Case No. 23-0106-EL-RDR

Compliance Audit of the 2022 Distribution Investment Rider (DIR) Ohio Power Company d/b/a AEP Ohio

September 29, 2023

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DISCLAIMER

In the context of this report, Blue Ridge Consulting Services, Inc. (Blue Ridge) intends the word *audit* as it is commonly understood in the utility regulatory environment: as a regulatory review, a field investigation, or a means of determining the appropriateness of a financial presentation for regulatory purposes. The word is not intended in its precise accounting sense denoting an examination of booked numbers and related source documents for financial reporting purposes. Neither is the term *audit* in this case an analysis of financial-statement presentation in accordance with the standards established by the American Institute of Certified Public Accountants (AICPA) and the Financial Accounting Standards Board (FASB). The reader should distinguish regulatory reviews, such as those that Blue Ridge performs, from financial audits performed by independent certified public accountants.

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ORGANIZATION OF BLUE RIDGE'S REPORT

Blue Ridge Consulting Services, Inc. ("Blue Ridge"), the auditor selected for the review of the 2022 Distribution Investment Rider (DIR) of Ohio Power Company d/b/a AEP Ohio ("AEP Ohio" or "Company"), organized this report of its audit activity and conclusions according to the following major sections:

- *Executive Summary*: This section provides a summary of Blue Ridge's observations, findings, conclusions, and recommendations that are presented in more detail in the body of the report.
- *Overview of Investigation*: This section provides discussion of these topics: background; project purpose; project scope; audit standard; information reviewed, including Rider DIR compliance filings; and a brief summary of the variance analyses, transactional testing, and other analyses.
- *Status of Case 22-0089-EL-RDR Recommendations*: This section presents the current status of the Company's implementation of recommendations from the prior DIR audit.
- *Findings and Recommendations*: This section documents Blue Ridge's analysis that led to our observations, findings, and recommendations regarding the components that comprise the DIR. In several instances, Blue Ridge used information obtained from prior DIR audits. In such cases, Blue Ridge has labeled the information used to show that we obtained it during the prior audits and we are providing it with the workpapers supporting this report.
- *Appendices*: The appendices include information reviewed, abbreviations used, data requests, and workpapers that support recommended adjustments.

The scope of the audit includes an overview of the process and control policies and procedures that affect the categories that feed into the Rider DIR calculations. Variance analysis evaluates significant changes in net plant and reserve by individual FERC account.

The scope also includes review of the Rider DIR Revenue Requirement components. It begins with an overview of methodology, including orders revising the makeup of the DIR. Additional Revenue Requirement topics include mathematical accuracy, net plant in service, DIR exclusions, accumulated deferred income tax, theoretical reserve offset, carrying charge rate, gross-up factor (Commercial Activity Tax), revenue offset, annual cap and recovery, and annual base distribution revenue. The report discusses the overall impact of findings on the Rider DIR Revenue Requirements and concludes with the continuing effect of the Tax Cuts and Jobs Act of 2017.

EXECUTIVE SUMMARY

BACKGROUND

On August 8, 2012, the Public Utilities Commission of Ohio (PUCO or "Commission") issued an opinion and order *In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan Case No. 11-346-EL-SSO et al*. In that opinion and order, the Commission established a Distribution Investment Rider (DIR). Through the DIR, Ohio Power Company d/b/a AEP Ohio ("AEP Ohio" or "Company") may recover property taxes, Commercial Activity Tax, and associated income taxes and earn a return on and of plant in service associated with distribution net investment regarding Federal Energy Regulatory Commission (FERC) Plant Accounts 360–374. The net capital additions to be included in the DIR reflect gross plant in service after August 31, 2010, as adjusted for accumulated depreciation. Capital additions, recovered through other riders authorized by the Commission to recover distribution capital additions, will be identified and excluded from the DIR.

In Case No. 13-2385-EL-SSO et al., the Commission modified and approved the continuation of the DIR for the period June 1, 2015, through May 31, 2018. In Case No. 16-1852-EL-SSO et al., the Commission modified and approved a subsequent extension for the DIR for the period June 1, 2018, through May 31, 2024.

On November 17, 2021, in Case No. 20-585-EL-AIR, the Commission approved new distribution rates. The net capital additions to be included in the DIR going forward reflect gross plant in service after December 21, 2019, as adjusted for accumulated depreciation. The maximum annual revenue authorized to be collected through the DIR was also established.

In accordance with the Opinion and Order in Case No. 11-346-EL-SSO, and as modified and approved in Case Nos. 13-2385-EL-SSO, 16-1852-EL-SSO, and 20-585-EL-AIR, the Commission sought proposals to review the accounting accuracy, prudency, and compliance of AEP Ohio with its PUCO-approved DIR with regard to in-service net capital additions since the last DIR compliance audit. Blue Ridge Consulting Services, Inc. ("Blue Ridge") submitted a proposal and was selected to perform the work.

PURPOSE OF PROJECT

The project purpose as defined in the RFP requires a review of the accounting accuracy, prudency, and compliance of AEP Ohio concerning its Commission-approved DIR regarding in-service net capital additions since the last DIR compliance audit. The review covers the DIR quarterly filings for 2022. Capital additions recovered through other riders authorized by the Commission will be identified to ensure their exclusion from the DIR. The review will also include identification, quantification, and explanation of any significant net plant increases within individual accounts.

PROJECT SCOPE

The project scope as defined in the RFP is to determine whether AEP Ohio has implemented its PUCO-approved DIR in compliance with the Opinion and Orders issued in Case Nos. 11-346-EL-SSO, 13-2385-EL-SSO, 16-1852-EL-SSO, and 20-585-EL-RDR.

FINDINGS AND RECOMMENDATIONS

PROCESSES AND CONTROLS

From the documents reviewed, Blue Ridge was able to obtain an understanding of the Company's processes and controls that affect the DIR.

Blue Ridge requested information on DIR changes since Blue Ridge's last audit covering DIR activity in year 2021. Blue Ridge reviewed the list of changes supplied by the Company and was satisfied that the Company's policies and procedures affecting the DIR, along with the preparation process, were adequate and not unreasonable.

Blue Ridge was satisfied with actions taken with regard to internal audits and SOX-compliance testing. Blue Ridge concluded AEP Ohio's processes and controls were adequate and not unreasonable.

VARIANCE ANALYSIS

Blue Ridge's variance analysis focused on identifying, quantifying, and explaining any significant net plant increases within the individual plant accounts. In its plan for analysis, Blue Ridge anticipated requesting from the Company explanations for any significant changes. Based on its investigative and analytic evaluation of the account changes and the Company's explanations, Blue Ridge's review of variances in the Company account balances during the 2022 DIR year, no variances resulted in concerns for the proper calculation of DIR amounts.

REVENUE REQUIREMENTS

Overview of Methodology

The DIR allows carrying costs on incremental distribution plant to be recovered each year using a pre-tax weighted average cost of capital and related plant expenses. The DIR revenue requirement excludes recovery on plant included in base distribution rate cases and other riders.

Mathematical Accuracy

Blue Ridge reviewed the mathematical calculations in the Company's DIR model and found them not unreasonable. The calculations were consistent with Attachment B of the Joint Stipulation approved in Case No. 20-0585-AIR.[1]

Net Plant in Service

Blue Ridge's review of net plant in service included validation to FERC Form 1 filings for gross plant and the reserve for depreciation. Blue Ridge compared the gross plant and accumulated depreciation amounts in the DIR filing to the 2022 FERC report for Distribution Plant. The account totals matched.

Regarding transactional testing of sampled work orders, Blue Ridge performed a nine-step testing process to determine the integrity of the DIR in process and intent. Blue Ridge found the continuing property records supported the assets completely and accurately for all 46 work orders sampled. Additionally, Blue Ridge selected 11 projects for field verification from the work order sample. The purpose for the field verification was to determine whether the assets had been installed per the work order scope and description and whether they are used and useful in rendering service

[1] V&V workpaper.

to the customer. Of the 11 projects reviewed, 10 were confirmed as installed and used and useful. One project was installed but not available for use until April or May 2024. **[ADJUSTMENT #2.16]**

Blue Ridge recommends that the Companies continue to make a concerted effort to reduce the volume of backlog work orders, both in quantity and dollar value. The focus should be primarily on work orders not unitized over 12 months but should, nevertheless, also include work orders under 12 months.

Blue Ridge also found that there is no indication that the insurance recoveries were applied inappropriately causing the DIR to be misstated.

Exclusions from DIR

The Commission ordered that capital additions recovered through other Commission-authorized riders be identified and excluded from the DIR. Blue Ridge reviewed each rider and determined that the Company appropriately excluded capital additions recovered through other Commission-authorized riders from the DIR, except regarding the adjustment Blue Ridge identifies as Adjustment #17. (See adjustments listed below under Overall Impact of Findings on DIR Revenue Requirements

Accumulated Deferred Income Tax

The DIR includes an offset in rate base to account for the impact of accumulated deferred income tax (ADIT), a source of non-investor supplied capital. The balance in DIR rate base is determined by calculating the incremental change in Account 2821001 relative to the test year balance in Case No. 20-0585-EL-AIR.

In October 2021, the Company made a reclass entry to transfer the balance of 1986 protected excess ADIT from account 2821001 to 2831001.[2] The impact was a non-normal increase to DIR rate base and the revenue requirement (prior to cap analysis). Accordingly, during the audit of year 2021 results, Blue Ridge recommended an adjustment to negate the impact of the reclass entry on future DIR filings. The Company agreed and implemented the adjustment beginning with the Q3 2022 DIR filing. Blue Ridge is satisfied with the Company's adjusted calculation of the incremental change in ADIT and found the resulting balance in DIR rate base not unreasonable.

Theoretical Reserve Offset

Blue Ridge found the application of the theoretical reserve offset to net plant at DIR formula line 13 to be consistent with prior precedent and not unreasonable. The Stipulation and Order in Case No. 20-0585-EL-AIR further includes a direct adjustment to the DIR revenue requirement to reflect the annual impact of the theoretical reserve amortization not in base rates. The Company explained the change as follows:

> The Stipulation and Order allows for adjustment to the DIR revenue requirement to include the changes in the theoretical reserve including the eventual expiration of the theoretical reserve beginning in June 2023. The annual DIR revenue requirement will start including the increase in the theoretical reserves (decrease the DIR revenue requirement of $21,451,689 - annual amount starting in December 2021) and then include the expiration of the theoretical reserve (increase the DIR revenue requirement starting June 2023) by $23,726,170 annually to offset the increase in AEP Ohio's depreciation expense due to the expiration of the theoretical reserve after May 31, 2023. The adjustments to the DIR are appropriate because base rates do not

[2] AEP Ohio's response to audit scope 2021 Data Request 14-003.

reflect the increase in the theoretical reserve that occurred in June 2021 and base rates will not reflect the expiration of the theoretical reserve starting in June 2023.[3]

Carrying Charge Rate

The carrying charge rates include elements to allow the Company an opportunity (1) to recover property taxes, (2) to recover depreciation on plant, and (3) to earn a return on (accounting for associated income taxes) plant in service associated with distribution net investment. The carrying charge rates comport with the rate of return and plant-related expense rates authorized in Case No. 20-0585-El-AIR.

Gross-Up Factor (CAT)

The DIR Revenue Requirement is grossed up for the Commercial Activity Tax. Blue Ridge found the gross-up rate not unreasonable.

Annual Cap and Under/Over Recovery

The annual DIR revenue cap for 2022 was $96 million, inclusive of a $5 million incentive for achieving 2021 reliability standards. The Company reached this annual cap beginning in the month of July; the cumulative disallowed revenue through December was $11.2 million. Thus, while Blue Ridge recommends certain adjustments to plant balances discussed later in this report, no impact results on the final revenue requirement because the changes in aggregate do not exceed amounts already deducted due to the cap.

Under-/Over-Recovery

The Company reported under-recovered billed revenues through January 31, 2023, of $2.7 million. The balance includes $2.96 million related to an open audit issue dating back to 2019. Blue Ridge recommends the Company not reflect the balance in question until the Commission formally approves. **[ADJUSTMENT #1]**

Annual Base Distribution Revenue

The DIR is collected as a percentage of base distribution revenue. Blue Ridge verified that the base distribution revenue used in the denominator agreed to the supporting documentation. We found no exceptions.

In conclusion, the mathematical calculations for each quarter are not unreasonable.

Continued Implementation of Tax Cuts and Jobs Act of 2017 from Case No. 18-1451-EL-ATA

Consistent with prior audits, Blue Ridge requested a reconciliation of the EDIT balances as of December 31, 2022.[4] Based on the data provided, Blue Ridge found the activity and ending EDIT balances in DIR rate base to be consistent with prior years and not unreasonable.

Overall Impact of Findings on DIR Revenue Requirements

Blue Ridge's review of the accounting, accuracy, prudence, and compliance of AEP Ohio with its Commission-approved DIR yielded these adjustments:

[3] AEP Ohio's response to audit scope 2021 Data Request BR-01-009.
[4] AEP Ohio's response to audit scope 2022 Data Request BR-01-032.

Table 1: Adjustments to DIR Balances and Revenue Requirement as of December 31, 2022

Adj No.	Description	Plant in Svc	Accum Depr	Net Plant	Revenue Requirement Subject to Cap (Line 27)	Annualized DIR Revenue Requirement Dec. 31, 2022 (Line 39)	Over/(Under) Adjustment (Line 41)	Fully Adjusted Revenue Req. (Line 43)
						a	b	c = a + b
	Plant in Service, less gridSMART - As Filed	$ 6,122,103,482	$ 1,773,808,397	$ 4,348,295,085	$ 130,564,356	$ 75,709,044	$ 4,768,164	$ 80,477,209
1	2019/2020/2021 Open Audit Issue	-	-	-	-	-	(2,964,660)	(2,964,660)
2	2022 Plant-in-Serivce							
2.1	Severance/Educational Expense (BOP0000001)	(3,052)	(60)	(2,992)	(516)	-	-	-
2.2	Severance/Educational Expense (BOP0000018)	(1,080)	(23)	(1,057)	(182)	-	-	-
2.3	Severance/Educational Expense (DOP0329033)	(13)	(0)	(13)	(2)	-	-	-
2.4	Severance/Educational Expense (DOP0340318)	(1,081)	(11)	(1,069)	(184)	-	-	-
2.5	Severance/Educational Expense (DOP0344522)	(15)	(0)	(15)	(3)	-	-	-
2.6	Severance/Educational Expense (DOP0345440)	(13)	(0)	(12)	(2)	-	-	-
2.7	Severance/Educational Expense (DOP0351997)	6	0	6	1	-	-	-
2.8	Severance/Educational Expense (DOP0354526)	(15)	(0)	(14)	(2)	-	-	-
2.9	Severance/Educational Expense (DOP0359914)	(11)	(0)	(11)	(2)	-	-	-
2.10	Severance/Educational Expense (DOP0360545)	(16,602)	(301)	(16,301)	(2,808)	-	-	-
2.11	Severance/Educational Expense (T10120323)	94	0	94	16	-	-	-
2.12	AFUDC Over-accrued (42710211)	(950)	(19)	(931)	(160)	-	-	-
2.13	AFUDC Over-accrued from July 20-Jan 22 (42738032)	(427,000)	(8,389)	(418,611)	(72,133)	-	-	-
2.14	AFUDC Over-accrued from Dec 20-April 21 (T1024585	(52,228)	(1,071)	(51,157)	(8,817)	-	-	-
2.15	Paid over FMV for the land (W0033215)	(113,386)	-	(113,386)	(19,462)	-	-	-
2.16	Huggy Campsites not used or in-service (T10298956)	(1,909,078)	(39,136)	(1,869,941)	(322,277)	-	-	-
2.17	gridSMART not excluded (Various)	(5,151,731)	(37,876)	(5,113,855)	(879,037)	-	-	-
2.18	gridSMART add back (Various)	34,732	1,250	33,481	5,789			
	Plant in Service, less gridSMART - Blue Ridge Adjusted	$ 6,114,462,061	$ 1,773,722,761	$ 4,340,739,300	$ 129,264,575	$ 75,709,044	$ 1,803,504	$ 77,512,549

The DIR revenue requirements calculation results in a percentage increase in base distribution revenue. The following table presents the DIR percentage of base distribution proposed by the Company in the Q42022 DIR filing and as adjusted by Blue Ridge.

Table 2: Rider DIR—Q42022 Fully Adjusted Revenue as a Percentage of Base Distribution Revenue

Adj No.	Description	Revenue Req. Dec. 31, 2022 (Line 39)	Over/(Under) (Line 41)	Fully Adjusted Revenue Req. (Line 43)	% Base Distr Rev
	Revenue Requirement - Q42022 DIR Filing	$ 75,709,044	$ 4,768,164	$ 80,477,209	8.73511%
1	2019/2020/2021 Open Audit Issue	-	(2,964,660)	(2,964,660)	-0.32179%
2	2022 Adjustments to Plant Balances	-	-	-	0.00000%
	Subtotal Blue Ridge Adjustments	-	(2,964,660)	(2,964,660)	-0.32179%
	Revenue Requirement - Q42022 DIR Filing - Adjusted	$ 75,709,044	$ 1,803,504	$ 77,512,549	8.41332%

Adjustments

Adjustments #2.1–2.11: In follow-up of 2021 DIR Audit Recommendation #4, Blue Ridge identified 11 work orders within the sample with cost element 143 charges. Cost element 143 is utilized to track activity associated with lump-sum payments to employees (other than incentive pay and relocation). Examples include retroactive pay changes, grievance settlements, benefit payment adjustments, signing bonuses, allowable meal allowances, and until recently, educational assistance. Blue Ridge notes that while some of the examples provided would, based on their descriptions, be appropriate to charge to construction, others (e.g., grievance settlements, educational assistance, and signing bonuses) would not.

BRCS Adjustment #	Work Order Number	Charges in Cost Element 143	Gross Plant Adjustment	Impact on Revenue Requirement
Adjustment #2.1	BOP0000001	$3,051.68	$(3,051.68)	$(515.53)
Adjustment #2.2	BOP0000018	$1,079.68	$(1,079.68)	$(182.21)
Adjustment #2.3	DOP0329033	$13.00	$(13.00)	$(2.23)
Adjustment #2.4	DOP0340318	$1,080.92	$(1,080.92)	$(183.96)
Adjustment #2.5	DOP0344522	$14.92	$(14.92)	$(2.55)
Adjustment #2.6	DOP0345440	$12.74	$(12.74)	$(2.13)
Adjustment #2.7	DOP0351997	-$5.84	$5.84	$0.99
Adjustment #2.8	DOP0354526	$14.69	$(14.69)	$(2.48)
Adjustment #2.9	DOP0359914	$10.80	$(10.80)	$(1.85)
Adjustment #2.10	DOP0360545	$16,601.57	$(16,601.57)	$(2,807.99)
Adjustment #2.11	T10120323	-$94.03	$94.03	$16.07
	Grand Total	**$21,780.13**	**$(21,780.13)**	**$(3,683.87)**

While the dollar amounts are relatively small, these non-construction activities should not be capitalized. Therefore, Blue Ridge recommends that Gross Plant be reduced by $21,780.13. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(3,683.87). However, in the 3rd and 4th quarters of 2022, the Company met the DIR cap, so no impact results to ratepayers.

Adjustment #2.12: In testing step T7A/B, Blue Ridge found work order 42738032 had negligible charges other than AFUDC for the period June 2017 through September 2021, and therefore, AFUDC should have been suspended during the extended period of inactivity. Blue Ridge recommends that AFUDC be reduced by $950. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(160.41).

Adjustment #2.13: In testing step T7A/B, Blue Ridge found work order 42738032 had negligible non AFUDC activity from July 2020 through January 2022 and had no charges other than AFUDC from November 2020 through August 2021. The Company should have suspended AFUDC during the extended periods of inactivity. Blue Ridge recommends that AFUDC be reduced by $427,000. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(72,133.44).

Adjustment #2.14: In testing step T7A/B, Blue Ridge found work order T10245851 did not have any charges other than AFUDC for the period December 2020 through April 2021. Therefore, the Company should have suspended AFUDC during the extended period of inactivity. Blue Ridge recommends that AFUDC be reduced by $52,228. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(8,816.76).

Adjustment #2.15: In testing step T7A/B, regarding work order W00333215, which had to do with a land purchase, the Company determined the fair market value based on the county value of the property, estimated at $18,000, adjusted for an estimation of the structural improvements on the property. The Company did not obtain any independent estimates of the fair market value of the property. Since the Company could not provide an independent fair market value of the property purchased and did not present any sales data on any comparable properties, Blue Ridge concludes that the Company paid $131,386 for the site, which is over the fair market value. Blue Ridge recommends disallowance to gross plant of $113,386, which is the difference between what the Company paid and the fair market value. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(19,462.15).

Adjustment #2.16: In testing step T9, Field Verification, Blue Ridge found work order DP20C1880 to be prudent and useful, but it is not currently being used for these reasons: the additional sites will not be available for purchase and rental until April or May 2024 and there is no increase in load as of 12/31/22 associated with the additional sites. Therefore, Blue Ridge recommends $1,909,077.51 Gross Plant be disallowed and moved back to CWIP until such time as the sites become available for purchase or rental. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(322,276.86). However, in the 3rd and 4th quarters of 2022, the Company met the DIR cap, so no impact results to ratepayers.

Adjustment #2.17: In testing step T1B, Blue Ridge found that $5,151,730.57 of gridSMART work is being recovered within the DIR. Blue Ridge recommends an adjustment to gross plant of $(5,151,730.57). Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(879.037.56). However, during the 3rd and 4th quarters of 2022, the Company met the DIR cap, so no impact results to ratepayers.

Adjustment #2.18: The gridSMART Rider recovers capital assets not only from Distribution Plant but also from Intangible and General Plant. Since the quarterly DIR filings include only Distribution Plant, the difference between the riders represents Intangible and General Plant. Blue Ridge compared the amount of cumulative gross plant included in the Company's gridSMART Rider to the amount excluded from the DIR and found a $34,732 difference. The Company confirmed that the difference relates to AMI Meters that were charged to gridSMART Phase 3, Work Order W0035066. These are gridSMART Phase 3 meter seals that closed to Plant in Service; however, they are not used and useful at this time, and therefore, it would be inappropriate to accumulate carrying charges on them. An oversight in the DIR filing caused this overstatement of gridSMART investments to be excluded, resulting in the DIR plant balance being slightly understated. Blue Ridge recommends an adjustment to increase DIR gross plant by $34,731.79. Blue Ridge estimates the effect on the Company's DIR revenue requirement to be $5,788.78. However, in the 3rd and 4th quarters of 2022, the Company met the DIR cap, and thus, no impact results to ratepayers.

Recommendations

Recommendation #1: In follow-up of 2021 DIR Audit Recommendation #4, Blue Ridge identified 11 work orders within the sample (in testing step T7A/B), one of which was a gridSMART work order, with cost element 143 charges. The Company stated that cost element 143 is utilized to track activity associated with lump-sum payments to employees (other than incentive pay and relocation). Blue Ridge notes that while some of the examples provided would, based on their descriptions, be appropriate to charge to construction, others (e.g., grievance settlements, educational assistance, and signing bonuses) would not. Therefore, Blue Ridge continues to recommend that charges be better defined and monitored going forward to ensure non-construction costs are not included as capitalized costs recovered through the DIR.

Recommendation #2: In regard to unitization backlog, Blue Ridge recommends that the Company should continue to make a concerted effort to reduce the volume of backlog work orders, both in quantity and dollar value. The focus should be primarily on work orders not unitized over 12 months but should also include work orders under 12 months.

Overview of Investigation

Background

On August 8, 2012, the Commission issued an opinion and order *In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer Pursuant to Section 4928.143, Revised Code, in the Form of an Electric Security Plan Case No. 11-346-EL-SSO et al*. In that opinion and order, the Commission established a Distribution Investment Rider (DIR). Through the DIR, AEP Ohio may recover property taxes, Commercial Activity Tax, and associated income taxes and earn a return on and of plant in service associated with distribution net investment regarding FERC Plant Accounts 360–374. The net capital additions to be included in the DIR reflect gross plant in service after August 31, 2010, as adjusted for accumulated depreciation. Capital additions, recovered through other riders authorized by the Commission to recover distribution capital additions, are identified and excluded from the DIR.

In Case No. 13-2385-EL-SSO et al., the Commission modified and approved the continuation of the DIR for the period June 1, 2015, through May 31, 2018. In Case No. 16-1852-EL-SSO et al., the Commission modified and approved a subsequent extension for the DIR for the period June 1, 2018, through May 31, 2024.

On November 17, 2021, in Case No. 20-585-EL-AIR, the Commission approved new distribution rates. The net capital additions to be included in the DIR reflect gross plant in service after December 21, 2019, as adjusted for accumulated depreciation. The maximum annual revenue authorized to be collected through the DIR was also established.

On January 6, 2023, AEP Ohio filed a standard service offer (SSO) application (Case No. 23-0023-EL-SSO) to petition the Commission for permission to extend the DIR beyond May 30, 2024, and adjust the revenue cap applicable to the extension. The PUCO has not yet ruled in that case.

In accordance with the Opinion and Order in Case Nos. 11-346-EL-SSO, 13-2385-EL-SSO, 16-1852-EL-SSO, and 20-585-EL-AIR, the Commission sought proposals to review the accounting accuracy, prudency, and compliance of AEP Ohio with its PUCO-approved DIR with regard to in-service net capital additions since the last DIR compliance audit. Blue Ridge submitted a proposal and was selected to perform the work.

Purpose of Project

The project purpose as defined in the RFP requires a review of the accounting accuracy, prudency, and compliance of AEP Ohio with its Commission-approved DIR regarding in-service net capital additions since the last DIR compliance audit. The review covers the DIR quarterly filings for 2022. Capital additions recovered through other riders authorized by the Commission are identified to ensure their exclusion from the DIR. The review also includes identification, quantification, and explanation of any significant net plant increases within individual accounts.

