OCC EXHIBIT NO. ______

BEFORE
THE PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio Power Company for Administration of the Significantly Excessive Earnings Test for 2016 Under Section 4928.143 (F), Revised Code, and Rule 4901:1-35-10, Ohio Administrative Code.	))))))	Case No. 17-1230-EL-UNC

TESTIMONY OF DANIEL J. DUANN, Ph.D. IN OPPOSITION TO THE STIPULATION

On Behalf of
The Office of the Ohio Consumers' Counsel
65 East State Street, 7th Floor
Columbus, Ohio 43215-4213

March 23, 2018

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I. INTRODUCTION

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

A1. My name is Daniel J. Duann. My business address is 65 East State Street, 7th Floor, Columbus, Ohio, 43215. I am a Principal Regulatory Analyst with the Office of the Ohio Consumers' Counsel ("OCC").

Q2. DID YOU FILE DIRECT TESTIMONY IN THIS PROCEEDING ON JANUARY 12, 2018?

A2. Yes. I will refer to that testimony as "Duann Direct Testimony."[1] It is incorporated here as Attachment DJD-1.

II. PURPOSE AND RECOMMENDATION

Q3. WHAT IS THE PURPOSE OF YOUR TESTIMONY TODAY?

A3. The purpose of my testimony is to explain and support OCC's position regarding the proposed Stipulation and Recommendation ("Settlement") filed by AEP Ohio ("AEP") on February 13, 2018.[2]

[1] See *In the Matter of the Application of Ohio Power Company for Administration of the Significantly Excessive Earnings Test for 2016 Under Section 4928.143(F), Revised Code and Rule 4901:1-35-10, Ohio Administrative Code*, Case No. 17-1230-EL-UNC ("AEP Ohio 2016 SEET Case"), Direct Testimony of Daniel J. Duann, Ph.D. (January 12, 2018).

[2] See AEP Ohio 2016 SEET Case, Stipulation and Recommendation (February 13, 2018).

Q4. WHAT IS YOUR RECOMMENDATION REGARDING THE PROPOSED SETTLEMENT?

A4. I recommend that the Public Utilities Commission of Ohio ("PUCO") reject the proposed Settlement. It is not reasonable or in the public interest.

Contrary to the claim by AEP and the PUCO Staff, the proposed Settlement does not represent a fair and reasonable solution for customers to all the issues raised in this proceeding.[3] It fails the three-part test under which settlements are evaluated by the PUCO. The proposed Settlement is not the product of serious bargaining and meaningful compromise among the parties to this proceeding.[4] The proposed Settlement, as a package, does not benefit customers or the public interest.[5] Further, the terms and conditions of the proposed Settlement do not satisfy the policies of the State of Ohio and they violate important regulatory policies and principles.[6]

Specifically, neither the PUCO Staff nor AEP demonstrated that customers will benefit if the proposed Settlement is adopted. To the contrary, if the proposed Settlement is adopted, AEP's customers will be unnecessarily and unjustly

[3] See AEP Ohio 2016 SEET Case, Stipulation and Recommendation at 3.
[4] See AEP Ohio 2016 SEET Case, Stipulation and Recommendation at 4.
[5] See AEP Ohio 2016 SEET Case, Stipulation and Recommendation at 4.
[6] See AEP Ohio 2016 SEET Case, Stipulation and Recommendation at 4.

harmed because they will not receive a refund of approximately $53 million from AEP for its significantly excessive earnings in 2016.[7]

Q5. DOES THE PROPOSED SETTLEMENT PRESENT ANY NEW AND USEFUL INFORMATION FOR THE RECORD IN THIS CASE?

A5. No. The proposed Settlement does not contribute anything new or useful for the record of this proceeding. The proposed Settlement and AEP's Supplemental Testimony provide only cumulative and repetitive arguments of AEP and the PUCO Staff. These arguments have been presented in previously-filed testimonies in this proceeding. There is no need to repeat those same arguments through the proposed Settlement and Supplemental Testimony. To ensure regulatory efficiency and fairness, the PUCO should not consider the proposed Settlement because it is meritless. The PUCO should decide this case solely on the evidence of record that has been properly examined at an evidentiary hearing and should arrive at the conclusion that the Settlement does not meet the principles embodied in the PUCO's three-prong test.

Q6. DOES THE PROPOSED SETTLEMENT CONTRIBUTE TO AN EFFICIENT AND FAIR RESOLUTION TO THIS CASE?

A6. No. The proposed Settlement does not contribute to an efficient resolution of this case. For example, the proposed Settlement does not even present a specific

[7] See Duann Direct Testimony at 4.

recommendation regarding the 2016 SEET ROE threshold for AEP. In the proposed Settlement, AEP suggests a SEET threshold of 17.69%[8] and the PUCO calculates a SEET threshold of 16.08%.[9] In this regard, the proposed Settlement provides no useful information on what the PUCO should decide regarding AEP Ohio's 2016 SEET ROE threshold. The sole purpose of the proposed Settlement is to provide a cover for AEP to shift the burden of proof from the reasonableness of the 2016 SEET Application to an unsupported and unreasonable settlement agreement wherein it is determined that AEP has no significantly excessive earnings in 2016 and therefore is not required to provide a refund to its customers.

Q7. DOES THE PROPOSED SETTLEMENT CHANGE YOUR EARLIER CONCLUSION THAT CUSTOMERS ARE ENTITLED TO A $53 MILLION REFUND TO PREVENT AEP FROM RETAINING SIGNIFICANTLY EXCESSIVE EARNINGS FOR 2016?

A7. No. As discussed earlier, the proposed Settlement is simply a rehash of the previously filed positions of AEP and the PUCO Staff. There are no new facts or arguments presented in the proposed Settlement for me to consider or respond to. Thus, the proposed Settlement does not change my conclusion that customers should be refunded $53 million from AEP.

[8] See AEP Ohio 2016 SEET Case, Stipulation and Recommendation at 4.

[9] Id. at 5.

Q8. DOES AEP'S SUPPLEMENTAL TESTIMONY SUPPORTING THE PROPOSED SETTLEMENT CHANGE YOUR CONCLUSION THAT CUSTOMERS ARE ENTITLED TO A $53 MILLION REFUND FOR AEP'S SIGNIFICANTLY EXCESSIVE EARNINGS IN 2016?

A8. No. I have reviewed the Supplemental Testimony filed by William A. Allen on March 9, 2018. I have concluded that Mr. Allen's assertions in the Supplemental Testimony are unreasonable. I will provide specific rebuttal to each of his assertions in my testimony today. Specifically, I will demonstrate in my testimony that:

(1) the proposed Settlement filed by AEP does not meet the three-prong test;

(2) AEP had significantly excessive earnings in 2016 and it should be ordered to provide a refund or credit to its customers;

(3) the calculated SEET ROE thresholds of 17.69% or 16.08% presented by AEP and the PUCO Staff are not in line with previously accepted SEET thresholds;

(4) there is no evidence produced that $21.4 million in pre-tax earnings associated with the 2016 reversal of the 2014 SEET refund provision were included in AEP's 2014 SEET earnings;

(5) the $22.8 million of PIRR equity carrying charges booked in 2016 were not included in AEP's SEET earnings for

years 2012 and 2015, and it should not be deducted from AEP's 2016 earnings for SEET purposes; and

(6) the proposed \$21.4 million and \$22.8 million adjustments (reductions) to its 2016 earnings for SEET purposes proposed by AEP are unreasonable and should not be allowed. That is because they were earnings from the electric security plan that must be considered for SEET purposes and they were not accounted for in the earnings of previous years.

Q9. WHAT IS YOUR UNDERSTANDING OF THE THREE-PRONG TEST THAT THE PUCO COMMONLY USES IN EVALUATING A PROPOSED SETTLEMENT?

A9. If the PUCO wants to consider the proposed Settlement in spite of its shortcomings, I understand that the PUCO typically analyzes a proposed settlement under a three-prong test.[10] Specifically, the PUCO will consider:

(1) Is the proposed settlement a product of serious bargaining among capable, knowledgeable parties?

(2) Does the proposed settlement, as a package, benefit customers and the public interest?

[10] See, for example, *In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company, Individually and, if Their Proposed Merger is Approved, as a Merged Company (collectively, AEP Ohio) for an Increase in Electric Distribution Rates,* PUCO Case No. 11-351-EL-AIR et al. Opinion and Order at 8-10 (December 14, 2011).

(3) Does the proposed settlement package violate any important regulatory principle or practice?

If the PUCO determines that a proposed settlement does not meet each of the three criteria outlined above, the settlement should be rejected.

Q10. IS THE PROPOSED SETTLEMENT A PRODUCT OF SERIOUS BARGAINING AMONG CAPABLE, KNOWLEDGEABLE PARTIES?

A10. No. The proposed settlement has to be a product of serious bargaining or negotiation among capable and knowledgeable parties to be approved by the PUCO. In other words, all parties in this disputed case should be afforded the opportunity to be heard and to meaningfully participate in the settlement process. It is also my understanding that this part of the settlement test involves considering the end product (that is the proposed settlement itself) of the serious bargaining and whether itis a reasonable compromise of the competing positions of parties.

Q11. DOES THE PROPOSED SETTLEMENT SATISFY THE FIRST PRONG OF THE SETTLEMENT STANDARD THAT REQUIRES THE SETTLEMENT TO BE A PRODUCT OF SERIOUS BARGAINING THAT INVOLVED A BALANCING OF COMPETING INTERESTS.?

A11. No. The interests of the residential customers, who will be directly affected by this proposed settlement, are not addressed or represented at all in the proposed

Settlement. Specifically, the proposed Settlement includes a 2016 SEET ROE threshold of 17.69%.[11] This has always been AEP's position in this proceeding[12] and it is considerably higher than the 2016 SEET ROE threshold of 14.59% recommended by OCC.[13]

The proposed Settlement also recommends a 2016 SEET-adjusted return on equity of 14.97%.[14] Once again, this has always been AEP Ohio's position in this proceeding.[15] This calculated ROE reflects two unreasonable and unsupported reductions (the adjustments proposed by AEP for the reversal of 2014 SEET refund provision and the incremental equity carrying charge incomes) in the 2016 earnings of AEP. It is considerably higher than the 2016 SEET-adjusted ROE of 16.23% recommended by OCC.[16] These two examples demonstrate that the proposed Settlement does not give any consideration to the interests of AEP's customers, and it does not represent a reasonable compromise of the competing positions among the parties.

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[11] See AEP Ohio 2016 SEET Case, Stipulation and Recommendation at 4-5.

[12] See AEP Ohio 2016 SEET Case, Direct Testimony of William A. Allen at 5 (May 15, 2017).

[13] See Duann Direct Testimony at 4.

[14] See AEP Ohio 2016 SEET Case, Stipulation and Recommendation at 4.

[15] See AEP Ohio 2016 SEET Case, Direct Testimony of Tyler H. Ross at 12 (May 15, 2017).

[16] See Duann Direct Testimony at 4.

Q12. DOES THE PROPOSED SETTLEMENT SATISFY THE SECOND PRONG OF THE SETTLEMENT STANDARD THAT REQUIRES A SHOWING THAT THE SETTLEMENT BENEFITS CUSTOMERS AND THE PUBLIC INTEREST?

A12. No. The customers of AEP could not be worse off under any circumstances than under the proposed Settlement. As discussed in the Duann Direct Testimony, AEP did have significantly excessive earnings in 2016 and $53,119,070 should be returned to customers through either a credit on their bills or a reduction in consumer monies owed to AEP.[17] However, if the proposed Settlement is adopted by the PUCO, AEP's customers would not receive any SEET refund or credit from AEP. This is the case because the proposed Settlement recommends the PUCO adopt an unreasonably high SEET ROE threshold of 17.69% or 16.08% for 2016 and finds that AEP did not have significantly excessive earnings in 2016. The proposed Settlement also implicitly recommends that the PUCO allow two unreasonable and unsupported reductions (adjustments as identified above) to AEP's 2016 earnings and find that AEP's 2016 SEET-adjusted ROE is 14.97%.

There is no benefit to customers included in the proposed Settlement that counterbalances and compensates customers for the 2016 SEET refund to which they are entitled. AEP witness Allen cannot identify or quantify any customer

[17] See Duann Direct Testimony at 23.

benefits from the proposed Settlement. At best, Mr. Allen makes a generic and unsubstantiated statement that the proposed Settlement would "benefit customers and the public interest by resolving this case in a timely manner, which supports administrative efficiency, and in a manner consistent with past PUCO decisions."[18] This is not demonstration of any benefit to consumers. As discussed earlier in my testimony, the filing of the proposed Settlement does not present any new and useful facts and arguments. The proposed Settlement is just a rehash of the previously-filed testimony of AEP and the PUCO Staff. The proposed Settlement will have no effect on the timeliness and the efficiency of the adjudication of this case and does not benefit customers. The so-called timely resolution of this case only benefits the utility. Customers would be better off with a resolution (later or not) where they receive $53 million in refunds from AEP's significantly excessive earnings of 2016.

Q13. DOES THE PROPOSED SETTLEMENT SATISFY THE THIRD PRONG OF THE SETTLEMENT STANDARD THAT IT NOT VIOLATE ANY IMPORTANT REGULATORY PRINCIPLE, PRACTICE, OR STATE POLICY?

