BEFORE THE
PUBLIC UTILITIES COMMISSION OF OHIO

In the Matter of the Application of Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to R.C. 4928.143, in the Form of an Electric Security Plan.	))))))	Case No. 16-1852-EL-SSO
In the Matter of the Application of Ohio Power Company for Approval of Certain Accounting Authority.	)))	Case No. 16-1853-EL-AAM

DIRECT TESTIMONY OF KEVIN C. HIGGINS

On Behalf of The Kroger Co.

May 2, 2017

DIRECT TESTIMONY OF KEVIN C. HIGGINS

Introduction

Q. Please state your name and business address.

A. Kevin C. Higgins, 215 South State Street, Suite 200, Salt Lake City, Utah, 84111.

Q. By whom are you employed and in what capacity?

A. I am a Principal in the firm of Energy Strategies, LLC. Energy Strategies is a private consulting firm specializing in economic and policy analysis applicable to energy production, transportation, and consumption.

Q. On whose behalf are you testifying in this proceeding?

A. My testimony is being sponsored by The Kroger Co. ("Kroger"). Kroger is one of the largest grocers in the United States. Kroger has over 90 facilities served by Ohio Power Company ("AEP Ohio") in the Columbus Southern Power service territory and 40 facilities served by AEP Ohio in the Ohio Power service territory that collectively consume over 240 million kWh per year. Kroger is a shopping customer in both service territories.

Q. Please describe your professional experience and qualifications.

A. My academic background is in economics, and I have completed all coursework and field examinations toward a Ph.D. in Economics at the University of Utah. In addition, I have served on the adjunct faculties of both the University of Utah and Westminster College, where I taught undergraduate and graduate courses in economics from 1981 to 1995. I joined Energy Strategies in 1995, where I assist private and public sector clients in the areas of energy-related economic and policy analysis, including evaluation of electric and gas utility rate matters.

Prior to joining Energy Strategies, I held policy positions in state and local government. From 1983 to 1990, I was economist, then assistant director, for the Utah Energy Office, where I helped develop and implement state energy policy. From 1991 to 1994, I was chief of staff to the chairman of the Salt Lake County Commission, where I was responsible for development and implementation of a broad spectrum of public policy at the local government level.

Q. Have you ever testified before the Public Utilities Commission of Ohio ("Commission" or "PUCO")?

A. Yes. In 2016, I filed testimony in Dayton Power and Light's ("DP&L") 2016 Electric Security Plan ("ESP") proceeding, Case Nos. 16-0395-EL-SSO, et al. In 2015, I filed testimony in AEP Ohio's Affiliate Power Purchase Agreement proceeding, Case Nos. 14-1693-EL-RDR, et al. In 2014, I filed testimony in the Ohio Edison Company, the Cleveland Electric Illuminating Company, and the Toledo Edison Company's (collectively, "FirstEnergy") ESP IV proceeding, Case Nos. 14-1297-EL-SSO, et al. (with supplemental testimony filed in 2015); Duke Energy Ohio's ("Duke") ESP III proceeding, Case Nos. 14-841-EL-SSO, et al.; the AEP Ohio ESP III proceeding, Case Nos. 13-2385-EL-SSO, et al.; DP&L's storm cost recovery rider proceeding, Case Nos. 12-3062-EL-RDR, et al. and the Republic Steel reasonable arrangements proceeding, Case No. 13-1913-EL-AEC.

In 2013, I testified in DP&L's Revised ESP proceeding, Case Nos. 12-426-EL-SSO, et al. and Duke's capacity charge proceeding, Case Nos. 12-2400-EL-UNC, et al.

In 2012, I testified in the AEP Ohio ESP II proceeding, Case Nos. 11-346-EL-SSO, et al. In 2011, I testified in the Duke Market Rate Offer ("MRO") proceeding, Case No. 10-2586-EL-SSO, and Duke's ESP II proceeding, Case No. 11-3549-EL-SSO, and in 2010, I filed testimony in Duke's storm damage cost recovery proceeding, Case No. 09-1946-EL-RDR.

In 2009, I testified in FirstEnergy's MRO proceeding, Case No. 09-906-EL-SSO, and in Duke's distribution rate case, Case Nos. 08-709-EL-AIR, et al.

In 2008, I testified in AEP Ohio's ESP I proceeding, Case Nos. 08-917-EL-SSO, et al.; FirstEnergy's MRO proceeding, Case No. 08-936-EL-SSO; FirstEnergy's ESP proceeding, Case No. 08-935-EL-SSO; and the FirstEnergy distribution rate case proceeding, Case Nos. 07-551-EL-AIR, et al.

In 2005, I testified in AEP Ohio's IGCC cost recovery proceeding, Case No. 05-376-EL-UNC, and in 2004, I testified in the FirstEnergy Rate Stabilization Plan proceeding, Case No. 03-2144-EL-ATA.