Project Scope

The project scope as defined in the RFP is to determine whether AEP Ohio has implemented its PUCO-approved DIR in compliance with the Opinion and Orders issued in Case Nos. 11-346-EL-SSO, 13-2385-EL-SSO, 16-1852-EL-SSO, and 20-585-EL-AIR. The audit includes, but is not limited to, the following tasks:

- Review Case No. 11-346-EL-SSO, 13-2385-EL-SSO, 16-1852-EL-SSO, and 20-585-EL-AIR.
- Read all applicable testimony and associated workpapers.

- Review Plant-in-Service related provisions contained within the Order in Case No. 20-585-EL-AIR.
- Obtain and review all additions, retirements, transfers, and adjustments to current date value of plant in service that have occurred for the actual year ended December 31, 2022.
- Verify balances with FERC Form 1 for year 2022.
- Obtain and review all appropriate documentation relating to the Company's compliance with its PUCO-approved DIR.
- Obtain and review all appropriate documentation related to compliance with the Annual Compliance Audit Reports and the Commission's Finding and Orders in Case Nos. 14-255-EL-RDR, 15-66-EL-RDR, 16-21-EL-RDR, 17-38-EL-RDR, and 18-230-EL-RDR.
- Obtain and review all appropriate documentation related to the Annual Compliance Audits in Case No. 19-65-EL-RDR, 20-169-EL-RDR, 21-16-El-RDR, and 22-89-EL-RDR.
- Verify the used and usefulness of incremental plant in service.
- Review all changes in capitalization policy and assess any impacts on the DIR, previously authorized recovery as part of base rates, and the impact on O&M expenses.
- Assess the Company's utilization of tax changes and provisions and verify their appropriate treatment within the DIR. Estimate foregone tax reduction opportunities and evaluate impact on the DIR and confirm implementation of any opportunities.
- Assess the Company's continued implementation of the Tax Cuts and Jobs Act of 2017, as approved by the Commission on October 3, 2018, in Case No. 18-1451-EL-ATA.

AUDIT STANDARD

Throughout the audit, Blue Ridge adopted the standard that the audit reviews the amounts for which recovery is sought to determine whether they are not unreasonable in light of the facts and circumstances known to the Company at the time such expenditures were committed.

Specifically, Blue Ridge applied these standards in its assessments:

Accounting Accuracy: The stated value is supported by accurate and complete plant accounting property records. Transactions are properly recorded as capital expenditures in the appropriate FERC account(s).

Used and Useful: The assets are used in providing services and are useful to the ratepayer.

Prudency and Reasonableness: The decision to make the investment was reasonable at the time the decision was made and based on information then available. The decision is one that a reasonable person could have made in good faith, given the information and decision tools available at the time of the decision.

Blue Ridge is familiar with and appropriately applied guidance, as necessary, from these standards:

1. GAAP
2. FERC Uniform System of Accounts
3. Various accounting and tax changes or decisions issued in 2015–2022
4. The Tax Cuts and Jobs Act of 2017

INFORMATION REVIEWED

Blue Ridge reviewed the following information as required by the RFP.

- Case Nos. 11-346-EL-SSO, 13-2385-EL-SSO, 16-1852-EL-SSO, 20-585-EL-AIR
- Applicable testimony and associated workpapers

- Plant-in-Service-related provisions contained within the Orders in Case Nos. 11-351-EL-AIR and 11-352-EL-AIR
- Annual Compliance Audit reports, approved stipulations, and/or the Commission's Finding and Orders in Case Nos. 14-255-EL-RDR, 15-66-EL-RDR, 16-21-EL-RDR, 17-38-EL-RDR, and 18-230-EL-RDR
- Annual Compliance Audit reports in Case Nos. 19-65-EL-RDR, 20-169-EL-RDR, 21-16-EL-RDR, and 22-89-EL-RDR
- All changes in capitalization policy and their impacts, if any, on the DIR and on O&M expenses

For ease of reference, excerpts from the Rider DIR portions of the Orders in the above cases are provided in Appendix A.

The appendices include electronic copies of the audit reports, stipulations, and orders reviewed.

During the audit process, Blue Ridge requested and was provided additional information. A list of the data requested is included as Appendix B. Electronic copies of the information obtained were provided on a USB drive to Staff.

Rider DIR Compliance Filings Reviewed

The Company filed and Blue Ridge reviewed the following quarterly DIR filings:

1. 1st Quarter 2022—Case No. 14-1696-EL-RDR filing dated June 24, 2022
2. 2nd Quarter 2022—Case No. 14-1696-EL-RDR filing dated September 28, 2022
3. 3rd Quarter 2022—Case No. 14-1696-EL-RDR filing dated December 21, 2022
4. 3rd Quarter 2022—Case No. 14-1696-EL-RDR filing Correction dated February 9, 2023
5. 4th Quarter 2022—Case No. 14-1696-EL-RDR filing dated May 16, 2023
6. 4th Quarter 2022—Case No. 14-1696-EL-RDR filing Correction dated May 17, 2023

Variance Analysis, Transactional Testing, and Other Analysis

To identify, quantify, and explain any significant net plant increases within the individual accounts, Blue Ridge performed account variance analyses. The Company was asked to explain any significant changes. The results of the analyses are included in this report under the section labeled Variance Analysis.

In addition, Blue Ridge selected a sample of work orders from the population of work orders that support the gross plant in service for detailed transactional testing. The results of the transactional testing are included in the section labeled Net Plant in Service.

Blue Ridge also performed various analyses, including mathematical verifications and source data validation, of the schedules that support the Rider DIR Compliance Filings. The report addresses each component of the DIR and the results of these analyses are included within each component's section.

A list of Blue Ridge's workpapers is included in Appendix C.

STATUS OF CASE NO. 22-0089-EL-RDR RECOMMENDATIONS

Blue Ridge performed the Compliance Audit of the 2021 DIR in Case No. 22-0089-EL-RDR. In its report, based on its findings, Blue Ridge presented two adjustments and four other recommendations. The Company provided status on the adjustments and recommendations.[5]

Adj #1: At this time the Commission has not decided the disputed recommendation in Case Nos. 20-0169-EL-RDR and 21-0016-EL-RDR concerning the Company's override of Line 41 limitation in the DIR formula. Moreover, no parties have filed comments supporting the Company's viewpoint in response to the respective audit reports Blue Ridge submitted on August 28, 2020, and September 1, 2021. As Blue Ridge cannot rely on the inference that the updated DIR formula for investments after December 31, 2019, should apply retrospectively, we carry forward the prior audit recommendation. The impact reduces the Company's under-recovered DIR revenue position and fully adjusted revenue requirement as of December 31, 2021, by $2.96 million.

<u>Company Status</u>: The Company maintains its position from the prior year's audit that it was under the 2019 DIR revenue cap.

<u>Blue Ridge Comments</u>: Because the Commission has not ruled on the prior audit finding concerning the Company's override of Line 41 limitation in the DIR formula, Blue Ridge again cannot rely on the inference that the updated DIR formula for investments after December 31, 2019, should apply retrospectively and, therefore, finds the impact reduces the Company's under-recovered DIR revenue position as calculated and reported in the Revenue Requirements section of this report. **[ADJUSTMENT #1]**

Adj #2: For months in which the Company is below the revenue cap, any 2021 plant adjustment that Blue Ridge proposes will flow through to the Fully Adjusted Revenue Requirement via the over/under adjustment at Line 41 of the Q4 2021 filing. The Company was above the revenue cap for the entire year. Therefore, the impact of the plant adjustments was zero.

Blue Ridge identified two work orders associated with projects considered not used and useful:

2a. Work Order W0032169: Land purchased for project was not used and useful as of 12/31/21. The Company made the transfer back to CWIP in 2022. Thus, the DIR is overstated by $510,000 (amount subject to check by the Company).

2b. Work Order T10192037: Mound St. Station is useful but not used in rendering service to the customer; therefore, the DIR is overstated by $3,492,382 (amount subject to check by the Company).

<u>Company Status</u>: The Company made these adjustments with the Quarter 3 2022 DIR filing. The Company also provided the accounting entry for this adjustment.[6]

<u>Blue Ridge Comments</u>: After reviewing the Company's accounting entry on July 22, 2022, Blue Ridge found that the Company's handling of this adjustment was not unreasonable.

Rec-01. Blue Ridge recommends that the Company continues to make a concerted effort to reduce the volume of backlog work orders, both in quantity and dollar value.

[5] AEP Ohio's response to audit scope 2022 Data Request BR-01-008.
[6] AEP Ohio's response to audit scope 2022 Data Request BR-12-002.

Company Status: The Company continues to make a concerted effort to ensure work orders are closed timely by following its established policies and procedures.

Blue Ridge Comments: The Company reduced the overall backlog from 2021 to 2022 by 27%. However, the backlog greater than 12-months decreased by 57% from $205 million to $87.4 million. While the Company has made an effort to reduce the overall backlog, that effort appears to be concentrated only on work orders under 12-months old.

Rec-02. Blue Ridge continues to recommend that the Company establish a tracking mechanism to ensure that work orders are unitized on a timely basis. Failure to do so might result in inaccurate charges to depreciation and the reserve because unitizations are not performed timely.

Company Status: An additional tracking mechanism was not added.

Blue Ridge Comments: Blue Ridge reiterates its recommendation from the last audit. Ensuring work orders are unitized on a timely basis is necessary to support avoiding inaccurate charges to depreciation and the reserve. Therefore, Blue Ridge recommends that the Company establish a tracking mechanism to support their efforts in unitizing work orders on a timely basis.

Rec-03. Blue Ridge recommends the Commission require the Company to make an adjustment to reverse the impact of the ADIT reclass entry it recorded in October 2021 so that it does not over-recover relative to the Case No. 20-0585-EL-AIR benchmark in future filings or explain why any adjustment to reverse the impact would not be appropriate.

Company Status: The Company made this adjustment with the Quarter 3 2022 DIR filing.

Blue Ridge Comments: Blue Ridge is satisfied with the Company's adjustment. No true-up adjustment for Q1 and Q2 is necessary due to the Company exceeding its revenue cap for 2022.

Rec-04. Blue Ridge notes that cost element 143 appears to include a small amount of costs related to non-construction activities (e.g., grievance settlements, signing bonus, and educational assistance). Although the amounts are negligible, Blue Ridge recommends that charges should be better defined and monitored going forward to ensure non-construction costs are not included as capitalized costs recovered through the DIR.

Company Status: An additional tracking mechanism was not added in 2022.

Blue Ridge Comments: During the 2021 DIR Audit, Blue Ridge did not ask the Company to provide an additional tracking mechanism in regard to Cost Element 143. However, we did and continue to recommend that the charges should be better defined and monitored going forward to ensure non-construction costs are not included as capitalized costs recovered through the DIR. In the current audit, Blue Ridge found that the problem prompting last year's recommendation continues and is growing. Blue Ridge found 11 work orders with cost element 143 charges:

BRCS Adjustment #	Work Order Number	Cost Element 143 Description	2022 Activity	Gross Plant Adjustment for Cost Element 143	Impact on Revenue Requirement
Adjustment #2.1	BOP0000001	Other Lump Sum Payment	$12,463,603.91	$(3,051.68)	$(515.53)
Adjustment #2.2	BOP0000018	Other Lump Sum Payment	$1,540,519.14	$(1,079.68)	$(182.21)
Adjustment #2.3	DOP0329033	Other Lump Sum Payment	$3,676,890.22	$(13.00)	$(2.23)

BRCS Adjustment #	Work Order Number	Cost Element 143 Description	2022 Activity	Gross Plant Adjustment for Cost Element 143	Impact on Revenue Requirement
Adjustment #2.4	DOP0340318	Other Lump Sum Payment	$1,592,663.20	$(1,080.92)	$(183.96)
Adjustment #2.5	DOP0344522	Other Lump Sum Payment	$3,977,325.74	$(14.92)	$(2.55)
Adjustment #2.6	DOP0345440	Other Lump Sum Payment	$312,466.90	$(12.74)	$(2.13)
Adjustment #2.7	DOP0351997	Other Lump Sum Payment	$659,521.03	$5.84	$0.99
Adjustment #2.8	DOP0354526	Other Lump Sum Payment	$15,506.00	$(14.69)	$(2.48)
Adjustment #2.9	DOP0359914	Other Lump Sum Payment	$147,515.15	$(10.80)	$(1.85)
Adjustment #2.10	DOP0360545	Other Lump Sum Payment	$7,642,630.18	$(16,601.57)	$(2,807.99)
Adjustment #2.11	T10120323	Other Lump Sum Payment	$6,425,858.54	$94.03	$16.07
	Grand Total			**$(21,780.13)**	**$(3,683.87)**

While the dollar amounts are relatively small, these non-construction activities should not be capitalized. Therefore, Blue Ridge again recommends that, going forward, the Company better define and monitor these charges to ensure they are not included as capitalized costs recovered through the DIR and that Gross Plant be reduced by $21,780.13. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(3,683.87). However, in the 3rd and 4th quarters of 2022, the Company met the DIR cap, so no impact results to ratepayers. **[ADJUSTMENTS #2.1—2.11]**

FINDINGS AND RECOMMENDATIONS

PROCESSES AND CONTROLS

The compliance audit of the AEP Ohio DIR was not a regulatory management audit (i.e., a diagnostic examination purposed to assess the effectiveness and efficiency of operation of a specific regulated utility). However, Blue Ridge did review AEP Ohio's processes and controls to ensure that they were sufficient so as not to adversely affect the costs in the DIR. Based on the documents reviewed, Blue Ridge was able to update its understanding of the Company's processes and controls that affect each of the plant balances and expense categories within the DIR.

DIR PREPARATION

Blue Ridge had obtained an understanding of how the DIR is prepared from AEP Ohio's 2015 description of the process: "The Rider is based on the FERC Form 3Q Net Book Value for Distribution Plant. The Net Book Value of gridSMART assets is removed from the rider because recovery of those assets is achieved through the gridSMART rider. The Net Book Value of gridSMART assets is obtained through a query of the owned asset system provided by property accounting. The capital dollars spent for vegetation management are also removed from the rider. These values are obtained from the distribution operations system by [the AEP Ohio regulatory department] and removed from Rider DIR because the recovery of incremental capital dollars for vegetation management [is] recovered through the Enhanced Service Reliability Rider. ADIT is removed from rider DIR per the order in Case Nos. 11-346-EL-SSO and 13-2385-EL-SSO. ADIT values are reflected on the balance sheet for the distribution function only in account 2821001[,] which is ADIT for utility property. $62,344,000 is then added to reflect the credit provided to rate payers as approved in Case No. 11-351-EL-AIR. In addition, the over/under recovery balance from the previous quarter is added or subtracted to get to the fully adjusted revenue requirement. Once the fully adjusted Revenue Requirement is calculated, AEP Ohio Regulatory provides the base distribution revenue in order to complete the rate design. This revenue is obtained from a query from the customer billing system that can be demonstrated during an onsite audit."[7]

In 2022, the Company did not make any changes to the way the DIR filings were prepared. However, the third quarter DIR filing includes adjustments from the prior year audit regarding ADIT, land, and the Mound St. Station.[8] The Companies changes in prior years are well documented in the DIR audit reports of those prior years.[9]

POLICIES AND PROCEDURES

Blue Ridge reacquainted itself with the policies, procedures, and process flow diagrams associated with the various processes that affect the categories that feed into the Rider DIR calculations:

- Plant Accounting
    - Capitalization
    - Preparation and Approval of Work Orders
    - Recording of CWIP (including the systems that feed the CWIP trial balance)
    - Application of AFUDC

[7] AEP Ohio's response to audit scope 2015 Data Request BR-01-003.
[8] AEP Ohio's response to audit scope 2022 Data Request BR-01-003.
[9] AEP Ohio's responses to audit scope 2019 Data Requests BR-02-001 and BR-01-003a, audit scope 2020 Data Request BR-01-003, and audit scope 2021 Data Request BR-01-003.

  - Recording and Closing of Additions, Retirements, Cost of Removal and Salvage to Plant
  - Unitization Process (based on the retirement unit catalog)
  - Application of Depreciation
  - Contributions in Aid of Construction (CIAC)
  - Damage Claims
- Purchasing/Procurement
- Accounts Payable/Disbursements
- Accounting/Journal Entries
- Payroll (direct charged and allocated)
- Taxes (Accumulated Deferred Income Tax, Federal, State, and local Income Tax)
- Insurance Recovery
- Allocations
- Work Management System
- Information Technology
- Capital Spares
- Vegetation Management

We requested modifications made in 2022 to those policies and procedures. The Company responded that no changes were made in the above areas.[10]

The Company also provided, on request, the documents for level of signature authority in service during 2022.[11]

Blue Ridge determined that the Company's policies and procedures specified above and in effect for 2022 were adequate and not unreasonable.

Rider DIR Internal Audit and SOX Audit

Blue Ridge requested a list of internal audits performed for 2022, including audits of any Company systems that feed CWIP, such as feeder systems that charge Distribution work orders, including those affecting Payroll, M&S, Transportation, overheads, and contractors, which can have costs closing to plant in service that become part of the DIR. The Company responded that no internal audits were completed in 2022 for any Company systems that feed CWIP.[12] Of the other internal audits, none had an impact on the CEP.[13]

SOX controls covering Expenditure Purchasing, HR Payroll, Fixed Asset, and Allocations were tested in 2022. The majority of dollars that end up in CWIP come from those feeder processes. All controls passed.[14]

Other Regulatory Audits

Blue Ridge also requested a list of audits conducted by FERC or any other regulatory body in 2022. The Company replied that AEP Ohio did not have a FERC audit in 2022.[15]

[10] AEP Ohio's response to audit scope 2022 Data Request BR-01-011.
[11] AEP Ohio's response to audit scope 2022 Data Request BR-01-018, Attachments 1 and 2 (Confidential).
[12] AEP Ohio's response to audit scope 2022 Data Request BR-01-019.
[13] AEP Ohio's response to audit scope 2022 Data Request BR-03-002 (Confidential).
[14] AEP Ohio's response to audit scope 2022 Data Request BR-01-020.
[15] AEP Ohio's response to audit scope 2022 Data Request BR-01.010.

Conclusion

From the documents reviewed, Blue Ridge was able to obtain an understanding of the Company's processes and controls that affect the DIR. Furthermore, we were satisfied with responses regarding internal audits and SOX-compliance testing. Blue Ridge concluded AEP Ohio's controls were adequate and not unreasonable.

Variance Analysis

Blue Ridge's variance analysis focused on identifying, quantifying, and explaining any significant net plant increases within the individual plant accounts. In its plan for analysis, Blue Ridge anticipated requesting from the Company explanations for any significant changes. Based on its investigative and analytic evaluation of the account changes and the Company's explanations, Blue Ridge would then arrive at its conclusions regarding the reasonableness of those changes.

Blue Ridge concentrated its efforts on three areas of account balance comparison in pursuing determination of variance reasonableness:

1. **Beginning DIR Balance to Prior Year FERC Form 1:** Distribution Plant balance at the beginning of year 2022 DIR filing compared to the end of the prior year 2021 FERC Form 1 filing by account
2. **2022 DIR Ending Balance to 2022 FERC Form 1:** Distribution Plant balance at the end of year 2022 DIR fourth quarter filing compared to 2022 FERC Form 1 Annual Report
3. **2022 Additions, Retirements, and Transfers/Adjustments:** 2022 Distribution Plant beginning balances by account compared to the 2020 ending balances for those accounts, while evaluating additions, retirements, and transfers/adjustments over the course of the year

Analysis: Beginning DIR to Prior FERC Form 1

Determining that the 2022 DIR calculations began from account balances consistent with the FERC Form 1 reporting is important to ensure that the DIR totals are correct. Blue Ridge compared the 2022 FERC Form 1 Distribution account beginning balance with the balance in the Quarter 4 2021 DIR. The balance matched giving reasonable assurance that the 2022 DIR calculations began from accurate account amounts.[16]

Analysis: Ending 2022 DIR to 2022 FERC Form 1

Blue Ridge compared the Distribution Plant balance of the DIR 4th Quarter filing to the Distribution Plant balance in the Company's 2022 FERC Form 1. The totals matched.

Analysis: 2021 Account Balances and Addition, Retirement, and Transfer Anomalies

To be assured of appropriate 2022 distribution account changes regarding additions, retirements, and transfers/adjustments, Blue Ridge requested and received the 2022 beginning and ending period balances by primary plant account for additions, retirements, transfers, and adjustments.[17]

[16] AEP Ohio's response to audit scope 2022 Data Request BR-01-001, Attachment 4.
[17] AEP Ohio's response to audit scope 2022 Data Request BR-01-021, Attachment 1.

Table 3: AEP Ohio 2022 Distribution Plant Additions, Retirements, and Transfers/Adjustments

Utility Account	01/01/2022 Balance	Additions	Retirements	Transfers	12/31/2022 Balance
36000 - Land	23,445,712.32	594,773.68	(558,183.70)	-	23,482,302.30
36010 - Land Rights	61,583,570.36	1,358,944.58	-	-	62,942,514.94
36100 - Structures and Improvements	56,031,589.63	11,746,934.81	(409,051.39)	-	67,369,473.05
36200 - Station Equipment	1,015,798,238.67	51,906,273.01	(9,594,416.84)	-	1,058,110,094.84
36216 - Station Equipment-SmartGrid	20,506,932.73	3,728,584.74	(8,394.33)	-	24,227,123.14
36300 - Storage Battery Equipment	5,117,365.68	45,255.49	-	-	5,162,621.17
36400 - Poles, Towers and Fixtures	900,061,599.87	78,611,122.78	(14,184,885.94)	59.97	964,487,896.68
36500 - Overhead Conductors, Device	1,104,685,950.89	101,455,428.97	(21,191,764.46)	(1,538.35)	1,184,948,077.05
36600 - Underground Conduit	426,705,845.59	60,162,402.82	(211,616.60)	1,128.94	486,657,760.75
36700 - Undergrnd Conductors,Device	798,198,789.08	43,776,522.12	(6,433,429.61)	305.33	835,542,186.92
36800 - Line Transformers	913,988,499.99	50,297,284.89	(15,450,568.54)	44.11	948,835,260.45
36900 - Services	366,720,592.64	19,794,848.66	(2,552,137.48)	-	383,963,303.82
37000 - Meters	91,165,125.38	5,427,032.84	(2,208,788.93)	-	94,383,369.29
37016 - AMI Meters	180,375,458.63	1,484,163.20	(1,149,882.33)	-	180,709,739.50
37100 - Installs Customer Premises	60,104,027.92	9,089,257.18	(1,575,037.33)	-	67,618,247.77
37200 - Leased Prop Cust Premises	103,067.00	-	-	-	103,067.00
37300 - Street Lghtng & Signal Sys	43,714,593.58	13,290,680.40	(778,830.16)	-	56,226,443.82
37400 - ARO for Distribution Plant	-	2,991,769.90	-	-	2,991,769.90
Total Plant in Service	**6,068,306,959.96**	**455,761,280.07**	**(76,306,987.64)**	**(0.00)**	**6,447,761,252.39**

In reviewing the spreadsheet information provided, Blue Ridge's analysis focused on irregular items (e.g., significant adjustments, significant additions in comparison to retirements, and significant retirements in comparison to additions). For those accounts, Blue Ridge requested additional information. After examining the Company's responses, Blue Ridge found that all conditions were the result of normal work activity.[18]

CONCLUSION

Based on Blue Ridge's review of variances in the Company account balances during the 2022 DIR year, no variances resulted in concerns for the proper calculation of DIR amounts.

REVENUE REQUIREMENTS

OVERVIEW OF METHODOLOGY

DIR Approved in Case No. 13-2385-EL-SSO

In Case No. 11-346-EL-SSO et al. (*ESP 2 Case*), the Company requested a DIR that would allow carrying costs on incremental distribution plant to be recovered each year using pre-tax weighted average cost of capital (WACC) and plant-related O&M expense. The DIR revenue requirement excluded recovery on plant included in prior base distribution rate cases and plant recovered in other riders.

The Commission approved the DIR (with modifications) as "an appropriate incentive to accelerate recovery of AEP Ohio's prudently incurred distribution investment costs." The Commission ordered that the DIR mechanism not include any gridSMART costs.[19] The gridSMART projects are separate from the DIR and are recovered through the gridSMART rider. The DIR also excludes capital dollars spent for vegetation management that are recovered through the Enhanced Service Reliability Rider (ESRR). Furthermore, the Commission ordered that the DIR mechanism be revised to account for accumulated deferred income tax (ADIT).[20]

[18] AEP Ohio's response to audit scope 2022 Data Requests BR-04-001 through BR-04-004.
[19] Case No. 11-346-EL-SSO, et al., Order dated August 8, 2012, page 46.
[20] Case No. 11-346-EL-SSO et al., Order dated August 8, 2012, page 47.

The DIR is subject to an annual cap with allowances for over- or under-recovery. The rider is collected as a percentage of base distribution revenue.[21] It is updated quarterly based on the incremental increase in the net plant balance as shown on Form 3Q. The DIR was scheduled to end May 31, 2015.[22]

Revisions to DIR Ordered in Case No. 13-2385-EL-SSO

Case No. 13-2385-EL-SSO extended the DIR through May 2018 and incorporated several modifications. These modifications included the adoption of six recommendations made by Staff, adoption of OCC's recommendation regarding property taxes, and the inclusion of gridSMART Phase 1 capital costs within the DIR.