A13. No. The proposed Settlement, if approved by the PUCO, does violate important regulatory principles, practices, and state policies. For example, as a result of it allows two unreasonable and unsupported reductions to AEP Ohio's 2016

[18] See 2016 AEP Ohio SEET Case, Supplemental Testimony of Allen at 4.

earnings (the adjustments for the reversal of 2014 SEET refund provision and the incremental equity carrying charge incomes). AEP Ohio's 2016 SEET return on equity will be reduced from 16.23% (as calculated in Duann Direct Testimony) to 14.97% (as recommended in the proposed Settlement). In combination with the adoption of an unreasonably high SEET ROE threshold of 16.08% or 17.69% (as recommended in the proposed Settlement), the customers of AEP are deprived of a significant benefit (approximately $53 million) in the form of either a refund or a credit to their monthly bills. In this regard, AEP's customers are being asked to pay unreasonably high profits to AEP, resulting in unjust charges to consumers for essential electric services. The proposed Settlement violates the fundamental regulatory principle that the rates of regulated utility services must be just and reasonable.[19] This forbearance of a 2016 SEET refund of approximately $53 million to which customers are entitled also abandons or at a minimum dilutes the protection of electric utility customers intended by the Ohio General Assembly in enacting the SEET statutes.[20]

The proposed Settlement is also detrimental to the welfare of many Ohioans and the Ohio economy. Specifically, I find the proposed Settlement, if adopted by the PUCO, would violate state electric services policy regarding: (1) the availability to consumers of adequate, reliable, safe, efficient, non-discriminatory, and

[19] See Ohio Revised Code 4905.22.

[20] See Ohio Revised Code 4928.143 (F).

reasonably priced retail electric service; (2) the protection of at-risk populations; and (3) the state's effectiveness in the global economy.[21]

Q14. DO YOU AGREE WITH AEP WITNESS ALLEN'S ASSERTION THAT THE CALCULATED SEET THRESHOLDS AS PRESENTED BY AEP AND THE PUCO STAFF ARE IN LINE WITH PREVIOUSLY ACCEPTED SEET THRESHOLDS?

A14. No. Mr. Allen's declaration is misguided and factually wrong. First of all, it should be noted that the SEET is an annual earnings test and the valid comparison of the ROE earned by AEP in 2016 is with those earnings by other publicly traded companies in the same time period. The relevant Ohio Revised Code specifically prescribes that:

> *"With regard to the provisions that are included in an electric security plan under this section, the commission shall consider, following the end of each annual period of the plan, if any such adjustments resulted in excessive earnings as measured by whether the earned return on common equity of the electric distribution utility is significantly in excess of* ***the return on common equity that was earned during the same period*** *by publicly traded companies, including utilities, that face comparable business and*

[21] See Ohio Revised Code 4928.02 (A), (L), and (N).

> *financial risk, with such adjustments for capital structure as may be appropriate."* [22]

Consequently, the previously accepted SEET thresholds mentioned by Mr. Allen should not have any bearing on the PUCO's evaluation of AEP's 2016 SEET Application.

Q15. BASED ON YOUR PARTICIPATION IN MANY OTHER SEET PROCEEDINGS IN OHIO, WHAT WAS THE RANGE OF PREVIOUSLY ACCEPTED SEET THRESHOLDS?

A15. Based on my extensive participation in the many SEET proceedings over the last nine years, my understanding is that a large majority of the SEET ROE thresholds accepted by the PUCO were in the range of 12% to 15%. Any SEET ROE threshold above 15% should be considered as an exception, not a norm. The calculated SEET ROE thresholds in the proposed Settlement clearly are not in line with previously accepted SEET ROE thresholds. Mr. Allen's statement regarding the previously accepted SEET ROE thresholds in Ohio is factually incorrect.

[22] See Ohio Revised Code 4928.143 (F) (emphasis added).

Q16. DO YOU AGREE WITH AEP WITNESS ALLEN'S ASSERTION THAT THE PRE-TAX $21.4 MILLION RECORDED IN 2016 PER-BOOK EARNINGS WERE ALREADY INCLUDED IN THE 2014 SEET EARNINGS AND SHOULD NOT BE INCLUDED IN AEP OHIO'S 2016 SEET EARNINGS, THUS REDUCING THE POTENTIAL REFUND TO CUSTOMERS?

A16. No. There is no factual basis that the $21.4 million SEET refund provision reversal recorded in 2016 was added back to either the 2014 per-book earnings or the 2014 SEET-adjusted earnings. As discussed in my Direct Testimony,[23] this proposed reduction of $21.4 million to the 2016 earnings is used by AEP to shift some earnings from one period (2016), when AEP's earnings are subject to SEET, to another period (2014) when its SEET application was already disposed of and its purported $21.4 million pre-tax earnings are no longer subject to SEET review.

Q17. IS THE PRE-TAX $21.4 MILLION PART OF THE PER-BOOK EARNINGS REPORTED IN THE 2016 FINANCIAL STATEMENT OF AEP?

A17. Yes. The reversal of the 2014 SEET refund provision was done in 2016 and its effect of increasing the per-book earnings should be reported in AEP's 2016 financial statements.

[23] See Duann Direct Testimony at 9.

Q18. IS THE PRE-TAX $21.4 MILLION PART OF THE PER-BOOK EARNINGS REPORTED IN THE 2014 FINANCIAL STATEMENT OF AEP?

A18. No. The reversal of the 2014 SEET refund provision was not made until 2016. Consequently, the effect of increasing the per-book earnings as a result of the reversal cannot be recorded and reported in AEP's 2014 financial statements.

Q19. HAS THE PUCO MADE ANY DETERMINATION REGARDING AEP'S 2014 SEET APPLICATION, SPECIFICALLY THE AMOUNT OF SEET-ADJUSTED EARNINGS, SEET-ADJUSTED ROE, AND THE SEET ROE THRESHOLD?

A19. No. There is no factual basis to Mr. Allen's assertion that the pre-tax $21.4 million was already included in AEP's 2014 SEET-adjusted earnings. AEP's 2014 SEET Application, PUCO Case No. 15-1022-EL-UNC, was resolved and closed as a part of the Global Settlement approved by the PUCO on February 23, 2017. As part of the Global Settlement, AEP agreed to return to customers $20.3 million in significantly excessive earnings for its 2014 earnings. It is further noted in the Global Settlement that the resolution of the 2014 SEET proceeding is for purpose of settlement only and without any precedential effect, including as to the method used to calculate significantly excessive earnings.[24]

[24] See PUCO Case No. 15-1022-EL-UNC et al., Joint Stipulation and Recommendation at 12 (December 21, 2016).

Q20. DO YOU AGREE WITH AEP WITNESS ALLEN'S ASSERTION THAT THE PRE-TAX $22.8 MILLION PHASE-IN RECOVERY RIDER ("PIRR") EQUITY CARRYING CHARGE INCOME RECORDED IN 2016 SHOULD BE ALLOCATED TO PRIOR YEARS OF 2012 TO 2015 FOR SEET PURPOSES?

A20. No. Mr. Allen's assertion has no factual basis and this proposed adjustment to the AEP Ohio's 2016 earnings for excluding certain PIRR equity carrying charge income is unreasonable. First of all, the SEET proceedings for the years of 2012 to 2015 have closed and it is irrelevant to argue what would happen if the incremental PIRR equity carrying charge incomes were recorded and included in the SEET filings of prior years. As discussed in my Direct Testimony, these pre-tax incremental PIRR equity carrying charges of $22.8 million were never recorded in the per-book earnings for the years of 2012 to 2015.[25] Similarly, these pre-tax incremental PIRR equity carrying charges were never included in the SEET-adjusted earnings for the years of 2012 to 2015.[26] If AEP's proposed adjustment (or exclusion) regarding the incremental PIRR carrying charges were adopted, it would shift earnings from one period subject to SEET review (2016) to other periods not subject to SEET review (2012 to 2015). In doing so, AEP's SEET-adjusted earnings in 2016 will be unnecessarily and unfairly decreased. So is the amount of potential SEET refund to AEP's customers. In a sense, if AEP's proposed adjustment to its 2016 earnings were adopted, this pre-tax $22.8 million

[25] See Duann Direct Testimony at 10.

[26] Id.

earnings recorded in 2016 would simply disappear and it would not be subject to the SEET review in any year. This is unreasonable and should not be allowed by the PUCO.

Q21. DO YOU AGREE WITH AEP WITNESS ALLEN'S ASSERTION THAT REVERSAL OF THE 2014 SEET REFUND PROVISION AND THE INCREMENTAL PIRR EQUITY CARRYING CHARGE RECORDED IN 2016 SHOULD BE CONSIDERED AS "NON-RECURRING, SPECIAL AND EXTRAORDINARY ITEMS" AND BE EXCLUDED FROM SEET INCOME?

A21. No. Mr. Allen provides no explanation why these two earning items should be considered as "non-recurring, special and extraordinary." Mr. Allen's assertion is also very peculiar in the sense that these two proposed adjustments should be considered as "non-recurring, special and extraordinary" items for the year 2016 and be excluded for the 2016 SEET, but they are considered not as "non-recurring, special and, extraordinary" items in the years of 2012 to 2015 and being included in those SEET proceedings retroactively and after the closing of these earlier SEET proceeding. Mr. Allen's statement is illogical.

The truth of the matter is that these two items of earnings recorded in 2016 are the direct result of the regular, continuing, and recurring rates (riders) and terms (commonly referred to as "adjustments" in R.C. 4928.143(F)) approved in an ESP. Consequently, the earnings resulting from these ESP adjustments must be part of the 2016 SEET income (earnings) subject to the annual SEET review. To do otherwise would be to encourage AEP to shift earnings from one period (subject to SEET review) to other periods (not subject to SEET review). This will unreasonably and unjustly frustrate the General Assembly's intent to protect customers from paying for significantly excessive earnings under a utility's electric security plan.

Q22. DO YOU SUPPORT THE SEET ROE THRESHOLD OF 16.08% PROPOSED BY THE PUCO STAFF IN THIS PROCEEDING?

A22. No. I do not support this SEET ROE threshold of 16.08% proposed by PUCO Staff witness, Joseph P. Buckley, in his prefiled testimony of January 16, 2018.[27] I believe this Staff-proposed SEET ROE threshold overstates the level of ROE that should be considered as significantly excessive for AEP in 2016. It is unreasonable to use this very high SEET ROE threshold of 16.08% to determine if AEP has significantly excessive earnings in 2016.

[27] See 2016 AEP SEET Case, Prefiled Testimony of Joseph P. Buckley at 4-5 (January 16, 2018).

Q23. WHY DO YOU BELIEVE THIS PUCO STAFF-PROPOSED SEET ROE THRESHOLD OF 16.08% IS OVERSTATED AND WOULD UNREASONABLY REDUCE THE POTENTIAL REFUND TO CUSTOMERS?

A23. I have no objection to Mr. Buckley's use of the publicly traded companies in the Select Sector Fund SPDR ("XLU" or the Comparable Group") and the use of the 95% confidence interval (corresponding to the use of 1.64 standard deviation).

Mr. Buckley also indicates, however, that he wants to remove three companies with an ROE deviated from the average ROEs of the Comparable Group by more than 400 percent.[28] The three companies removed by the PUCO Staff in his analysis were AES, FirstEnergy, and NRG Energy. Mr. Buckley provided no explanation why the 400 percent cut off was selected other than saying the three companies should not be considered comparable.[29] Based on this selected Comparable Group, Mr. Buckley calculated an average ROE of 8.67%, a standard deviation of 4.52%, and a proposed SEET ROE threshold of 16.08%.[30]

I believe that, even with the removal of the three companies with unusual and volatile earnings in 2016, the standard deviation of 4.52% as calculated by Mr. Buckley from the selected comparable group is still overstated. Specifically, by

[28] Id.

[29] Id.

[30] See 2016 AEP SEET Case, Prefiled Testimony of Buckley at 5.

using the high standard deviation of 4.52%, the Staff-proposed SEET ROE threshold (16.08%) is approximately 85% higher than the average ROE (8.67%) of the Comparable Group. This adder of 85% is much higher than the adder of 50% to 60% adopted by the PUCO in developing the SEET ROE threshold in the past.

In order to reduce the extremely high variability of the selected Comparable Group, I believe another company, Entergy Corp., with a net loss of $583,618,000 and an ROE of -6.73% in 2016, should also be excluded from the Comparable Group. It is unreasonable to include a company, such as Entergy Corp., with an ROE of -6.73% in the comparable group for a regulated utility such as AEP with an ROE higher than 16% in 2016.

When a more representative and comparable sample is used, the average ROE and the standard deviation of the ROEs of the Comparable Group will be reduced. Then a reasonable SEET ROE can be calculated from this new selected Comparable Group. I have made this calculation based on a comparable group that excluded the four companies (AES, FirstEnergy, NRG Energy, and Entergy Corp.) in my Direct Testimony.[31] My calculation would indicate an average ROE of 10.30%, a standard deviation of 2.65%, and an SEET ROE threshold of 14.65%.

[31] See Duann Direct Testimony at 18-19.

Q24. BASED ON YOUR RECOMMENDATION OF A SEET ROE THRESHOLD OF 14.65% AND AEP'S 2016 SEET-ADJUSTED ROE OF 16.23%, HOW MUCH MONEY SHOULD BE RETURNED TO AEP'S CUSTOMERS BASED ON THE SIGNIFICANTLY EXCESSIVE EARNINGS MADE BY AEP IN 2016?

A24. As discussed in detail in my Direct Testimony,[32] AEP did have significantly excessive earnings in 2016 because it had a SEET-adjusted ROE of 16.23%, which exceeded the OCC-proposed SEET ROE Threshold of 14.59%. My calculation also indicates that AEP should refund its customers approximately $53 million for its significantly excessive earnings in 2016. Based on my calculation, AEP would have a SEET-adjusted net income of $337,599,000 and an average SEET-adjusted shareholders' equity of $2,079,767,830 in 2016. The allowed earnings at the OCC-proposed SEET ROE Threshold of 14.59% would be $303,438,126.[33] A comparison of the SEET-adjusted net income with the allowed earnings indicates that AEP would have excessive earnings of $34,160,874 in 2016.[34] The pre-tax revenue collection that should be returned to customers, assuming an effective tax rate of 35.69%, would be $53,119,070.[35] This is the amount of money that should be returned to customers through a credit on their

[32] See Duann Direct Testimony at 22-24.

[33] $303,438,126 = $2,079,768,000 * 0.1459.

[34] $34,160,874 = $337,599,000 – $303,438,126.