Q. Have you testified before utility regulatory commissions in other states?

A. Yes. I have testified in approximately 190 proceedings on the subjects of utility rates and regulatory policy before state utility regulators in Alaska, Arizona, Arkansas, Colorado, Georgia, Idaho, Illinois, Indiana, Kansas, Kentucky, Michigan, Minnesota, Missouri, Montana, Nevada, New Mexico, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, South Carolina, Texas, Utah, Virginia, Washington, West Virginia, and Wyoming. I have also filed affidavits in proceedings at the Federal Energy Regulatory Commission.

<u>Overview and Conclusions</u>

Q. What is the purpose of your testimony in this proceeding?

A. My testimony addresses the following aspects of AEP Ohio's amended ESP that will extend and modify the current Electric Security Plan ("ESP III"):

1) AEP Ohio's proposal to continue the Distribution Investment Rider ("DIR") through May 2024, with increased annual caps.

2) AEP Ohio's proposal to institute a Distribution Technology Investment Rider ("DTR") to collect additional distribution revenues.

3) AEP Ohio's proposal to implement a Sub-Metering Rider ("SR") to recover future costs to purchase and replace distribution assets for certain complexes that are currently being billed under sub-metering practices.

4) AEP Ohio's proposal to implement a Renewable Generation Rider ("RGR") to recover the costs of future renewable generation projects from all customers.

Relative to the wide scope of the issues addressed in AEP Ohio's filing, my recommendations are concentrated on a limited number of key issues. Absence of comment on my part regarding a particular aspect of AEP Ohio's filing does not signify support (or opposition) toward the Company's filing with respect to the non-discussed issue.

Q. What are your primary conclusions and recommendations?

A. 1) I recommend that the Commission reject AEP Ohio's proposed approach to recovering incremental distribution-related costs through continuous increases in the DIR caps, and recommend that AEP Ohio's indexed ROE mechanism be rejected.

2) I recommend that the Commission reject AEP Ohio's proposed DTR, including the "incentive" ROE adder.

3) I recommend that the Commission reject AEP Ohio's proposed SR, and recommend that the SR assets be considered within the overall context of the Company's total distribution revenues, expenses, and return on distribution rate base in a distribution rate case.

4) I recommend that the Commission reject the RGR, which is neither reasonable nor in the public interest. It is particularly unreasonable for AEP Ohio to impose such a generation purchase obligation on shopping customers, who have demonstrated their preference to procure their generation supplies from non-AEP Ohio sources.

Distribution Investment Rider ("DIR")

Q. What is AEP Ohio proposing with respect to the DIR?

A. The Company is proposing to continue to utilize the DIR to collect carrying costs on distribution plant, and proposes increased DIR annual caps through May 2024. Through the DIR, the Company collects a return on its incremental distribution net plant, along with depreciation expense and property tax.[1] AEP Ohio's proposed DIR caps are based on an estimated average direct distribution capital investment for 2018 through 2024 of $225 million annually.[2] In addition, AEP Ohio is proposing to increase the January 2019 DIR cap by $38,746,032, which the Company asserts is necessary to reflect the expiration of a depreciation reserve over-accrual amortization. The

[1] The DIR also collects an additional $62.344 million annually, resulting from Case Nos. 11-351-EL-AIR, et al.
[2] Direct Testimony of Selwyn J. Dias at 14, lns. 10-14. AEP Ohio projects $286.4 million of loaded DIR capital additions annually (closed to DIR accounts). See AEP's Response to Staff-DR-11-001, Staff_DR-11-001_Attachment_1, "Captial Spend" [sic] tab, attached as Exhibit KCH-1, page 2.

amortization of this over-accrual reduced annual depreciation expense for a seven-year period beginning in January 2012, as a result of Case Nos. 11-351-EL-AIR, et al.[3]

According to the Direct Testimony of David R. Gill, the Company is proposing DIR caps of $136.4 million for June to December 2018 ($233.8 million on an annualized basis), $312 million in 2019, $343 million in 2020, $373 million in 2021, $401 million in 2022, $427 million in 2023, and $185 million for January to May 2024 ($444 million on an annualized basis).[4] AEP Ohio proposes continuation of the current mechanism whereby any over- or under-collection of the DIR revenue relative to the cap in a given year is applied to the cap in the subsequent year.[5]

As illustrated in Figure KCH-1, below, AEP Ohio's proposed DIR caps represent a dramatic increase through 2024 from the caps approved by the Commission in AEP Ohio's ESP III through May 31, 2018. AEP Ohio's proposed DIR cap in 2024 of $444 million, on annualized basis, is triple the 2015 cap of $145 million, and double the Commission-approved cap for January through May 2018 of $215 million on an annualized basis.