Staff's Recommendations

In Case No. 13-2385-EL-SSO, the Commission adopted the following six recommendations made by Staff.[23]

1. Detailed Account Information: AEP should file what plant in service is being recorded and recovered in the Enhanced Vegetation Rider, the gridSMART Phase II Rider, the Solar Rider, and any other rider which is recovering Distribution plant in service. AEP should provide this information by plant account and subaccount for each rider. Providing this information to the Commission is critical because it will allow Staff to ensure that no plant-in-service costs related to other riders are being recovered in the DIR.
2. Jurisdictional Allocations and Accrual Rates: Require AEP to use the jurisdictional allocations and accrual rates for each account and subaccount that were approved in AEP's prior AIR case, subject to Staff's exception for gridSMART depreciation rates.
3. Reconciliation between Functional Ledgers and FERC-Form 1 Filings: In each DIR filing, AEP should include, for each account and subaccount, a full reconciliation between the functional ledger and FERC-form 1 filings as well as detailed workpapers showing the jurisdictional allocation, accrual rates, and reserve balances of each account and subaccount. AEP should be directed to provide this information, for any rider being used to collect costs recorded in the Distribution Plant Accounts, by rider and as a grand total. Commission Staff needs this information to determine whether the appropriate allocation of cost recovery is occurring between the DIR and other riders. This information will also help Staff ensure that the Company is adhering to the accrual schedules ordered in the previous rate case.
4. Revenue Collected by Month in the DIR: AEP should also be directed to detail the DIR revenue collected by month and to date in its filings to demonstrate compliance with the annual revenue caps authorized by the Commission.
5. Highlighting and Quantifying DIR Capitalization Policy: Any further changes AEP proposes to make to its capitalization policy should be highlighted and quantified in the DIR filing preceding the implementation of the change. This action would allow the Commission to consider the proposed change and ensure that there is no inappropriate recovery from AEP customers.
6. Filing of an Updated Depreciation Study by November 2016: AEP to file a fully updated depreciation study by November 2016 with a study plant date of December 31, 2015.

[21] Case No. 11-346-EL-SSO et al., Direct Testimony of Andrea E. Moore, page 13.
[22] Case No. 11-346-EL-SSO et al., Direct Testimony of William A. Allen, page 10.
[23] Case No. 13-2385-EL-SSO, Opinion and Order dated February 25, 2015, pages 46–47 and the Prefiled Testimony of Doris McCarter (Staff Exhibit 17, pages 5–7).

OCC's Property Taxes Recommendation

In Case No. 13-2385-EL-SSO, the Commission adopted OCC's recommendation to modify the property tax calculation, specifically the derivation of the change in net plant to which the property tax rate is subsequently applied. The modification was deemed appropriate because, since December 31, 2011 (when rates in Case Nos. 11-351-EL-AIR and 11-352-EL-AIR went into effect), the depreciation reserve reflected the cumulative amortization of an excess depreciation reserve; the impact increased the net book value of plant in rate base, but not the value of taxable property. As such, determining the growth of taxable property using the change in net plant would overstate calculated property taxes.[24]

The Company implemented the Commission's order beginning with the June 2015 DIR filing, based on the method proposed in the testimony of OCC witness Effron. The adjustment to remove the theoretical reserve amortization is equal to the monthly amortization of the excess depreciation reserve multiplied by the number of months subsequent to December 2011.[25]

The Commission also reaffirmed the DIR is a percentage of customer base distribution charges.[26]

In Case No. 13-2385-EL-SSO, as part of the Commission's extension of the DIR, the Commission approved the Company's request to include gridSMART Phase 1 capital costs in the DIR. The Company filed its final true-up of the Phase I project and began recovering the assets of the Phase I through the DIR per the Commission's order. This change was implemented beginning in April 2017.[27]

<u>Revisions to DIR Ordered in Case No. 16-1852-EL-SSO</u>

In Case No. 16-1852-EL-SSO, as part of the Commission's extension of the DIR, the Commission ordered several modifications to the DIR.

In order to help address concerns about some of the distribution riders becoming excessive and to recalibrate the costs being reflected in base rates versus riders, AEP Ohio agrees to file a base distribution case by June 1, 2020.

The DIR will continue through the extended ESP term, subject to the conditions noted below.

The DIR is updated quarterly with rates effective 60 days after filing unless otherwise ordered by the Commission.

The DIR will continue to be subject to an annual compliance audit, which may be conducted by an independent auditor under the direction of Staff, the cost of which will be recoverable through the DIR.

The annual authorized DIR revenue caps will be modified:

- 2018—$215 million
- 2019—$240 million
- 2020—$265 million
- 2021—$290 million (unless otherwise changed by the 2020 AIR rate case order in 2021)

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[24] Case No. 13-2385-EL-SSO, Opinion and Order dated February 25, 2015, page 46 and the Prefiled Testimony of David Effron (OCC Exhibit 18, pages 8–11).
[25] Case No. 16-01-EL-RDR, Blue Ridge's Report dated August 5, 2016, titled "Compliance Audit of 2015 Distribution Investment Rider (DIR) of Ohio Power Company d/b/a AEP Ohio," page 32.
[26] Case No. 13-2385-EL-SSO et al., Order dated February 25, 2015, page 46.
[27] AEP Ohio's response to audit scope 2016 Data Request BR-08-008.

Starting in 2019, the unused revenue cap from the prior year will be limited up to $5 million for carryover to the following year (e.g., the 2019 cap could be up to $245 million if there is a $5 million or more unused revenue requirement [referring to unspent funds, not to uncollected funds] from 2018; the 2020 cap could be up to $270 million if there is a $5 million or more unused revenue requirement from 2019). If in any year, the unused revenue cap is greater than $5 million, the revenue cap for the subsequent year(s) will be lowered by any amount greater than $5 million.

Revisions to DIR Ordered in Case No. 20-0585-EL-AIR

A Joint Stipulation and Recommendation in Case No. 20-0585-EL-AIR, the Company's most recent base rate case, was originally filed on March 12, 2021, and updated on May 11, 2021. The Commission issued an Opinion & Order adopting the settlement on November 17, 2021. Accordingly, with the Q42021 DIR filing, the formula changes reflected in Attachment B to the Joint Stipulation are reflected.

In Case No. 20-0585-EL-AIR, the Commission set the revenue cap for the 12 months ended December 31, 2022, at $96 million (inclusive of a $5 million incentive for 2021 reliability performance).

Mathematical Accuracy

Blue Ridge validated the mathematical calculations in the Company's revenue requirement model and found them not unreasonable. The following sections address the verification and validation of the various components of the DIR, including mathematical accuracy, net plant in service, exclusions, accumulated deferred income tax, theoretical reserve offset, carrying charge rate, gross-up factor, revenue offset, annual cap and over- or under-recovery revenue balance, the annual base distribution revenue and the calculation of the DIR as a percent of base distribution revenues.

Net Plant in Service

The DIR allows carrying costs on net distribution plant[28] associated with FERC Plant Accounts 360–374 for plant placed in service after date certain in the most recent base rate case. The Opinion and Order for the Company's most recent base rate case (Case No. 20-585-EL-AIR) was issued on November 17, 2021. Beginning with the Q42021 DIR filing, the date certain is December 31, 2019.

Accumulated depreciation in DIR rate base is developed using the book reserve, which reflects Commission-approved depreciation rates by FERC account.[29]

Blue Ridge confirmed that the Company used the date certain net plant approved by the Commission in Case No. 20-0585-EL-AIR [30] in the quarterly DIR filings.[31]

The incremental net plant for which the Company is seeking recovery (prior to any exclusions discussed later in this report) is shown in the following table.

[28] Net Distribution Plant is Gross Plant less the Accumulated Reserve for Depreciation.
[29] Case No. 20-585-EL-AIR, AEP Ohio's response to 2022 Data Request BR-01-029.
[30] Case No. 20-585-EL-AIR, Opinion and Order (November 17, 2021) and Joint Stipulation and Recommendation (May 11, 2021) Attachment A, Schedule B-1.
[31] AEP Ohio's response to audit scope 2022 Data Request BR-01-001, Attachments 1, 2, 3, and 4.

Table 4: Incremental Net Plant in Service Included in Rider DIR (As Filed)

Description	12/31/2019	Q4 2022
Distribution Plant	$ 5,131,634,000	$ 6,444,769,482
Accumulated Depreciation	(1,614,321,000)	(1,833,353,446)
Net Distribution Plant	$ 3,517,313,000	$ 4,611,416,037
Δ Net Distribution Plant	--	**$ 1,094,103,037**
% Δ from Date Certain		*31.11%*

FERC Form Validation

The DIR is updated quarterly based on the incremental increase in the net plant balance as reported on interim FERC Form 3Q and year-end FERC Form 1. Blue Ridge compared the gross plant and accumulated depreciation amounts in the DIR filing to the 2022 FERC reports for Distribution Plant. As noted above (in the Variance Analysis section), the account totals matched.

Work Order Testing Background

The Company provided a list of 25, 202 work orders (298,961 line items) that support gross plant in service included in the DIR from January 1, 2022, through December 31, 2022.

(1) Determining Work Order Sample

From this list, Blue Ridge selected 46 work orders, totaling $124,538,595, for transactional testing using a statistically valid sampling technique.[32] Additional work orders were selected based on professional judgment with a focus on the selection of individual (rather than blanket) work orders that have a high-dollar value and, if possible, could also be inspected in the field to determine its used-and-useful status (in accordance with work order testing step T9 discussed later in this document).

(2) Conducting Work Order Testing

The Company provided descriptions of the projects included in the work order sample. In general, the projects may be categorized based on the following types of additions, replacements, adjustments, and transfers.

1. Land and Land Rights
2. Structures and Improvements
3. Station Equipment and SmartGrid
4. Poles, Towers and Fixtures, and Services
5. Installation of underground and overhead conduit, conductors, and devices
6. Line Transformers
7. Services
8. AMI Meters
9. Installs Customer Premises
10. Street Lighting and Signal System

The following areas were the determined focus for transactional testing review:

- Project descriptions to determine exclusions from the DIR
- Project justifications
- Project actual versus budgeted cost

[32] WP 2022 Sensitivity, Sample Size Calc, Intervals, Pulling Sample (BR-DR 1-002, Attachment 1).

- Variance explanations
- Reasonableness of the actual in-service dates in comparison to the estimated in-service dates
- Proper charge of the actual detailed cost to the proper FERC account
- AFUDC charge on the work order (and if so, was it appropriate)
- Timeliness of recording of asset retirements for replacement work orders
- Appropriate charge of cost of removal and salvage, if applicable

To satisfy these areas of focused review, Blue Ridge formulated the objective criteria into nine transactional testing steps, labeled T1 through T9.[33] Blue Ridge's observations and findings against the criteria follow:

T1: Project Type
- T1A: Is the work order included in plant in service associated with distribution net investment accounts—FERC Plant Accounts 360–373?
- T1B: Is the work order part of any other excluded rider (e.g., gridSMART Phase 2 Rider, Enhanced Service Reliability Rider (ESRR), Energy Efficiency and Peak Demand Reduction (EE/PDR), any other)?
- T1C: Does the work order / project include plant in service associated with distribution, and sub transmission, plant?
- T1D: Is the work order / project specific, blanket, or other (provide description)?
- T1E: Is the work order / project an addition, replacement, or other (provide description)?

T2: Capital Scope
- T2A: Is the scope of work properly classified as capital and charged to the proper FERC 300 account(s) as dictated by the FERC code of accounts (CFR 18)?

T3: Justification
- T3A: For specific or multi-year work orders / projects (i.e., not blankets), does the project have detailed justification that supports that it was necessary and not unreasonable?

T4: Budget
- T4A: Did the work order / project have proper level of approval?
- T4B: Does the work order / project have an approved budget?
- T4C: Are the work order / project costs +/- 15% of the approved budget?
- T4D: Are explanations and approvals provided for cost overruns 15% and greater of the approved budget?

T5: In-Service Dates
- T5A: Is the actual in-service date in line (at or before) with the estimated in-service date.
- T5B: Was the work order / project in service and closed to EPIS within a reasonable time period from project completion, and if not, was AFUDC stopped?

T6: Continuing Property Records
- T6A: Do the Continuing Property Records support the asset completely and accurately?

T7: Cost Categories
- T7A: For work orders / projects, are the cost categories (Payroll, M&S, etc.) not unreasonable and support the work order total?
- T7B: For "other" (referring to T1E above), are the description and costs not unreasonable?

T8: Replacement projects

[33] WP Ohio Power DIR Work Order Testing Matrix Final.

T8A: Were assets retired?
T8B: Was the date of retirement in line with the asset replacement date?
T8C: Is the amount of the retired asset not unreasonable?
T8D: Was salvage recorded?
T8E: Was cost of removal charged? Is the amount not unreasonable?
T8F: Was the date of cost of removal in line with the asset replacement date?

T9: Field Verification
T9A: Is the project a candidate for field verification?

Work Order Detailed Transactional Testing

The results of the detailed transaction testing performed on the work order sample are included in the workpapers.[34] Specific observations and findings about the testing are listed below.

T1: Project Type

T1A: Is the work order included in plant in service associated with distribution net investment accounts—FERC Plant Accounts 360–373?

The plant-in-service work orders in the sample were all associated with distribution FERC Plant accounts 360–373.

T1B: Is the work order part of any other excluded rider (e.g., gridSMART Phase 2 or 3 Rider, Enhanced Service Reliability Rider (ESRR), Energy Efficiency and Peak Demand Reduction (EE/PDR), any other)?

As discussed in the Exclusions portion of this report, the Company stated, and Blue Ridge confirmed, gridSMART and Distribution Investment Riders are the only riders that provide recovery of distribution plant.[35] Each quarterly filing for the DIR includes a summary of the distribution assets associated with these riders to demonstrate that they have been excluded from the DIR.

The gridSMART Rider recovers capital assets not only from Distribution Plant but also from Intangible and General Plant. Since the quarterly DIR filings include only Distribution Plant, the difference between the two capital riders represents Intangible and General Plant. Additionally, the gridSMART Phase 3 Opinion and Order (Case No. 19-1475-EL-RDR) authorized the Company to include gridSMART Phase 3 costs in the existing Phase II rider starting December 1, 2021. Finally, the name of the rider was changed from "gridSMART Phase II Rider" to "gridSMART Rider."[36]

The Company provided a listing of all gridSMART Rider associated work orders, three of which are within the DIR sample and properly excluded from the DIR.

Work Order	Program / Blanket	WO Description	Actual
DOP0336788	OHGRSMPH2	gridSMART Stand Alone	$44,146.22
DOP0351997	OHGRSMPH2	gridSMART Stand Alone	$659,521.03
DOP0357254	SG3OHSMGR	gridSMART Stand Alone	$335,918.84

While Blue Ridge found that each of the three gridSMART work orders were excluded from the DIR, we also compared the list of gridSMART work orders against the population[37] of work

[34] WP Ohio Power DIR Work Order Testing Matrix Final.
[35] AEP Ohio's response to audit scope 2021 Data Request BR-01-033, 01-034, 01-035, 01-036, 01-037.
[36] AEP Ohio's response to audit scope 2021 Data Request BR-01-033.
[37] AEP Ohio's response to audit scope 2022 Data Request BR-06-002.

orders and in doing so noticed that $5,151,730.57 of gridSMART work is being recovered within the DIR. The Company did not provide a reconciliation. However, they did explain AEP Ohio is either recovering the investments in the DIR or in the gridSMART (GS) rider but not in both. A known piece of the tie-out difference relates to the retirement of assets that were installed prior to gridSMART. The assets retired during several GS projects were installed and placed in service prior to GS, thus appropriately not being picked up in the gridSMART Rider. However, upon review of the analysis performed by Blue Ridge and an independent review by AEP Ohio, AEP Ohio found several work orders that are being recorded to distribution plant but not included in the GS Rider. These work orders should have been tagged as GS assets in the Company's fixed asset system, PowerPlan. AEP Ohio also found a few work orders that are included in the GS Rider but were not included in the population provided in BR-01-035 Attachment 1 (listing of GS Phase 2 and Phase 3 work orders).[38] Based on the information provided by the Company, Blue Ridge recommends an adjustment to gross plant of $(5,151,730.57). Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(879.037.56). However, during the 3rd and 4th quarters of 2022, the Company met the DIR cap, so no impact results to ratepayers. **[ADJUSTMENT #2.17]**

Blue Ridge noted and asked the Company why five work orders with FERC Account 362.16—Station Equipment-SmartGrid Activity were not excluded from the DIR filing.

Work Order	Description	FERC 36216 - Station Equipment-SmartGrid	Total
42710211	Monroe Street Distribution	$31,933.76	$2,573,087.63
42738032	Reaver Substation - D Station	$87,184.92	$6,601,239.70
42811601	Newcornerstown 138/12 kVxmer	$788.82	$1,641,844.89
T10091877	Trabue Sta OP-D	$133,445.91	$2,077,757.49
T10388906	Payne Station Install/Removal	$26,691.41	$1,918,874.33

The Company has verified that these work orders were not included in the gridSMART rider. Therefore, the Company can confirm that these amounts were properly included in the DIR.[39]

Blue Ridge found the Company's explanation not unreasonable.

T1C: Does the work order / project include plant in service associated with distribution and sub transmission, plant?

All the work orders in the sample were associated with distribution and/or sub transmission plant. There were 11 work orders that were a combination of Distribution and Transmission related work.

Work Order	Program	Description	2022 Activity	Actual
07900199	DISTBLKOP	Customer Meter/Op	$34,044,377.95	$34,044,377.95
42710211	TP2016108	Monroe Street Distribution	$2,573,087.63	$2,573,087.63
42811601	TP2016117	Newcornerstown 138/12 kVxmer	$1,641,844.89	$1,641,844.89
T10074241	TP2019017	Shannon Station Expansion	$620,142.81	$620,142.81
T10091877	TP2017100	Trabue Sta OP-D	$2,077,757.49	$2,093,251.15
T10211060	TA2019111	State Mills Station Failure	$2,261,245.66	$2,261,245.66

[38] AEP Ohio's response to audit scope 2022 Data Request BR-12-001.
[39] AEP Ohio's response to audit scope 2022 Data Request BR-05-014.

T10245851	TP2016117	Newcornerstown 138/12 kVxmer	$1,950,243.29	$1,950,243.29
T10322979	TA2021111	Byesville TR-1 Failure	$1,002,820.45	$1,002,820.45
T10378842	TA2021111	Linworth XF#3 Failure	$1,006,478.88	$1,006,478.88
T10388906	TP2020135	Payne Station Install/Removal	$1,918,874.33	$1,948,851.08
TS0243076	TA2016913	Mobile OP-23 Rebuild	$1,523,974.83	$1,523,974.83
TS0259676	TBLANKTOP	D/OH NonSpecific Stati CO REG	$125,782.21	$125,782.21

T1D: Is the work order / project specific, blanket, or other (provide description)?

The following list provides the breakdown of work orders in the sample:

- Blanket projects = 24
- Stand-alone and Multi-Year Programs = 22

T1E: Is the work order / project an addition, replacement, or other (provide description)?

Of the 46 sample work orders tested, 19 work orders were additions and 37 work orders were replacements or relocations. The sample did not include any adjustments or other non-project allocations.

T2: Capital Scope

T2A: Is the scope of work properly classified as capital and charged to the proper FERC 300 Plant account(s) as dictated by the FERC code of accounts (CFR 18)?

Blue Ridge found that the scope of work was properly classified as capital and charged to one or more FERC 300 plant accounts in accordance with the FERC code of accounts.

T3: Justification

T3A: For specific or multi-year work orders / projects (i.e., not blankets), does the project have detailed justification that supports that it was necessary and not unreasonable?

Each of the work orders included in the sample had supporting detail that included budget and detailed justifications. Blue Ridge found that the projects had sufficient supporting documentation, budgets, and costs to determine that they were not unreasonable and should be included in the DIR.

T4: Budget

T4A: Did the work order / project have proper level of approval?

Each of the work orders tested within the sample had the proper approval level in accordance with the Level of Signature Authority documents.

T4B: Does the work order / project have an approved budget?

Each of the work orders included in the sample had an approved budget. However, several of the 2022 work orders were approved in 2023.

Work Order	Program	Description	Actual	Approvals
DOP0348921	Stand-alone	St Clair Av D-Line UG	$182,372.26	Approved by employees between 12/15/2022 and 01/05/2023 who had the proper approval level based on the LOSA document

	Company Explanation: St Clair Av D-Line UG—$182,372.26 - This work order is under a larger program that was originally approved in September 2021. The project required a revision due to an increase in estimated cost as noted in BR-02-001_Attachment_4 page 27 of 60.[40] Blue Ridge found the Company's explanation not unreasonable.			
T10074241	TP2019017	Shannon Station Expansion	$620,142.81	Approved by employees between 02/20/2023 and 03/24/2023 who had the proper approval level based on the LOSA document.
	Company Explanation: Shannon Station Expansion—$620,142.81 – This work order is under a larger program that was approved in two phases as noted in BR-02-001_Attachment_7 page 42 of 62. This work order was completed in Phase 1 which was approved in June 2020.[41] Blue Ridge found the Company's explanation not unreasonable.			
07900199	DISTBLKOP	Customer Meter/Op	$34,044,377.95	Approved by employees between 01/27/2023 and 02/10/2023 who had the proper approval level based on the LOSA document.
07900299		Customer Meter/Op	$5,420,618.22	
BOP0000001		DS/OP/CS New Customers	$12,463,603.91	
BOP0000018		OP-Failed Equip No Outage	$1,540,519.14	
DOP0316665		DS-OP-AI Other Make Ready	$40,056.47	
DOP0325743		OP/Columbus Rd Rebuild	$407,420.22	
DOP0337873		OP/Hudson Street PPR	$100,755.46	
DOP0340318		Cols. South Netwrok PILC	$1,592,663.20	
DOP0345440		OPPortWashMultiPhase	$312,466.90	
DOP0346488		DS0Op-AI-Support CS-C-I	$466,160.32	
DOP0347900		Warsaw-Nellie Relocate Line US	$344,652.96	
DOP0351337		Ds-Op-Ai Other Make Ready	$64,256.78	
DOP0352332		Ds-Op-Ai Other Make Ready	$165,180.07	
DOP0353810		Ds-Op-Ai Other Make Ready	$29,049.45	
DOP0354526		DS/OP/CS-Upgrades	$15,506.00	
DOP0356674		DS-OP-Ai Ckt Inspection	$35,830.58	
DOP0358111		1 Ph OH Line rebuild or relo	$189,515.84	
DOP0358843		DS-OP-Ai Ckt Inspection	$136,755.36	
DOP0359914		DS-OP-Ai Ckt Inspection	$147,515.15	
DOP0360545		OP/Wind Storm 6/13/22	$7,642,630.18	
DOP0361148		Single Phase UG Line Rebuild	$98,040.93	
Company Explanation: DISTBLKOP is a blanket program where a request for a lump sum dollar amount (based on a calendar year) is approved annually for work that is repetitive, predictable in nature or for a specific scope of work. The annual authorization is reviewed at the Investment Review Committee (IRC) meeting, which is based on the most recent forecast. Final approval is based on a one-page Capital Blanket Summary included in the December 2021 Subsidiary Company Board meeting for the following year. These work orders were approved under the blanket and required a revision due to an increase in estimated cost as noted in BR-02-001_Attachment_2 page 1 of 31.[42] Blue Ridge found the Company's explanation not unreasonable.				

T4C: Are the work order / project costs +/- 15% of the approved budget?

The Company budgets are based on each program rather than work order. However, this list includes the breakdown of the 46 work orders tested and whether their programs were within 15% range of their approved budget:

% of Sample	DIR Work Orders	Description

[40] AEP Ohio's response to audit scope 2022 Data Request BR-05-015.
[41] AEP Ohio's response to audit scope 2022 Data Request BR-05-015.
[42] AEP Ohio's response to audit scope 2022 Data Request BR-05-016.

0%	0	Program over budget greater than 15%
17%	8	Program under budget by less than -15%
76%	35	Program over/under budget by less than +/-15%
7%	3	gridSMART work orders
100%	**46**	**Total**

T4D: Are explanations and approvals provided for cost overruns 15% and greater of the approved budget?

None of the programs within the sample included cost overruns greater than 15% of their approved budget. Therefore, no explanations and approvals were reviewed.

T5: In-Service Dates

T5A: Is the actual in-service date in line (at or before) with the estimated in-service date.

The Company uses two separate dates associated with closing out completed work orders:

- The in-service date is the date the work is complete and work orders are closed to account 106 (Completed Construction Not Classified) or 101 (Electric Plant in Service).
- The Completion Date is the date when field personnel report retirements and the asset is removed from service, which is the same time the new assets are moved from FERC account 107 (Construction Work in Progress) to FERC account 106. Those retirements will be removed from the CPR in the next accounting period.

Once an asset is in-service, it is considered used and useful. AFUDC, if any, would cease, and the cost would reside in FERC account 106. The final step in the process is to move the assets from FERC account 106 to FERC account 101. Property Accounting performs that process. Those projects that reside in FERC account 106 for an extended period of time end up on the work order backlog report. Blue Ridge considers a work order includable in the work-order population if it resides in either 106 or 101.

The following list includes the breakdown of work orders in the sample relative to their in-service dates:

- Specific work orders appropriately included in the 2022 DIR: 14
- Multi-year program work orders: 8
- Blankets for which certain costs are placed in service every 30 days: 24

Blue Ridge found nine work order with delayed in-service dates.

1. Work Order 42738032—Reaver Substation - D Station—$6,601,239.70
   a. Last In-Service Date: 12/1/22
   b. Estimated Completion: 3/31/20
   c. Delay: 975
   d. Company Explanation for the Delay: The high side (transmission) portion of the station work was in-serviced 5/19/2019, but the distribution portion could not be finalized and energized until the D circuits we're completed. It took around 3.5 years to close ROW deals for D circuit construction. WO remained open (and accruing AFUDC) in effort to continue progress.
   e. Company Explanation for Accrual of AFUDC: The project was ongoing during the term, so there was not an over accrual for AFUDC.[43]

[43] AEP Ohio's response to audit scope 2022 Data Request BR-05-017.