[35] $53,119,070 = $34,160,874 / (1 – 0.3569).

bills. The calculation of the refund to customers is summarized in Table 3 of my Direct Testimony.

Q25. DOES THIS CONCLUDE YOUR TESTIMONY?

A25. Yes. However, I reserve the right to supplement my testimony in the event that additional testimony is filed, or if new information or data in connection with this proceeding becomes available.

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Testimony of Daniel J. Duann, Ph.D. In Opposition to the Stipulation on Behalf of the Office of the Ohio Consumers' Counsel,* was served via electronic transmission to the persons listed below on this 23th day of March 2018.

/s/ William J. Michael
William J. Michael
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On Behalf of
The Office of the Ohio Consumers' Counsel
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January 12, 2018

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I. INTRODUCTION

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

A1. My name is Daniel J. Duann. My business address is 65 East State, 7th Floor, Columbus, Ohio, 43215-4213. I am a Principal Regulatory Analyst with the Office of the Ohio Consumers' Counsel ("OCC").

Q2. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE AND EDUCATIONAL BACKGROUND.

A2. I joined OCC in January 2008 as a Senior Regulatory Analyst. I was promoted to my current position in November 2011. My primary responsibility is to assist OCC by participating in regulatory proceedings before the Public Utilities Commission of Ohio ("PUCO"). These proceedings include rate cases, cost of capital, alternative regulation, fuel cost recovery, standard service offer, and other types of cases filed by Ohio's electric, gas, and water utilities.

I was a Utility Examiner II in the Forecasting Section of the Ohio Division of Energy, Ohio Department of Development, from 1983 to 1985. The Forecasting Section was later transferred to the PUCO. From 1985 to 1986, I was an Economist with the Center of Health Policy Research at the American Medical Association in Chicago. In late 1986, I joined the Illinois Commerce Commission as a Senior Economist at its Policy Analysis and Research Division. From 1987 to 1995, I was employed as a Senior Institute Economist at the National

Regulatory Research Institute ("NRRI") at The Ohio State University. NRRI has been a policy research center funded by state public utilities commissions since 1976. NRRI is currently located in Silver Spring, Maryland and is no longer a part of The Ohio State University. My work at NRRI involved research, authoring publications, and public services in many areas of utility regulation and energy policy. I was an independent consultant from 1996 to 2007.

I received my Ph.D. degree in Public Policy Analysis from the Wharton School, University of Pennsylvania. I also have an M.S. degree in Energy Management and Policy from the University of Pennsylvania, and an M.A. degree in Economics from the University of Kansas. I completed my undergraduate study in Business Administration at the National Taiwan University, Taiwan, Republic of China. I have been a Certified Rate of Return Analyst by the Society of Utility and Regulatory Financial Analysts since 2011.

Q3. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY OR TESTIFIED BEFORE THE PUBLIC UTILITIES COMMISSION OF OHIO?

A3. Yes. I have submitted expert testimony or testified on behalf of the OCC before the PUCO in a number of cases. A list of these cases is included in Attachment DJD-1.

Q4. HAVE YOU PREVIOUSLY TESTIFIED BEFORE OTHER REGULATORY AGENCIES AND LEGISLATURES?

A4. Yes. I have testified before the Illinois Commerce Commission and the California State Legislature (Senate) on the restructuring and deregulation of electric utilities.

II. PURPOSE AND RECOMMENDATION

Q5. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A5. The purpose of my testimony is to explain and support OCC's position regarding the 2016 Significantly Excessive Earnings Test ("SEET") Application ("Application") and supporting testimonies filed by Ohio Power Company ("AEP") on May 15, 2017.[1]

Q6. PLEASE SUMMARIZE YOUR RECOMMENDATION?

A6. Based on my review of the Application and testimonies filed by AEP and other relevant material, I recommend the following:

(1) the PUCO not accept Adjustment 2 (June 2016 Reversal of 2014

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[1] See *In the Matter of the Application of Ohio Power Company for Administration of the Significantly Excessive Earnings Test for 2016 Under Section 4928.143(F), Revised Code, and Rule 4901:1-35-10, Ohio Administrative Code*, PUCO Case No. 17-1230-EL-UNC (May 15, 2017).

(2) SEET Provision)[2] and Adjustment 3 (PIRR[3] Equity Carrying Charges)[4] proposed by AEP in calculating its SEET-adjusted Return on Equity ("ROE");

(3) the PUCO accept the removal of an after-tax effect of the provision for 2016 SEET refund[5] and Adjustment 1 (Net Impact of the December 2016 Global Settlement Provision)[6] proposed by AEP, and find that AEP has a SEET-adjusted ROE of 16.23% in 2016[7];

(4) the PUCO adopt a SEET ROE Threshold of 14.59% for AEP based on the 2016 ROEs earned by a comparable group of companies[8]; and

(5) the PUCO find that AEP had significantly excessive earnings in 2016 based on a comparison of its SEET-adjusted ROE of 16.23% and the SEET ROE Threshold of 14.70%, and order AEP to provide a refund or a credit to customers of approximately $53 million.[9]

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[2] See Direct Testimony of Tyler H. Ross at 10 (May 15, 2017).

[3] "PIRR" refers to the Phase-In Recovery Rider that was approved by the PUCO for AEP in the form of a non-bypassable rider for the recovery of accumulated deferred fuel costs including carrying costs in the first ESP case.

[4] See Direct Testimony of Ross at 11-12.

[5] See Direct Testimony of Ross at 4-5.

[6] See Direct Testimony of Ross at 6-10.

[7] A detailed discussion of the calculation of the 2016 SEET-adjusted ROE of AEP is included later in my testimony.

[8] More discussion on this OCC-proposed SEET ROE Threshold is provided later in my testimony.

[9] More discussion on the calculation of this amount of SEET refund to AEP's customers is provided later in my testimony.

III. CALCULATION OF AEP's 2016 SEET-ADJUSTED RETURN ON EQUITY

Q7. PLEASE EXPLAIN HOW THE ANNUAL SEET REVIEW PROTECTS CUSTOMERS FROM PAYING TOO MUCH IN ELECTRIC SECURITY PLAN RATES.

A7. As envisioned by the Ohio General Assembly, the annual SEET review provides an important and essential safeguard to protect Ohio's electricity customers from unwarranted charges. The annual SEET review is intended to ensure that any significantly excessive earnings resulting from an Electric Security Plan ("ESP") will be returned to customers who paid these excessive charges in the first place.[10] The annual SEET review is a customer protection tool that the PUCO is required to use to correct a prior ESP decision that resulted in significantly excessive earnings received by the regulated electric utility.

Furthermore, the annual SEET review examines the total ("in the aggregate") earnings of a regulated electric utility regarding all the rates, service terms, and conditions approved in an ESP.[11] The SEET review is not an examination of the earnings from one specific provision, such as a rate increase, a new rider, or a

[10] See R.C. 4928.143(F). Specifically, (if a utility's ESP resulted in "significantly excessive earnings," the PUCO "shall require the electric distribution utility to return to customers the amount of the excess by prospective adjustments").

[11] See R.C. 4928.143 (F). Specifically, (With regard to the provisions that are included in an electric security plan under this section, If the PUCO "finds that such adjustments, in the aggregate, did result in significantly excessive earnings").

deferral, approved under an ESP -- even if such earnings can be determined. In reality, it would be difficult, if not impossible, to identify and quantify the earnings of a specific individual ESP provision or the exact source of the money ("earnings") for the SEET refund. The SEET review is a comprehensive examination of regulated electric utility profits that result from implementing a PUCO-approved electric security plan.

Q8. WHAT ARE AEP'S 2016 PER-BOOK EARNINGS, SHAREHOLDERS' EQUITY, AND RETURN ON EQUITY?

A8. According to AEP, the per-book ("actual" or "reported") 2016 earnings is approximately $282,183,000 and the average common equity is approximately $2,052,060,000.[12] The 2016 per-book return on equity, as calculated by AEP, is 13.75%.[13]

Q9. WHAT ARE THE STEPS TAKEN BY AEP IN CALCULATING ITS 2016 SEET-ADJUSTED EARNINGS AND RETURN ON EQUITY?

A9. AEP takes several steps to adjust its per-book 2016 earnings and shareholders' equity for the purpose of applying the 2016 SEET. First, AEP removed the effect of a pre-tax provision of $58.3 million for potential 2016 SEET refund.[14] By recording this pre-tax $58.3 million provision for potential 2016 SEET refund,

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[12] See Direct Testimony of Ross, Exhibit THR-1, page 1 of 2.

[13] *Id.*

[14] See Direct Testimony of Ross at 4-5.

AEP's 2016 per-book earnings were reduced by approximately $37.5 million based on an Effective Tax rate of 35.69%.[15] For SEET purposes, this $37.5 million should be added back to the per-book earnings, and AEP has done so.[16]

After this removal of the provision of 2016 SEET refund, AEP proposed three additional adjustments to its per-book earnings of $319,705,000.[17] These three additional adjustments are:

(1) adding back $17,894,000 to the per-book earnings to account for the net impact of the December 2016 Global Settlement Provision that was recorded as losses in AEP's per-book earnings;[18]

(2) deducting $13,791,000 from the per-book earnings to account for the net impact related to the June 2016 Reversal of 2014 SEET Provision;[19] and

(3) deducting $14,694,000 from the per-book earnings to account for the net impact related to the incremental Phase-in Recovery Rider Equity Carrying Charges related to the years of 2012 to 2015.[20]

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[15] See Direct Testimony of Ross, Exhibit THR-1, page 1 of 2.

[16] See Direct Testimony of Ross at 4-5.

[17] See Direct Testimony of Ross, Exhibit THR-1, page 2 of 2. Specifically, $319,705,000 = $282,183,000 + $37,522,000.

[18] See Direct Testimony of Ross at 6-10.

[19] See Direct Testimony of Ross at 10.

[20] See Direct Testimony of Ross at 11-12.

Q10. WHAT ARE THE 2016 SEET-ADJUSTED EARNINGS AND RETURN ON EQUITY AS CALCULATED BY AEP?

A10. As a result of these steps and adjustments, AEP proposed an adjusted net income of $309,114,000, an adjusted average shareholders' equity of $2,065,526, and a SEET-adjusted return-on-equity of 14.97%.[21]

Q11. DO YOU AGREE WITH THE PROPOSED ADJUSTMENT OF $17,894,000 RELATED TO THE NET IMPACT OF SEVERAL PROVISIONS OF THE DECEMBER 2016 GLOBAL SETTLEMENT?

A11. Yes. I agree with the proposed adjustment related to the net impact of the December 2016 Global Settlement ("Global Settlement"). It is my understanding that AEP recorded an after-tax loss of approximately $17,894,000 as a result of the various provisions in the Global Settlement. Because the 2016 per-book net income was reduced by this recorded loss from the Global Settlement, the $17,894,000 should be added back to the per-book net income for SEET purposes. I have reviewed the explanations on the expense and income treatment of these provisions in AEP's regulatory filings, such as SEC Form 10-K and FERC Form 1. I have no objection to this particular adjustment related to the Global Settlement for 2016 SEET purposes.

[21] See Direct Testimony of Ross, Exhibit THR-1, page 2 of 2.

Q12. IS AEP'S PROPOSED ADJUSTMENT OF $13,791,000 RELATED TO THE JUNE 2016 REVERSAL OF THE 2014 SEET PROVISION REASONABLE?

A12. No. I do not believe this proposed reduction of $13,791,000 to the per-book earnings as a result of the June 2016 reversal of the 2014 SEET refund provision is necessary or reasonable for SEET purposes. The decision by AEP to record a provision for its 2014 SEET refund in 2014 and then reverse this provision in 2016 is essentially shifting part of its 2014 net income to its 2016 net income. As indicated by AEP witness Ross, all the SEET proceedings prior to 2016 are considered approved by the PUCO and cannot be re-opened at this time.[22] In this instance, this proposed adjustment related to the June 2016 reversal of the 2014 SEET refund provision is essentially allowing AEP to shift some earnings for SEET purposes from one period (2016), when AEP's earnings are subject to SEET, to another period (2014), when its earnings are no longer subject to SEET. This shifting of earnings from one time period to another results in the shielding of a portion of AEP's earnings from SEET review. This unjustified shielding of certain earnings from SEET review is unreasonable and decreases, unfairly, the SEET refund to customers.

[22] See Direct Testimony of Ross at 12.

Q13. IS AEP'S PROPOSED ADJUSTMENT RELATED TO THE INCREMENTAL PIRR EQUITY CARRYING CHARGE INCOME OF $14,694,000 FOR THE PERIOD OF 2012 THROUGH 2015 REASONABLE?

A13. No. I do not believe this proposed reduction to the 2016 per-book earnings for incremental PIRR equity carrying charge income "deferred" from prior years is necessary or reasonable for SEET purposes. The incremental PIRR equity carrying charge income of $14,694,000 (net-of-tax) related to the years 2012 through 2015, as calculated by AEP, should not be removed from the 2016 per-book earnings for SEET purposes. These PIRR equity carrying charge incomes of $14,694,000 were never recorded as per-book earnings in the years 2012 to 2015. Similarly, these PIRR equity carrying charge incomes of $14,694,000 were never included in the SEET-adjusted ROE calculations for the years 2012 to 2015. If they were also excluded in the 2016 earnings for SEET purposes, then these incremental PIRR equity carrying charge incomes essentially disappeared and never accounted for the earnings in any of the SEET proceedings from 2012 to 2016. This proposed adjustment would shift earnings from one period subject to SEET review to other periods not subject to SEET review, thus allowing these earnings to avoid SEET review altogether. These previously uncollected incremental PIRR equity carrying charges were collected in 2016. Because they cannot be flowed back to the earnings of AEP in prior years, these PIRR equity carrying charges collected in 2016 should be fully counted as part of the 2016 earnings for SEET purposes. Otherwise the SEET refund to customers is unfairly and unreasonably decreased, to customers' detriment.