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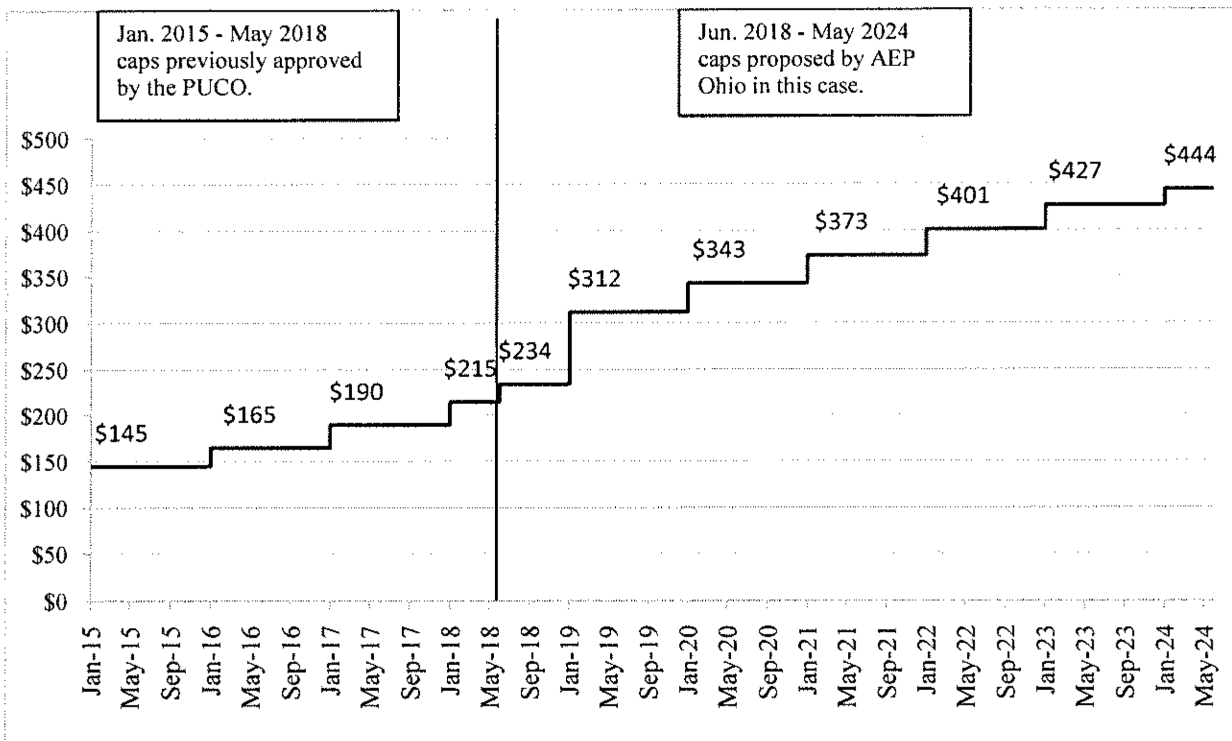
[3] Direct Testimony of Andrea E. Moore at 15, lns. 8-15.
[4] Direct Testimony of David R. Gill at 4, lns. 1-4.
[5] Direct Testimony of David R. Gill at 4, lns. 5-8. Through this mechanism, any revenues collected that exceed the cap in a given year will reduce the next year's cap, whereas if DIR revenues are below the cap in a given year, the next year's cap is increased by that increment.

Figure KCH-1
Annualized DIR Caps 2015-24 ($ millions)[6]



Q. What is your recommendation to the Commission regarding the DIR?

A. I recommend that the Commission reject AEP Ohio's proposal to recover incremental distribution-related costs through continuous increases in the DIR, as well as the addition of new distribution riders, which I will discuss below. AEP Ohio's proposed distribution revenue requirement is increasing too substantially to be simply passed though in a rider. Based on the base distribution revenues that AEP Ohio presents in this case of $633.7 million,[7] the DIR caps proposed by AEP Ohio would range from approximately 37% for the last 7 months of 2018 to 70% in 2024, as a

[6] January 2015 through May 2018 caps based on Case No. 13-2385-EL-SSO, Fourth Entry on Rehearing at 51 (November 3, 2016). Annualized cap for January – May 2018 derived from the authorized cap of $89.6 million ([$89.6 ÷ 5] × 12). June 2018 through May 2024 caps based on the Direct Testimony of David R. Gill at 4.
[7] See Mr. Gill's workpaper, WP DRG-8 at 2.

percentage of base distribution revenues.[8] In most years of the extended ESP term, AEP Ohio's proposed DIR caps exceed the annual growth in the DIR permitted in the Commission's Fourth Entry on Rehearing in the ESP III case, as a percentage of base distribution revenue, of three to four percent.[9] Yet even the Company's proposed steep series of increases is only a fraction of the Company's proposed distribution revenue requirement increase, as evidenced by the Company's attempt to introduce even more riders.

Investing in and maintaining the distribution system and properly staffing its workforce are fundamental responsibilities for a utility distribution company such as AEP Ohio. In carrying out this responsibility, utilities are entitled to an opportunity to recover their prudently-incurred costs. However, rather than relying on continuous increases in the DIR and the introduction of new distribution riders, the incremental distribution costs that AEP Ohio wishes to recover in this proceeding are best considered in the overall context of the Company's total distribution revenues, expenses, and return on distribution rate base. The best forum for such consideration is a distribution rate case.