Blue Ridge found that AFUDC was over accrued by $427,000. For more information on the adjustment to AFUDC please see Transactional Testing Step T7.

2. Work Order DOP0344522—OSU - F-7705 D-Line Ug—$3,977,325.74
   a. Last In-Service Date: 11/1/22
   b. Estimated Completion: 6/30/22
   c. Delay: 124
   d. Company Explanation for the Delay: Network scheduling placed work order DOP0344522 in service during the month of August 2022, with a recorded in-service date of March 10, 2022. Final construction packets were not received in Information Services for closing until October 2022. Final invoices to business partner processed January 2023 and order completed February 10, 2023.
   e. Company Explanation for Accrual of AFUDC: Work Order DOP0344522 was placed in service during the month of August 2022 with a recorded in-service date of March 10, 2022. AFUDC accruals stopped in the month of August and credit applied for over-accrual of AFUDC.[44]

   Blue Ridge found that the Company did not over-accrue AFUDC.

3. Work Order T10065134—Shawnee Station Upgrades—$1,660,101.44
   a. Last In-Service Date: 12/31/22
   b. Estimated Completion: 12/1/21
   c. Delay: 395
   d. Company Explanation for the Delay: The asset was used and useful in 2021. AFUDC was reversed out in January 2022 after being accrued for the months April through end of 2021. Project went in service before the estimated completion date.
   e. Company Explanation for Accrual of AFUDC: No over-accrual due to the reversal of AFUDC in January of 2022.[45]

   Blue Ridge found that the Company did not over-accrue AFUDC. The Company continued to accrue AFUDC after it was placed in-service; however, it appropriately reversed the over-accrual in January of 2022.

4. Work Order T10091877—Trabue Sta OP-D—$2,077,757.49
   a. Last In-Service Date: 12/31/22
   b. Estimated Completion: 6/1/22
   c. Delay: 213
   d. Company Explanation for the Delay: Project went in service on 12/23/2021 but was not placed in service in the system until 5/5/2022. When placed in service, the additional AFUDC that accrued from December 21 to May 22 was journal-entried off the WO#. The project did go in after the estimated completion date due to outage availability and material challenges while scheduling the work to be finalized.[46]

   Blue Ridge found that the Company did not over-accrue AFUDC. The Company continued to accrue AFUDC after it was placed in service; however, it appropriately reversed the over-accrual in May of 2022 via a journal entry. There was a five-month delay in placing the project in service in the system.

5. Work Order T10211060—State Mills Station Failure—$2,261,245.66

[44] AEP Ohio's response to audit scope 2022 Data Request BR-05-017.
[45] AEP Ohio's response to audit scope 2022 Data Request BR-05-017.
[46] AEP Ohio's response to audit scope 2022 Data Request BR-05-017.

   a. Last In-Service Date: 12/31/22
   b. Estimated Completion: 6/30/21
   c. Delay: 549
   d. Company Explanation for the Delay: Project design and material delivery led to project delays that were not foreseen when the project was initially routed for funding. The entire station (Txfr, breakers, steel bay) all had to be rebuilt.
   e. Company Explanation for Accrual of AFUDC: No AFUDC was accrued.[47]

   Blue Ridge found that since the Company's did not accrue AFUDC on this project the delays did not result in overstatement of the costs.

6. Work Order T10245851—Newcornerstown 138/12 kVxmer—$1,950,243.29
   a. Last In-Service Date: 4/1/22
   b. Estimated Completion: 6/15/19
   c. Delay: 1,021
   d. Company Explanation for the Delay: Project had the DICM delivery delayed from 2019 into 2020 and then had cascading delays due to no outage availability until 2021. In July of 2021, the CCVT failed, causing all work to stop and the outage window to be forfeit to another project in the area. Final material was received in January 2022, and then the project was able to proceed forward to being put in service.
   e. Company Explanation for Accrual of AFUDC: The project was on going during the term so there was not an over accrual for AFUDC.[48]

   Blue Ridge found that the Company over-accrued AFUDC by $52,228. For more information on the adjustment to AFUDC please see Transactional Testing Step T7.

7. Work Order T10298956—North Middlepoint - Station—$1,909,077.51
   a. Last In-Service Date: 12/1/22
   b. Estimated Completion: 6/1/22
   c. Delay: 183
   d. Company Explanation for the Delay: Funding delays on the project led to ordering transformers and regulators later than expected. Both of those materials had substantial increases in lead times during the 2021 period where the project was funded, and this changed the project schedule once manufacturers were able to confirm delivery dates in Q4 2022.
   e. Company Explanation for Accrual of AFUDC: The project was ongoing during the term, so there was not an over-accrual for AFUDC.[49]

   Blue Ridge confirmed that work was ongoing and found the Company's explanation not unreasonable.

8. Work Order TS0243076—Mobile OP-23 Rebuild—$1,523,974.83
   a. Last In-Service Date: 2/1/22
   b. Estimated Completion: 6/1/20
   c. Delay: 913
   d. Company Explanation for the Delay: This was the first unit to go through AEP Ohio's new Central Machine Shop where AEP Ohio employees do the rebuilds on mobiles, which took some additional time to work through being new at it. Additionally,

[47] AEP Ohio's response to audit scope 2022 Data Request BR-05-017.
[48] AEP Ohio's response to audit scope 2022 Data Request BR-05-017.
[49] AEP Ohio's response to audit scope 2022 Data Request BR-05-017.

there were delays for breakers, control panel, and other ancillary items that delayed the ability to complete the assembly.

e. Company Explanation for Accrual of AFUDC: The project was ongoing during the term, so there was not an over-accrual for AFUDC.[50]

Blue Ridge confirmed that work was ongoing and found the Company's explanation not unreasonable.

9. Work Order W0033215—Shawnee Land Purchase—$157,229.02
   a. Last In-Service Date: 11/1/22
   b. Estimated Completion: 6/30/22
   c. Delay: 124
   d. Company Explanation for the Delay: This project was electrical in service as of 4/2021, along with the Shawnee station upgrades project WO# T100065134. Project was completely journaled off to another WO#. Report shows a balance of $0 upon completion, and the $157,229.02 amount is the amount prior to costs being taken off. No AFUDC appears to have been accrued.
   e. Company Explanation for Accrual of AFUDC: No AFUDC was accrued. Land assets are eligible to receive AFUDC only during the construction phase of a project, and this work order is only for land.[51]

   Blue Ridge found the Company's explanation not unreasonable.

T5B: Was the work order / project in service and closed to EPIS within a reasonable time period from project completion, and if not, was AFUDC stopped?

Blue Ridge found two work orders with in-service delays that resulted in over-accrued AFUDC. See Transactional Testing Step T5A above for detail of those two adjustments.

T6: Continuing Property Records

T6A: Do the Continuing Property Records support the asset completely and accurately?

The Continuing Property Records support the assets completely and accurately for all 46 work orders in the sample.

T7: Cost Categories

T7A/B: For work orders / projects, are the cost categories (Payroll, M&S, etc.) not unreasonable and support the work order total? For "other" (referring to T1E above), are the description and costs not unreasonable?

Blue Ridge identified approximately $286,488.23 of incentive compensation charges; however, the Company and PUCO agreed that the Company may continue to capitalize incentives and there will be no rate base reduction for this item or capitalized incentive adjustments in future rider audit cases.[52]

The following work orders had charges that required further investigation.

1. Work Order 42710211, Program TP2016108—Monroe Street Distribution—$2,573,087.93
   a. Total Activity: $2,573,087.93

[50] AEP Ohio's response to audit scope 2022 Data Request BR-05-017.
[51] AEP Ohio's response to audit scope 2022 Data Request BR-05-017.
[52] AEP Ohio's response to audit scope 2021 Data Request DR-01-007.

b. Description: The West Bellaire-Moundsville 69 kV Circuit has experienced below-average reliability over the last several years (approximately seven million minutes of customer interruption). Ninety-one percent of the outage duration and seventy-five percent of the outage frequency was due to transmission line equipment conditions. The majority of the transmission line was built in 1943 on wood poles with copper conductor and is in poor condition. To remediate identified risk related to equipment condition, performance, operational flexibility and efficiency, this project proposes to rebuild fifteen miles of 69 kV transmission line, rebuilding the Monroe Street 69-12 kV Distribution Station, and installing a new switch in Shadyside Station. The construction estimate is more than the typical rebuild in Ohio for several reasons: 1) approximately four miles of double-circuit 69 kV construction, requiring davit arms; 2) the construction is located in a high slip area, requiring approximately twenty-eight miles of engineered roads and slip mitigation; 3) 125 structures are custom-designed, rather than standard poles due to the hilly terrain; and 4) there are a number of right of way constraints and encroachments. The West Bellaire-Moundsville 69 kV Circuit project was submitted to PJM as a supplemental project (s1623). Prior year actuals relate to pre-engineering. This is a Class 3 estimate (+30%/-20%).

c. Blue Ridge Initial Concern: AFUDC charges during a period of extended inactivity

a. Company Explanation: This project took approximately two years to finalize the line routes into the station and being able to expand the station fence. The Company had to purchase several homes due to the tight drop into the station and the T-line route design.[53]

Blue Ridge found the project had negligible charges other than AFUDC for the period June 2017 through September 2021, and therefore, AFUDC should have been suspended during the extended period of inactivity. Blue Ridge recommends that AFUDC be reduced by $950. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(160.41). **[ADJUSTMENT #2.12]**

2. Work Order 42738032, Program N/A—Reaver Substation - D Station—$6,601,239.70
   a. Total Activity: $6,618,076.78
   b. Description: Install a new 138/13.2kV substation on previously purchased land along Harrisburg Pike. This new substation, named Reaver, will be utilized to remove and replace the existing 40kV fed Briggsdale Substation which will contribute to Transmission's future plans to remove the 40kV lines in the area. Additionally, Reaver Substation will pick up a feeder out of Canal Substation which will allow it to be better utilized by serving Nationwide Children's Hospital. The Scioto peninsula is currently undergoing redevelopment and Reaver is strategically located to be able to provide capacity to the area.
   The Briggsdale Station Transformer #1 and #2 are projected to be loaded to 23.2 MVA, which is 93% of their 25.0 MVA capability. Briggsdale Substation has no expansion capability at the existing site. Additionally, the Canal Substation feeders that serve the Scioto peninsula are 70% loaded or higher, limiting contingency switching during abnormal conditions. Installing a new substation will alleviate these system capacity issues, enhance reliability and recovery capability in the area, and also allow for future expansion in the area.
   c. Blue Ridge initial concern: AFUDC charges during a period of inactivity

[53] AEP Ohio's response to audit scope 2022 Data Request BR-05-003.

d. Company Explanation: The high side (transmission) portion of the station work was in-serviced 5/19/2019 but the distribution portion could not be finalized and energized until the D circuits we're completed. It took around 3.5 years to close ROW deals for D circuit construction. WO remained open (and accruing AFUDC) in effort to continue progress.[54]

Blue Ridge found this project had negligible non AFUDC activity from July 2020 through January 2022 and had no charges other than AFUDC from November 2020 through August 2021. The Company should have suspended AFUDC during the extended periods of inactivity. Blue Ridge recommends that AFUDC be reduced by $427,000. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(72,133.44). **[ADJUSTMENT #2.13]**

3. Work Order T10245851, Program TP2016117—Newcornerstown 138/12 kVxmer—$1,950,243.29
   a. Total Activity: $1,950,243.29
   b. Description: To support credible shale load growth in Eastern Ohio, mitigate anticipated capacity constraints, and address aging infrastructure at risk of failure, this requisition recommends the replacement of the Newcomerstown 50 MVA transmission transformer with a 90 MVA 138/69 kV transformer. Circuit switchers will be installed on the high side and low side of the transmission transformer. Additionally, a 9.375 MVA 138/12 kV distribution transformer and a circuit switcher will be installed to remove the distribution load currently served from tertiary winding of the transmission transformer. To accommodate the transformer replacement, the station will be expanded (on existing AEP Ohio-owned property) to provide adequate space for the equipment and allow access into the appropriate areas. Prior period actuals relate to pre-engineering. This is a Class 4 estimate (+50%/-30%).
   c. Blue Ridge initial concern: AFUDC charges during a period of inactivity
   d. Company Explanation: This project had several material delays related to supply chain issues that delayed construction until the materials were available in 2021.[55]

   Blue Ridge found that this project did not have any charges other than AFUDC for the period December 2020 through April 2021. Therefore, the Company should have suspended AFUDC during the extended period of inactivity. Blue Ridge recommends that AFUDC be reduced by $52,228. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(8,816.76). **[ADJUSTMENT #2.14]**

4. Work Order T10388906, Program TP2020135—Payne Station Install/Removal—$1,918,874.33
   a. Total Activity: $1,948,851.08
   b. Description: This project is a customer interconnection and PJM supplemental project (s2467) to address equipment material condition, performance, and risk as well as customer service in Paulding County, OH. Timber Road Solar Park, LLC (Customer) has requested a new interconnection to accommodate a 50 MW (19 MW capacity) solar generating facility, and the point of interconnection is a direct connection to AEP's Payne 69 kV Station. Per the Open Access Transmission Tariff (OATT), the Transmission Service Provider (TSP) is required to provide the requested service

[54] AEP Ohio's response to audit scope 2022 Data Request BR-05-001.
[55] AEP Ohio's response to audit scope 2022 Data Request BR-05-002.

consistent with the obligations outlined in the agreement. Additionally, at Payne Station, the two 69 kV circuit breakers are vintage 1960s and are oil-filled without oil containment. All 23 relays are electromechanical or static type with limited spare part availability and fault data collection, and the existing RTU installed is now obsolete. To accommodate Customer's request, AEP will construct a point of direct connection to AEP's existing Payne 69 kV Station. A new 69 kV circuit breaker will be installed to terminate the new line from Customer. At the same time of addressing the customer request, AEP will also address supplemental scope at Payne Station by replacing the two vintage 69 kV circuit breakers with new ones. Additionally, a DICM will be installed as well as new electromechanical relays. This project's outages and construction will be coordinated with an approved related area project, TP2020015. As an IPP in PJM, the IPP scope of this project is 100% reimbursable. This project was initiated through PJM's IPP Queue Process as Project AD1-119 and has a fully executed service and construction service agreement. This is a Class 4 estimate (+50%/-30%).

c. Blue Ridge initial concern: CIAC with no reimbursement shown in Cost Detail
d. Company Explanation: The CIAC listed in the scope of work was 100% related to the Transmission IPP scope under the total program. $1,687,569 was received on a transmission project and work order under this program, TP2020135.[56]

Blue Ridge found the Company's explanation not reasonable.

5. Work Order TS0243076, Program TA2016913—Mobile OP-23 Rebuild—$1,523,974.83
   a. Total Activity: $1,523,974.83
   b. Description: This three-year program (2017-2019) consists of specific asset replacement projects, replacement of failed equipment, and the purchase of major spare and mobile equipment for the transmission and distribution systems. The program is part of an on-going effort to improve system reliability and dependability by replacing equipment that has reached the end of its serviceable life and by purchasing long-lead-time equipment that will become system spares. The equipment purchased will mainly consist of capital spare transformers, spare reactors, spare circuit breakers, mobile transformer stations, and spare transmission line towers. A three-year program allows AEP to secure equipment contracts to leverage our purchases and obtain the best prices for the needed equipment. This requisition is a class 5 estimate (+100%/-50%).
   c. Blue Ridge initial concern: Potential excess capital spares purchased
   d. Company Explanation: Mobile OP-23 Rebuild is the refurbished capital spare that the Company placed in-service on 12/28/2022. This mobile is 10MVA with 69/34kV on the high side and 12/4kV on the low side. The total cost to refurbish was $1,523,975.[57]

   Blue Ridge found the Company's explanation not unreasonable.

6. Work Order W0033215, Program TP2018156—Shawnee Land Purchase—$157,229.02
   a. Total Activity: $157,229.02
   b. Description: This is a PJM supplemental upgrade to rebuild the 8.7-mile New Lexington-Shawnee 69 kV line to address equipment material, condition, performance, and risk. The line was built in 1916 with wood pole structures and is part of the New Lexington-East Logan 69 kV circuit. There are 139 open A conditions

[56] AEP Ohio's response to audit scope 2022 Data Request BR-05-005.
[57] AEP Ohio's response to audit scope 2022 Data Request BR-05-004.

on this line, including burnt/broken conductors and broken structures. The 69 kV circuit has experienced over 3 million customer minutes of interruption in the past three years. To address known conditions on this line, this project will rebuild 8.7 miles of 69 kV line between the New Lexington and Shawnee Stations. Additionally, two motor operated air break switches at Shawnee Station will be replaced. At New Lexington Station, three circuit breaker disconnect switches and the 69 kV line riser toward East Logan will be replaced. These station replacements will address equipment that is in poor condition. Prior year actuals relate to pre-engineering. This is a Class 4 estimate (+50%/-30%).

c. Blue Ridge initial concern: Purpose and accounting for two land purchases
d. Company Explanation: These charges represent the purchase acquisition for the property. The $10,000 represents the earnest money deposit in June 2020 and $121,406.90 represents the full amount due at closing, on November 1, 2020.[58] The Company paid $131,386 for the one parcel purchased. The Company determined the fair market value for the purchase by using the county value of the property estimated at approximately $18,000. The Company did not perform an independent evaluation. The Company contacted the owner of the parcel and learned that the residence was a rental property. The county appraisal value was low because substantial improvements within the structure had been made. The Company offered a fair market value considering the structural improvements. Due to the pressing need to acquire the property for expansion of the existing Shawnee Station, the before mentioned improvements and loss of income to the property owner, the final purchase price agreed to was $131,386, including labor, title costs, and environmental surveys. Note: The Company has confirmed that there was only one parcel of land purchased. See BR-05-006 that states why there are charges in June and November.[59]

According to the support provided, the Company determined the fair market value based on the county value of the property estimated at $18,000, adjusted for an estimation of the structural improvements on the property. The Company did not obtain any independent estimates of the fair market value of the property. Since the Company could not provide an independent fair market value of the property purchased, Blue Ridge concludes that the Company paid over fair market value for the site. An adjustment should be made to the 2022 DIR filing based on the following.

- The Company did not obtain an independent appraisal.
- The Company did not obtain sales data on any comparable properties.

Blue Ridge recommends disallowance to gross plant of $113,386. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(19,462.15). **[ADJUSTMENT #2.15]** The Company should have obtained an independent evaluation, appraisal and/or useable sales data from comparable properties in order to justify the cost to purchase the land.

The Program Revision Preparation Documentation for the following work orders indicated that a customer would pay a CIAC.

[58] AEP Ohio's response to audit scope 2022 Data Request BR-05-006.
[59] AEP Ohio's response to audit scope 2022 Data Request BR-09-001.

Table 5: Work Orders that Should Indicate CIAC Reimbursements

Work Order	Description	CIAC Credits	Activity Cost	CIAC in Cost Detail	CIAC Credit
BOP0000001	DS/OP/CS New Customers	($13,572,410)	$12,463,604	($2,992,910)	$3,537,948
	Company Explanation: For work orders BOP00000001 the CIAC amounts in the "CIAC credit column" in the support provided in BR-05-019 related to the higher-level project CIAC amount. Work order BOP0000001 had a CIAC credit of $2,992,910 as shown in attachment BR-02-001 Attachment 9, while the project this work order related to had a CIAC credit of $3,537,948.[60]				
DOP0354526	DS/OP/CS-Upgrades	($13,572,410)	$15,506	$0	$161,105
	Company Explanation: For work orders DOP0354526, the CIAC amounts in the "CIAC credit column" in the support provided in BR-05-019 related to the higher-level project CIAC amount. Work Order DOP0354526 did not have any CIAC, while the project it related to had a CIAC credit of $161,105.[61]				
DOP0316665	DS-OP-AI Other Make Ready	($10,083,565)	$40,056	$0	$10,477
	Company Explanation: The CIAC came from the support provided in attachment BR-02-001 Attachment 9 under cost component 975.[62]				
DOP0346488	DS0Op-AI-Support CS-C-I	($10,083,565)	$466,160	$0	$0
DOP0351337	Ds-Op-Ai Other Make Ready	($10,083,565)	$64,257	$0	$0
DOP0352332	Ds-Op-Ai Other Make Ready	($10,083,565)	$165,180	$0	$14,198
	Company Explanation: The CIAC came from the support provided in attachment BR-02-001 Attachment 9 under cost component 975.[63]				
DOP0353810	Ds-Op-Ai Other Make Ready	($10,083,565)	$29,049	$0	$12,091
	Company Explanation: The CIAC came from the support provided in attachment BR-02-001 Attachment 9 under cost component 975.[64]				
DOP0325743	OP/Columbus Rd Rebuild	($1,263,273)	$407,420	$0	$0
DOP0337873	OP/Hudson Street PPR	($1,263,273)	$100,755	$0	$0
DOP0340318	Cols. South Netwrok PILC	($1,263,273)	$1,592,663	$0	$0
DOP0345440	OPPortWashMultiPhase	($1,263,273)	$312,467	$0	$0
DOP0347900	Warsaw-Nellie Relocate Line US	($1,263,273)	$344,653	$0	$0
DOP0356674	DS-OP-Ai Ckt Inspection	($1,263,273)	$35,831	$0	$0
DOP0358111	1 Ph OH Line rebuild or relo	($1,263,273)	$189,516	$0	$0
DOP0358843	DS-OP-Ai Ckt Inspection	($1,263,273)	$136,755	$0	$0
DOP0359914	DS-OP-Ai Ckt Inspection	($1,263,273)	$147,515	$0	$0
DOP0361148	Single Phase UG Line Rebuild	($1,263,273)	$98,041	$0	$0
07900199	Customer Meter/Op	($776,789)	$34,044,378	$0	$0
T10378842	Linworth XF#3 Failure	($62,000)	$1,006,479	$0	$0
BOP0000018	OP-Failed Equip No Outage	($32,675)	$1,540,519	$0	$1
DOP0360545	OP/Wind Storm 6/13/22	($32,675)	$7,642,630	$0	$0
TS0259676	D/OH NonSpecific Stati CO REG	($25,513)	$125,782	$0	$0
Company Explanation: These work orders selected are related to a blanket programs that contains multiple projects which have several work orders that do not necessarily have CAIC associated with them.[65]					
T10322979	Byesville TR-1 Failure	($4,502)	$1,002,820	$0	$0

60 AEP Ohio's response to audit scope 2022 Data Request BR-09-002.
61 AEP Ohio's response to audit scope 2022 Data Request BR-09-002
62 AEP Ohio's response to audit scope 2022 Data Request BR-09-002.
63 AEP Ohio's response to audit scope 2022 Data Request BR-09-002.
64 AEP Ohio's response to audit scope 2022 Data Request BR-09-002.
65 AEP Ohio's response to audit scope 2022 Data Request BR-05-019.

Company Explanation: This is associated with regular maintenance and replacement and would not be considered a customer job so no CIAC would be applicable[66]					
T10091877	Trabue Sta OP-D	($220)	$2,077,757	$0	$0
Company Explanation: This is associated with regular maintenance and replacement and would not be considered a customer job so no CIAC would be applicable[67]					

Blue Ridge found the Company's explanations not unreasonable.

In follow-up of 2021 DIR Audit Recommendation #4, Blue Ridge identified 11 work orders within the sample, one of which was a gridSMART work order, with cost element 143 charges. The Company stated that cost element 143 is utilized to track activity associated with lump-sum payments to employees (other than incentive pay and relocation). Examples include retroactive pay changes, grievance settlements, benefit payment adjustments, signing bonuses, allowable meal allowances, and until recently, educational assistance. Blue Ridge notes that while some of the examples provided would, based on their descriptions, be appropriate to charge to construction, others (e.g., grievance settlements, educational assistance, and signing bonuses) would not. Blue Ridge recommends that charges should be better defined and monitored going forward to ensure non-construction costs are not included as capitalized costs recovered through the DIR.

Work Order	Program	Description	2022 Activity	Cost Element 143 Charges
BOP0000001	DISTBLKOP	Cust Serv Residential New	$12,463,603.91	$3,051.68
BOP0000018	DISTBLKOP	Asset Improvement Blanket	$1,540,519.14	$1,079.68
DOP0329033	N/A	Capacity Additions - Cap Std	$3,676,890.22	$13.00
DOP0340318	DISTBLKOP	Network Reliability - Cap Blkt	$1,592,663.20	$1,080.92
DOP0344522	N/A	Capacity Additions - Cap Std	$3,977,325.74	$14.92
DOP0345440	DISTBLKOP	Asset Imp Small Wire OH	$312,466.90	$12.74
DOP0351997	OHGRSMPH2	gridSMART Stand Alone	$659,521.03	($5.84)
DOP0354526	DISTBLKOP	Cust Serv Residential Upgrade	$15,506.00	$14.69
DOP0359914	DISTBLKOP	Asset Imp Circuit Insp/Rep	$147,515.15	$10.80
DOP0360545	DISTBLKOP	Major Storm Capital Blanket	$7,642,630.18	$16,601.57
T10120323	N/A	Capacity Additions - Cap Std	$6,425,858.54	($94.03)

BRCS Adjustment #	Work Order Number	Cost Element 143 Description	2022 Activity	Gross Plant Adjustment for Cost Element 143	Impact on Revenue Requirement
Adjustment #2.1	BOP0000001	Other Lump Sum Payment	$12,463,603.91	$(3,051.68)	$(515.53)
Adjustment #2.2	BOP0000018	Other Lump Sum Payment	$1,540,519.14	$(1,079.68)	$(182.21)
Adjustment #2.3	DOP0329033	Other Lump Sum Payment	$3,676,890.22	$(13.00)	$(2.23)
Adjustment #2.4	DOP0340318	Other Lump Sum Payment	$1,592,663.20	$(1,080.92)	$(183.96)
Adjustment #2.5	DOP0344522	Other Lump Sum Payment	$3,977,325.74	$(14.92)	$(2.55)
Adjustment #2.6	DOP0345440	Other Lump Sum Payment	$312,466.90	$(12.74)	$(2.13)
Adjustment #2.7	DOP0351997	Other Lump Sum Payment	$659,521.03	$5.84	$0.99
Adjustment #2.8	DOP0354526	Other Lump Sum Payment	$15,506.00	$(14.69)	$(2.48)
Adjustment #2.9	DOP0359914	Other Lump Sum Payment	$147,515.15	$(10.80)	$(1.85)
Adjustment #2.10	DOP0360545	Other Lump Sum Payment	$7,642,630.18	$(16,601.57)	$(2,807.99)

66 AEP Ohio's response to audit scope 2022 Data Request BR-05-019.
67 AEP Ohio's response to audit scope 2022 Data Request BR-05-019.