Q14. WHAT WILL BE AEP'S 2016 SEET-ADJUSTED EARNINGS AND RETURN ON EQUITY IF THE PUCO DISALLOWS THESE TWO PROPOSED ADJUSTMENTS BY AEP?

A14. If the PUCO disallows the two proposed adjustments (Adjustment 2 and Adjustment 3) by AEP to its 2016 per-book earnings for SEET purposes, the 2016 SEET-adjusted earnings would be $337,599,000 (changed from the per-book earnings of $282,183,000) and SEET-adjusted average shareholder's equity would be $2,079,768,000 (changed from the per-book average shareholders' equity of $2,052,060,000). The resulting 2016 SEET-adjusted ROE would be 16.23%. The calculation of the 2016 SEET-adjusted ROE is summarized in Table 1.

Table 1
Calculation of 2016 SEET-Adjusted ROE.

	Net Income	Average Shareholders' Equity	Return on Equity
2016 Per-Book	$282,183,000	$2,052,060,000	13.75%
Addition for Removal of 2016 Preliminary SEET Provision	$37,522,000	$18,760,830	
Addition for Net Impact of December 2016 Global Settlement	$17,894,000	$8,947,000	
2016 SEET-Adjusted	$337,599,000	$2,079,767,830	16.23%

IV. RECOMMENDATION ON AEP'S 2016 SEET ROE THRESHOLD

Q15. WHAT IS THE SEET ROE THRESHOLD PROPOSED BY AEP IN ITS 2016 SEET APPLICATION?

A15. AEP proposed a 2016 SEET ROE Threshold of 17.69%.[23] This SEET ROE Threshold was calculated by AEP using the adjusted earnings and shareholders' equity information of the 28 companies included in the Utilities Select Sector SPDR.[24] According to AEP, the unweighted average ROE of these companies in 2016 was 10.69% with a standard deviation of 4.27%. Using a standard deviation multiplier of 1.64 that was used by the PUCO in the past, the proposed SEET ROE Threshold would be 17.69%.[25]

Q16. IS THIS SEET ROE THRESHOLD OF 17.69% REASONABLE TO USE TO PROTECT CUSTOMERS FROM PAYING FOR SIGNIFICANTLY EXCESSIVE EARNINGS?

A16. No. This SEET ROE Threshold of 17.69% proposed by AEP is not reasonable. This SEET ROE Threshold of 17.69% is approximately 70% higher than AEP's currently authorized return on equity of 10.20%.[26] It is approximately 65% higher

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[23] See Direct Testimony of William A. Allen at 5 and Exhibit WAA-1, page 1 of 1(May 15, 2017).

[24] Utilities Select Sector SPDR or SPDR Index is an index fund seeking to provide investment results that correspond generally to the price and yield performance of the Utilities sector of the S&P 500 Index. At the end of 2017, 28 companies are included in the SPDR Index.

[25] See Direct Testimony of Allen at 5 and Exhibit WAA-1, page 1 of 1. Specifically, 17.69% = 10.69% + 1.64 * 4.27%.

[26] See PUCO Case No. 11-351-EL-AIR et al., Joint Stipulation and Recommendation at 5 (November 23, 2011).

than the 2016 unweighted average ROE (10.69%), as calculated by AEP, of the comparable group of 28 companies.[27] This SEET ROE Threshold of 17.69% is simply too high to be effective in protecting the customers of AEP from paying unreasonable ESP rates. Further, this SEET ROE Threshold of 17.69% is based on flawed or questionable methodology and data that would have led to an inflated average ROE of 10.69%, and an excessively high standard deviation of 4.27% associated with the ROEs of the comparable group of companies.

Another indication of the unreasonableness of the SEET ROE Threshold of 17.69% is that AEP management had determined in February 2017 that a reasonable 2016 SEET ROE threshold would be 14.56%.[28] This 2016 SEET ROE Threshold used by AEP management in preparing its 2016 financial statements was based on an average ROE of 10.54% for the companies included in the SPDR Index with a standard deviation of 2.45% for the ROEs, and a 1.64 standard deviation multiplier.

Q17. HOW SHOULD THIS AEP-PROPOSED SEET ROE THRESHOLD BE MODIFIED TO PROTECT CUSTOMERS FROM PAYING FOR AEP'S SIGNIFICANTLY EXCESSIVE EARNINGS?

A17. There are two issues related to the methodology and data used by AEP in supporting the SEET ROE Threshold of 17.69%. One is the measurement of the

[27] See Direct Testimony of Allen at 5 and Exhibit WAA-1, page 1 of 1.

[28] See Ohio Power Company's Response to OCC RPD 2-003 at 5-6, attached here as Attachment DJD-5.

average ROE. The other one is the volatility of the 2016 earnings and ROEs of those companies included in the comparable group. Regarding the measurement of the average ROE, AEP calculated an average ROE based on the simple average of the ROEs of those companies, irrespective of the size (as measured by average shareholders' equity) of the companies in the comparable group. Others, including the PUCO Staff, have calculated the average ROE of the comparable group as the equity-weighted average ROE. In other words, the ROE of an individual company in the comparable group is weighted by the amounts of shareholders' equity of the individual companies in the comparable group.

Regarding the volatility of the reported earnings and ROEs of the individual companies included in the comparable group, AEP might try to address this issue by using adjusted earnings (instead of per-book earnings) that eliminated the effects of restructuring in the calculation of returns on equity. However, this approach does not necessarily reduce the volatility of the ROEs to the extent of providing a reasonable SEET ROE Threshold. I believe a proper approach in addressing this issue of volatility is to exclude those companies that were involved in significant restructuring activities in 2016 and with unusually large losses (thus negative ROEs) from the comparable group in calculating the ROEs and the standard deviation of these ROEs. Otherwise, the comparable group may not represent companies that face comparable business and financial risks to that of a regulated electric utility, as the statutory test requires.

Q18. PLEASE EXPLAIN WHY THE EQUITY-WEIGHTED AVERAGE ROE INSTEAD OF THE UNWEIGHTED AVERAGE ROE SHOULD BE USED IN SETTING THE SEET ROE THRESHOLD?

A18. As discussed earlier, in calculating the average ROE of the comparable group, the ROE of the individual companies should be weighted by the shareholders' equity of individual companies. Expressed another way, the average ROE of the comparable group should be calculated by the sum of the earnings (or net incomes) divided by the sum of the average shareholders' equity. This method of calculating the average ROE of the comparable group is a more representative and accurate approach than using the simple average of the ROEs of the individual companies. As weighted by shareholders' equity, the resulting average ROE is less likely to be distorted by including the ROEs of some small companies in the comparable group. At the same time, the equity-weighted average ROE tends to be closer to the median ROE of the comparable group of companies.

This methodology of calculating the average ROE weighted by shareholders' equity has been used consistently by the PUCO Staff in previous SEET proceedings such as the 2010 SEET Applications by Ohio Power and Columbus Southern Power in PUCO Case Nos. 11-4571-EL-UNC et al. This approach is also used by the PUCO Staff and FirstEnergy in their analysis of the average ROE of the comparable group in FirstEnergy's 2016 SEET Application.[29]

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[29] See PUCO Case No. 17-0993-EL-UNC, specifically the Prefiled Testimony of Joseph P. Buckley (December 8, 2017) and the Direct Testimony of Joanne M. Savage (May 15, 2017).

Q19. PLEASE EXPLAIN WHY CERTAIN COMPANIES THAT HAD SUBSTANTIAL RESTRUCTURING ACTIVITIES IN 2016 SHOULD BE EXCLUDED FROM THE COMPARABLE GROUP IN CALCULATING THE AVERAGE ROE AND THE STANDARD DEVIATION OF THE ROE.

A19. There are at least four companies in the Utilities Select Sector SPDR (the comparable group) that were involved in significant restructuring activities in 2016. They all exhibited unusual fluctuations in earnings and shareholders' equity from 2015 to 2016. These four companies are FirstEnergy Corp., Entergy Corp., AES Corp., and NRG Energy. In 2016, they all posted either unusually large accounting losses[30] or significant decreases or increases in shareholders' equity[31] due to restructurings.

Some fluctuations in the earnings and shareholders' equity of individual companies in the comparable group in a particular year can be expected. But it is clear that the earnings and shareholders' equity of these four companies in 2016 are not the result of their normal operations. Given the very large amounts of restructuring-related charges, write-offs, and possibly other accounting adjustments, there would be increased and unusually large volatility of reported

[30] Specifically, FirstEnergy Corp. had a net loss of $6,177 million in 2016, Entergy Corp. had a net loss of $584 million, AES Corp. a net loss of $1,130 million, and NRG Energy a net loss of $774 million. See PUCO Case No. 17-0993-EL-UNC, Prefiled Testimony of Buckley, Attachment 1.

[31] Id. Specifically, the shareholders' equity of FirstEnergy Corp. has decreased from $12,421 million in 2015 to $6,241 million in 2016, Entergy Corp. decreased from $9,257 million to $8,082 million while AES Corp. has increased from $319 million to $2,794 million and NRG Energy increased from $2,707 million to $6,241 million.

and adjusted earnings (which already removed some effects of the restructuring activities), shareholders' equity, and resulting ROEs associated with these four companies. If the earnings and ROEs of these four companies are not excluded from the analysis, there could be substantial and unwarranted distortions of the average ROE and the standard deviation of the ROEs. The 2016 operational and financial results as reported by or adjusted further for these four companies do not necessarily represent the operational and financial results of those companies that face business and financial risk that is comparable to what AEP faces.

As discussed earlier, AEP might try to address this issue of earnings and ROE volatility by using the Non-GAAP Income (which would remove the effects of the restructuring activities) rather than the per-book income (which would fully reflect the financial impacts of restructuring) in calculating the ROEs of the comparable group and the associated standard deviation. Nevertheless, the use of non-GAAP income by AEP might not completely eliminate the distortions in the 2016 reported or adjusted earnings caused by restructuring. This is demonstrated by the fact that the resulting standard deviation of 4.27% as calculated by AEP (using adjusted non-GAAP net income) is still unreasonably high for the purpose of setting a reasonable SEET ROE threshold.

In addressing this issue of unreasonably high volatility of earnings and ROEs, it is not unusual to remove one or more companies from a comparable group in order to derive more reasonable average ROEs and standard deviation. For example, FirstEnergy proposed to remove two companies (NRG and AES) from the comparable group when calculating its proposed 2016 SEET ROE Threshold.[32] In the same case, the PUCO Staff removed three companies (AES, FirstEnergy, and NRG Energy) from the comparable group in calculating its proposed SEET ROE Threshold in the 2016 FirstEnergy SEET case.[33] Removing these anomalies from the comparable group is to assure that the comparison of earnings that is being made truly does represent companies that face business and financial risk that is comparable to what AEP faces.

Q20. WHAT WOULD BE THE PROPOSED SEET ROE THRESHOLD IF YOUR MODIFICATIONS TO AEP'S ANALYSIS WERE IMPLEMENTED?

A20. In order to select a more reasonable SEET ROE Threshold in this proceeding, I propose two modifications to the analysis set forth by AEP.[34] AEP's original calculation is summarized in Attachment DJD-2, page 1 of 2. First, I propose to use the shareholders' equity-weighted average ROE instead of the unweighted average ROE. Second, I propose to exclude four companies (AES Corporation, NRG Energy, FirstEnergy Corporation, and Entergy Corporation) that have significant restructuring activities (and consequently with volatile earnings and ROEs in 2016) from the group of comparable companies.

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[32] See PUCO Case No. 17-0993-EL-UNC, Direct Testimony of Savage, Schedule JMS-1, page 1 of 1.

[33] See PUCO Case No. 17-0993-EL-UNC, Prefiled Testimony of Buckley at 3-4.

[34] See Direct Testimony of Allen at 5 and Exhibit WAA-1, page 1 of 1.

If these four companies are excluded in the group of comparable companies, the equity-weighted average ROE for the remaining 24 companies would be 10.30%. This average ROE represents a very small change from the result of 10.40% of the original AEP analysis. But, the standard deviation of the ROEs would be reduced to 2.65% from the original AEP result of 4.27%. See Attachment DJD-2, page 2 of 2. The resulting SEET threshold would be 14.65%. This will be referred as OCC Modification 1.

Q21. HAVE YOU REVIEWED THE RESULTS OF OTHER ANALYSIS IN RECOMMENDING A SEET ROE THRESHOLD FOR AEP?

A21. Yes. In addition to the PUCO's decisions in previous SEET proceedings, I have reviewed the testimonies by the PUCO Staff and FirstEnergy on the proposed SEET ROE Threshold for FirstEnergy's 2016 SEET Application in PUCO Case No. 17-993-EL-UNC. The results of the analysis by the PUCO Staff and FirstEnergy in the 2016 FirstEnergy SEET case are relevant to this proceeding for various reasons. First, the analysis of the PUCO Staff and FirstEnergy in that case is based largely from the same group of 28 companies (Utilities Select Sector SPDR) with essentially the same or similar 2016 information in shareholder's equity and reported or adjusted net income. Second, the methodologies used by the PUCO Staff and FirstEnergy in the 2016 FirstEnergy SEET Application are similar to some of those methodologies adopted by the PUCO in past SEET proceedings. These methodologies, as well as those methodologies proposed by

AEP and OCC in this proceeding, are likely to be carefully reviewed and considered by the PUCO.

According to the filings in the 2016 FirstEnergy SEET Case, FirstEnergy calculated the equity-weighted average ROE in 2016 of the comparable group of companies is 10.25% with a standard deviation of 2.77%.[35] The 2016 SEET ROE Threshold proposed by FirstEnergy for its 2016 SEET Application is 14.79%. See Attachment DJD-3.

Q22. WHAT WOULD BE THE RESULTING SEET ROE THRESHOLD FOR AEP IF THE PUCO STAFF'S ANALYSIS IN FIRSTENERGY'S 2016 SEET APPLICATION WERE MODIFIED?

