.

Capacity prices have already been established for the first two years of the ESP Period, so the values in the PPA Rider Estimate are correct. The value for the third year (2017/18) will be established in an RPM auction to be held in May, 2014 with the results announced May 23. AEP Ohio's estimate for this price – [redacted] is higher than many observers expect for the upcoming auction. For example, UBS expects $80/MW-day for the applicable region.[19] Updating the assumed capacity price for 2017/18 from [redacted] to $80/MW-day would increase the estimated cost to customers by approximately [redacted] however I have not included this adjustment in my estimate. I understand that I

[19] UBS Global Research, US Electric Utilities & IPPs: *Flattening our PJM Capacity Price Forecast,* April 22, 2014 (stating expectations of $80/MW-day for the RTO region), and *Re-Thinking the Capacity Downside Case in PJM*, April 28, 2014 (stating the same expectations).

may be asked to update my estimate of the cost to customers of the proposed PPA Rider based on the actual capacity price for 2017/18 when it becomes available.

I have also not updated the coal prices used in the PPA Rider Estimate. The market assumptions used in the PPA Rider Estimate were established in August, 2013.[20] Coal prices are much more stable than electric energy or natural gas prices, and have not changed much since last August. I reviewed the coal cost assumptions and recent coal forward prices, and concluded there was no need to update the coal cost assumptions.

The Clifty Creek plant receives most of its coal supply under [redacted]

[redacted] Futures contracts have been defined for a few different standard coals, but there is no futures contract for Illinois Basin coal. However, coal prices, including Illinois Basin spot coal prices, have been quite stable in recent years and months,[22] so any update to the assumptions set in August 2013 would likely result in only a very small change. The Kyger Creek plant is supplied

[20] OCC-INT-5-90 (Att. JFW-2).

[21] OCC-RPD-5-035, Competitively-Sensitive Confidential Attachments 1 and 2, Article V.

[22] See, for instance, U.S. Energy Information Administration, *Coal News and Markets Archive*, available at http://www.eia.gov/coal/news_markets/archive/

[redacted] and prices for Appa achian coals have a so been stable recently. Consequently, the coal prices estimates used in the PPA Rider Estimate likely would not change much if revisited at this time.

Q30. PLEASE EXPLAIN THE THIRD ASSUMPTION YOU MENTIONED: THE OVEC GENERATION FORECAST.

A30. The PPA Rider Estimate uses a forecast of hourly OVEC generation over the ESP Period, which determines the energy market earnings (price times quantity). The forecast of hourly OVEC generation was provided in response to a data request.[24] The forecast suggests much higher generation than the OVEC plants have achieved in recent years. Specifically, while the OVEC plants' output allocated to AEP-Ohio (based on its 19.93% share of OVEC output[25]) was 1,952,385 MWh and 1,985,352 MWh in 2012 and 2013, respectively,[26] AEP Ohio forecasts [redacted] in 2016, and even higher values in 2017 and 2018. AEP Ohio's forecast of OVEC generation for 2016 through 2018 is also much higher than it expects for the months of 2015 that are part of the ESP Period.

[23] OCC-RPD-5-035, Competitively-Sensitive Confidential Attachment 3, Article V.

[24] OCC INT-11-275 Competitively Sensitive Confidential attachment in response to part f.

[25] IEU INT-2-003 (Att. JFW-2).

[26] IEU INT-2-020, IEU INT-2-021 (Att. JFW-2).

Q31. HOW DOES AEP OHIO EXPLAIN THE HIGHER OVEC GENERATION FORECAST?

A31. With respect to the summer months, AEP Ohio states that the higher generation forecast reflects higher expected energy market prices, while costs increase to a much lesser extent.[27]

Q32. DO YOU ACCEPT THIS EXPLANATION?

A32. No. As explained above, AEP Ohio's assumed Energy Market Prices, which are a key determinant of the generation quantities, are generally higher than recent forward prices. AEP Ohio's models would likely forecast substantially lower OVEC generation, if updated with the latest AD Hub prices.

Exhibit JFW-2 shows the monthly Energy Market Price, OVEC Cost (per MWh), and generation, from the PPA Rider Estimate. It shows that even using AEP's estimated Energy Market Prices, the assumed increase in the Energy Market Price between summer 2015 and summer 2016 is less than [redacted] while the coal price also increases, yet the assumed generation increases by a substantial amount. In addition, this exhibit shows that the assumed generation does not appear to be highly correlated with the energy price – OVEC cost differential. Indeed, some of the months with the highest generation have relatively low price

[27] OCC INT-6-114 (Att. JFW-2).

– cost differentials. Accordingly, I do not see a basis for AEP Ohio's forecast of a very large increase in OVEC generation in 2016-2018 compared to recent years, or expectations for 2015.

Q33. WHAT VALUES DID YOU USE FOR THE OVEC GENERATION?

A33. To adjust the assumed OVEC generation to be more consistent with historical values, I reduced the forecast OVEC generation in 2016 to 2018 by 20% in peak hours and 40% in off-peak hours. I made no adjustment to the forecast 2015 values, which are much lower and generally in line with recent outcomes. The OVEC generation in the PPA Rider Estimate, and the reduced values I used, are illustrated in Exhibit No. JFW-3.

This adjustment still results in annual OVEC generation in excess of the recent historical values, as shown in Table 2.

Note also that changing the OVEC generation also changes the weighted-average monthly prices based on the updated AD Hub values; because I have reduced off-peak generation more than on-peak generation, the monthly weighted average prices are somewhat higher. This price pattern was also shown in Exhibit No. JFW-1.

Summary: Testimony Public Version of James F. Wilson on behalf of the Office of the Ohio Consumers' Counsel (Part 1 of 2) electronically filed by Mr. Steven T Nourse on behalf of Ohio Power Company