Adjustment #2.11	T10120323	Other Lump Sum Payment	$6,425,858.54	$94.03	$16.07
	Grand Total			**$(21,780.13)**	**$(3,683.87)**

As a response to 2021 DIR Audit Recommendation #4, the Company stated that they have not added an additional tracking mechanism in 2022. During the 2021 DIR Audit, Blue Ridge did not ask the Company to provide an additional tracking mechanism in regard to Cost Element 143. However, we did and continue to recommend that the charges should be better defined and monitored going forward to ensure non-construction costs are not included as capitalized costs recovered through the DIR. Blue Ridge continues to note that cost element 143 appears to include a small amount of costs related to non-construction activities (e.g., grievance settlements, signing bonuses, and educational assistance). Although the amounts are negligible, they are consistently being included. Therefore, Blue Ridge continues to recommend that charges should be better defined and monitored going forward to ensure non-construction costs are not included as capitalized costs recovered through the DIR. Blue Ridge recommends that Gross Plant be reduced by $21,780.13. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(3,683.87). However, in the 3rd and 4th quarters of 2022, the Company met the DIR cap, so no impact results to ratepayers. **[ADJUSTMENTS #2.1—2.11]** The Company's explanations for the other cost codes are not unreasonable.

Other than the adjustment mentioned above, Blue Ridge found that the Company's responses were not unreasonable.

T8: Replacement projects

T8A: Were assets retired?

Of the 24 replacement work orders within the sample, the Company provided retirement charge detail on 23 of them. Blue Ridge found that the retirement charge detail for the work orders with retirements is not unreasonable. The remaining work order tested was a replacement or retirement with no retirement recorded in 2022.

1. Work Order W0035210, Program LEDOHCONV—LED Light Replacement—$15,582,565.25
   a. Description: Replace all existing roadway and area lighting with LED fixtures installed with networked streetlight controllers in each of the 225,000 locations identified. This work is planned to be completed over a period of five years with work done by external contract crews. By deploying LED lights with networked controllers installed, we will be immediately and automatically alerted to malfunctions and will not need to rely upon customers to call in. Not only will this reduce AEP Ohio's call center volume and thus lead to operational savings, it will allow for more efficient dispatch of repair crews to ensure all failed street and area lights are scheduled to be repaired concurrently. These actions also improve customer satisfaction by helping the Company repair malfunctioning lights more quickly. Additionally, LED street and area lights should require scheduled maintenance at roughly only one quarter of the rate of current technology. Funding for 2023 and beyond will be incremental and funded in future budget cycles.
   b. Company Explanation: This work order is for the construction cost for the LED light program and would not include the retirement cost.[68]

   Blue Ridge found the Company's explanation not unreasonable.

[68] AEP Ohio's response to audit scope 2022 Data Request BR-05-009.

T8B: Was the date of retirement in line with the asset replacement date?

Except as indicated above, the retirements took place within or before the scope period.

T8C: Is the amount of the retired asset not unreasonable?

Of the 24 retirement/replacement work orders, 9 had retirements which required additional review:

1. Work Order 42710211, Program TP2016108—Monroe Street Distribution—$2,573,087.63
    a. Retirement: $(501,739.75)
2. Work Order T10091877, Program TP2017100—Trabue Sta OP-D—$2,077,757.49
    a. Retirement: $(454,965.31)
3. Work Order T10211060, Program TA2019111—State Mills Station Failure—$2,261,245.66
    a. Retirement: $(0.10)
4. Work Order T10298956, Program N/A—North Middlepoint - Station—$1,909,077.51
    a. Retirement: $(33,211.37)
5. Work Order T10322979, Program TA2021111—Byesville TR-1 Failure—$1,002,820.45
    a. Retirement: $(4,161.56)
6. Work Order T10378842, Program TA2021111—Linworth XF#3 Failure—$1,006,478.88
    a. Retirement: $(60,690.78)
7. Work Order T10388906, Program TP2020135—Payne Station Install/Removal—$1,918,874.33
    a. Retirement: $(292,591.66)
8. Work Order TS0243076, Program TA2016913—Mobile OP-23 Rebuild—$1,523,974.83
    a. Retirement: $(15,249.50)
9. Work Order TS0259676, Program TBLANKTOP—D/OH NonSpecific Stati CO REG—$125,782.21
    a. Retirement: $(19,157.65)

Company explanation for items 1–9 above: The investment in work orders in this question are related to utility accounts 361 (Structures & Improvements), 362 (Station Equipment), and 397 (Communication Equipment). All of these utility accounts are considered non-mass property accounts. Non-mass property accounts do not require quantities to be entered into the Company's property records for retirements to be recorded. Instead, the original cost of the property being retired is recorded into the Company's property records.[69]

Blue Ridge found the Company's explanation not unreasonable.

T8D: Was salvage recorded?

Salvage was recorded on five work orders within the sample. Blue Ridge required additional salvage information on eight work orders that recorded cost of removal charges with no corresponding salvage.

1. Work Order 07900299, Program DISTBLKOP—Customer Meter/Op—$5,420,618.22
    a. Cost of Removal: $(361,802.11)
2. Work Order DOP0316665, Program DISTBLKOP—DS-OP-AI Other Make Ready—$40,056.47
    a. Cost of Removal: $(4,380.54)

[69] AEP Ohio's response to audit scope 2022 Data Request BR-05-008.

3. Work Order DOP0339472, Program DISTPGMOH—DS-OP-Small Wire Repl Ovhd—$42,130.08
   a. Cost of Removal: $(9,458.28)
4. Work Order DOP0340318, Program DISTBLKOP—Cols. South Netwrok PILC—$1,592,663.20
   a. Cost of Removal: $(121,752.94)
5. Work Order DOP0345440, Program DISTBLKOP—OPPortWashMultiPhase—$312,466.90
   a. Cost of Removal: $(1,686.57)
6. Work Order DOP0354526, Program DISTBLKOP—DS/OP/CS-Upgrades—$15,506.00
   a. Cost of Removal: $(1,404.09)
7. Work Order TS0259676, Program TBLANKTOP—D/OH NonSpecific Stati CO REG—$125,782.21
   a. Cost of Removal: $(3,151.84)

Company explanation for items 1–7 above: The value of salvaged material (scrap value) is not credited to the individual work orders but is credited to stores expense. This is spread on a monthly basis to all material laden work orders charged during that particular month.[70]

Blue Ridge found the Company's response not unreasonable.

8. Work Order W0035210, Program LEDOHCONV—LED Light Replacement—$15,582,565.25
   a. Cost of Removal: $(619,339.89)
   b. Company explanation: This work order is for the construction cost for the LED light program and would not include the retirement cost.[71]

   Blue Ridge found the Company's response not unreasonable.

T8E: Was cost of removal charged? Is the amount not unreasonable?

Of the 24 replacement work orders within the sample, 13 work orders had Cost of Removal charges. The remaining 11 replacement work orders did not have cost of removal charges.

1. Work Order 42710211, Program TP2016108—Monroe Street Distribution—$2,573,087.63
   a. Retirement: $(501,739.75)
   b. Company explanation: Cost of removal were billed by a vendor along with construction cost. The Company found $97,924.94 of cost associated with ABM code 584 which is for removal. This cost have been reclassified.[72] ABM Code 584 activity encompasses the removal or retirement of all equipment, structures, wiring, fencing, foundations, and any other assets to be retired for Transmission-managed Capital projects. The cost of removal was closed to account 101.[73]

   Blue Ridge found that the Company charged $97,924.94 to Plant in Service rather than to Cost of Removal, which would be charged to the depreciation reserve. Therefore, gross plant and the reserve is overstated. The mistake does not impact net plant or the DIR. However, depreciation expense would be impacted. Since the project was placed in-

[70] AEP Ohio's response to audit scope 2022 Data Request BR-05-007.
[71] AEP Ohio's response to audit scope 2022 Data Request BR-05-007.
[72] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[73] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.

service in December 2022 the impact, if any, would be minimal Blue Ridge does not recommend any adjustments for this work order because the costs were reclassified.

2. Work Order DOP0351337, Program DISTBLKOP—Ds-Op-Ai Other Make Ready—$64,256.78
   a. Retirement: $(8,291.45)
   b. Company explanation: Removal was recorded to account 1080005, retirement work in process (RWIP), in 2022. The costs on the work order are considered RWIP until the work order closes – at which time a journal entry occurs and reclassifies the RWIP on the work order to the depreciation reserve as cost of removal/salvage. This work order was closed 2023.[74] The work orders were placed in service during 2022 but did not close until 2023. As a result, cost of removal activity on the work orders did not transfer to the accumulated reserve until 2023. Cost of Removal as of 12/31/22 was $10,564.77.[75]

   Blue Ridge found the Company's explanation not unreasonable.

3. Work Order DOP0352332, Program DISTBLKOP—Ds-Op-Ai Other Make Ready—$165,180.07
   a. Retirement: $(11,890.29)
   b. Company explanation: Removal was recorded to account 1080005, retirement work in process (RWIP), in 2022. The costs on the work order are considered RWIP until the work order closes – at which time a journal entry occurs and reclassifies the RWIP on the work order to the depreciation reserve as cost of removal/salvage. This work order was closed 2023.[76] The work orders were placed in service during 2022 but did not close until 2023. As a result, cost of removal activity on the work orders did not transfer to the accumulated reserve until 2023. Cost of Removal as of 12/31/22 was $44,602.83.[77]

   Blue Ridge found the Company's explanation not unreasonable.

4. Work Order DOP0360545, Program DISTBLKOP—OP/Wind Storm 6/13/22—$7,642,630.18
   a. Retirement: $(991,553.88)
   b. Company explanation: Removal was recorded to account 1080005, retirement work in process (RWIP), in 2022. The costs on the work order are considered RWIP until the work order closes – at which time a journal entry occurs and reclassifies the RWIP on the work order to the depreciation reserve as cost of removal/salvage. This work order was closed 2023.[78] The work orders were placed in service during 2022 but did not close until 2023. As a result, cost of removal activity on the work orders did not transfer to the accumulated reserve until 2023. Cost of Removal as of 12/31/22 was $495,509.05.[79]

   Blue Ridge found the Company's explanation not unreasonable.

5. Work Order T10091877, Program TP2017100—Trabue Sta OP-D—$2,077,757.49

[74] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[75] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.
[76] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[77] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.
[78] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[79] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.

   a. Retirement: $(454,965.31)
   b. Company explanation: The removal cost is still in account 1080005 since the work order is completed. The original retirements recorded in 2022.[80] Cost of removal activity was recorded on the work orders but was still in RWIP (Retirement Work in Progress – 1080005) as of 12/31/22. The cost of removal activity was not recorded to any other general ledger accounts. Cost of removal as of 12/31/22 was $173,466.18.[81]

   Blue Ridge found the Company's explanation not unreasonable.

6. Work Order T10211060, Program TA2019111—State Mills Station Failure—$2,261,245.66
   a. Retirement: $(0.10)
   b. Company explanation: The removal cost is still in account 1080005 since the work order is in service. The original retirements recorded in 2022.[82] Cost of removal activity was recorded on the work orders but was still in RWIP (Retirement Work in Progress – 1080005) as of 12/31/22. The cost of removal activity was not recorded to any other general ledger accounts. Cost of removal as of 12/31/22 was $14,396.13.[83]

   Blue Ridge found the Company's explanation not unreasonable.

7. Work Order T10298956, Program N/A—North Middlepoint - Station—$1,909,077.51
   a. Retirement: $(33,211.37)
   b. Company explanation: The removal cost is still in account 1080005 since the work order is in service. The original retirements recorded in 2022.[84] Cost of removal activity was recorded on the work orders but was still in RWIP (Retirement Work in Progress – 1080005) as of 12/31/22. The cost of removal activity was not recorded to any other general ledger accounts. Cost of removal as of 12/31/22 was $80,701.14.[85]

   Blue Ridge found the Company's explanation not unreasonable.

8. Work Order T10322979, Program TA2021111—Byesville TR-1 Failure—$1,002,820.45
   a. Retirement: $(4,161.56)
   b. Company explanation: The removal cost is still in account 1080005 since the work order is in service. The original retirements recorded in 2022.[86] Cost of removal activity was recorded on the work orders but was still in RWIP (Retirement Work in Progress – 1080005) as of 12/31/22. The cost of removal activity was not recorded to any other general ledger accounts. Cost of removal as of 12/31/22 was $42,179.06.[87]

   Blue Ridge found the Company's explanation not unreasonable.

9. Work Order T10378842, Program TA2021111—Linworth XF#3 Failure—$1,006,478.88

[80] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[81] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.
[82] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[83] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.
[84] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[85] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.
[86] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[87] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.

a. Retirement: $(60,690.78)
b. Company explanation: The removal cost is still in account 1080005 since the work order is in service. The original retirements recorded in 2022.[88] Cost of removal activity was recorded on the work orders but was still in RWIP (Retirement Work in Progress – 1080005) as of 12/31/22. The cost of removal activity was not recorded to any other general ledger accounts. Cost of removal as of 12/31/22 was $(61,805.22).[89]

Blue Ridge found the Company's explanation not unreasonable.

10. Work Order T10388906, Program TP2020135—Payne Station Install/Removal—$1,918,874.33
    a. Retirement: $(292,591.66)
    b. Company explanation: The removal cost is still in account 1080005 since the work order is in service. The original retirements recorded in 2022.[90] Cost of removal activity was recorded on the work orders but was still in RWIP (Retirement Work in Progress – 1080005) as of 12/31/22. The cost of removal activity was not recorded to any other general ledger accounts. Cost of removal as of 12/31/22 was $154,013.67.[91]

    Blue Ridge found the Company's explanation not unreasonable.

11. Work Order TS0243076, Program TA2016913—Mobile OP-23 Rebuild—$1,523,974.83
    a. Retirement: $(15,249.50)
    b. Company explanation: The removal cost is still in account 1080005 since the work order is completed. The original retirements recorded in 2022.[92] Cost of removal activity was recorded on the work orders but was still in RWIP (Retirement Work in Progress – 1080005) as of 12/31/22. The cost of removal activity was not recorded to any other general ledger accounts. Cost of removal as of 12/31/22 was $81,274.31.[93]

    Blue Ridge found the Company's explanation not unreasonable.

Removal cost is recorded in account 1080005 and will remain in account 1080005 until the work order closes in PowerPlan. At that time, the removal cost amount is reversed out of account 1080005 and recorded to cost of removal 1080011. It will not show up on the Powerplan CPR activity reporting until the work order is closed. The original cost retirement (credit to 1010001/debit to 1080001) is recorded when the work order is placed in service. Investment is recorded to account 1010001 when the work order closes. Note that both the recording of retirements and transfers to plant in service occur during the month end closing processing.[94]

T8F: Was the date of cost of removal in line with the asset replacement date?

Each of the 13 work orders with cost of removal charges had cost of removal charges recorded that were in line with asset replacements dates.

[88] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[89] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.
[90] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[91] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.
[92] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.
[93] AEP Ohio's response to audit scope 2022 Data Request BR-11-001.
[94] AEP Ohio's response to audit scope 2022 Data Request BR-05-010 Supplement.

T9: Field Verification

T9A: Is the project a candidate for field verification?

Blue Ridge selected 11 projects for field verification from the work order sample. The purpose of the field verification was to determine whether the assets had been installed per the work order scope and description and whether they are prudent, used, and useful in rendering service to the customer. The work order/project-selection criteria specified assets that represented a targeted population of projects completed to understand AEP Ohio's engineering and construction practices and to support the accounting review of the work order sample. Work orders/projects were excluded from selection for the following reasons:

1. The work order is a blanket, and therefore, multiple assets have been installed at various locations, making it impractical to try to find them. In addition, those assets are generally minor in terms of dollar value. An example is meters installed at multiple locations.
2. The work order is for a mass unitization where the total dollars are large, but each work order is small.
3. The work order was not selected based on professional judgement.

Physical inspections were performed using virtual "desktop" reviews. Desktop reviews are detailed technical document reviews, focusing on prudence and used-and-useful status. They are conducted outside the formal discovery structure while still reviewing documentation, such as budget worksheets, justification statements, asset records, and design/construction prints. They also involve detailed discussions that can become part of the record through the Blue Ridge engineer's workpapers. Detailed desktop reviews offer additional advantages:

1. They allow Blue Ridge and Staff the flexibility to explore good candidate work orders that may otherwise have not been chosen for review because the work could not be readily viewed in the field.
2. They allow leveraging of Staff's technical expertise of the Ohio utility market with Blue Ridge's own industry knowledge.
3. They allow Blue Ridge to leverage its experience of leading similar virtual technical desktop reviews following a defensible, structured approach in understanding prudence and used and usefulness.

Blue Ridge, along with Commission Staff and with assistance from AEP Ohio representatives, conducted the field verifications and desktop reviews on August 14–15, 2023.

Information for each work order / project was provided to the observation team and a standard questionnaire was completed for each location. Where possible, pictures were taken of the installed assets. For the detailed desktop reviews, pictures of the selected project documents, detailed asset attribute tables, and before and after drawings were available. The completed questionnaires and applicable pictures are included as workpapers with this report. The questionnaire addressed these areas:

- Whether the assets were operational (used and useful) and providing service to the customer
- Whether the purpose of the project was reasonable
- Whether the assets that were installed in accordance with the original scope of work and no assets were installed that were not in the original scope of work
- If assets were retired before the end of their Economic or Average Service Life, whether the Company was able to adequately explain the reason(s)

- Whether the equipment that was installed matched the equipment that was capitalized to the DIR
- Whether Company personnel understood the scope of work and were able to provide Staff with detailed answers to questions about the work
- Whether problems identified during the process of construction were identified and discussed
- Whether the Company provided reasons (either to Staff or Blue Ridge) for any variances from budget that were greater than 20%
- Photos taken to support the field observations.

The following projects were field inspected:

Table 6: Desktop and Field Selection Desktop & Field Selection

<table>
<tr><th>Project</th><th>Work Order</th><th>Project Description</th><th>Activity Cost</th></tr>
<tr><td rowspan="3">DR19C14E0</td><td rowspan="3">DOP0353096</td><td>Astor - Rp Feeder Exit Cables</td><td>$1,324,391</td></tr>
<tr><td colspan="2">Company explanation: DOP0353096 was for the F-4611 cable install. This feeder is in service and is serving load. The work order for the F-4609 cable (DOP7346312) is not in service and is still open. This work could not be completed due to the inability to obtain the necessary Right-of-Way to tie to the proposed facilities. The F-4601 cable was installed under DOP7358230. Presently the F-4601 cable is not in service due to equipment failure of the station regulators. The cable is currently not serving load because the station regulators that are connected to the F-4601 feeder failed. Those regulators are in the process of being replaced. Once they are replaced, the feeder and cable will be serving load. DOP0353096 is only for the F-4611 cable.
• F-4609 is estimated at $55,077. F-4601 is estimated at $345,311.
• F-4609 and F-4601 are targeted for completion in Q1 2024.[95]</td></tr>
<tr><td colspan="2">Blue Ridge found that as the additional feeder work orders DOP7346312 and DOP7358230 are not in the 2022 population of in-service work the Company's explanation is not unreasonable and the work is prudent used and useful.</td></tr>
<tr><td rowspan="3">DP20C08E0</td><td rowspan="3">DOP0329033</td><td>Bixby - UG Feeder Exits</td><td>$3,676,890</td></tr>
<tr><td colspan="2">Company Explanation: F7109 is not in service. The cost for F-7109 is not included in the $3,676,890 that was placed in service in work order DOP0329033.[96]</td></tr>
<tr><td colspan="2">Blue Ridge found that as the F7109 costs were not included within work order DOP0329033. The Company's explanation is not unreasonable, and the work order is prudent used and useful.</td></tr>
<tr><td>P16108006</td><td>42710211</td><td>Monroe Street Distribution</td><td>$2,573,088</td></tr>
<tr><td>P16117003</td><td>42811601</td><td>Newcornerstown 138/12 kVxmer</td><td>$1,641,845</td></tr>
<tr><td>P16117003</td><td>T10245851</td><td>Newcornerstown 138/12 kVxmer</td><td>$1,950,243</td></tr>
<tr><td>DP20C18B0</td><td>T10298956</td><td>North Middlepoint - Station</td><td>$1,909,078</td></tr>
</table>

[95] AEP Ohio's response to audit scope 2022 Data Request BR-09-003.
[96] AEP Ohio's response to audit scope 2022 Data Request BR-09-004.

Project	Work Order	Project Description	Activity Cost
		Company Explanation: The new sites will be a mix of permanent sites (campers leave their RVs on site) and weekend renters; the exact breakdown has not been fully determined. It is expected that approximately half of the additional sites will be permanent, and the other half will be for weekend rentals. This is a seasonal/recreational camping grounds and not a year-around mobile home park. **The expanded sites have not been put to use. It is expected that the additional sites will be available for purchase and rental by the 2024 camping season (approximately April/May 2024).** CIAC doesn't apply to station work. These charges are only applied to any new or upgraded service to the customer. The Company further objects to the form of the question as this request is vague and overbroad. The expanded service is due entirely to the additional sites. If not for the expansion, the campground would not have needed the additional service.[97]	
		Blue Ridge found that the work is prudent and useful, but is not being used for the following reasons: • The additional sites will not be available for purchase and rental until April/May 2024. • There is no increase in load as of 12/31/22 associated with the additional sites. Blue Ridge recommends $1,909,077.51 Gross Plant be disallowed and moved back to CWIP until such time as the sites become available for purchase or rental, which appears to be April or May 2024. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $(322,276.86). However, in the 3rd and 4th quarters of 2022, the Company met the DIR cap, so no impact results to ratepayers. **[ADJUSTMENT #2.16]**	
DP21C15E0	DOP0344522	OSU - F-7705 D-Line Ug	$3,977,326
P20135007	T10388906	Payne Station Install/Removal	$1,918,874
P19017015	T10074241	Shannon Station Expansion	$620,143
DR21C03B0	T10065134	Shawnee Station Upgrades	$1,660,101
DP21C20E0	DOP0348921	St Clair Av D-Line UG	$182,372

Of the 11 projects selected for field verification, 10 were confirmed to be assets installed and used and useful.

Unitization Backlog

Blue Ridge reviewed the unitization backlog for two reasons. First, it provides an indication of how well the Company controls the process, and second, if the backlog were both significant and old, it represents a potential reserve issue.

The purpose of unitization is to assign costs to the appropriate FERC 300 account so that the accrual for depreciation is appropriate. Therefore, to the extent work orders remain in Completed Construction not Classified, it could distort the accrual for depreciation and the accumulated reserve.

[97] AEP Ohio's response to audit scope 2022 Data Request BR-09-005.

It is not uncommon for work orders to remain in FERC 106 for several months, waiting for the completion of the project or recording of final charges. In accordance with FERC accounting, a project can be substantially complete, used and useful, and waiting for completion of work that does not hinder the functionality of the asset(s).

Blue Ridge compared the Company's backlog in the unitization of work orders for 2022 to 2021.

Table 7: Unitization Backlog as of 12/31/22[98]

# of Months Backlogged	As of 12/31/21		As of 12/31/22		Change in	
	Amount	Work Orders	Amount	Work Orders	Amount	Work Orders
Over 100	$487,349	8	$1,633,300	10	235%	25%
Between 48-99	$16,799,948	8	$18,340,571	11	9%	38%
Between 24-47	$53,322,193	89	$13,082,991	30	-75%	-66%
Between 12-23	$134,438,425	1,096	$54,399,198	206	-60%	-81%
Less than 12	$264,447,817	10,722	$255,758,477	5,940	-3%	-45%
Grand Total	**$469,495,732**	**11,923**	**$343,214,537**	**6,197**	**-27%**	**-48%**

Blue Ridge reviewed the Company's backlog for unitization and found that the total backlog has been reduced by 27% from 2021 to 2022. However, the backlog of work orders not unitized over 12 months has decreased 57% from approximately $205 million to $87.4 million. AEP Ohio does not have a separate process that tracks a unitization backlog. Blue Ridge found that the Company's process using the PowerPlan application to track capital work order activity is not unreasonable. Blue Ridge recommends only that the Company continue to monitor the work orders in FERC account 106 to ensure they are unitized on a timely basis.

Blue Ridge recommends that the Company should continue to make a concerted effort to reduce the volume of backlog work orders, both in quantity and dollar value. The focus should be primarily on work orders not unitized over 12 months but should also include work orders under 12 months.