A22. Regarding the analysis done by the PUCO Staff in the 2016 FirstEnergy SEET Application, the PUCO Staff uses the per-book Net Income (including the full effects of restructuring activities) in calculating the equity-weighted average ROE. The PUCO Staff also excluded three companies, FirstEnergy Corp., AES Corp., and NRG Energy, from its calculation due to their volatile earnings in 2016. The average ROE for the remaining 25 companies is 8.67% with a standard deviation of 4.52%.[36] The resulting SEET ROE Threshold proposed by the PUCO Staff in that case is 16.08%. See Attachment DJD-4, page 1 of 2.

[35] See PUCO Case No. 17-0993-EL-UNC, Direct Testimony of Savage, Schedule JMS-1, page 1 of 1.

[36] See PUCO Case No. 17-0993-EL-UNC, Prefiled Testimony of Buckley at 3-4.

The PUCO Staff's analysis should be modified because it still includes one company, Entergy Corp., that had an unusually large reported loss of \$583,618,000, an approximately \$1.2 billion reduction in shareholder's equity, and a negative ROE of -6.73% in 2016.[37] The inclusion of Entergy Corp. in the comparable group would significantly distort the average ROE and the standard deviation of the ROEs. If Entergy Corp. is excluded in the comparable group and if the per-book net income is still being used in calculating the ROE, the equity-weighted average ROE of the 24 companies would be 9.13% with a standard deviation of 3.30%. The resulting SEET ROE Threshold is 14.53%. See Attachment DJD-4, page 2 of 2. This will be referred to as OCC Modification 2.

Q23. WHAT SEET ROE THRESHOLD DO YOU RECOMMEND REGARDING AEP'S 2016 SIGNIFICANTLY EXCESSIVE EARNINGS TEST?

A23. I recommend a SEET ROE Threshold of 14.59% for AEP in this proceeding. This level of SEET ROE Threshold is the average of the OCC Modification 1 (14.65%) and the OCC Modification 2 (14.53%). This proposed SEET ROE Threshold of 14.59% represents a careful balance of protecting customers from paying unreasonable charges and of ensuring AEP an opportunity of earning a more than reasonable return. A summary of the SEET ROE Thresholds under various analyses is provided in Table 2.

[37] See PUCO Case No. 17-0993-EL-UNC, Prefiled Testimony of Buckley, Attachment 1.

Table 2
A Summary of Proposed SEET ROE Thresholds

Proposed By	**Companies Excluded**	**Weighted Average ROE**	**Unweighted Average ROE**	**Standard Deviation**	**Multiplier**	**ROE Adder**	**SEET ROE Thresholds**
AEP in AEP SEET Case	None		10.69%	4.27%	1.64	7%	17.69%
OCC Modification 1	AES, NRG, FE, ETR	10.30%		2.65%	1.64	4.35%	14.65%
PUCO Staff in FE SEET Case	AES, NRG, FE	8.67%		4.52%	1.64	7.41%	16.08%
OCC Modification 2	AES, NRG, FE, ETR	9.13%		3.30%	1.64	5.40%	14.53%
FirstEnergy in FE SEET Case	AES, NRG	10.25%		2.77%	1.64	4.54%	14.79%
OCC Recommendation							**14.59%**

V. PROPOSED REFUND OR CREDIT TO AEP'S CUSTOMERS

Q24. DID AEP HAVE SIGNIFICANTLY EXCESSIVE EARNINGS AS A RESULT OF THE ELECTRIC SECURITY PLAN RATES PAID FOR BY CUSTOMERS IN 2016?

A24. Yes. Based on my calculation, AEP did have significantly excessive earnings in 2016 because it had a SEET-adjusted ROE of 16.23%, which exceeded the OCC-proposed SEET ROE Threshold of 14.59%. In addition, this SEET-adjusted ROE of 16.23% is approximately 59% higher than AEP's currently authorized return on equity of 10.20%. It is approximately 58% higher than the 2016 equity-weighted average ROE (10.30%), as calculated by OCC, of the comparable group of 24 companies without significant restructuring activities in 2016. Although

AEP claimed that it did not have significantly excessive earnings in 2016, there is no plausible or reasonable explanation provided by AEP to support that claim.

Q25. HOW MUCH MONEY SHOULD BE RETURNED TO AEP'S CUSTOMERS BASED ON THE SIGNIFICANTLY EXCESSIVE EARNINGS MADE BY AEP IN 2016?

A25. My calculation indicates that AEP should refund its customers approximately $53 million for its significantly excessive earnings in 2016. AEP would have a SEET-adjusted net income of $337,599,000 and an average SEET-adjusted shareholders' equity of $2,079,767,830 in 2016. The allowed earnings at the OCC-proposed SEET ROE Threshold of 14.59% would be $303,438,126.[38] A comparison of the SEET-adjusted net income with the allowed earnings indicates that AEP would have excessive earnings of $34,160,874 in 2016.[39] The pre-tax revenue collection that should be returned to customers, assuming an effective tax rate of 35.69%, would be $53,119,070.[40] This is the amount of money that should be returned to customers through a credit on their bills. The calculation of the refund to customers is summarized in Table 3.

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[38] $303,438,126 = $2,079,768,000 * 0.1459.

[39] $34,160,874 = $337,599,000 – $303,438,126.

[40] $53,119,070 = $34,160,874 / (1 – 0.3569).

Table 3
Calculation of Refund to Customers

SEET-adjusted Net Income	(1)	$337,599,000
SEET-adjusted Average Equity	(2)	$2,079,767,830
SEET ROE Threshold	(3)	14.59%
Net Income at ROE Threshold	(4) = (2) * (3)	$303,438,126
Excessive Net Income	(5) = (1) – (4)	$34,160,874
Effective Tax Rate	(6)	35.69%
Tax Gross-up Factor	(7) = 1/(1– (6))	1.554968123
Pre-tax Revenue	(8) = (5) * (7)	$53,119,070

Q26. DOES AEP PROPOSE ANY EXCLUSION TO THE REFUND OR CREDIT TO CUSTOMERS AS A RESULT OF ITS SIGNIFICANTLY EXCESSIVE EARNINGS IN 2016?

A26. Yes. AEP proposes that "If the Commission determines in this proceeding that AEP Ohio's 2016 SEET earnings exceed the SEET threshold, the Commission should allow AEP Ohio to retain the first $31.2 million (pre-tax) of earnings that are attributable to EE/PDR (energy efficiency and peak demand reduction) program shared savings . . . ."[41]

[41] See Direct Testimony of Allen at 6.

Q27. SHOULD THIS REQUEST BY AEP FOR EXCLUDING SHARED SAVINGS OF $31.2 MILLION FROM A SEET REFUND TO CUSTOMERS BE ADOPTED BY THE PUCO?

A27. No. This request for excluding such a large amount of money resulting from the 2016 significantly excessive earnings by AEP from being returned to customers is unreasonable. First of all, AEP's EE/PDR rider was approved as part of its ESP case.[42] Because it is a part of a previously-approved ESP and customers paid for the program costs through rates, the EE/PDR is definitely an ESP adjustment contemplated under Ohio Revised Code 4928.143(F). There is no valid reason to exclude the earnings from the EE/PDR from the SEET consideration. Second, AEP's request does not benefit customers or the public interest. This request, by reducing the amount of funds available in returning to customers, dilutes or voids the customer protection intended by the Ohio General Assembly from unreasonable ESP rates and terms of service.

Q28. IS IT A SOUND REGULATORY POLICY TO EXCLUDE SHARED SAVINGS OF $31.2 MILLION FROM A SEET CUSTOMER REFUND?

A28. No. It is a bad regulatory policy for the PUCO to grant such a request by AEP. First, AEP's claim that it will have a diminished incentive for EE/PDR if such an exclusion of refund to customers is not granted demonstrates AEP's fundamental

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[42] See *In re Application of Ohio Power Co. for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Elec. Security Plan*, Case No. 13-2385-EL-SSO, Opinion & Order at 68 (Feb. 25, 2015).

misunderstanding of the purpose of SEET. The SEET refund to customers is a return of money collected for the overall excessive earnings, not the return of excessive earnings associated with any individual rate or rider. There is no such thing as a refund of earnings from the EE/PDR program. AEP's claim that a SEET refund would "claw back" the incentive for the EE/PDR program is simply unfounded and meritless.[43]

Second, there is no evidence that any SEET refund or credit to customers as a result of significantly excessive earnings will diminish or eliminate AEP's incentive to implement EE/PDR program. As an initial matter, including AEP's profits from EE/PDR programs in SEET refund could not possibly eliminate its incentive to implement EE/PDR programs because, as suggested by AEP's own witness, AEP is statutorily required to implement these programs.[44]

Further, it is clear to me that the "shared savings" of $31.2 million in 2016 alone from the EE/PDR program is pure profit to AEP. This is an enormous amount of profit, given the minimal risk that AEP faces in implementing energy efficiency programs. AEP collects from customers the costs of operating its EE/PDR program (administrative costs plus customer rebates). On top of that, AEP is

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[43] See Direct Testimony of Allen at 6 (May 15, 2017).

[44] See R.C. 4928.66(A)(1)(a) ("an electric distribution utility shall implement energy efficiency programs …").

allowed by the PUCO to collect "shared savings" which is utility profit as a result of the customers' participation in the EE/PDR program.

It should also be noted that, while AEP exceeded the SEET ROE Threshold in 2016, there is no guarantee that it will also have significantly excessive earnings in 2017, 2018 and future years. Therefore, it is very unlikely that AEP would cut back its future EE/PDR programs, which are very profitable and with minimal risk for AEP, based on the SEET refund in a single year of 2016.

Q29. DOES THIS CONCLUDE YOUR TESTIMONY?

A29. Yes. But I reserve the right to supplement my testimony in the event that additional testimony is filed, or if new information or data in connection with this proceeding becomes available.

CERTIFICATE OF SERVICE

I hereby certify that a true copy of the foregoing *Direct Testimony of Daniel J. Duann, Ph.D. on Behalf of the Office of the Ohio Consumers' Counsel* was served via electronic transmission to the persons listed below on this 12th day of January 2018.

/s/ William J. Michael
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Daniel J. Duann, Ph.D.
List of Testimonies Filed Before PUCO

1. *Application of The Dayton Power and Light Company for Approval of Its Electric Security Plan*, Case No. 08-1094-EL-SSO (January 26, 2009).

2. *Application of Ohio American Water Company to Increase Its Rates for Water and Sewer Service Provided to Its Entire Service Area*, Case No. 09-391-WS-AIR (January 4,2010).

3. *Application of Aqua Ohio, Inc. for Authority to Increase its Rates and Charges in its Masury Division*, Case No. 09-560-WW-AIR (February 22, 2010).

4. *Application of Aqua Ohio, Inc. for Authority to increase its Rates and Charges in its Lake Erie Division*, Case No. 09-1044-WW-AIR (June 21, 2010).

5. *In the Matter of the Fuel Adjustment Clauses for Columbus Southern Power Company and AEP Company*, Case Nos. 09-872-EL-FAC and 09-873-EL-FAC (August 16, 2010).

6. *In the Matter of the Application of Columbus Southern Power Company for Approval of an Electric Security Plan; an Amendment to its Corporate Separation Plan; and the Sale or Transfer of Certain Generating Asset (Remand)*, Case Nos. 08-917-EL-SSO et al (June 30, 2011).

7. *In the Matter of the Application of The East Ohio Gas Company d/b/a Dominion East Ohio for Approval of Tariffs to Modify and further Accelerate its Pipeline Infrastructure Replacement Program and to Recover the Associated Costs et al.*, Case Nos. 11-2401-GA-ALT and 08-169-GA-ALT (July 15, 2011).

8. *In the Matter of the Application of Columbus Southern Power Company and AEP Company for Authority to Establish a Standard Service Offer Pursuant to 4928.143, Ohio Rev. Code in the Form of an Electric Security Plan (ESP)*, Case Nos. 11-346-EL-SSO, et al (July 25,2011).

9. *In the Matter of the Application of Columbus Southern Power Company and AEP Company for Authority to Merge and Related Approval (ESP Stipulation)*, Case Nos. 10-2376-EL-UNC, et al (September 27, 2011).

10. *In the Matter of the 2010 Annual Filing of Columbus Southern Power Company and AEP Company Required by Rule 4901:1-35-10, Ohio Administrative Code,* Case Nos. 11-4571-EL-UNC and 11-4572-EL-UNC (October 12, 2011).

11. *In the Matter of the Application of Ohio American Water Company to Increase Its Rates for Water and Sewer Service Provided to Its Entire Service Area*, Case No. 11-4161-WS-AIR (March 1, 2012).

12. *In the Matter of the Application of Columbus Southern Power Company and AEP Company for Authority to Establish a Standard Service Offer Pursuant to 4928.143, Ohio Rev. Code in the Form of an Electric Security Plan (Modified ESP)*, Case Nos. 11-346-EL-SSO, et al (May 4, 2012).

13. *In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company For Authority to Establish a Standard Service Offer Pursuant to R.C. § 4928.143 in the Form Of an Electric Security Plan,* Case No. 12-1230-EL-SSO (May 21, 2012).

14. *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Electric Distribution Rates, et al.* Case Nos. 12-1682-EL-AIR (February 19, 2013).

15. *In the Matter of the Application of Duke Energy Ohio, Inc., for an Increase in Gas Rates,* Case Nos. 12-1685-GA-AIR, et al (February 25, 2013).

16. *In the Matter of the Application of Dayton Power & Light Company for Authority to Establish a Standard Service Offer in the Form Of an Electric Security Plan Pursuant to R.C. 4928.143,* Case No. 12-426-EL-SSO et al. (March 1, 2013).

17. *In the Matter of the Application of The Dayton Power and Light Company for Authority to Recover of Certain Storm-related Service Restoration Costs,* Case Nos. 12-3062-EL-RDR, et al. (January 31, 2014).

18. *In the Matter of the Application of The Dayton Power and Light Company for Authority to Recover of Certain Storm-related Service Restoration Costs,* Case Nos. 12-3062-EL-RDR, et al. (May 23, 2014).