Q. Do you have an additional concern with AEP Ohio's method of determining DIR costs?

A. Yes. AEP Ohio is proposing to update its weighted average cost of capital annually, both the return on equity ("ROE") and cost of debt components, used in calculating the carrying charge for numerous existing and proposed riders, including the DIR, the Distribution Technology Rider, the Sub-Metering Rider, and the Renewable

[8] See Mr. Gill's workpaper, WP DRG-2.
[9] See Case No. 13-2385-EL-SSO, Fourth Entry on Rehearing at 51 (November 3, 2016). For AEP Ohio's DIR Rate Estimate, see Mr. Gill's workpaper, WP DRG-2.

Generation Rider.[10] Each year, the Company would adjust its ROE based on the Moody's Baa Utility Bond Index, which tracks changes in the cost of debt. In his Direct Testimony, Matthew D. Kyle argues that this approach provides regulatory efficiency by avoiding "a costly and time consuming proceeding to update the WACC." Mr. Kyle recommends that the indexed ROE have a floor of 10.2% and a ceiling of 12.5%.[11] Under his asymmetrical proposal, the maximum potential reduction, from AEP Ohio's proposed initial ROE of 10.41%, before the floor is reached is but a fraction of the potential increase before the ceiling is reached, to the detriment of customers.

Based on Mr. Gill's Direct Testimony, AEP Ohio's proposed DIR caps reflect the indexed ROE ceiling. That is, the return component used in AEP Ohio's calculation of its proposed DIR caps utilizes an ROE set at Mr. Kyle's recommended indexed ROE ceiling of 12.5%.[12] Absent the indexed ROE mechanism, AEP Ohio would propose DIR caps that are $10 million to $19 million less than the proposed caps each year of the extended ESP term.[13]

Q. What is your recommendation to the Commission regarding AEP Ohio's proposal to update its ROE annually?

A. I recommend that the Commission reject AEP Ohio's proposal to update its ROE annually based on the Moody's index. The Company's ROE should not automatically fluctuate with the bond market. To the extent that AEP Ohio wishes to update its ROE,

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[10] See Direct Testimony of Matthew D. Kyle.

[11] Direct Testimony of Matthew D. Kyle at 7.

[12] See AEP Ohio's Response to Staff-DR-11-001, Staff_DR-11-001_Attachment_1, "Return Component" tab, attached as Exhibit KCH-1, page 3.

[13] Direct Testimony of David R. Gill at 4, n.1, states: "These caps reflect the indexed ROE ceiling supported by Company witness Kyle. Absent the indexed ROE mechanism, the Company proposes a revenue cap on the DIR of $130.4 million for the last seven months of 2018, or $223.5 million on an annualized basis; $300 million in 2019; $329 million in 2020; $357 million in 2021; $384 million in 2022; $408 million in 2023; and $178 million for the first five months of 2024, or $427.2 million on an annualized basis."

this request should be considered in the context of a distribution rate case or a subsequent ESP proceeding. If, despite my recommendation, the Commission approves a mechanism to update AEP Ohio's ROE annually, then the basis-point difference between the ceiling ROE and the ROE approved in this case should not be any greater than the basis-point difference between the floor ROE and the ROE approved in this case.

Distribution Technology Investment Rider ("DTR")

Q. What is the DTR?

A. AEP Ohio proposes to implement the DTR to recover costs for its proposed Distribution Technology Investment Plan, consisting of three initiatives:

1) Installation of electric vehicle charging stations, microgrids, and smart lighting controls in conjunction with Smart Columbus, a transportation-focused program funded by a U.S. Department of Transportation grant and other public and private funding sources;
2) Deployment of a Next Generation Utility Communication System; and
3) Enhancement of the physical security of AEP Ohio's distribution substations to protect against theft and vandalism.[14]

The DTR is projected to recover O&M costs of $48.9 million through 2024, as well as carrying charges (return on net plant, depreciation expense, and property taxes)

[14] See Direct Testimony of Scott S. Osterholt.

on $250.8 million of capital expenditures made through 2020.[15] Table KCH-2, below, summarizes AEP Ohio's projected DTR revenue requirement.

Table KCH-2
Projected DTR Revenue Requirement ($ millions)[16]

Year	O&M Costs	Carrying Charge	Total DTR Revenue Requirement
2017	2.25	0.60	2.85
2018	3.89	11.24	15.13
2019	5.66	24.20	29.86
2020	6.99	36.73	43.72
2021	7.31	44.58	51.89
2022	7.55	44.77	52.32
2023	7.76	42.83	50.59
2024	7.98	40.89	48.87
Total	49.39	245.84	295.22

The DTR is proposed to be updated quarterly for recovery of actual O&M expenses as well as capital carrying costs on in-service assets. The cost of the rider would be split between Residential and Non-Residential customers based on each group's share of base distribution revenues, and the revenue requirement for each group would be divided by the number of customers in that group to yield per-bill charges.[17]

AEP Ohio is also requesting an "incentive" ROE for the DTR capital expenditures of seventy-five basis points added to the proposed ROE of 10.41%. AEP