Insurance Recoveries

The Company had one insurance claim charged to capital during the period January 1, 2022, through December 31, 2022, for $884,411.[99] The Company explained that the accounting for the insurance funds received as a result of the claim is a credit of $884,441 to FERC Account number 1070001, associated with work order 4301099202—Maliszewski Failed TR1. This claim offsets the expenses recorded to repair the asset. However, this work order was associated with a transmission transformer recorded to Business Unit 160; therefore, neither the cost of repair nor the offsetting insurance proceeds were included in Distribution Investment Rider.[100]

As of May 12, 2023, the Company did not have any pending insurance recoveries.[101]

The Company's management procedures for claims[102] are not unreasonable, and recovered money is appropriately applied to the work order that repairs the damage.

In summary, Blue Ridge found no indication that the insurance recoveries were not applied appropriately, which would have caused the DIR to be misstated.

[98] AEP Ohio's response to audit scope 2022 Data Request BR 01-027.
[99] AEP Ohio's response to audit scope 2022 Data Request BR-01-043
[100] AEP Ohio's response to audit scope 2022 Data Request BR-03-001.
[101] AEP Ohio's response to audit scope 2022 Data Request BR-01-044.
[102] AEP Ohio's response to audit scope 2015 Data Request BR-01-050.

Exclusions from DIR

The Commission ordered that capital additions recovered through other Commission-authorized riders be identified and excluded from the DIR Rider. Blue Ridge reviewed the Company's filed tariff and identified the following riders in effect as shown in the following list.[103]

1. Basic Transmission Cost Rider
2. KWH Tax Rider
3. Universal Service Fund Rider
4. Pilot Throughput Balancing Adjustment Rider
5. Enhanced Service Reliability Rider (ESRR)
6. **gridSMART® Rider**
7. **Distribution Investment Rider**
8. Storm Damage Recovery Rider (SDRR)[104]
9. Bad Debt Rider
10. Economic Development Cost Recovery Rider
11. Legacy Generation Resource Rider
12. Retail Reconciliation Rider
13. SSO Credit Rider
14. Power Forward Rider
15. Smart City Rider[105]
16. Tax Savings Credit Rider
17. Solar Generation Fund Rider
18. Generation Energy Rider
19. Auction Cost Reconciliation Rider
20. Energy Efficiency and Peak Demand Reduction Cost Recovery Rider
21. Alternative Energy Rider
22. Interruptible Power Rider–Expanded Service Discretionary Rider
23. Interruptible Power Rider—Expanded Discretionary Rider

The Company stated, and Blue Ridge confirmed, that the gridSMART Rider and DIR are the only riders that provide recovery of distribution plant.[106]

Each quarterly filing includes a summary of the distribution assets associated with the Company's gridSMART assets that are recovered in separate riders to demonstrate that they have been excluded from the DIR.

The riders germane to the exclusion criterion are discussed below.

gridSMART Phase II

The Commission's February 1, 2017, Order in Case No. 13-1939-EL-RDR approved the recovery of gridSMART Phase II assets and ended the carrying charge calculation for the gridSMART I assets.

[103] AEP Ohio's response to audit scope 2022 Data Request BR-01-034 Attachment 1.
[104] The SDRR allows recovery of O&M related incremental storm restoration costs from major storms that are above the baseline of $5.12 million through November 30, 2021. However, as a result of the 11-17-2021 Opinion and Order in Case No. 20-585-EL-SSO the annual SDRR baseline changed from $5,120,000 to $3,340,678 starting December 1, 2021. Capital expenditures for all major and non-major storms are recovered through the DIR (audit scope 2021 BR-01-034).
[105] SMARTCity Rider allows the Company to recover the O&M related Smart City technologies. There are no capital activities for SMARTCity initiatives (audit scope 2021 BR-01-034).
[106] AEP Ohio's response to audit scope 2022 Data Request BR-01-035.

As a result, gridSMART Phase II assets have been excluded from the DIR rider. Effective in April 2017, as a result of the Commission's February 25, 2015, order in Case No. 13-2385-EL-SSO (ESP III), the gridSMART Phase I assets are included in the DIR Rider.[107]

The Commission's February 1, 2017, Order in Case No. 13-1939-EL-RDR also ordered that to perfect the gridSMART Phase I pilot program, an additional 22,000 AMI meters were deployed. These meters, as well as all replacement and in-stock AMI meters, were moved to the gridSMART Phase II rider for recovery.[108]

The Company excluded the following net plant costs associated with gridSMART Rider from the DIR.

Table 8: gridSMART Excluded from DIR[109]

DIR Filing Case No. 14-1696-EL-RDR	Book Cost	Allocated Reserve	Net Book Value to be Excluded
gridSMART Q4 2021	290,923,835	(46,053,608)	244,870,227
gridSMART Q1 2022	299,879,731	(49,563,054)	250,316,676
gridSMART Q2 2022	305,175,375	(52,970,930)	252,204,445
gridSMART Q3 2022	315,851,719	(56,164,735)	259,686,984
gridSMART Q4 2022	322,666,001	(59,545,049)	263,120,952
Incremental Change from the DIR Filing	31,742,166	(13,491,441)	18,250,725

GS Filing Case No. 23-484-EL-RDR (Workpaper 1)	Gross Plant
December 2021 Cumulative Distribution Gross Plant	290,923,835
December 2022 Cumulative Distribution Gross Plant	322,631,269
Incremental Change from the GS Filing (Distribution only)	31,707,434

Incremental Change from the DIR Filing	31,742,166
Incremental Change from the GS Filing (Distribution only)	31,707,434
Difference	34,732

The gridSMART assets are tracked by work order, project IDs that allow them to be identified as gridSMART assets. A query from the Company's owned-asset system identifies the net book value to be removed associated with the Company's gridSMART Phase II riders.[110]

The gridSMART Rider recovers capital assets not only from Distribution Plant but also from Intangible and General Plant. Since the quarterly DIR filings include only Distribution Plant, the difference between the riders represents Intangible and General Plant.[111] Blue Ridge compared the amount of cumulative gross plant included in the Company's gridSMART Rider to the amount excluded from the DIR and found a $34,732 difference. The Company confirmed that the difference relates to AMI Meters that were charged to gridSMART Phase 3, Work Order W0035066. These are gridSMART Phase 3 meter seals that closed to Plant in Service; however, they are not used and useful at this time, and therefore, it would be inappropriate to accumulate carrying charges on them. (They were removed from the gridSMART filing in case 22-0473-EL-RDR.) An oversight in the DIR filing caused this overstatement of gridSMART investments to be excluded, resulting in the DIR plant

[107] AEP Ohio's response to audit scope 2020 Data Request BR-02-025.
[108] Case No. 13-1939-EL-RDR, Order dated February 2, 2017, page 14.
[109] AEP Ohio's response to audit scope 2021 and 2022 Data Request BR-01-001, Case No. 23-484-EL-RDR Application Workpaper 1.
[110] AEP Ohio's response to audit scope 2022 Data Request BR-01-034.
[111] AEP Ohio's response to audit scope 2022 Data Request BR-01-038.

balance being slightly understated.[112] Blue Ridge recommends an adjustment to increase DIR gross plant by $34,731.79. Blue Ridge estimates the effect on the Company's DIR revenue requirements to be $5,788.78. However, in the 3rd and 4th quarters of 2022, the Company met the DIR cap, and thus, no impact results to ratepayers. **[ADJUSTMENT #2.18]**

Conclusion

In summary, Blue Ridge found the Company has a disconnect between capital additions that should be recovered through other Commission-authorized riders and the DIR.

Accumulated Deferred Income Tax

The Commission ordered that the DIR mechanism account for accumulated deferred income taxes (ADIT), an offset in rate base. The Commission found that it is not appropriate to establish the DIR rate mechanism in a manner that provides the Company with the benefit of ratepayer-supplied funds. Any benefit resulting from ADIT should be reflected in the DIR revenue requirement.[113]

The DIR revenue requirement includes ADIT related to utility property of the distribution function.[114] The ADIT in the calculation of the DIR includes direct-assigned amounts related to the distribution function.[115] The source of the data is the Company's utility property ADIT (Account 2821001) as reported on its balance sheet.[116] Blue Ridge requested and reviewed the underlying book-tax timing differences constituting the balance as of December 31, 2022, and did not identify any exceptions, such as non-distribution or non-plant-related items.[117]

The balance reflected in DIR rate base is determined by calculating the incremental change in Account 2821001 relative to the test year in Case No. 20-0585-EL-AIR. In October 2021, the Company made a reclass entry to transfer the balance of 1986 protected excess ADIT from account 2821001 to 2831001.[118] The impact was a non-normal increase to DIR rate base and the revenue requirement (prior to cap analysis). Accordingly, during the audit of year 2021 results, Blue Ridge recommended an adjustment to negate the impact of the reclass entry on future DIR filings. The Company agreed and implemented the adjustment beginning with the Q3 2022 DIR filing. Blue Ridge is satisfied with the Company's adjusted calculation of the incremental change in ADIT and found the resulting balance in DIR rate base not unreasonable.

The quarterly incremental changes from date certain, December 31, 2019, are shown in the following table.

[112] AEP Ohio's response to audit scope 2022 Data Request BR-05-013.
[113] Case No. 11-346-EL-SSO, et al., Order dated August 8, 2012, page 47.
[114] AEP Ohio's response to audit scope 2016 Data Request BR-01-027.
[115] AEP Ohio's response to audit scope 2016 Data Request 9-002 and audit scope 2017 Data Request 3-004.
[116] Blue Ridge's Report dated June 19, 2013, titled "Compliance Audit of 2012 Distribution Investment Rider (DIR) of Columbus Southern Power and Ohio Power Company d/b/a AEP Ohio," page 42.
[117] AEP Ohio's response to audit scope 2021 Data Request BR-01-029.
[118] AEP Ohio's response to audit scope 2021 Data Request BR-14-003.

Table 9: Incremental ADIT Reflected in Rate Base

Period	Distribution ADIT (Account 282.1)	Incremental ADIT Offset	Distribution ADIT (Account 282.1)	Incremental ADIT Offset
Date Certain 12/31/2019	(907,826,188)	--		
1st Quarter 2020	(910,002,982)	(2,176,794)		
2rd Quarter 2020	(911,863,516)	(4,037,328)		
3rd Quarter 2020	(919,186,245)	(11,360,057)		
4th Quarter 2020	(948,426,250)	(40,600,062)		
1st Quarter 2021	(952,242,142)	(44,415,954)		
2rd Quarter 2021	(953,176,265)	(45,350,076)		
3rd Quarter 2021	(957,439,705)	(49,613,517)		
4th Quarter 2021	(948,276,277)	(40,450,089)		
1st Quarter 2022	(952,366,723)	(44,540,535)		
2rd Quarter 2022	(959,420,804)	(51,594,615)		
Date Certain 12/31/2019			(895,190,908)	--
3rd Quarter 2022			(962,968,687)	(67,777,779)
4th Quarter 2022			(1,019,884,396)	(124,693,488)

<u>THEORETICAL RESERVE OFFSET</u>

In Case No. 13-2385-EL-SSO, the Commission adopted OCC's recommendation to modify the property tax calculation, specifically the derivation of the change in net plant to which the property tax rate is subsequently applied. The Company implemented the Commission's order to reflect the theoretical reserve as an offset to assessable net plant beginning with the June 2015 DIR filing.[119]

The adjustment to reflect the theoretical reserve offset is equal to the monthly amortization of the excess depreciation reserve multiped by the number of months since the date certain in the most recent base rate case.

Blue Ridge found the application of the theoretical reserve offset in the DIR property tax calculation to be consistent with the method approved in Case Nos. 13-2385-EL-SSO and 16-1852-EL-SSO and not unreasonable.

The modifications Blue Ridge observed beginning with the 4Q2021 DIR filing are consistent with the updated formula in Attachment B to the approved Joint Stipulation in Case No. 20-585-EL-AIR. The Company described the changes as follows:

> The Stipulation and Order allows for adjustment to the DIR revenue requirement to include the changes in the theoretical reserve including the eventual expiration of the theoretical reserve beginning in June 2023. The annual DIR revenue requirement will start including the increase in the theoretical reserves (decrease the DIR revenue requirement of $21,451,689 - annual amount starting in December 2021) and then include the expiration of the theoretical reserve (increase the DIR revenue requirement starting June 2023) by $23,726,170 annually to offset the increase in AEP Ohio's depreciation expense due to the expiration of the theoretical reserve after May 31, 2023. The adjustments to the DIR are appropriate because base rates do not

[119] Case No. 16-01-EL-RDR, Blue Ridge's Report dated August 5, 2016, titled "Compliance Audit of 2015 Distribution Investment Rider (DIR) of Ohio Power Company d/b/a AEP Ohio," page 32.

reflect the increase in the theoretical reserve that occurred in June 2021 and base rates will not reflect the expiration of the theoretical reserve starting in June 2023.[120]

CARRYING CHARGE RATE

The carrying charge includes elements to allow the Company an opportunity to recover property taxes and depreciation and to earn a return (and associated income taxes) on plant in service associated with distribution net investment.

The return, depreciation, and property tax components are separate components in the DIR calculation. The following table summarizes the components for the carrying charge rate effective with the Commission's approval of the Joint Stipulation in Case No. 20-585-EL-AIR.

Table 10: Carrying Charge Rate Components

Description	Order
Return – Pre-Tax WACC	8.74%
Average Depreciation Rate	3.34%
Weighted Average Property Tax	5.04%

Return Pre-Tax Weighted Average Cost of Capital (WACC)

The carrying charge includes a pre-tax weighted average cost of capital (WACC). The Commission approved the current capital structure and debt/equity cost rates in Case No. 20-0585-EL-AIR.[121] The following table shows the pre-tax WACC used by the Company beginning with its Q42022 DIR filing.

Table 11: Pre-Tax Weighted Average Cost of Capital

Class of Capital	% of Total Capital	Embedded Cost (%)	After-Tax Weighted Cost (%)	Pre-Tax Weighted Cost (%)
Long-Term Debt	45.57%	4.40%	2.00%	2.00%
Common Equity	54.43%	9.70%	5.28%	6.74%
Total Capital	100.00%		7.28%	8.74%

The WACC is applied to the adjusted change in net Distribution Plant to derive the return component of the Carrying Charge. Blue Ridge verified the updated WACC against the Order in Case No. 20-0585-EL-AIR and found no exceptions.

Average Depreciation Expense

The annual accrual rate in the depreciation expense calculation is 3.34%. The composite rate is derived based on the average distribution plant balance and depreciation rates approved in Case No. 20-585-EL-RDR.[122] The depreciation rate is applied to the adjusted change in gross Distribution Plant to derive the depreciation component of the carrying charge. The depreciation expense is not unreasonable.

[120] AEP Ohio's response to audit scope 2021 Data Request BR-01-009.
[121] AEP Ohio's response to audit scope 2021 Data Request BR-07-014.
[122] Staff's response to audit scope 2021 Data Request BR-10-001.

Weighted Average Property Tax

The property tax rate of 5.04% in the DIR filing is based on test year data from Case No. 20-0585-EL-AIR.[123] The former 5.66% property tax rate used in prior filings derives from Case No. 11-351-EL-AIR. Blue Ridge found the rates not unreasonable.

For the purpose of calculating property taxes, the Company applied the property tax rate to the change in Distribution Plant, adjusted for exclusions and a theoretical reserve offset. The property tax computation conforms with the Commission-approved method and rates and is not unreasonable.

Conclusion

In summary, Blue Ridge found that the carrying charge rate was applied as authorized by various Commission orders.

Gross-Up Factor (CAT)

The Rider Revenue Requirement is grossed up for the Commercial Activity Tax (CAT). The Company used the statutory rate of 0.26% for the Commercial Activity Tax as defined in Section 5751.03 of the Ohio Revised Code.[124] Blue Ridge found the rate not unreasonable.

Annual Cap and Under/Over Recovery

Annual Cap

The revenue authorized under the DIR is capped at a certain level each year. In Case No. 20-0585-EL-AIR, the Commission set these annual revenue caps through May 2024:

> {¶ 53} For 2021, the DIR revenue cap will be $57 million. For 2022, the base DIR revenue cap will be $91 million. The 2022 base DIR revenue cap will be increased to $96 million, if, in 2021, AEP Ohio achieves the 2021 reliability standard set forth below. For 2023, the base DIR revenue cap will be $116 million. The 2023 base DIR revenue cap will be increased by $5 million (to $121 million), if, in both 2021 and 2022, AEP Ohio achieves the applicable annual reliability standards set forth below. The 2023 base DIR revenue cap will be separately increased by an additional $5 million (to up to $126 million in total), if, in 2022, AEP Ohio achieves the 2022 reliability standard set forth below. (Joint Ex. 1 at 6.)
>
> {¶ 54} For January 2024 through May 2024, the base DIR revenue cap will be $51.25 million. The 2024 base DIR revenue cap will be increased by $2 million (to $53.25 million), if, in 2023, AEP Ohio achieves the 2023 reliability standard set forth below. The 2024 base DIR revenue cap will be separately increased by $2 million (to up to $55.25 million), if, in each of 2021, 2022, and 2023, AEP Ohio achieves the applicable annual reliability standards set forth below. The 2024 base DIR revenue cap will be separately increased by $2 million (to up to $57.25 million in total), if, in both 2021 and 2022, AEP Ohio achieves the applicable annual reliability standards set forth below. (Joint Ex. 1 at 6.)
>
> …

[123] Staff's response to audit scope 2021 Data Request BR-10-001.
[124] AEP Ohio's Response to audit scope 2016 Data Request 1-031 and confirmed by review of current Ohio Revised Code 5751.03 Commercial Activity Tax Rate-Computation.

{¶ 56} For purposes of the above paragraphs, the DIR performance-based trigger standards for 2021 through 2023, based on the system average interruption duration index (SAIDI), shall be as follows:

Year	SAIDI
2021	87.8
2022	86.8
2023	85.8

For each annual period, AEP Ohio will report the prior year's reliability performance on or before March 31. Staff will review and verify the performance results within 20 days. (Joint Ex. 1 at 7.)[125]

The 2022 revenue cap is $96 million, inclusive of a $5 million incentive for meeting the above specified 2021 SAIDI metric. The benchmark was 87.8, and the Company exceeded benchmark when compared to actual performance of 76.4.[126]

Beginning July 2022, the annual revenue requirement exceeded the 2022 cap of $96 million. Accordingly, any plant adjustments Blue Ridge proposes in this case would have no bearing on the annualized revenue requirement because the impact would be negated by the cap adjustment at Line 29 of the DIR formula.

Authorized DIR Revenue vs. Amount Billed—Over/Under Recovery

The DIR includes a mechanism to track the difference between cumulative billed and cumulative authorized revenues ("over/under true-up"). The calculated Rider Revenue for each period is adjusted by the over/under true-up to derive the Fully Adjusted Revenue Requirement. During the prior year audit of the 2021 DIR, Blue Ridge recommended an adjustment to reduce the opening under-recovered balance by approximately $2.96 million. The issue derived from the Company's override of the Line 41 limitation in the former DIR formula beginning with the 2Q2019 filing.[127] Blue Ridge found during the audit of the 2019 DIR (and maintained in the audit of the 2020 and 2021 DIR) that the Company acted to correct what it viewed as a deficiency in the established formula without Commission approval. The Company did not accept Blue Ridge's recommendation and contends the negotiated changes to the DIR formula approved in Case No. 20-0585-AIR demonstrate the prior instances of the Line 41 override were appropriate.[128]

At this time the Commission has not decided the disputed recommendation in Case Nos. 20-0169-EL-RDR, 21-0016-EL-RDR, and 22-0089-EL-RDR. Moreover, no parties have filed comments supporting the Company's viewpoint in response to the respective audit reports Blue Ridge submitted on August 28, 2020, September 1, 2021, and September 9, 2022. As Blue Ridge cannot rely on the inference that the updated DIR formula for investments after December 31, 2019, should apply retrospectively, we carry forward the prior audit recommendation. The impact reduces the Company's under-recovered DIR revenue position and fully adjusted revenue requirement as of December 31, 2021, by $2.96 million. **[ADJUSTMENT #1]**

[125] Case No. 20-585-EL-AIR, Opinion and Order (November 17, 2021), pg. 21.
[126] AEP Ohio's response to audit scope 2022 Data Request BR-13-001.
[127] AEP Ohio's 2Q2019 DIR filing dated September 26, 2019, pg. 2.
[128] AEP Ohio's response to audit scope 2021 Data Request BR-01-007; AEP Ohio's original and supplemental response to 2020 audit Data Request BR-08-001.

As discussed previously, due to the revenue cap, the 2022 plant adjustments that Blue Ridge proposes has no impact on the Company's fully adjusted revenue requirement as of December 31, 2021. **[ADJUSTMENT #2, including the 18 individual plant adjustments]**

Table 12: Impact of 2022 Plant Adjustment on Cumulative Over/Under Recovered Balance as of December 31, 2021Table: Impact of 2021 Plant Adjustment on Cumulative Over/Under Recovered Balance as of December 31, 2022

	Δ Distr Plant	Δ Accum. Depr	Adjustment to Net Plant	Return 8.74%	Depr 3.34%	Property Tx 5.04%	Δ Revenue Subtotal	Gross-Up 100.26%	Cap	1/12th Annualized Revenue Req
1/31/2022	$ (2,502,642)	$ (48,615)	$ (2,454,026)	(214,482)	(83,588)	(123,683)	$ (421,753)	$ (422,850)	Below	$ (35,237)
2/28/2022	(2,502,642)	(48,615)	(2,454,026)	(214,482)	(83,588)	(123,683)	(421,753)	(422,850)	Below	(35,237)
3/31/2022	(2,502,654)	(48,615)	(2,454,039)	(214,483)	(83,589)	(123,684)	(421,755)	(422,852)	Below	(35,238)
4/30/2022	(2,502,654)	(48,615)	(2,454,039)	(214,483)	(83,589)	(123,684)	(421,755)	(422,852)	Below	(35,238)
5/31/2022	(2,502,654)	(48,615)	(2,454,039)	(214,483)	(83,589)	(123,684)	(421,755)	(422,852)	Below	(35,238)
6/30/2022	(2,524,477)	(49,011)	(2,475,466)	(216,356)	(84,318)	(124,764)	(425,437)	(426,543)	Below	(35,545)
7/31/2022	(2,524,477)	(49,011)	(2,475,466)	(216,356)	(84,318)	(124,764)	(425,437)	(426,543)	Above	211,733
8/31/2022	(2,524,492)	(49,011)	(2,475,481)	(216,357)	(84,318)	(124,764)	(425,439)	(426,545)	Above	-
9/30/2022	(2,524,398)	(49,010)	(2,475,388)	(216,349)	(84,315)	(124,760)	(425,423)	(426,529)	Above	-
10/31/2022	(2,524,398)	(49,010)	(2,475,388)	(216,349)	(84,315)	(124,760)	(425,423)	(426,529)	Above	-
11/30/2022	(2,524,409)	(49,010)	(2,475,398)	(216,350)	(84,315)	(124,760)	(425,425)	(426,531)	Above	-
12/31/2022	(2,524,422)	(49,010)	(2,475,411)	(216,351)	(84,316)	(124,761)	(425,427)	(426,533)	Above	-
							Δ Line 41 (Over)/Under Adjustment			$ -

Annual Base Distribution Revenue

The rider is collected as a percentage of base distribution revenue. The annual base distribution revenue for DIR filing for the four quarters in 2022 is provided in the following table.

Table 13: Annual Base Distribution Revenues in DIR by Quarter

Period	Reported Rolling 12-Mo. Revenue
1st Quarter 2022	$ 911,341,069
2nd Quarter 2022	$ 911,341,069
3rd Quarter 2022	$ 911,341,069
4th Quarter 2022	$ 921,307,243

Annual base distribution revenues are obtained through the Company's billing system. The billing system tracks each charge by an equation code. The base distribution revenues are represented by a unique set of equation codes that allow them to be separately identified.[129] Blue Ridge compared the results of the query used to determine the base distribution revenues to the amount included within the DIR filings and found that the base distribution revenues agree to the supporting documentation for Q4. For Q1, Q2, and Q3, the Company used the base distribution amount agreed to in the Case No. 20-585-EL-AIR.[130]

[129] Blue Ridge's Report dated June 19, 2013, titled "Compliance Audit of 2012 Distribution Investment Rider (DIR) of Columbus Southern Power and Ohio Power Company d/b/a AEP Ohio," page 46.
[130] AEP Ohio's response to audit scope 2022 Data Request BR-01-042.

CONCLUSION

In conclusion, the mathematical calculations for each quarter are not unreasonable. However, Blue Ridge recommends reducing the cumulative under-collected DIR revenue balance in total by $2.96 million as discussed in the Annual Cap and Over/Under Recovery section. Blue Ridge also had findings and recommendations related to non-used and useful plant that had no impact on the revenue requirement subject to cap as of December 31, 2022, because the Company reached the Case No. 20-0585-EL-AIR cap in July.