19. *In the Matter of the Application of Aqua Ohio, Inc. to Increase Its Rates and Charges for Its Waterworks Service,* Case No. 13-2124-WW-AIR (August 4, 2014).

20. *In the Matter of the Application Seeking Approval of AEP Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Ride,* Case No. 14-1693-EL-RDR, et al. (September 11, 2015).

21. *In the matter of the Application of Duke Energy Ohio, Inc. for Approval of an Alternative Rate Plan Pursuant to R.C. 4929.05, Revised Code, for an Accelerated Service Line Replacement Program*, Case No. 14-1622-GA-ALT (November 6, 2015).

22. *In the Matter of the Application of Ohio Edison Company, The Cleveland Electric Illuminating Company, and The Toledo Edison Company for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.141 in the Form of an Electric Security Plan,* Case No. 14-1297-EL-SSO (June 22, 2016).

Calculation of Average ROE and Standard Deviation of Utilities Selector Sector SPDR (28 Companies)

Company	Symbol	2016 Non-GAAP Income	2016 Equity	2015 Equity	Average Equity	Return on Common Equity
NextEra	NEE	$2,912	$24,341	$22,574	$23,458	12.41%
Duke	DUK	$2,858	$41,033	$39,727	$40,380	7.08%
Southern	SO	$2,678	$24,758	$20,592	$22,675	11.81%
Dominion	D	$2,123	$14,605	$12,664	$13,635	15.57%
Exelon	EXC	$1,728	$25,837	$25,793	$25,815	6.69%
AEP	AEP	$2,078	$17,397	$17,892	$17,645	11.78%
PG&E	PCG	$1,393	$17,940	$16,576	$17,258	8.07%
Sempra	SRE	$1,465	$12,951	$11,809	$12,380	11.83%
Edison International	EIX	$1,311	$11,996	$11,368	$11,682	11.22%
PPL Corporation	PPL	$1,902	$9,899	$9,919	$9,909	19.19%
Consolidated Edison	ED	$1,245	$14,298	$13,052	$13,675	9.10%
Public Service Enterprise Group	PEG	$1,283	$13,130	$13,066	$13,098	9.80%
Xcel Energy Inc.	XEL	$1,123	$11,021	$10,601	$10,811	10.39%
WEC Energy Group Inc.	WEC	$939	$8,930	$8,655	$8,793	10.68%
DTE Energy Company	DTE	$868	$9,011	$8,772	$8,892	9.76%
Eversource Energy	ES	$942	$10,712	$10,352	$10,532	8.94%
FirstEnergy	FE	$928	$6,241	$12,422	$9,332	9.94%
Entergy Corporation	ETR	$1,293	$8,082	$9,257	$8,670	14.91%
American Water Works Company	AWK	$468	$5,218	$5,049	$5,134	9.12%
Ameren Corporation	AEE	$653	$7,103	$6,946	$7,025	9.30%
CMS Energy Corporation	CMS	$551	$4,253	$3,938	$4,096	13.45%
CenterPointEnergy Inc.	CNP	$432	$3,460	$3,461	$3,461	12.48%
SCANA Corporation	SCG	$595	$5,725	$5,443	$5,584	10.66%
Pinnacle West Capital Corporation	PNW	$442	$4,804	$4,584	$4,694	9.42%
Alliant Energy Corporation	LNT	$423	$3,862	$3,724	$3,793	11.15%
AES Corporation	AES	$609	$2,794	$3,149	$2,972	20.49%
NiSource Inc.	NI	$331	$4,071	$3,844	$3,958	8.36%
NRG Energy	NRG	-$104	$2,041	$2,707	$2,374	-4.38%
Total		$33,469	$325,513	$317,936	$321,725	10.40%
Unweighted Average ROE						10.69%
Median						10.52%
Standard Deviation						4.27%
Standard Deviation Multiplier						1.64
AEP SEET Threshold						17.69%

SOURCE: Direct Testimony of William A. Allen, Exhibit WAA-1, page 1 of 1.

Calculation of Average ROE and Standard Deviation of Utilities Selector Sector SPDR (26 Companies)

Company	Symbol	2016 Non-GAAP Income	2016 Equity	2015 Equity	Average Equity	Return on Common Equity
NextEra	NEE	$2,912	$24,341	$22,574	$23,458	12.41%
Duke	DUK	$2,858	$41,033	$39,727	$40,380	7.08%
Southern	SO	$2,678	$24,758	$20,592	$22,675	11.81%
Dominion	D	$2,123	$14,605	$12,664	$13,635	15.57%
Exelon	EXC	$1,728	$25,837	$25,793	$25,815	6.69%
AEP	AEP	$2,078	$17,397	$17,892	$17,645	11.78%
PG&E	PCG	$1,393	$17,940	$16,576	$17,258	8.07%
Sempra	SRE	$1,465	$12,951	$11,809	$12,380	11.83%
Edison International	EIX	$1,311	$11,996	$11,368	$11,682	11.22%
PPL Corporation	PPL	$1,902	$9,899	$9,919	$9,909	19.19%
Consolidated Edison	ED	$1,245	$14,298	$13,052	$13,675	9.10%
Public Service Enterprise Group	PEG	$1,283	$13,130	$13,066	$13,098	9.80%
Xcel Energy Inc.	XEL	$1,123	$11,021	$10,601	$10,811	10.39%
WEC Energy Group Inc.	WEC	$939	$8,930	$8,655	$8,793	10.68%
DTE Energy Company	DTE	$868	$9,011	$8,772	$8,892	9.76%
Eversource Energy	ES	$942	$10,712	$10,352	$10,532	8.94%
FirstEnergy	FE	$928	$6,241	$12,422	$9,332	9.94%
Entergy Corporation	ETR	$1,293	$8,082	$9,257	$8,670	14.91%
American Water Works Company	AWK	$468	$5,218	$5,049	$5,134	9.12%
Ameren Corporation	AEE	$653	$7,103	$6,946	$7,025	9.30%
CMS Energy Corporation	CMS	$551	$4,253	$3,938	$4,096	13.45%
CenterPointEnergy Inc.	CNP	$432	$3,460	$3,461	$3,461	12.48%
SCANA Corporation	SCG	$595	$5,725	$5,443	$5,584	10.66%
Pinnacle West Capital Corporation	PNW	$442	$4,804	$4,584	$4,694	9.42%
Alliant Energy Corporation	LNT	$423	$3,862	$3,724	$3,793	11.15%
NiSource Inc.	NI	$331	$4,071	$3,844	$3,958	8.36%
Total		$32,964	$320,678	$312,080	$316,379	10.42%
Unweighted Average ROE						10.89%
Median						10.52%
Standard Deviation						2.68%
Standard Deviation Multiplier						1.64
OCC SEET Threshold 1						14.81%

Calculation of Average ROE and Standard Deviation of Utilities Selector Sector SPDR (24 Companies)

Company	Symbol	2016 Non-GAAP Income	2016 Equity	2015 Equity	Average Equity	Return on Common Equity
NextEra	NEE	$2,912	$24,341	$22,574	$23,458	12.41%
Duke	DUK	$2,858	$41,033	$39,727	$40,380	7.08%
Southern	SO	$2,678	$24,758	$20,592	$22,675	11.81%
Dominion	D	$2,123	$14,605	$12,664	$13,635	15.57%
Exelon	EXC	$1,728	$25,837	$25,793	$25,815	6.69%
AEP	AEP	$2,078	$17,397	$17,892	$17,645	11.78%
PG&E	PCG	$1,393	$17,940	$16,576	$17,258	8.07%
Sempra	SRE	$1,465	$12,951	$11,809	$12,380	11.83%
Edison International	EIX	$1,311	$11,996	$11,368	$11,682	11.22%
PPL Corporation	PPL	$1,902	$9,899	$9,919	$9,909	19.19%
Consolidated Edison	ED	$1,245	$14,298	$13,052	$13,675	9.10%
Public Service Enterprise Group	PEG	$1,283	$13,130	$13,066	$13,098	9.80%
Xcel Energy Inc.	XEL	$1,123	$11,021	$10,601	$10,811	10.39%
WEC Energy Group Inc.	WEC	$939	$8,930	$8,655	$8,793	10.68%
DTE Energy Company	DTE	$868	$9,011	$8,772	$8,892	9.76%
Eversource Energy	ES	$942	$10,712	$10,352	$10,532	8.94%
American Water Works Company	AWK	$468	$5,218	$5,049	$5,134	9.12%
Ameren Corporation	AEE	$653	$7,103	$6,946	$7,025	9.30%
CMS Energy Corporation	CMS	$551	$4,253	$3,938	$4,096	13.45%
CenterPointEnergy Inc.	CNP	$432	$3,460	$3,461	$3,461	12.48%
SCANA Corporation	SCG	$595	$5,725	$5,443	$5,584	10.66%
Pinnacle West Capital Corporation	PNW	$442	$4,804	$4,584	$4,694	9.42%
Alliant Energy Corporation	LNT	$423	$3,862	$3,724	$3,793	11.15%
NiSource Inc.	NI	$331	$4,071	$3,844	$3,958	8.36%
Total		$30,743	$306,355	$290,401	$298,378	10.30%
Unweighted Average ROE						10.76%
Median						10.52%
Standard Deviation						2.65%
Standard Deviation Multiplier						1.64
OCC SEET Threshold 2						14.65%

Calculation of Average ROE and Standard Deviation of Utilities Selector Sector SPDR (26 Companies)

Symbol	Company	2015 Equity	2016 Equity	Average Equity	2016 Net Profit	Return on Common Equity
NEE	NextEra	22,574	24,341	23,458	2,687	11.45%
DUK	Duke	39,727	41,033	40,380	2,940	7.28%
SO	Southern	20,592	24,758	22,675	2,675	11.80%
D	Dominion	12,664	14,605	13,635	2,212	16.22%
AEP	AEP	17,892	17,397	17,645	2,074	11.75%
EXC	Exelon	25,793	25,837	25,815	1,739	6.74%
PCG	PG&E	16,576	17,940	17,258	1,431	8.29%
PPL	PPL Corporation	9,919	9,899	9,909	1,902	19.19%
SRE	Sempra	11,809	12,951	12,380	1,025	8.28%
PEG	Public Service Enterprise Group	13,066	13,130	13,098	1,400	10.69%
EIX	Edison International	11,368	11,996	11,682	1,422	12.17%
ED	Consolidated Edison	13,052	14,298	13,675	1,189	8.69%
XEL	Xcel Energy Inc.	10,601	11,021	10,811	1,123	10.39%
WEC	WEC Energy Group Inc.	8,655	8,930	8,793	940	10.69%
ES	Eversource Energy	10,352	10,712	10,532	940	8.93%
DTE	DTE Energy Company	8,772	9,011	8,892	868	9.76%
FE	FirstEnergy	12,421	6,241	9,331	765	8.20%
ETR	Entergy Corporation	9,257	8,082	8,670	1,250	14.42%
AWK	American Water Works Company	5,049	5,218	5,134	465	9.06%
AEE	Ameren Corporation	6,946	7,103	7,025	659	9.38%
CMS	CMS Energy Corporation	3,938	4,253	4,096	553	13.50%
SCG	SCANA Corporation	5,443	5,713	5,578	595	10.67%
CNP	CenterPointEnergy Inc.	3,461	3,460	3,461	432	12.48%
PNW	Pinnacle West Capital Corporation	4,584	4,804	4,694	435	9.27%
NI	NiSource Inc.	3,844	4,071	3,958	328	8.29%
LNT	Alliant Energy Corporation	3,724	3,862	3,793	374	9.86%
	Total	312,079	320,666	316,371	32,423	10.25%
	Unweighted Average ROE					10.67%
	Median					10.12%
	Standard Deviation					2.77%
	Standard Deviation Multiplier					1.64
	FirstEnergy SEET Threshold					14.79%

SOURCE: PUCO Case No. 17-0993-EL-UNC, Direct Testimony of Joanne M. Savage, Schedule JMS-1, page 1 of 1.

Calculation of Average ROE and Standard Deviation of Utilities Selector Sector SPDR (25 Companies)

Symbol	Company Name	Net Income ($000)	Equity 2016 ($000)	Equity 2015 ($000)	Average Common Equity ($000)	ROACE
NEE	NextEra	2,912,000	24,341,000	22,574,000	23,457,500	12.41%
DUK	Duke	2,152,000	41,033,000	39,727,000	40,380,000	5.33%
SO	Southern	2,448,000	24,758,000	20,592,000	22,675,000	10.80%
D	Dominion	2,123,000	14,605,000	12,664,000	13,634,500	15.57%
PCG	PG&E	1,393,000	17,940,000	16,576,000	17,258,000	8.07%
AEP	AEP	610,900	17,397,000	17,891,700	17,644,350	3.46%
EXC	Exelon	1,134,000	25,837,000	25,793,000	25,815,000	4.39%
SRE	Sempra	1,370,000	12,951,000	11,809,000	12,380,000	11.07%
EIX	Edison International	1,311,000	11,996,000	11,368,000	11,682,000	11.22%
PPL	PPL Corporation	1,902,000	9,899,000	9,919,000	9,909,000	19.19%
ED	Consolidated Edison	1,056,000	11,829,000	11,415,000	11,622,000	9.09%
PEG	Public Service Enterprise Group	887,000	13,130,000	13,066,000	13,098,000	6.77%
XEL	Xcel Energy Inc.	1,123,379	11,020,849	10,600,920	10,810,885	10.39%
WEC	WEC Energy Group Inc.	939,000	8,929,800	8,654,800	8,792,300	10.68%
ES	Eversource Energy	942,302	10,711,734	10,352,215	10,531,975	8.95%
DTE	DTE Energy Company	622,000	5,995,000	5,673,000	5,834,000	10.66%
AWK	American Water Works Company	468,000	5,218,000	5,049,000	5,133,500	9.12%
ETR	Entergy Corporation	-583,618	8,081,809	9,256,791	8,669,300	-6.73%
AEE	Ameren Corporation	653,000	7,103,000	6,946,000	7,024,500	9.30%
CMS	CMS Energy Corporation	551,000	4,253,000	3,938,000	4,095,500	13.45%
CNP	CenterPointEnergy Inc.	432,000	3,460,000	3,461,000	3,460,500	12.48%
PNW	Pinnacle West Capital Corporation	442,034	4,803,622	4,583,917	4,693,770	9.42%
SCG	SCANA Corporation	595,000	5,725,000	5,443,000	5,584,000	10.66%
LNT	Alliant Energy Corporation	371,500	3,862,000	3,724,100	3,793,050	9.79%
NI	NiSource Inc.	331,500	4,071,200	3,843,500	3,957,350	8.38%
	Total	26,185,997	308,951,014	294,920,943	301,935,979	8.67%
	Unweighted Average ROE					9.36%
	Median					9.79%
	Standard Deviation					4.52%
	Standard Deviation Multiplier					1.64
	Staff SEET Threshold in FE					16.09%

SOURCE: PUCO Case No. 17-0993-EL-UNC, Prefiled Testimony of Joseph P. Buckley, Attachment 1a.