[15] See Mr. Gill's WP DRG-8 at 10. Note: Mr. Gill's DTR rate projections include carrying charges and O&M incurred through 2024, including loading. Scott S. Osterholt's Direct Testimony tables include only <u>direct</u> capital expenditures and O&M through 2020. Mr. Osterholt's Direct Testimony Tables 3 through 7 report capital expenditures of $6.4M for EV charging stations, $51.9M for microgrid and battery storage, $29.9M for Smart Lighting, $69M for the Next Generation Utility Communication System, and $30M for substation security, for a total of $187.1M. Tables 3 through 7 report O&M of $1.7M for EV charging stations, $3.8M for microgrid and battery storage, $5.5M for Smart Lighting, $1M for the Next Generation Utility Communication System, and $1M for substation security, for a total of $13.0M.
[16] Derived from Mr. Gill's WP DRG-8 at 2-10. Amounts in Figure KCH-2 represent "loaded" O&M and carrying costs grossed-up by 100.938% for Uncollectible Accounts Expense and Commercial Activities Tax.
[17] Direct Testimony of David R. Gill at 9-10.

Ohio further proposes that of the 0.75% ROE incentive, 0.25% be contingent upon AEP Ohio borrowing a portion of the capital from local Ohio banks.[18]

Q. What is your assessment of the DTR proposal?

A. I recommend that the Commission reject AEP Ohio's proposed DTR. AEP Ohio is seeking over $166 million in this case to fund projects in conjunction with Smart Columbus,[19] which is more than four times the $40 million federal grant that initiated Smart Columbus.[20] I will note that the Smart Columbus-related costs in this case only include capital expenditures through 2020, though AEP Ohio anticipates capital expenditures beyond this initial phase.[21] Mr. Gill's DTR rate projections include carrying costs incurred through 2024 on capital expenditures made through 2020, as well as O&M costs through 2024.

AEP Ohio is also seeking $39 million to fund distribution substation security improvements,[22] accounts that would otherwise be eligible for inclusion in the DIR. However, AEP Ohio proposes to recover these costs in the DTR instead, while not reducing its proposed DIR caps.[23]

Additionally, AEP Ohio seeks $90 million to fund a new communication system called "Next Generation Utility Communication System."[24] The Commission has previously denied AEP Ohio's request to include general plant, such as a radio communication system, in the DIR and stated that the level of DIR proposed in AEP Ohio's ESP III, including the request to include general plant in the DIR, "would be

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[18] Direct Testimony of Andrea E. Moore at 10.
[19] Derived from Mr. Gill's workpaper, WP DRG-8 at 2-10 ("DTR calc" Excel file).
[20] "Smart Columbus." The City of Columbus. https://www.columbus.gov/smartcolumbus/. Web. 1 May 2017.
[21] See the Direct Testimony of Scott S. Osterholt, at 5, lns. 11-18.
[22] Derived from Mr. Gill's workpaper, WP DRG-8 at 2-10 ("DTR calc" Excel file).
[23] See AEP Ohio's response to Staff-DR-3-002, attached as Exhibit KCH-2.
[24] Derived from Mr. Gill's workpaper, WP DRG-8 at 2-10 ("DTR calc" Excel file).

better considered and reviewed in the context of a distribution rate case where the costs can be evaluated in the context of the Company's total distribution revenues and expenses, and the Company's opportunity to recover a return on and of its investment can be balanced against customers' right to reasonably priced service."[25] Similarly, I recommend that the Commission reject AEP Ohio's request to include general plant (i.e., the Next Generation Utility Communication System) in its amended ESP III.[26]

AEP Ohio provides minimal support for its incentive ROE adder, except to state that it must compete for the necessary capital in order to bring the benefits of the Distribution Technology Investment Plan to customers and the State of Ohio.

In my opinion, AEP Ohio's request for an incentive ROE is gratuitous and unwarranted. AEP Ohio's proposed ROE in this case of 10.41%, absent the 0.75% adder, is higher than the vast majority of ROEs approved by regulatory commissions during 2016 and the first four months of 2017. As shown in Exhibit KCH-3, the median ROE approved for electric utilities in the United States from January 2016 through April 2017 was 9.60%, including ROE determinations for vertically-integrated utilities.[27] AEP Ohio's proposed 10.41% ROE would be above the 95th percentile of these approved ROEs. The Company's proposed ROE including the incentive adder, of 11.16%, would be higher than any other ROE approved in rate cases during that period.

[25] AEP Ohio ESP III proceeding, Case Nos. 13-2385-EL-SSO, et al., Opinion and Order at 46 (February 25, 2015), aff'd Second Entry on Rehearing at 23 (May 28, 2015).
[26] It is important to note that in the Joint Stipulation and Recommendation modified and adopted in Case Nos. 14-1693-EL-RDR, et al., which AEP Ohio stated created an obligation to file this application to modify its existing ESP III, prohibits AEP Ohio from renewing proposals for riders "that were rejected in the ESP III Order for both the current ESP term and the extended ESP term (i.e., through May 31, 2024)." *In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider*, Case Nos. 14-1693-EL-RDR, et al., Joint Stipulation at 13 (December 14, 2015). AEP Ohio's renewed request to upgrade its communication system and include such costs for the general plant upgrade in the DTR should be rejected in this amended ESP III.
[27] As reported by SNL Financial and compiled by Regulatory Research Associates.