Table 14: Adjustments to DIR Balances and Revenue Requirement as of December 31, 2022

Adj No.	Description	Plant in Svc	Accum Depr	Net Plant	Revenue Requirement Subject to Cap (Line 27)	Annualized DIR Revenue Requirement Dec. 31, 2022 (Line 39)	Over/(Under) Adjustment (Line 41)	Fully Adjusted Revenue Req. (Line 43)
						a	b	c = a + b
	Plant in Service, less gridSMART - As Filed	$ 6,122,103,482	$ 1,773,808,397	$ 4,348,295,085	$ 130,564,356	$ 75,709,044	$ 4,768,164	$ 80,477,209
1	2019/2020/2021 Open Audit Issue	-	-	-	-	-	(2,964,660)	(2,964,660)
2	2022 Plant-in-Serivce							
2.1	Severance/Educational Expense (BOP0000001)	(3,052)	(60)	(2,992)	(516)	-	-	-
2.2	Severance/Educational Expense (BOP0000018)	(1,080)	(23)	(1,057)	(182)	-	-	-
2.3	Severance/Educational Expense (DOP0329033)	(13)	(0)	(13)	(2)	-	-	-
2.4	Severance/Educational Expense (DOP0340318)	(1,081)	(11)	(1,069)	(184)	-	-	-
2.5	Severance/Educational Expense (DOP0344522)	(15)	(0)	(15)	(3)	-	-	-
2.6	Severance/Educational Expense (DOP0345440)	(13)	(0)	(12)	(2)	-	-	-
2.7	Severance/Educational Expense (DOP0351997)	6	0	6	1	-	-	-
2.8	Severance/Educational Expense (DOP0354526)	(15)	(0)	(14)	(2)	-	-	-
2.9	Severance/Educational Expense (DOP0359914)	(11)	(0)	(11)	(2)	-	-	-
2.10	Severance/Educational Expense (DOP0360545)	(16,602)	(301)	(16,301)	(2,808)	-	-	-
2.11	Severance/Educational Expense (T10120323)	94	0	94	16	-	-	-
2.12	AFUDC Over-accrued (42710211)	(950)	(19)	(931)	(160)	-	-	-
2.13	AFUDC Over-accrued from July 20-Jan 22 (42738032)	(427,000)	(8,389)	(418,611)	(72,133)	-	-	-
2.14	AFUDC Over-accrued from Dec 20-April 21 (T1024585	(52,228)	(1,071)	(51,157)	(8,817)	-	-	-
2.15	Paid over FMV for the land (W0033215)	(113,386)	-	(113,386)	(19,462)	-	-	-
2.16	Huggy Campsites not used or in-service (T10298956)	(1,909,078)	(39,136)	(1,869,941)	(322,277)	-	-	-
2.17	gridSMART not excluded (Various)	(5,151,731)	(37,876)	(5,113,855)	(879,037)	-	-	-
2.18	gridSMART add back (Various)	34,732	1,250	33,481	5,789			
	Plant in Service, less gridSMART - Blue Ridge Adjusted	$ 6,114,462,061	$ 1,773,722,761	$ 4,340,739,300	$ 129,264,575	$ 75,709,044	$ 1,803,504	$ 77,512,549

The DIR revenue requirements calculation results in a percentage increase in base distribution revenue. The following table presents the DIR percentage of base distribution proposed by the Company in the Q42022 DIR filing and as adjusted by Blue Ridge.

Table 15: Rider DIR—Q42022 Fully Adjusted Revenue as a Percentage of Base Distribution Revenue

Adj No.	Description	Revenue Req. Dec. 31, 2022 (Line 39)	Over/(Under) (Line 41)	Fully Adjusted Revenue Req. (Line 43)	% Base Distr Rev
	Revenue Requirement - Q42022 DIR Filing	$ 75,709,044	$ 4,768,164	$ 80,477,209	8.73511%
1	2019/2020/2021 Open Audit Issue	-	(2,964,660)	(2,964,660)	-0.32179%
2	2022 Adjustments to Plant Balances	-	-	-	0.00000%
	Subtotal Blue Ridge Adjustments	-	(2,964,660)	(2,964,660)	-0.32179%
	Revenue Requirement - Q42022 DIR Filing - Adjusted	$ 75,709,044	$ 1,803,504	$ 77,512,549	8.41332%

Continued Implementation of Tax Cuts and Jobs Act of 2017 from Case No. 18-1451-EL-ATA

Case No. 20-0585-EL-AIR did not result in any changes to the treatment of excess accumulated deferred income taxes (EDIT) in the DIR. According to the Company,

> Under the Stipulation and Order, excess normalized ADIT will continue to impact the cap calculation. Additionally, the Order did not change the return of normalized excess ADIT through the DIR as a result of Case No. 18-1007-EL-UNC and 18-1451-EL-ATA (Tax Cuts and Jobs Act of 2017). The adjustment to the Cap reflects that ADIT decreases as excess ADIT is flowed back to customers. This change in ADIT is not included in the cap calculation. The return on the change is removed from the calculated revised grossed up revenue (line 23 of Attachment B) to establish the DIR Revenue Requirement Subject to the Cap. The excess normalized ADIT will continue to flow back to customers as a reduction in the DIR Revenue Requirement (line 31 of Attachment B).[131]

Consistent with prior audits, Blue Ridge requested a reconciliation of the EDIT balances as of December 31, 2022.[132] Based on the data provided, Blue Ridge found the activity and ending EDIT balances in DIR rate base to be consistent with prior years and not unreasonable. The Company's response reflected a 2021 tax return true-up that increased the liability owed to customers by $2.9 million (after tax gross up). Based on the results of prior audit investigations, Blue Ridge found the adjustment not unreasonable.

Table 16: Reconciliation of Normalized Excess ADIT in DIR Rate Base[133]

Description	2021/Q4 DIR Filing	2021 Return to Provision Trueup	2022 Amortization	2022/Q4 DIR Filing
Excess ADFIT 282 - Protected	$ (155,072,088)	$ (2,284,024)	$ 2,772,107	$ (154,584,006)
Tax Gross Up Factor	1.27	1.27	1.27	1.27
DIR Pass Back (Not Subject to Cap)	$ (196,293,782)	$ (2,891,170)	$ 3,508,996	$ (195,675,956)

131 AEP Ohio's response to audit scope 2021 Data Request BR-01-007.
132 AEP Ohio's response to audit scope 2022 Data Request BR-01-032.
133 AEP Ohio's response to audit scope 2022 Data Request BR-01-032.

APPENDICES

Appendix A: Rider DIR Excerpts within Stipulations and Order

Appendix B: Data Requests and Information Provided

Appendix C: Workpapers

APPENDIX A: RIDER DIR EXCERPTS WITHIN ORDER AND COMBINED STIPULATION

Excerpts specifically related to Rider DIR from the following Commission Opinions and Orders are provided within this section. In addition, electronic copies of prior filings, audit reports, and opinions and orders reviewed were provide on a USB drive.

- Case No. 11-346-EL-SSO, et al. (Rate Case)
- Case No. 11-351-EL-AIR, et al. (Rate Case)
- Case No. 13-1939-EL-RDR SmartGrid
- Case No. 13-2385-EL-SSO, et al. (Rate Case)
- Case No. 14-0255-EL-RDR (Larkin DIR Report), Case No. 15-0066-EL-RDR (Baker Tilly DIR Report), and Case No. 16-0021-EL-RDR (Blue Ridge R DIR eport)
- Case No. 16-1852-EL-SSO, et. al. (Rate Case)
- Case No. 17-38-EL-RDR and Case No. 18-230-EL-RDR (Blue Ridge DIR Report)
- Case No. 18-1451-EL-ATA TCJA
- Case No. 19-0065-EL-RDR (Vantage DIR Report)—NO ORDER ISSUED
- Case No. 20-0169-EL-RDR (Blue Ridge DIR Report)—NO ORDER ISSUED
- Case No. 20-0585-EL-AIR (Rate Case)
- Case No. 21-0016-EL-RDR (Blue Ridge DIR Report)—NO ORDER ISSUED
- Case No. 22-89-EL-RDR (Blue Ridge DIR Report)—NO ORDER ISSUED
- Case No. 23-106-EL-RDR (Rate Case)

Case No. 11-346-EL-SSO, et al.

On August 8, 2012, the Commission issued an Opinion and Order that included the following relevant to the DIR.

On pages 42-47

9. Distribution Investment Rider

The Company's modified ESP application includes a Distribution Investment Rider (DIR), pursuant to the provisions of Section 4928.143(B)(2)(h) or (d), Revised Code, and consistent with the approved settlement in the Company's distribution rate case,[134] to provide capital funding, including carrying cost on incremental distribution infrastructure to support customer demand and advanced technologies. Aging infrastructure, according to AEP-Ohio, is the primary cause of customer outages and reliability issues. AEP-Ohio reasons that the DIR will facilitate and encourage investments to maintain and improve distribution reliability, align customer expectations and the expectations of the distribution utility, as well as streamline recovery of the associated costs and reduce the frequency of base distribution rate cases. Replacement of aging distribution equipment will also support the advanced technologies of gridSMART which will reduce the duration of customer outages based on preliminary gridSMART Phase 1 information. The Company argues that its existing capital budget forecast includes an annual investment in excess of $150 million plus operations and maintenance in distribution assets. The DIR mechanism, as proposed by the Company, includes components to recover property taxes, commercial activity tax, and to earn a return on plant in-service based on a cost of debt of 5.46 percent, a return on common equity of 10.2 percent utilizing a 47.72 percent debt and 52.28 percent common equity capital structure. The net capital additions to be included in the DIR reflect gross plant in-service after August 31, 2010, as adjusted for accumulated depreciation, because August 31, 2010, is the date certain in the Company's

[134] In re AEP-Ohio, Case Nos. 11-351-EL-AIR, et al. Opinion and Order at 5-6 (December 14, 2011) in reference to paragraph IV.A.3 of the Joint Stipulation and Recommendation filed on November 23, 2011.

most recent distribution rate case and any increase in net plant that occurs after that date is not recovered in base rates. The Company proposes to cap the DIR mechanism at $86 million in 2012, $104 million for 2013, $124 million for 2014 and $51.7 million for the period January 1 through May 31, 2015, for a total of $365.7 million. As the DIR mechanism is designed, for any year that the Company's investment would result in revenues to be collected which exceed the cap, the overage would be recovered and be subject to the cap in the subsequent period. Symmetrically, for any year that the revenue collected under the DIR is less than the annual cap allowance, then the difference shall be applied to increase the cap for the subsequent period. The Company notes that the DIR revenue requirement must recognize the $62.344 million revenue credit reflected in the Commission approved Stipulation in the Company's distribution rate case.[135] As proposed by the Company, the DIR would be adjusted quarterly to reflect in-service net capital additions, excluding capital additions reflected in other riders, and reconciled for over and under recovery. The Company specifically requests through the DIR project, that when meters are replaced by the installation of smart meters, that the net book value of the replaced meter be included as a regulatory asset for recovery in a future filing. The DIR mechanism would be collected as a percentage of base distribution revenues. Because the DIR provides the Company with a timely cost recovery mechanism for distribution investment, AEP-Ohio will agree not to seek a change in distribution base rates with an effective date earlier than June 1, 2015. (AEP-Ohio Ex. 116 at 9-12; AEP-Ohio Ex. 110 at 18-19.)

The Company notes that Staff continuously monitors the Company's distribution system reliability by way of service complaints, electric outage reports and compliance provisions pursuant to Chapter 4901:1-10, O.A.C. In reliance on Staff testimony, the Company offers that the reliability of the distribution system was evaluated as a part of this case. (Staff Ex. 106 at 5-6; Tr. at 4339,4345-4346.)

Customer expectations, as determined by AEP-Ohio, are aligned with the Company's expectations. AEP-Ohio witness Kirkpatrick offered that the updated customer survey results show that 19 percent of residential customers and 20 percent of commercial customers expect their reliability expectations to increase in the next five years. AEP-Ohio points out that when those customers are considered in conjunction with the customers who expect the utility to maintain the level of reliability, customer expectations increase to 90 percent of residential customers and 93 percent of commercial customers. AEP-Ohio states it is currently evaluating, based on several criteria, various asset categories with a high probability of failure and will develop a DIR program, with Staff input, taking into consideration the number of customers affected. (AEP-Ohio Ex. 110 at 11-19.)

OHA supports the adoption of the DIR as proposed by the Company (OHA Br. at 2). Kroger, OCC and APJN, on the other hand, ask the Commission to reject the DIR, as this case is not the proper forum to consider the recovery of distribution-related costs. Kroger, OCC and APJN reason that prudently incurred distribution costs are best considered in the context of a base distribution rate case where such cost are more thoroughly reviewed by the Commission. Kroger asserts that maintaining the distribution system is a fundamental responsibility of the utility and the Company should continue to operate under the terms of its last distribution rate case until the next such proceeding. If the Commission elects to adopt the DIR mechanism, Kroger endorses Staffs position that the DIR be modified to account for accumulated deferred income taxes (ADIT) and accelerated tax depreciation. In addition, Kroger asserts that the DIR for the CSP rate zone and the OP rate zone are distinct and the cost of each unique service area should be maintained and the distribution costs assigned on the basis of cost causation. OCC and APJN add that the Company's reason for pursuing

[135] *Id.*

the DIR, as a component of the ESP rather than in the distribution case, is the expedience of cost recovery and when that rationale is considered in conjunction with the lack of detail on the projects to be covered within the DIR, suggest that the DIR is not needed. (Kroger Ex. 101 at 13-19; Kroger Reply Br. at 3-4; OCC/APJN Br. at 87-89; Tr. at 1184.)

OCC and APJN argue that in determining whether the DIR complies with the requirements of Section 4928.143(B)(2)(h), Revised Code, the Company focuses exclusively on the percentage of residential and commercial customers (71 percent and 73 percent, respectively) who do not believe that their electric service reliability expectations will increase rather than the minority of customers who expect their service reliability expectations to increase (19 percent and 20 percent, respectively). OCC and APJN note that 10 percent of residential customers and seven percent of commercial customers expect their reliability expectations to decrease over the next five years. At best, these interveners assert, the customer survey results are inconclusive regarding an expectation for reliability improvements as the majority of customers are content with the status quo. OCC and APJN state that with the lack of project details, and without providing an analysis of customer reliability expectation alignment with project cost and performance improvements, AEP-Ohio has failed to meet its burden of proof to support the DIR. Accordingly, OCC and APJN request that this provision of the modified ESP be rejected. (AEP-Ohio Ex. 110 at 11-12; OCC/APJN Br. at 987-994).

NFIB and COSE emphasize that the DIR, as AEP-Ohio witness Roush testified, would, if approved as proposed, result in General Service tariff rate customers receiving an increase of approximately 14.2 percent in distribution charges, about $2.00 monthly (NFIB/COSE Br. at 8-9;Tr. at 1162-1163).

Staff testified that consistent with the requirements of Rule 4901:1-10-10(B)(2), O.A.C., AEP-Ohio has rate zone specific minimum reliability performance standards, as measured by the customer average interruption duration index (CAIDI) and system average interruption frequency index (SAIFI).[136] According to Staff, development of each CAIDI and SAIFI takes into account the electric utility's three-year historical system performance, system design, technological advancements, the geography of the utility's service territory, customer perception surveys and other relevant factors. Staff monitors the utility's compliance with the reliability standards. Staff offers that based on customer surveys, 75 to 80 percent of residential and commercial customers are satisfied overall with the Company's service reliability. However, the Company's 2011 reliability measures were below their reliability measures for 2010 for CSP and the SAIFI measure was worse in 2011 than in 2010 for OP. Accordingly, Staff determined that AEP-Ohio's reliability expectations are not currently aligned with the reliability expectations of its customers. Staff further offered that a number of conditions be imposed on the Commission's approval of the DIR, including that the Company be ordered to work with Staff to develop a distribution capital plan, that the DIR mechanism include an offset for ADIT, irrespective of the Company's asserted inconsistency with the distribution rate case settlement, and that gridSMART related cost not be recovered through the DIR, so as to better facilitate the tracking of gridSMART expenditures and savings and benefits of the gridSMART project. Further, Staff proposes that AEP-Ohio be directed to make quarterly filings to update the DIR mechanism, with the filed rate to be effective, unless suspended by the Commission, 60 days after filing. The DIR mechanism, as advocated by Staff, would be subject to annual audits after each May filing and, in addition, subject to a final reconciliation filing on or about May 31, 2015. With the final reconciliation, Staff recommends that any amounts collected by AEP-Ohio in excess of the established cap be refunded to customers as a one-time credit on customer bills. (Staff Ex. 106 at 6-11; Staff Ex. 108 at 3-4; Tr. at 4398.)

[136] See *In re AEP-Ohio*, Case No. 09-756-EL-ESS, Opinion and Order (September 8, 2010).

AEP-Ohio disagrees with the Staff's rationale that the Company's and customer's expectations are not aligned. The Company reasons that the Staff relies on the reliability indices and the fact that the Company performed below the level of the preceding year. AEP-Ohio notes that in the most recent customer survey results, with the same questions as the prior year, the Company received an 85 percent positive rating from residential customers and a 92 percent positive rating from commercial customers for providing reliable service. Further, AEP-Ohio points out that missing one of the eight applicable reliability standards during the two year period does not, under the rules, constitute a violation. The Company also notes that the reliability standards are affected by storms, which are not defined as major storms, and other factors like tree-caused outages. (Tr. at 4344-4345, 4347, 4366-4367; OCC Ex. 113, Att. JDW-2.)

AEP-Ohio also opposes Staff's recommendation to file the DIR plan in a separate docket, subject to an adversarial proceeding. The Company expresses great concern that this recommendation, if adopted, will result in the Commission micromanaging and becoming overly involved in the "day-to-day operations of the business units within the utility."

As to Staff's and Kroger's proposal to reduce the DIR to account for ADIT, the Company responds that such an adjustment would have resulted in a reduced DIR credit if taken into account when the distribution rate case settlement was pending. AEP-Ohio argues that the decision on the DIR in the modified ESP should continue to mirror the understanding of the parties to the distribution rate case as any change would improperly impact the overall balanced ESP package. (AEP-Ohio Ex. 151 at 9-10.)

As authorized by Section 4928.143(B)(2)(h), Revised Code, an ESP may include the recovery of capital cost for distribution infrastructure investment to improve reliability for customers. A provision for distribution infrastructure and modernization incentives may, but need not, include a long-term energy delivery infrastructure modernization plan. We find that the DIR is an incentive ratemaking to accelerate recovery of the Company's investment in distribution service. In deciding whether to approve an ESP that contains any provision for distribution service. Section 4928.143(B)(2)(h), Revised Code, directs the Commission, as part of its determination, to examine the reliability of the electric utility's distribution system and ensure that customers' and the electric utility's expectations are aligned and that the electric utility is placing sufficient emphasis on and dedicating sufficient resources to the reliability of its distribution system.

In this modified ESP, there is some disagreement between Staff and the Company whether or not AEP-Ohio's reliability expectations are aligned with the expectations of its customers. The Company focuses on customer surveys to conclude that expectations are aligned while Staff interprets the slight degradation in the reliability performance measures to indicate that expectations are not aligned. Despite the different conclusions by the Company and Staff, the Commission finds that both Staff and the Company have demonstrated that indeed, customers have a high expectation of reliable electric service. Given that customer surveys are one component in the factor used to establish the reliability indices and the slight reduction in the level of measured performance on which the Staff concludes that reliability expectations are not aligned, we are convinced that it is merely a slight difference between the Company's and customers' expectations. We also recognize that customer satisfaction is dependent on whether the customer has recently experienced any service outages and how quickly service was restored.

<u>The Commission finds</u> that, adoption of the DIR and the improved service that will come with the replacement of aging infrastructure will facilitate improved service reliability and better align the Company's and its customers' expectations. The Company appears to be placing sufficient proactive emphasis on and will dedicate sufficient resources to the reliability of its distribution system. Having

made such a finding, the Commission approves the DIR as an appropriate incentive to accelerate recovery of AEP-Ohio's prudently incurred distribution investment costs. We emphasize that the DIR mechanism shall not include any gridSMART costs; the gridSMART projects shall be separate and apart from the DIR mechanism and projects. With this clarification, we believe it is unnecessary to address the Company's request to allow the remaining net book value of removed meters to be included as a regulatory asset recoverable through the DIR mechanism.

We agree with Staff and Kroger that the DIR mechanism be revised to account for ADIT. The Commission finds that it is not appropriate to establish the DIR rate mechanism in a manner which provides the Company with the benefit of ratepayer supplied funds. Any benefit resulting from ADIT should be reflected in the DIR revenue requirement. Therefore, the Commission directs AEP-Ohio to adjust its DIR to reflect the ADIT offset.

As was noted in the December 14, 2012 *[SIC, should be 2011]* Order on the ESP 2, we find that granting the DIR mechanism requires Commission oversight. We believe that it is detrimental to the state's economy to require the utility to be reactionary or allow the performance standards to take a negative turn before we encourage the electric utility to proactively and efficiently replace and modernize infrastructure and, therefore find it reasonable to permit the recovery of prudently incurred distribution infrastructure investment costs. AEP-Ohio is correct to aspire to move from a reactive to a more proactive replacement maintenance program. The Company is directed to work with Staff to develop a plan to emphasize proactive distribution maintenance that focuses spending on where it will have the greatest impact on maintaining and improving reliability for customers. Accordingly, AEP-Ohio shall work with Staff to develop the DIR plan and file the plan for Commission review in a separate docket by December 1, 2012.

With these modifications, we approve the DIR mechanism, and direct Staff to monitor, as part of the prudence review, by an independent auditor for in-service net capital additions and compliance with the proactive distribution maintenance plan developed with the assistance of the Staff. The proactive distribution infrastructure plan shall quantify reliability improvements expected, ensure no double recovery, and include a demonstration of DIR expenditures over projected expenditures and recent spending levels. The DIR mechanism will be reviewed annually for accounting accuracy, prudency and compliance with the DIR plan developed by the Staff and AEP-Ohio.

Case No. 11-351-EL-AIR, et al.

On December 14, 2011, the Commission approved the November 23, 2011, stipulation and recommendation. The major items relevant to the DIR in the Opinion and Order are shown below.

On page 4-6

(1) The outcome of the provisions in the Stipulation will result in a zero base distribution rate increase (Joint Ex. 1 at 3).

(a) The value of CSP's property which is used and useful in the rendition of distribution of electric power, or rate base, is $908,001,000, and the current operating income is $65,194,000, resulting in a rate of return of 7.18 percent (Id. at 4, Stipulated Schedule A-1).

(b) The value of OPCo's property which is used and useful in the rendition of distribution of electric power, or rate base, is $1,003,670,000, and the current operating income is $55,763,000, resulting in a rate of return of 5.56 percent (Id. at 4-5, Stipulated Schedule A-1).

…

(e) CSP and OPCo are entitled to returns on equity of 10.0 percent and 10.3 percent, respectively (*Id.*).

...

(g) In order to prevent excess collection of distribution revenue associated with collection of the Distribution Investment Rider (DIR) sought in the September 7, 2011, Stipulation filed in In the Matter of the Application of Columbus Southern Power Company and Ohio Power Company for Authority to Establish a Standard Service Offer, Case Nos. 11-346-EL-SSO and 11-348-EL-SSO (ESP II Stipulation), a $62,344,000 revenue credit shall be applied as outlined by the terms of this Stipulation. This credit shall be derived from subtracting $23,656,000 of DIR revenues related to certain postdate distribution investments, actual and estimated, through December 2012, from the $86,000,000 DIR cap for 2012 in the ESP II Stipulation. (Id. at 6.)

(h) The first $46,656,000 of DIR revenue credit will negate the base distribution revenue requirement stated above, resulting in a net $0 base distribution rate increase until such rates may be established pursuant to an application for establishing rates filed under Section 4909.18, Revised Code. The remaining $15,688,000 DIR revenue collected will be applied annually through May 31,2015, as follows:

(i) The first $14,688,000 of remaining DIR revenue credit will be applied solely to residential customers through a new Commission-approved rider during the term in which the DIR is in effect through May 31, 2015. The total credit to residential customers' bills during this term will be no greater than $50,184,000.

(ii) The final $1,000,000 DIR annual revenue credit will be used to fund the Partnership with Ohio Initiative, totaling $3,400,000 during the term in which the DIR is in effect. This low-income bill payment assistance funding will be provided through the Partnership with Ohio Initiative's existing Neighbor-to-Neighbor program. (Id. at 6-7.)

(2) The zero base distribution rate increase includes amortization of the depreciation reserve over-accrual identified in the Staff reports. The schedule will reflect a ten-year amortization of the theoretical accumulated depredation reserve over-accrual; however, in recognition of the overall compromises in this Stipulation, AEP-Ohio will amortize the depreciation reserve over-accrual over a seven-year period. (Id. at 7-8.)

(3) AEP-Ohio will be authorized to establish new depreciation rates based on the whole-life method as recommended by the Staff reports, and, if the merger of CSP and OPCo is approved, the combined company will utilize the combined rates detailed in Attachment D to the Stipulation (Id. at 8).

On page 7-8

(9) AEP-Ohio will include data related to its DIR investments and their effect on distribution service reliability in its next application(s) to 11-351-EL-AIR, et al. establish new service standards under Rule 4901:1-10-10, Ohio Administrative Code (O.A.C.) (Id. at 10-11).

On page 10

Finally, the Commission finds that, with respect to the third criterion, the evidence in the record demonstrates that the Stipulation does not violate any important regulatory principle or practice (Co. Ex. 4 at 12; OCC Ex. 1 at 8-9). The Commission notes that the Stipulation eliminates any potential for double recovery of distribution investments through distribution base rates and the distribution investment rider (DIR) provided for by AEP-Ohio's electric security plan in In re Columbus Southern Power Company and Ohio Power Company, Case Nos. 11-346-EL-SSO, et al. (Co. Ex. 4 at 5).

The Joint Stipulation and Recommendations dated November 23, 2011, provides the approved plant-in-service balances approved in the Order (Attachment A: Stipulated Schedules B-1)

Case No. 13-1939-EL-RDR, SmartGrid

On February 1, 2017, the Commission approved the April 7, 2016, stipulation and recommendation with modifications. Of relevance to the DIR is the plant booked in Account 36216 "Station Equipment-SmartGrid" that is recovered in the DIR is not eligible to be recovered in the GridSmart Phase II Rider. The Order granted limited approval of recovery of reasonable costs for AMI meters, Distribution Automation Circuit Reconfiguration (DACR) Reliability Improvements, and Volt VAR Optimization (VVO).

Case No. 13-2385-EL-SSO, et al

On February 25, 2015, the Commission issued its Opinion and Order. The major items relevant to the DIR are shown below.