Calculation of Average ROE and Standard Deviation of Utilities Selector Sector SPDR (24 Companies)

Symbol	Company Name	Net Income ($000)	Equity 2016 ($000)	Equity 2015 ($000)	Average Common Equity ($000)	ROACE
NEE	NextEra	2,912,000	24,341,000	22,574,000	23,457,500	12.41%
DUK	Duke	2,152,000	41,033,000	39,727,000	40,380,000	5.33%
SO	Southern	2,448,000	24,758,000	20,592,000	22,675,000	10.80%
D	Dominion	2,123,000	14,605,000	12,664,000	13,634,500	15.57%
PCG	PG&E	1,393,000	17,940,000	16,576,000	17,258,000	8.07%
AEP	AEP	610,900	17,397,000	17,891,700	17,644,350	3.46%
EXC	Exelon	1,134,000	25,837,000	25,793,000	25,815,000	4.39%
SRE	Sempra	1,370,000	12,951,000	11,809,000	12,380,000	11.07%
EIX	Edison International	1,311,000	11,996,000	11,368,000	11,682,000	11.22%
PPL	PPL Corporation	1,902,000	9,899,000	9,919,000	9,909,000	19.19%
ED	Consolidated Edison	1,056,000	11,829,000	11,415,000	11,622,000	9.09%
PEG	Public Service Enterprise Group	887,000	13,130,000	13,066,000	13,098,000	6.77%
XEL	Xcel Energy Inc.	1,123,379	11,020,849	10,600,920	10,810,885	10.39%
WEC	WEC Energy Group Inc.	939,000	8,929,800	8,654,800	8,792,300	10.68%
ES	Eversource Energy	942,302	10,711,734	10,352,215	10,531,975	8.95%
DTE	DTE Energy Company	622,000	5,995,000	5,673,000	5,834,000	10.66%
AWK	American Water Works Company	468,000	5,218,000	5,049,000	5,133,500	9.12%
AEE	Ameren Corporation	653,000	7,103,000	6,946,000	7,024,500	9.30%
CMS	CMS Energy Corporation	551,000	4,253,000	3,938,000	4,095,500	13.45%
CNP	CenterPointEnergy Inc.	432,000	3,460,000	3,461,000	3,460,500	12.48%
PNW	Pinnacle West Capital Corporation	442,034	4,803,622	4,583,917	4,693,770	9.42%
SCG	SCANA Corporation	595,000	5,725,000	5,443,000	5,584,000	10.66%
LNT	Alliant Energy Corporation	371,500	3,862,000	3,724,100	3,793,050	9.79%
NI	NiSource Inc.	331,500	4,071,200	3,843,500	3,957,350	8.38%
	Total	26,769,615	300,869,205	285,664,152	293,266,679	9.13%
	Unweighted Average ROE					10.03%
	Median					10.09%
	Standard Deviation					3.30%
	Standard Deviation Multiplier					1.64
	OCC SEET Threshold 3					14.53%

Date: February 27, 2017

Subject: Accounting Implications of Ohio Power Company's (OPCo's) Significantly Excessive Earnings Test (SEET) for the Year Ended December 31, 2016

From: Tom Mitchell and Tyler Ross

To: Craig Adelman and Chuck Oberlin

Purpose

This memo documents OPCo's SEET analysis and SEET accrual for the year ended December 31, 2016 using: (a) actual 2016 book earnings, (b) a SEET adjustment excluding from income all December 2016 journal entries related to OPCo's December 2016 Joint Stipulation and Recommendation that was filed in December 2016 at the PUCO to resolve various open OPCo regulatory cases (Attachment 1, "Global Settlement") and (c) an estimated SEET threshold using the PUCO-approved Staff SEET methodology. This memo also references the PUCO's February 2017 Order approving the Global Settlement without material modification.

Background on SEET

Ohio Statute

Ohio Revised Code Section 4928.143 (E) and (F) provides for a SEET for Ohio utilities that operate under an Electric Security Plan (ESP):

> If an electric security plan approved under division (C) of this section, except one withdrawn by the utility as authorized under that division, has a term, exclusive of phase-ins or deferrals, that exceeds three years from the effective date of the plan, the commission shall test the plan in the fourth year, and if applicable, every fourth year thereafter, to determine whether the plan, including its then-existing pricing and all other terms and conditions, including any deferrals and any future recovery of deferrals, continues to be more favorable in the aggregate and during the remaining term of the plan as compared to the expected results that would otherwise apply under section 4928.142 of the Revised Code.
>
> The commission shall also determine the prospective effect of the electric security plan to determine if that effect is substantially likely to provide the electric distribution utility with a return on common equity that is significantly in excess of the return on common equity that is likely to be earned by publicly traded companies, including utilities, that face comparable business and financial risk, with such adjustments for capital structure as may be appropriate. The burden of proof for demonstrating that significantly excessive earnings will not occur shall be on the electric distribution utility. If the test results are in the negative or the commission finds that continuation of the electric security plan will result in a return on equity that is significantly in excess of the return on common equity that is likely to be earned by publicly traded companies, including utilities, that will face comparable business and financial risk, with such adjustments for capital structure as may be appropriate, during the balance of the

> plan, the commission may terminate the electric security plan, but not until it shall have provided interested parties with notice and an opportunity to be heard. The commission may impose such conditions on the plan's termination as it considers reasonable and necessary to accommodate the transition from an approved plan to the more advantageous alternative. In the event of an electric security plan's termination pursuant to this division, the commission shall permit the continued deferral and phase-in of any amounts that occurred prior to that termination and the recovery of those amounts as contemplated under that electric security plan.
>
> With regard to the provisions that are included in an electric security plan under this section, the commission shall consider, following the end of each annual period of the plan, if any such adjustments resulted in excessive earnings as measured by whether the earned return on common equity of the electric distribution utility is significantly in excess of the return on common equity that was earned during the same period by publicly traded companies, including utilities, that face comparable business and financial risk, with such adjustments for capital structure as may be appropriate. Consideration also shall be given to the capital requirements of future committed investments in this state. The burden of proof for demonstrating that significantly excessive earnings did not occur shall be on the electric distribution utility. If the commission finds that such adjustments, in the aggregate, did result in significantly excessive earnings, it shall require the electric distribution utility to return to consumers the amount of the excess by prospective adjustments; provided that, upon making such prospective adjustments, the electric distribution utility shall have the right to terminate the plan and immediately file an application pursuant to section 4928.142 of the Revised Code. Upon termination of a plan under this division, rates shall be set on the same basis as specified in division (C)(2)(b) of this section, and the commission shall permit the continued deferral and phase-in of any amounts that occurred prior to that termination and the recovery of those amounts as contemplated under that electric security plan. In making its determination of significantly excessive earnings under this division, the commission shall not consider, directly or indirectly, the revenue, expenses, or earnings of any affiliate or parent company.

<u>Investigation into the Development of the SEET</u>

In Case No. 09-786-EL-UNC, the PUCO issued an order that addressed various issues in regards to the development of the SEET pursuant to Amended Substitute Senate Bill 221 for Electric Utilities. Within this Order, the PUCO established the principle of excluding “non-recurring, special and extraordinary items” (page 18 of Attachment 2):

> Accordingly, for the SEET calculation, the earned return will equal the electric utility's profits after deduction of all expenses, including taxes, minority interest, and preferred dividends, paid or accumulated, and excluding any non-recurring, special, and extraordinary items. The average book equity used to calculate the SEET will be the book equity for the 12-month period.

The PUCO also recognized a “safe harbor” for 200 basis points above the mean of the comparable group (page 29 of Attachment 2).

> To that end, any electric utility earning less than 200 basis points above the mean of the comparable group will be found not to have significantly excessive earnings.

Applicability of SEET Threshold by the PUCO

As background, Columbus Southern Power Company (CSPCo) and OPCo were governed by the SEET beginning in 2009. CSPCo and OPCo merged on December 31, 2011. The PUCO established its current SEET methodology using the SPDR Index in the 2010 SEET case with a 1.64 multiplier times the calculated standard deviation of member companies in the "Utilities Select Spector SPDR Fund" (SPDR Index). For the 2009 SEET case, the PUCO used two indices to determine CSPCo's SEET threshold. To date, the only years in which the earnings of either CSPCo or OPCo were found to be significantly excessive was in 2009 and 2010 (both CSPCo) as described below.

2009 SEET Filing

In PUCO Order dated January 11, 2011 on Case No. 10-1261-EL-UNC, the PUCO utilized two indices to determine an average ROE index of 11% (page 25 of Attachment 3) to which the PUCO used an adder of 6.6% (page 27 of Attachment 3) to determine CSPCo's and OPCo's SEET threshold of 17.6% (page 35 of Attachment 3). The two utility indices used by the Staff were exchange funds titled "iShares Dow Jones US Utilities Index Fund" and "Utilities Select Sector SPDR Fund" (see page 20 of Attachment 3). The Order ruled that $42.7 million (page 35 of Attachment 3) of pre-tax CSPCo earnings for the 2009 SEET year were excessive. In December 2010, following PUCO hearings and a failed OPCo stipulation agreement to resolve the 2009 SEET issue, CSPCo recorded an estimated SEET accrual of $50 million. The $50 million was considered the most likely outcome within a potential settlement range of refund between $30 million and $75 million.

2010 SEET Filing

In PUCO Order dated October 23, 2013 on Case Nos. 11-4571/4572-EL-UNC, the PUCO utilized only the SPDR Index to determine an average ROE index of 10.97% (page 27, footnote 29 of Attachment 4 and Attachment 5 for Buckley Testimony) to which the PUCO used an adder of 6.59% (page 27, footnote 29 - 1.64 multiplier x 4.0163% - Attachment 4) to determine CSPCo's and OPCo's SEET threshold of 17.56% (pages 27 and 28 of Attachment 4). The 10.97% Staff ROE used the SPDR Index and was calculated by taking the average of total operating net income and total shareholder equity for the respective SPDR Index companies. The Order ruled that $6.9 million of pre-tax CSPCo earnings for the 2010 SEET year were excessive. CSPCo recorded estimated SEET provisions for the 2010 SEET year of $20 million in December 2011 and an additional $2.6 million in December 2012 to recognize a probable liability based on Staff's recommended $22.6 million SEET refund.

The PUCO found that CSPCo's adjusted ROE was 17.90% (page 28 of Attachment 4) and was based on CSPCo's filing of 17.54% ROE (page 11 and 28 of Attachment 4) as amended by the PUCO for a transmission adjustment associated with off-system sales to arrive at the 17.90% ROE earned by CSPCo. CSPCo's filed 17.54% (Attachment 4) ROE for 2010 included non-operating adjustments (reference 2010 AEP earnings call) to GAAP earnings consisting of restructuring and Medicare-Part D as well as adjustments for off-system sales and the $42.7 million 2009 SEET refund made in 2010.

Based on the 2010 SEET Case, OPCo has consistently used the SPDR Index and regularly made non-operating adjustments to GAAP earnings consistent with non-operating adjustments referenced in AEP's analyst earnings calls. As noted above, there have been no findings of significantly excessive earnings since 2010 as OPCo has been below the PUCO-determined threshold.

2011-2014 SEET Filings

The PUCO determined that OPCo did not have significantly excessive earnings for the years ended 2011, 2012 and 2013. OPCo's ROEs were below both the 12% threshold and the SPDR index for 2012 and 2013. The PUCO continued to use the SPDR Index methodology for the 2011 SEET.

In the PUCO's August 2012 order for OPCo's June 2012 – May 2015 ESP, the PUCO set OPCo's SEET threshold at 12%. However, OPCo continued to file a SEET threshold based on the SPDR Index method and began an appeal process to the Supreme Court of Ohio concerning the validity of the PUCO-established 12% SEET threshold as to whether the 12% SEET threshold followed Ohio law. In 2014, OPCo recorded a $21 million pre-tax provision for earnings in excess of 12% ROE.

2015 Filing

In the PUCO's February 2015 Order on OPCo's June 2015 – May 2018 ESP (Case Nos. 13-2385-EL-SSO, 13-2386-EL-AAM – Attachment 6), the PUCO did not establish a SEET threshold for this ESP period as described below (page 88 of Attachment 6):

> The Commission finds that, since we have not authorized or renewed a service stability rider, it is not necessary to establish a SEET threshold in these ESP proceedings. Accordingly, AEP Ohio's SEET threshold for each year of the ESP will be determined within the context of each annual SEET case.

For the 2015 SEET filing, OPCo's filed SEET ROE was 11.73% which was below OPCo's calculated safe harbor of 11.74% based on the SPDR Index. Note that there were no non-operating adjustments in OPCo's ROE calculation. Both OPCo and Staff filed testimony recommending SEET thresholds based on the SPDR Index with an adder adjustment of 1.64 for the standard deviation as previously approved by the PUCO. OPCo's calculated SEET ROE threshold was 15.36% which significantly exceeded OPCo's actual 2015 ROE of 11.73%. OCC filed testimony recommending continuation of the 12% SEET threshold while OEG filed testimony recommending a 200 basis point adder to the average ROE based on the SPDR Index.