Further, AEP Ohio states that 0.25% of the 0.75% ROE adder would be contingent upon the Company borrowing a portion of the capital from Ohio banks, but has not defined the term "portion," stating that "[t]he amount of local financing will depend on interest from the local banks as well as access to competitive rates." [28] The Company has not provided evidence that its proposed ROE adder is necessary to compete for capital or that incentive ratemaking is appropriate in this case. An incentive return on equity should not be required for the Company to seek to improve its communication systems, protect its substations from theft and vandalism, or encourage adoption of electric vehicles. If the DTR is adopted, the incentive ROE should be eliminated.

Rather than relying on the introduction of new distribution riders, the incremental distribution costs that AEP Ohio wishes to recover in this proceeding are best considered in a distribution rate case within the overall context of the Company's total distribution revenues, expenses, and return on distribution rate base.

Sub-Metering Rider ("SR")

Q. Please describe AEP Ohio's proposed SR.

A. AEP Ohio is proposing the SR as a placeholder non-bypassable rider to recover future costs to purchase and replace distribution assets for certain multi-unit complexes that are currently being billed under sub-metering practices. AEP Ohio has proposed the SR in anticipation of changes to the sub-metering eligibility. The SR would include a return on and of the assets for any capital portion, and would be collected as a

[28] See AEP Ohio's response to OCC-INT-2-269, attached as Exhibit KCH-4.

percentage of base distribution revenue, similar to the current DIR.[29] According to Mr. Gill's Direct Testimony, since the timing and outcome of any future proceeding that could approve costs to be recovered under the SR is unknown, the Company has no basis to estimate the potential SR rates.[30]

Q. What is your recommendation to the Commission regarding the SR?

A. I recommend that the SR be rejected by the Commission, as it is yet another attempt by AEP Ohio to collect distribution costs in a piecemeal fashion, while avoiding a comprehensive review of its distribution revenues, expenses, and return on distribution rate base in a distribution rate case. In addition, the appropriate cost allocation for the SR assets may not mirror overall distribution revenues, warranting consideration in a distribution rate case.

<u>Renewable Generation Rider ("RGR")</u>

Q. What is AEP Ohio proposing with respect to the RGR?

A. AEP Ohio is proposing the non-bypassable RGR as an alternative method to recover the costs of renewable power from customers, which would replace the mechanism set forth in the stipulation in AEP Ohio's Affiliate PPA Rider proceeding, Case Nos. 14-1693-EL-RDR, et al. Based on that stipulation, AEP Ohio and its affiliates are to develop 500 MW of wind and 400 MW of solar capacity.[31] According to the stipulation, the capacity, energy and ancillary services were to be liquidated in the

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[29] Direct Testimony of Andrea E, Moore, at 12, 20.
[30] Direct Testimony of David R. Gill at 9.
[31] *In the Matter of the Application Seeking Approval of Ohio Power Company's Proposal to Enter into an Affiliate Power Purchase Agreement for Inclusion in the Power Purchase Agreement Rider*, Case Nos. 14-1693-EL-RDR, et al., Joint Stipulation and Recommendation at 30 (December 14, 2015).

PJM markets, with resulting revenues being credited to retail customers.[32] Per the stipulation, customers were to be subject to a non-bypassable uniform per kWh charge (or credit) for monthly consumption up to 833,000 kWh per account for the net costs (or benefits) of the renewable resources.[33]

However, in the instant case, AEP Ohio is proposing that customers actually have a portion of their power sourced from the renewable facilities. The Company is also proposing that the Commission approve a non-bypassable charge for the life of the facility (versus the ESP term), citing to Section (B)(2)(c) of the ESP statute, R.C. 4928.143(B).[34] The proposed RGR would be a placeholder for future non-bypassable charges to recover the costs of renewable projects approved by the Commission.

Q. What is your recommendation to the Commission regarding the RGR?

A. The RGR should be rejected. For years, AEP Ohio customers have been burdened with the cost of funding various schemes to pay for AEP Ohio's above market generation costs. It is neither reasonable nor in the public interest to introduce yet another open-ended generation cost obligation that customers will owe to AEP Ohio. It is particularly unreasonable and inappropriate for AEP Ohio to impose such a purchase obligation on shopping customers, who have demonstrated their preference to procure their generation supplies from non-AEP Ohio sources. My overall recommendation to reject the RGR notwithstanding, if a variant of the RGR is adopted, I recommend that the Commission reject AEP Ohio's proposal to compel shopping customers to be served by renewable resources owned or procured by AEP Ohio or its affiliates. Customers who have chosen to receive their power from a competitive supplier should not be

[32] Id. at 31.
[33] Id.at 32.
[34] Direct Testimony of William A. Allen at 10.

forced to bear the costs of AEP Ohio or its affiliates' decisions to procure new renewable resources.

Further, based on my regulatory experience and understanding of Section (B)(2)(c) of the ESP statute, R.C. 4928.143, before establishing a non-bypassable surcharge of the type contemplated by AEP Ohio, the Commission must first determine that there is a need for the facility based on resource planning projections submitted by the electric distribution utility. To my knowledge, AEP Ohio has not demonstrated a need for the renewable facilities based on resource planning projections.

Q. Does this conclude your direct testimony?

A. Yes.

**OHIO POWER COMPANY'S RESPONSE TO
THE PUBLIC UTILITIES COMMISSION OF OHIO'S
DATA REQUEST
PUCO CASE NO. 16-1852-EL-SSO et al.
ELEVENTH SET**

DATA REQUEST

Staff-DR-11-001 Please provide the quantitative rationale and calculations for each year of the annual revenue caps requested by AEP Ohio for the years 2018 through 2024. Please provide the excel work papers in a format wherein all formulas are open.

For any numbers which are hard coded into the spread sheet(s) please also provide the source inputs (including any explanatory information, assumptions, or methodologies) of the cost or input.

To the extent that the inputs are associated with individual plant balances, please provide that granularity in your response.

RESPONSE

Please see Staff DR-11-001 Attachment 1.

Prepared by: David R. Gill

Year	DIR Additions	Distribution Spend
2016	254,600,000	200,000,000
2017	286,425,000	225,000,000
2018	286,425,000	225,000,000
2019	286,425,000	225,000,000
2020	286,425,000	225,000,000
2021	286,425,000	225,000,000
2022	286,425,000	225,000,000
2023	286,425,000	225,000,000
2024	286,425,000	225,000,000

Notes

Annual spend supported by Company witness Dias

Loadings:	34%	based on DIR activity in 2013-2015
Closed to DIR accounts:	95%	based on DIR activity in 2013-2015

AEP OHIO
CASE No. 16-1852-EL-SSO AND CASE No. 16-1853-EL-AAM
Cost of Capital
($000)

Date of Capital Structure: December 31, 2015

Line No.	Class of Capital	($) Amount	% of Total	(%) Cost	Weighted Cost (%)	Pre-Tax Weighted Cost (%)
1	Long-Term Debt	$ 1,950,000	49.54%	6.01%	2.98%	2.98%
2	Short-Term Debt	$ -	0.00%	0.00%	0.00%	0.00%
3	Common Equity	1,986,600	50.46%	12.50% *	6.31%	9.83%
4	Total Capital	$ 3,936,600	100%		9.29%	12.81%

* 12.5% ROE equal to ROE cap supported by Company witness Kyle

OHIO POWER COMPANY'S RESPONSE TO TO THE PUBLIC UTILITIES COMMISSION OF OHIO'S DATA REQUEST PUCO CASE NO. 16-1852-EL-SSO et al. THIRD SET STAFF SCHWEITZER

DATA REQUEST

Staff -DR-3-002 Are the costs associated with the proposed security technologies for distribution substations eligible for cost recovery through the existing Distribution Investment Rider?

RESPONSE

The accounts for which the substation security assets are recorded are eligible for recovery through the DIR. As proposed, the Company would track these assets separately by using special accounting asset tags in the owned asset system and remove them from the DIR asset balances. Through the Company's proposal, the investment in substation security would be recovered through the Distribution Technology Rider and the caps associated with the DIR would not be reduced so the Company can continue to focus on the system hardening benefits of the DIR programs.

Prepared by: Andrea E. Moore

Electric Utility ROE Decisions - January 2016 through April 2017
As Compiled by Regulatory Research Associates and Reported by SNL Financial