Supreme Court of Ohio Remand of 12% SEET Threshold

OPCo challenged the PUCO-ordered 12% threshold at the PUCO and the Supreme Court of Ohio and in April 2016, the Supreme Court of Ohio issued Slip Opinion No. 2016-Ohio-1608 (paragraph 66, Attachment 7) relating to the PUCO-ordered 12% threshold. The Supreme Court of Ohio agreed with OPCo's cross-appeal assertion that the 12% ROE threshold applied by the PUCO was not in accordance with Ohio statute. As cited in paragraph 65 of the Slip Opinion (Attachment 7), the Supreme Court of Ohio's Opinion confirmed OPCo's position under the SEET statute:

> Whether a plan resulted in excessive earnings must be measured by whether the earned return on common equity of the electric distribution utility is significantly in excess of the return on common equity that was earned during the same period by publicly traded companies, including utilities, that face comparable business and financial risk, with such adjustments for capital structure as may be appropriate.

The Supreme Court of Ohio reversed the 12% threshold and remanded this issue to the PUCO. Subsequent to the Supreme Court of Ohio's April 2016 Slip Opinion, legal counsel advised that it was probable that the PUCO on remand would establish a new SEET threshold for 2014 that exceeded OPCo's adjusted 2014 earnings level.

Based on the Supreme Court of Ohio's April 2016 Slip Opinion that reversed the 12% ROE SEET threshold, management determined that since OPCo's adjusted ROE was significantly below the SEET threshold using the SPDR Index and the 1.64 standard deviation multiplier, it was no longer probable that OPCo would be required to refund any 2014 earnings to ratepayers. Management viewed the Supreme Court of Ohio's remand of the SEET 12% ROE threshold issue as an effective extinguishment of the original PUCO-imposed 12% ROE threshold. As a result, in June 2016 business, OPCo reversed its 2014 SEET provision of $21 million.

In December 2016, OPCo's Global Settlement agreement that was filed with PUCO included an obligation of $20.3 million related to the 2014 SEET. However, the Global Settlement specifically stated (page 12 of Attachment 1) that payment concessions had no precedential effect on OPCo's SEET methodology:

> For purposes of settlement and without any precedential effect, including as to the method used to calculate significantly excessive earnings, $20.3 million will be returned to customers, on a kWh basis over a twelve-month period within 45 days of a final Commission order adopting the Global Settlement, to resolve the Company's 2014 SEET proceeding (Case No. 15-1022-EL-UNC). The refund under this paragraph will be includable as an expense in 2017 for purposes of applying the SEET.

PUCO Order on Global Settlement

In February 2017, the PUCO issued an Order (Attachment 11) that approved the Global Settlement in its entirety. It is anticipated that OPCo will revise tariff rates for the first billing cycle of April 2017.

Accounting Implications

Determination of SPDR Index Threshold

The PUCO-administered SEET process in accordance with Ohio Revised Code Section 4928.143 effectively requires OPCo to determine whether it has risk of refund of revenues to customers due to significantly excessive earnings. In December 2016 business, an analysis of the consensus projected 2016 operating earnings for the members of the SPDR Index was prepared for SEET analysis purposes using the following information:

- Listing of all companies included in SPDR Index - http://www.sectorspdr.com/sectorspdr/sector/xlu/holdings
- Consensus 2016 Net Income, Consensus 2016 Shareholders' Equity and 2015 Shareholders' Equity using IPREO's FactSet product for SPDR Index companies. In Attachment 8, the tabs for each SPDR Index company were used to obtain the appropriate data:

  - Income Statement Tab – 'CY '16E Net Income – Non-GAAP' – projected net income for ongoing operations
  - Balance Sheet Tab – 'CY '15 Shareholder Equity'
  - Balance Sheet Tab – 'CY '16E Shareholder Equity'

- Due to the absence of actual 2015 shareholders' equity for WEC Energy Group in IPREO FactSet, we obtained the corresponding equity value from the 2015 SEC Form 10-K on SEC's EDGAR archive website: https://www.sec.gov/Archives/edgar/data/783325/000010781516000248/wec1231201510-k.htm#sE4421F056C269B2DE6B521CA4C8AA7E1

- 2016 Projected earnings for American Electric Power (AEP) was calculated based on an estimate of 2016 earnings per share ($3.89) multiplied by the average number of shares from AEP's most recent SEC Form 10-Q (approximately 491 million shares as of September 30, 2016).

- 2015 Shareholders' Equity for American Electric Power (AEP) was obtained from the 2015 SEC Form 10-K on SEC's EDGAR archive website: https://www.sec.gov/Archives/edgar/data/4904/000000490416000056/ye15aep10k.htm

As also shown in Scenario 1 of Attachment 9, average ROEs were calculated on both a Staff approach of 10.54% (methodology as previously approved in the 2010 SEET case) as well as an OPCo approach (10.90%) which determines the average ROE based on a simple average of the SPDR Index companies. Using a 2.45% standard deviation and a 1.64 Standard Deviation Multiplier (multiplier consistent with the 2010 and 2011 CSPCo and OPCo SEET cases), significantly excessive ROE thresholds of 14.56% (Staff) and 14.91% (OPCo) were calculated. Consistent with the PUCO Order for CSPCo's 2010 SEET earnings, management used the Staff approach ROE threshold for 2016 of 14.56% to calculate an estimated 2016 SEET provision of $58.3 million.

Scenario 2 of Attachment 9 is intended to validate the ROEs calculated in Scenario 1 by using each SPDR index company's individual non-operating 2016 income projections which resulted in an ROE of 14.59%. Scenario 2 confirms the reasonableness of the 14.56% ROE threshold estimate.

Impact of Global Settlement on Calculation of 2016 OPCo ROE

As previously discussed in the "Investigation into the Development of the SEET" section above, the PUCO ordered that Ohio utility companies make adjustments to per book SEET calculations for items that are non-recurring, extraordinary or special accounting items. Also as previously noted, OPCo has historically determined that the scope of the items to be removed from net income consists of non-operating adjustments referenced in AEP's analyst earnings calls, including adjustments for restructuring, Medicare Part D, plant impairments and carbon capture adjustments.

In December 2016, OPCo filed the Global Settlement with the PUCO. In December 2016 business, OPCo recorded entries for the following items due to the probable adoption by the PUCO of the Global Settlement:

- Refund $100 million for amounts paid by Standard Service Offer (SSO) customers from August 2012 through May 2015 related to alleged "double recovery" of capacity costs related to OPCo's ownership interest in Ohio Valley Electric Corporation and OPCo's previously owned Lawrenceburg Plant. The settlement indicated that the $100 million would reduce SEET earnings in 2017.

- Refund $20.3 million applicable 2014 SEET to OPCo distribution customers over a 12-month period within 45 days of a final order from the PUCO. The settlement indicated that the $20.3 million would reduce SEET earnings in 2017.

- Recognize a $4.2 million probable liability for rate credits to Kroger, OMAEG and OEG payable within 45 days of the final order from the PUCO.

- Establish regulatory assets for $96.7 million of deferred capacity costs including related carrying charges due to the PUCO's misapplication of an overstated "energy credit" in the determination of OPCo's deferred capacity threshold from August 2012 through May 2015.

Although OPCo had no non-operating adjustment items in AEP's 2016 earnings call (Global Settlement agreement was included in OPCo's operating income), for OPCo's 2016 SEET calculation, management excluded the net impact of all items discussed above ($27.8 million pre-tax loss). The exclusion of the net $27.8 million pre-tax loss was based on the two specific references in the Global Settlement (pages 12 and 13 of Attachment 1) that specifically stated the impacts of the $20.3 million and $100 million refunds should be included as an expense in OPCo's 2017 SEET calculations. With respect to the RSR, no similar references were made to the inclusion or exclusion of the increase in pre-tax income of approximately $186 million (total RSR proceeds of $388 million to be received less approximately $202 million or capacity cost regulatory assets prior to the Global Settlement as of December 31, 2016, including carrying charges) in future SEET tests. Due to the uniqueness of settling a multitude of outstanding OPCo regulatory issues in a Global Settlement agreement as well as the expected comparable treatment of both refunds and RSR, management concluded that all of the Global Settlement impacts should be removed from 2016 SEET calculations, including the establishment of RSR regulatory assets of $96.7 million. This conclusion was also supported by AEP's Legal and Regulatory departments.

Calculation of 2016 OPCo SEET Accrual

Prior to the December 2016 close, OPCo's preliminary pre-tax earnings and incremental tax rate of 35.69% were used to calculate OPCo's preliminary, pre-tax 2016 SEET provision of $61,187,996 (Attachment 10, cell H-28). Following the recording of the preliminary 2016 SEET provision, various additional incentive compensation plan adjustments (unrelated to the Global Settlement) totaling $2,842,621 pre-tax were recorded on OPCo's ledger. Concurrently, a corresponding offsetting adjustment of $2,842,621 pre-tax was made to reduce OPCo's 2016 SEET provision resulting in a net pre-tax OPCo 2016 SEET provision of $58,345,375.

The exclusion of the December 2016 $27.8 million net loss on the Global Settlement for SEET calculation purposes resulted in a SEET ROE of 14.5590% (Attachment 10, cell K-17) as noted above. OPCo's book earnings which included the Global Settlement resulted in a per books ROE of 13.7512% (Attachment 10, cell I-17).

Management believed that its approximate $58.3 million 2016 SEET accrual was probable and was determined in a consistent manner with past PUCO SEET orders, taking into consideration the exclusion of the entire income statement impact of the Global Settlement. However, any party, including OPCo, could propose alternatives to the SEET calculation that could potentially change the PUCO's previously approved Staff approach to the SEET threshold (using the SPDR Index with a 1.64 standard deviation multiplier) or proposing an adjusting entry to OPCo's operating earnings.

Accounting Guidance

In accordance with ASC 980-405-25-1, OPCo records regulatory liabilities when a true-up to actual costs is required and/or when it is likely that a regulator will require refunds to customers. OPCo's third quarter review of 2016 SEET earnings did not indicate that a 2016 SEET provision for refund was necessary. However, based on management's fourth quarter 2016 review of OPCo's 2016 earnings, OPCo's known Global Settlement adjustments for 2016 SEET purposes and estimations of 2016 earnings and equity balances of the SPDR Index, management calculated a 14.56% ROE SEET threshold under the previously PUCO-approved Staff approach. OPCo recorded a provision for a 2016 SEET refund based on OPCo's probable obligation to refund revenues to OPCo's retail distribution customers under Ohio Revised Code Section 4928.143 (E) and (F) and the calculation of OPCo's 2016 SEET earnings that were in excess of the calculated 14.56% ROE SEET threshold.

Accrual Journal Entries

As described above, in December 2016 business, Regulated Accounting (Craig Adelman, Manager) recorded two entries on OPCo's Distribution Business Unit (BU 250) for OPCo's 2016 SEET provision resulting in the following net 2016 OPCo SEET provision:

Account	Description	Debit	Credit
4491003	Prov Rate Refund – Retail	$58,345,375	
2290002	Acc Prov for Potential Refund – Long-term		$58,345,375
	2016 OPCo SEET provision (net transaction) based on OPCo's 2016 book earnings, with an adjustment for the exclusion of December 2016 Global Settlement and a calculated SEET threshold of 14.56% based on the SPDR index.		

AEP typically records provisions for revenue refunds to Account 229. Upon receipt of a commission order approving the refund, AEP's policy is to reclassify this provision from Account 229 to Account 242. Note that in the entry above, a long-term provision for refund account was used (Account 2290002) based on discussion with Regulatory Services and Legal which indicated any potential refund would likely be given to customers in 2018 when considering the anticipated timing of a PUCO order following a May 2017 SEET filing. The use of a long-term liability is also supported by the delays in issuance of PUCO orders for the 2009 and 2010 SEET cases as documented in the discussion above.

In March 2017, Regulatory Accounting Services will work with Regulatory Services and Finance to calculate a new SEET threshold based on the actual 2016 net incomes and actual 2016 equity balances of entities within the SPDR Index. Based on this updated SEET threshold, Regulatory Accounting Services will calculate a March 2017 SEET provision for refund adjustment which will be provided to Regulated Accounting (Craig Adelman, Manager) and Revenue Accounting (Chuck Oberlin, Manager) and be recorded in March 2017 business.

Revenue Accounting (Chuck Oberlin, Manager) will also need to review the provision for refund with Regulatory Accounting Services in March 2017 business for possible reclassification to current (Account 2290006) on OPCo's balance sheet.

Financial Reporting

Regulatory Accounting Services worked with Financial Reporting for proper financial statement and footnote disclosure due to the 2016 SEET.

Earnings Offset (EO)

Since no O&M accounts were impacted by these entries, no corresponding EO offsets are necessary.

Attachments
cc:

George Fackler – D&T	Jeff Hoersdig	Dwayne Woodruff
Cliff Olsen – D&T	Andy Reis	PwC

cc: without attachments

Greg Adams	Renee Hawkins	Ollie Sever
Bill Allen	Nancy Heimberger	Pam Sicilian
Michele Bair	Jon Holtzmuller	Shelli Sloan
Mike Baird	Matt Kyle	Julie Sloat
Jeff Bartsch	Michael McCulty	Greg Sohovich
Joe Buonaiuto	Jennifer McLravy	Raja Sundararajan
Kwoun Choi	Christine Minton	Dan Tiemann
Kellie Conklin	Andrea Moore	Brian Tierney
Lonni Dieck	Bobby Myers	Scott Travis
Tim Dooley	Steve Nourse	Janet Tully-Green
Danielle Dorsey	John Pulsinelli	David Weiss
Andy Fisher	Mark Pyle	John Woellert
Pam Flemming	Darcy Reese	Julie Williams
Diana Gregory	Marc Reitter	
Randy Hamlett	David Roush	