Date	State	Company	Case Identification	Case Type	Return on Equity (%)
12/6/2016	Illinois	Ameren Illinois	D-16-0262	Distribution	8.64
12/6/2016	Illinois	Commonwealth Edison Co.	D-16-0259	Distribution	8.64
6/15/2016	New York	NY State Electric & Gas Corp.	C-15-E-0283	Distribution	9.00
6/15/2016	New York	Rochester Gas & Electric Corp.	C-15-E-0285	Distribution	9.00
12/19/2016	Maine	Emera Maine	D-2015-00360	Distribution	9.00
1/24/2017	New York	Consolidated Edison Co. of NY	C-16-E-0060	Distribution	9.00
12/14/2016	Connecticut	United Illuminating Co.	D-16-06-04	Distribution	9.10
12/19/2016	Colorado	Black Hills Colorado Electric	D-16AL-0326E	Vertically Integrated	9.37
4/12/2017	New Hampshire	Liberty Utilities Granite St	D-DE-16-383	Distribution	9.40
3/2/2017	Minnesota	Otter Tail Power Co.	D-E-017/GR-15-1033	Vertically Integrated	9.41
1/18/2017	Wyoming	MDU Resources Group Inc.	D-2004-117-ER-16	Vertically Integrated	9.45
6/8/2016	New Mexico	El Paso Electric Co.	C-15-00127-UT	Vertically Integrated	9.48
1/6/2016	Washington	Avista Corp.	D-UE-150204	Vertically Integrated	9.50
8/18/2016	Arizona	UNS Electric Inc.	D-E-04204A-15-0142	Vertically Integrated	9.50
9/1/2016	Washington	PacifiCorp	D-UE-152253	Vertically Integrated	9.50
11/10/2016	Oklahoma	Public Service Co. of OK	Ca-PUD201500208	Vertically Integrated	9.50
12/28/2016	Idaho	Avista Corp.	C-AVU-E-16-03	Vertically Integrated	9.50
3/20/2017	Oklahoma	Oklahoma Gas and Electric Co.	Ca-PUD201500273	Vertically Integrated	9.50
4/20/2017	New Hampshire	Unitil Energy Systems Inc.	D-DE-16-384	Distribution	9.50
11/15/2016	Maryland	Potomac Electric Power Co.	C-9418	Distribution	9.55
9/28/2016	New Mexico	Public Service Co. of NM	C-15-00261-UT	Vertically Integrated	9.58
12/12/2016	New Jersey	Jersey Cntrl Power & Light Co.	D-ER-16040383	Distribution	9.60
12/22/2016	Nevada	Sierra Pacific Power Co.	D-16-06006	Vertically Integrated	9.60
2/15/2017	Maryland	Delmarva Power & Light Co.	C-9424	Distribution	9.60
2/22/2017	New Jersey	Rockland Electric Company	D-ER-16050428	Distribution	9.60
2/23/2016	Arkansas	Entergy Arkansas Inc.	D-15-015-U	Vertically Integrated	9.75
6/3/2016	Maryland	Baltimore Gas and Electric Co.	C-9406 (elec)	Distribution	9.75
8/24/2016	New Jersey	Atlantic City Electric Co.	D-ER-16030252	Distribution	9.75
2/24/2017	Arizona	Tucson Electric Power Co.	D-E-01933A-15-0322	Vertically Integrated	9.75
4/29/2016	Massachusetts	Fitchburg Gas & Electric Light	DPU 15-80	Distribution	9.80
11/9/2016	Wisconsin	Madison Gas and Electric Co.	D-3270-UR-121 (Elec)	Vertically Integrated	9.80
3/16/2016	Indiana	Indianapolis Power & Light Co.	Ca-44576	Vertically Integrated	9.85
8/9/2016	Tennessee	Kingsport Power Company	D-16-00001	Vertically Integrated	9.85
9/30/2016	Massachusetts	Massachusetts Electric Co.	DPU-15-155	Distribution	9.90
12/22/2016	North Carolina	Virginia Electric & Power Co.	D-E-22, Sub 532	Vertically Integrated	9.90
7/18/2016	Indiana	Northern IN Public Svc Co.	Ca-44688	Vertically Integrated	9.98
9/8/2016	Michigan	Upper Peninsula Power Co.	C-U-17895	Vertically Integrated	10.00
11/18/2016	Wisconsin	Wisconsin Power and Light Co	D-6680-UR-120 (Elec)	Vertically Integrated	10.00
12/1/2016	California	Liberty Utilities CalPeco Ele	A-15-05-008	Vertically Integrated	10.00
12/7/2016	South Carolina	Duke Energy Progress LLC	D-2016-227-E	Vertically Integrated	10.10
1/31/2017	Michigan	DTE Electric Co.	C-U-18014	Vertically Integrated	10.10
2/28/2017	Michigan	Consumers Energy Co.	C-U-17990	Vertically Integrated	10.10
4/4/2017	Florida	Gulf Power Co.	D-160186-EI	Vertically Integrated	10.25
11/29/2016	Florida	Florida Power & Light Co.	D-160021-EI	Vertically Integrated	10.55
				Median ROE:	9.60

Includes only rate cases in which the company requested a rate change of at least $5 million or had an authorized rate change of at least $3 million.
Excludes limited issue rider ROE determinations.

**OHIO POWER COMPANY'S RESPONSE TO
THE OFFICE OF THE OHIO CONSUMERS' COUNSEL'S
DISCOVERY REQUEST
PUCO CASE NO. 16-1852-EL-SSO et al.
SECOND SET**

INTERROGATORY

OCC-INT-2-269 From the testimony of Andrea E. Moore Page 10, lines 12 – 15: "Of the .75% incentive ROE, the Company would provide that .25% be recognized only to the extent that the Company is able to borrow a portion of the capital from local Ohio banks. This will further benefit the communities we serve by borrowing from and supporting their local businesses." Is the term a portion defined (i.e. is there a % of the total amount borrowed that must be borrowed from local Ohio banks before the .25% is recognized)?

RESPONSE

The Company has not defined the term a portion. The amount of local financing will depend on interest from the local banks as well as access to competitive rates.

Prepared by: Andrea E. Moore