On pages 40-47

6. Distribution Investment Rider

The DIR was previously approved by the Commission, in the ESP 2 Case, to facilitate the timely and efficient replacement of aging infrastructure to improve service reliability. ESP 2 Case, opinion and Order (Aug. 8, 2012) at 46-47. Presently, the DIR is updated quarterly using FERC forms and AEP Ohio's DIR rider rates are automatically approved 60 days after the application is filed, unless the Commission specifically orders otherwise. The Commission reviews the DIR annually for accounting accuracy, prudency, and compliance with the DIR plan developed by AEP Ohio with Staff input.

In this ESP application, under the authority of R.C. 4928.143(B)(2)(h), AEP Ohio requests the continuation of the DIR, with certain modifications and adjustments. AEP Ohio requests that the DIR rate caps be established at $155 million for 2015, $191 million for 2016, $219 million for 2017, and $102 million for January 1 through May 31, 2018, for a total of $667 million. For any year that AEP Ohio's investment results in revenues to be collected that exceed the cap, the excess would be recovered and be subject to the cap applicable in the subsequent period. The same would be true when AEP Ohio's investment results in revenues to be collected that fall below the cap for the period; the cap for the subsequent period would be increased by the amount available from the prior period. AEP Ohio proposes DIR capital projects that primarily fall into eight categories: asset improvement, customer service, forestry, general, other, planning capacity, reliability, and system restoration. AEP Ohio reasons that these types of capital investments are key components in its strategy for maintaining the distribution system and improving reliability. One of the capital investments that AEP Ohio plans to make, if this ESP is approved, is to replace its 800 megahertz radio system at a cost of approximately $23 million. The radio system is used to support field communication, dispatching, remote equipment interrogation, global positioning satellite communications, service restoration, and remote meter reading. (Co. Ex. 1 at 9-10; Co. Ex, 4 at 17-19; Co. Ex. 14 at 5-7.)

However, AEP Ohio requests that the DIR, as currently implemented, be modified in three respects.[137] First, AEP Ohio requests that the DIR mechanism be modified such that the balance of each category of plant incurs an applicable associated carrying charge. Second, AEP Ohio proposes that the DIR be expanded to include general plant. Third, AEP Ohio requests that a gross-up factor be added to riders, including the DIR, to account for the Company's obligation to fund a portion of the budgets of the Commission and OCC. (Co. Ex. 13 at 5-7; Co. Ex. 14 at 1-2.)

[137] AEP Ohio also requests that gridSMART Phase 1 capital costs be transferred into the DIR and that issue is addressed in the gridSMART section of this Opinion and Order

Market Strategies International (MSI) conducted telephone surveys for AEP Ohio in2012 to determine customer reliability expectations. MSI conducted two series of telephone surveys, interviewing a total of 400 residential customers and 400 small commercial customers. According to the survey results, 69.8 percent of residential customers and 75.8 percent of small commercial customers believe that their electric service reliability expectations will stay about the same over the next five years. Significantly fewer customers surveyed, 13.0 percent of residential customers and 14.8 percent of small commercial customers, thought that their service reliability expectations over the next five years would increase somewhat. Some of the customers surveyed thought that their service reliability expectations would increase significantly over the next five years, 5.8 percent of residential customers and 3.0 percent of small commercial customers. On the other hand, the surveys revealed that relatively few customers believe that their service reliability expectations will decrease somewhat, 5.3 percent of residential customers and 2.8 percent of small commercial customers. (Co. Ex. 4 at 5-8, Ex. SJD-1 at 1-2.)

AEP Ohio submits that the DIR advances the state policies expressed in R.C. 4928.02(A), (D), (E), (G), and (M). Further, AEP Ohio encourages the Commission to find that the DIR, as proposed, satisfies the statutory requirements set forth in R.C. 4928.143(B)(2)(h) and to approve the rider. (Co. Br. at 84.)

OHA supports the Commission's approval of the DIR, as proposed by AEP Ohio (OHA Br. at 3). Similarly, Staff generally does not oppose the continuation of the DIR, as the Commission approved the mechanism and the process for review in AEP Ohio's previous ESP proceedings. ESP 2 Case, Opinion and Order (Aug. 8, 2012) at 46-47. Staff testified that AEP Ohio's most recent system reliability standards were developed pursuant to Ohio Adm. Code 4901:1-10-10(B)(2), in Case No. 12-1945-EL-ESS, and adopted by the Commission in accordance with a stipulation filed by all of the parties to the proceeding. In re Ohio Power Company, Case No. 12-1945-EL-ESS (Reliability Standards Case), Opinion and Order (Mar. 19, 2014) at 6. In the Reliability Standards Case, the Commission established a customer average interruption duration index (CAIDI) of 150.0 minutes and a system average interruption frequency index (SAIFI) of 1.20, excluding "major event days," as defined by the Institute of Electrical and Electronics Engineers. The new CAIDI and SAIFI standards were first applicable to AEP Ohio for calendar year 2013. Staff confirmed that, based on AEP Ohio's application filed in Case No. 14-517-EL-ESS, the Company met both its SAIFI and CAIDI performance standards for 2013. For that reason. Staff recommends that the Commission find that AEP Ohio's reliability expectations are aligned with those oi its customers. (Staff Ex. 10 at 5-6;Staff Ex. 17 at 2; Staff Br. at 43.)

Staff, however, opposes the substantial increase and modifications that AEP Ohio requests with respect to the DIR. Regarding the request to include general plant. Staff, OCC, and Kroger assert that the request is another example of AEP Ohio's attempt to avoid a distribution rate case. OCC argues that general plant is not, by definition, infrastructure and, therefore, it is not appropriate to include general plant in the DIR. Staff reasons that the recovery of general plant costs via a rider is inconsistent with the intent of the ESP statute and the Commission's directives with respect to the DIR. Noting the Commission's rationale for approving the DIR as stated in the ESP 2 Case, Staff asks the Commission to reaffirm its directive that AEP Ohio's DIR spending focus on those components that will best improve or maintain reliability. General plant, in Staff's and OCC's opinion, does not satisfy the Commission's stated criteria, because the types of general plant expenses that AEP Ohio seeks to include in the DIR do not directly relate to the reliability of the distribution system. Staff maintains that general plant like the radio system and service centers, at best, supports maintaining reliability, but does not directly relate to distribution system reliability. Staff argues that the DIR was never intended to facilitate the recovery of all capital expenditures. General plant. Staff reasons, does not satisfy the Commission's stated objective for the DIR, which is "to encourage the electric utility to proactively and efficiently replace and modernize infrastructure." ESP 2 Case, Opinion and Order (Aug. 8, 2012) at 47. Staff requests that AEP Ohio's proposal to modify the DIR to include general plant be denied. (OCC Ex. 18 at 14; Staff Br. at 43-47; Staff Reply Br. at 34-36; OCC Br. at 85-86; OCC Reply Br. at 59-60; Kroger Reply Br. at 3-4.)

AEP Ohio responds that the general plant investments in question primarily consist of service centers and the radio communications systems that directly support the frontline employees. AEP Ohio witness Dias testified that some of the facilities were built in the World War II era and need work. AEP Ohio notes that the DIR plan will be discussed with Staff, as it has been since implementation, and filed with the Commission. AEP Ohio further notes that Staff witness McCarter indicated that, after a full review. Staff may agree to the inclusion of the radio system. (Tr. II at 344; Tr. IX at 2295; Co. Reply Br. at 73-74.)

AEP Ohio also proposes that the DIR be modified to include a factor to account for the Commission's and OCC's budgets. According to Staff, including a gross-up factor to account for AEP Ohio's share of the Commission's and OCC's budgets is short-sighted and unnecessary. Staff contends that there are only two scenarios where AEP Ohio would owe a significantly larger dollar amount for the assessments in a subsequent year; first, if AEP Ohio's revenues increase disproportionally to the revenues of all of the other regulated public utilities in Ohio; and, second, if there is an increase in either the Commission's or OCC's budget. Staff notes that the Commission's and OCC's budgets have not increased in recent years and are not expected to increase in the foreseeable future. Staff also argues that AEP Ohio did not demonstrate that its revenues would increase so disproportionately as to justify the proposed change in the gross-up factor. (Staff Ex. 17 at 4; Staff Br. at 47-48.)

OCC emphasizes AEP Ohio's failure to provide specific service reliability improvements for each DIR program implemented. OCC and OMAEG argue that AEP Ohio failed to present any analysis to support its claims that service reliability has and will deteriorate without the DIR. For that reason, OCC and OMAEG oppose any increase in the DIR without supporting documentation. (OMAEG Br. at 10; OCC Reply Br. at 56.)

If the Commission approves the continuation oi the DIR, Staff makes six recommendations to facilitate the Commission's efficient review of plant recovery costs across the Company's riders. More specifically. Staff recommends that, in all subsequent DIR filings, AEP Ohio include additional detailed account and subaccount information; employ jurisdictional allocations and accrual rates from the Distribution Rate Case; provide a full reconciliation between the functional ledger and FERC forms; detail the DIR revenue collected by month; and highlight and quantify any proposed changes to capitalization policy. Staff also recommends that the Commission direct AEP Ohio to file a fully updated depreciation study by November 2016, with a study date of December 31, 2015. (Staff Ex. 17 at 5-7.)

OCC notes that AEP Ohio's enhanced service reliability rider (ESRR) and DIR programs include the widening and clearing of right-of-ways. OCC recommends that the Commission delete $3.9 million from the forestry component of the DIR for each year 2015 through 2018 to avoid any double recovery by AEP Ohio. (Tr. II at 353; OCC Br. at 84-85.) Further, OCC contends that the depreciation reserve used to calculate property taxes should be adjusted to eliminate the cumulative amortization of the excess depreciation reserve and the net plant to which the property tax is applied (OCC Br. at 90). Staff concurs with OCC's recommendation (Staff Reply Br. at 36-37).

OCC believes that the DIR, as well as other riders, should not be allocated based on total base distribution revenues, as AEP Ohio proposes, but rather in proportion to the allocation of net electric plant in service as set forth in the cost-of-service studies filed in the Distribution Rate Case. OCC contends that AEP Ohio's allocation does not follow cost causation principles and would result in residential customers being charged approximately $29 million more than their fair share for the DIR, ESRR, and sustained and skilled workforce rider (SSWR). (OCC Ex. 14 at 5-12; OCC Br. at 107-109.) OEG and lEU-Ohio oppose OCC's reallocation proposal. OEG advocates that the costs underlying the DIR and the other riders are related to the provision of distribution service and it is, therefore, reasonable to allocate the rider costs to rate schedules on the basis of distribution revenues. OEG notes that the Commission adopted the DIR in the ESP 2 Case and reasons that it is appropriate for the Commission to follow this methodology for the new and modified riders proposed in these ESP proceedings. OEG also reasons that the approach recommended by OCC would require a fresh review of the cost of service and allocation methodology, which would equate to a "mini rate case" on rider allocation and rate design. OEG offers that such a review is outside of the scope and would unduly complicate the ESP proceedings. OEG and lEU-Ohio submit that the cost-of-service study relied on by OCC is outdated and reliance on the study would be unreasonable. OEG asserts that there is insufficient evidence in these proceedings to change an allocation method and rate design that the Commission has previously vetted and determined to be fair, just, and reasonable. (OEG Br. at 27; lEU-Ohio Reply Br. at 28-30.)

OPAE and APJN challenge the DIR, noting that AEP Ohio is not claiming that reliability will decline if the DIR is not approved in this ESP. Given that the DIR currently constitutes approximately 17.1 percent of the average residential customer's distribution charges, OPAE and APJN reason that this rider makes electric service less affordable for residential customers who are struggling financially. On that basis, OPAE and APJN opine that it is reasonable for the Commission to discontinue the DIR. OPAE and APJN dispute AEP Ohio's contention that the DIR advances the state policy as expressed in R.C. 4928.02(A), which requires the availability to consumers of reliable and reasonably priced retail electric service. OPAE and APJN claim that AEP Ohio failed to present any testimony or discussion on brief indicating how the DIR complies with R.C. 4928.02(L), regarding the protection of at-risk populations. To address this oversight, OPAE and APJN suggest that the Commission require AEP Ohio to continue its annual $1 million funding commitment of the Neighbor-to-Neighbor program. Further, OPAE and APJN ask the Commission to direct AEP Ohio to contribute $1 million annually from shareholders to the Neighbor-to-Neighbor program. Finally, these intervenors ask the Commission to exempt income-eligible customers from riders approved in these ESP proceedings, including the DIR, to mitigate the impact of rate increases on at-risk customers, in support of R.C. 4928.02(L). (OPAE/APJN Reply Br. at 4-9.)

First, the Commission notes that, under R.C. 4928.143(B)(2)(h), an ESP may include provisions regarding distribution infrastructure and modernization incentives for the electric distribution utility. In determining whether to approve an ESP that includes a provision for distribution infrastructure modernization, R.C. 4928,143(B)(2)(h) directs the Commission to examine the reliability of the electric distribution utility's distribution system, ensure that the expectations of customers and the electric distribution utility are aligned, and determine that the electric distribution utility is placing sufficient emphasis on and dedicating sufficient resources to the reliability of its distribution system.

The Commission concludes that the record indicates that the vast majority of residential customers, 82.8 percent, and small commercial customers, 90.6 percent, believe their electric service expectations will be about the same, or increase somewhat over the next five years (Co. Ex. 4 at Ex. SJD-1 at 1-2). We note that, in the prior ESP proceedings, when the Commission approved the implementation oi the DIR, AEP Ohio's reliability measures were or had been below its reliability standards for 2010 and 2011. ESP 2 Case, Opinion and Order (Aug. 8, 2012) at 45. The record in these proceedings indicates that AEP Ohio has met its system reliability standards, CAIDI and SAIFI, for

2013 (Staff Ex. 10 at 5). Further, in the Reliability Standards Case, AEP Ohio agreed to file an updated reliability performance standards application by June 30, 2016, to reflect the impact of system design changes, technological advancements, geographical effects of programs like, but not limited to, the DIR and gridSMART programs, and the results of updated and current customer perception surveys. Reliability Standards Case, Opinion and Order (Mar. 19,2014) at 3.

As several of the parties have noted, the Commission approved the current DIR mechanism on the premise offered by AEP Ohio that aging infrastructure was the primary cause of customer outages and reliability issues and the DIR would improve reliability and support the installation of gridSMART technologies. The expanded DIR for which AEP Ohio seeks approval in these ESP proceedings far exceeds the justification offered and accepted by the Commission in approving the original DIR. Furthermore, it appears that AEP Ohio's interpretation of distribution infrastructure exceeds the intent of the statute (Tr. II at 436-438). Accordingly, we must deny AEP Ohio's request to significantly increase the amount to be recovered via the DIR and to incorporate general plant into the DIR mechanism. The record does not support such a significant expansion of the DIR. We find that AEP Ohio's DIR investments, at the level requested in these proceedings, would be 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. (Staff Ex. 17 at 3.) For these reasons, the Commission denies AEP Ohio's request to increase the DIR to the level proposed in the ESP application and its request to incorporate general plant into the DIR mechanism.

Likewise, we deny AEP Ohio's request to adjust the DIR to account for the budgets of the Commission and OCC. The Commission agrees with the arguments of Staff that it is unlikely that the budgets of either agency will increase significantly over the next few years sufficient to justify revising the DIR (Staff Ex. 17 at 4). For this reason, we find that the requested modification to the DIR is inappropriate and unreasonable. Further, the Commission declines to adopt OCC's recommendation regarding the allocation of the DIR, as it is reasonable and consistent with the ESP 2 Case to allocate the rider costs to rate schedules on the basis of distribution revenues. We also decline to adopt OCC's proposal to adjust the forestry component of the DIR, because OCC has not established the occurrence of any double recovery through the DIR and ESRR. We note, however, that the DIR will continue to be subject to an annual audit.

The Commission finds merit in OCC's recommendation to revise the property tax calculation and, therefore, we adopt the adjustment recommended by OCC witness Effron (OCC Ex. 18 at 9-11; Staff Ex. 17 at 4-5). We further modify the DIR to adopt the six recommendations by Staff regarding detailed account information, jurisdictional allocations and accrual rates, reconciliation between functional ledgers and FERC form filings, revenue collected by month in the DIR, highlighting and quantifying DIR capitalization policy, and the filing of an updated depreciation study by November 2016, as outlined in Staff witness McCarter's testimony (Staff Ex. 17 at 5-7). However, the Commission recognizes that AEP Ohio is now performing at or above its established reliability standards and its reliability expectations appear to be aligned with its customers (Staff Ex. 10 at 5; Co. Ex. 4 at Ex. SJD-1 at 1-2). Therefore, we conclude that it is no longer necessary for AEP Ohio to work with Staff to develop a DIR plan, so long as the Company continues to perform at or above its adopted reliability standards.

To facilitate AEP Ohio's continued proactive investment in its aging distribution infrastructure, we approve the Company's request to continue the DIR at $124 million for 2015, $146.2 million for 2016, $170 million for 2017, and $103 million for January through May 2018, for a total of $543.2 million. The Commission has determined the annual DIR amounts based on the level of growth of three to four percent as permitted for the DIR in the ESP 2 Case. We find this to be a reasonable level to allow AEP Ohio to continue to replace aging distribution infrastructure in order to maintain and improve service reliability over the term of this ESP. With the modifications discussed herein, the Commission approves the continuation of the DIR as a component of the ESP.

On pages 50-52

8. gridSMART Rider

In this ESP, AEP Ohio proposes the continuation of the gridSMART program, including the gridSMART rider initially approved by the Commission in the ESP 1 Case and continued in the ESP 2 Case. ESP 1 Case, Opinion and Order (Mar. 18, 2009) at 37-38, Entry on Rehearing (July 23, 2009) at 18-24; ESP 2 Case, Opinion and Order (Aug. 8, 2012) at 62. However, AEP Ohio proposes modification of the gridSMART rider to transfer the remaining gridSMART Phase 1 costs to the DIR and use the gridSMART rider to track gridSMART Phase 2 costs. AEP Ohio reasons that gridSMART Phase 1 spending concluded at the end of 2013 and the gridSMART Phase 1 assets are not currently in base rates and have been excluded from the DIR. AEP Ohio requests that the DIR be modified to include the existing gridSMART Phase 1 assets. In support of the request, AEP Ohio claims that, beginning in June 2015, the total cost data for gridSMART Phase 1 will be available for reconciliation. With the reconciliation of gridSMART Phase 1, AEP Ohio posits that eliminating the removal of gridSMART Phase 1 net book value from the DIR mechanism will allow the Company to recover its investment on and of gridSMART Phase 1 assets in service. As of the filing of AEP Ohio's direct testimony in these cases, the Company expected to complete the installation of equipment associated with gridSMART Phase 1 and to submit data on gridSMART Phase 1 to the United States Department of Energy (USDOE) by December 31, 2014. AEP Ohio notes that it filed an evaluation of gridSMART Phase 1 with the Commission on or about March 31, 2014. AEP Ohio also notes that the Commission granted the Company authority to initiate the installation of certain gridSMART technologies that have demonstrated success and are cost-effective. ESP 2 Case, Opinion and Order (Aug. 8, 2012) at 62-63. AEP Ohio tiled its proposed expansion of the gridSMART program, gridSMART Phase 2, in Case No. 13-1939-EL-RDR (gridSMART 2 Case), on September 13, 2013. According to AEP Ohio's application in the gridSMART 2 Case, the Company plans to invest $465 million in gridSMART Phase 2. (Co. Ex. 1 at 10; Co. Ex. 3 at 4-5; Co. Ex. 4 at 10-11,13,15-16,20; Co. Ex. 13 at 7.)

AEP Ohio reasons that continuation of the gridSMART Phase 2 rider provides for continued deployment of emerging distribution system technologies where they can cost effectively improve the efficiency and reliability of the distribution system, develop performance standards and targets for service quality for all consumers, and encourage the use of energy efficiency programs and alternative energy resources. AEP Ohio submits that authority for including the gridSMART program in the ESP is set forth in R.C, 4928.143(B)(2)(h). AEP Ohio avers that the continuation of the proposed gridSMART Phase 2 program and rider is consistent with the policies listed in R.C. 4905.31(E) and R.C. 4928.02. (Co. Br. at 87-88.)

OCC argues that customers should not incur gridSMART Phase 2 charges on their bills until there has been a complete review of the gridSMART Phase 1 program and customer representatives and other interested stakeholders are provided an opportunity to raise any issues or concerns. On that basis, OCC requests that AEP Ohio's proposed treatment of gridSMART Phase 1 and gridSMART Phase 2 be rejected. (OCC Br. at 112-113.)

IGS, OEC, and EDF support AEP Ohio's gridSMART rider and the deployment of smart meters throughout the service territory. IGS, OEC, and EDF reason that smart meters are essential for the widespread offering of TOU products to customers. OEC and EDF believe that there is great potential for improved air quality resulting from the deployment of gridSMART technology, due to the reduced number of trucks that must be deployed to read meters and to disconnect and reconnect electric utility service. OEC and EDF also submit that Volt-VAR optimization will facilitate savings through energy efficiency and demand response programs. (OEC/EDF Br. at 7; IGS Reply Br. at 14.)

Further, while OEC and EDF recognize that the details of gridSMART Phase 2 will be determined in the gridSMART 2 Case, OEC and EDF aver that certain issues relating to the prudency of gridSMART costs and the associated benefits should be addressed by the Commission as a part of these ESP proceedings. To that end, OEC and EDF recommend that the Commission approve the continuation of the gridSMART program and the introduction of the gridSMART Phase 2 rider subject to nine conditions. (OEC/EDF Ex. 1 at 3-8; Tr. XII at 2784-2785.) OEC and EDF assert that their recommendations are intended to facilitate AEP Ohio's demonstration of the additional benefits of its gridSMART deployment, ease compliance with forthcoming United States Environmental Protection Agency regulations regarding greenhouse gas emissions for existing coal plants under Section 111(d) of the Clean Air Act, and ensure transparency and accountability (OEC/EDF Br, at 7-9; OEC/EDF Reply Br. at 7-S).

Kroger opposes AEP Ohio's request to transfer the remaining gridSMART Phase 1 cost into the DIR. Kroger notes that the Commission previously directed that gridSMART costs be recovered via a separate rider and not be incorporated into the DIR. ESP 2 Case, Opinion and Order (Aug. 8, 2012) at 63. Kroger submits that, if gridSMART costs are recovered outside the framework of a distribution rate case, the associated costs should be recovered through a separate rider that properly recovers costs on a per-customer basis. (Kroger Ex. 1 at 11; Kroger Br. at 4, 6.) In reply to Kroger, AEP Ohio states that moving gridSMART Phase 1 costs into the DIR is appropriate in order to dedicate the gridSMART Phase 2 rider to recovery of costs associated with Phase 2 of the program as approved in the gridSMART 2 Case. AEP Ohio also posits that the recommendations of OEC and EDF for gridSMART Phase 2 should be addressed in the gridSMART 2 Case, not these ESP proceedings. (Co. Reply Br. at 77-78.)

As discussed in the ESP 1 Case and the ESP 2 Case, the Commission continues to find significant long-term value and benefit for AEP Ohio and its customers with the implementation of advanced metering infrastructure, distribution automation, and other smart grid technologies. In the ESP 2 Case, the Commission approved AEP Ohio's request to initiate gridSMART Phase 2, directed that the Company file its proposed gridSMART Phase 2 project with the Commission, and directed that gridSMART Phase 2 costs be recovered through a separate rider as opposed to merging the costs into the gridSMART Phase 1 rider. ESP 2 Case, Opinion and Order (Aug. 8, 2012) at 62-63. For that reason, the Commission finds AEP Ohio's request to continue the gridSMART rider, with certain modifications as proposed by the Company, to be reasonable. Further, consistent with our decision in these proceedings to continue the gridSMART Phase 2 rider, we approve AEP Ohio's request to transfer gridSMART Phase 1 capital costs to the DIR mechanism upon the Company's accounting for all USDOE reimbursements due. (Co. Ex. 1 at 10; Co. Ex. 3 at 4-5; Co. Ex. 4 at 10-11, 13, 15-16, 20; Co. Ex. 13 at 7.) Given that, at the conclusion of gridSMART Phase 1, AEP Ohio will have recovered the vast majority of O&M expense, with only capital asset cost remaining to be collected over the useful life of installed gridSMART assets, it is efficient for the associated gridSMART Phase 1 costs to be included in the DIR. We remind AEP Ohio that, consistent with the Commission's directive in the ESP 2 Case, within 90 days after the expiration of ESP 2, the Company shall file an application for review and reconciliation of the gridSMART Phase 1 rider. ESP 2 Case, Entry on Rehearing (Jan. 30, 2013) at 53. After the Commission has reviewed and reconciled gridSMART Phase 1 costs, AEP Ohio may transfer the approved capital cost balance into the DIR, which will not be subject to the DIR caps, and may also transfer any unrecovered O&M balance into the gridSMART Phase 2 rider.

As with gridSMART Phase 1, the Commission will continue to annually review and approve AEP Ohio's gridSMART Phase 2 program, including the prudency of expenditures and the reconciliation of investments placed in service with revenues collected. We will also evaluate AEP Ohio's gridSMART Phase 2 program and determine the gridSMART rate to be charged customers, as well as consider OEC's and EDF's remaining recommendations, in the gridSMART 2 Case currently pending before the Commission.

Case No. 14-0255-EL-RDR
Case No. 15-066-EL-RDR
Case No. 16-0021-EL-RDR

On March 14, 2018, the Commission issued It Opinion and Order adopting the Joint Stipulation and Recommendations filed on December on December 19, 2017, to resolve all issues raised in Case Nos. 14-0255-EL-RDR, Case No. 15-066-EL-RDR, and Case No. 16-0021-EL-RDR

Pages 5-8, IV. Summary of the Audit Reports

(29) As previously noted, Larkin performed the DIR compliance audit in the 2013 DIR Case. Larkin makes the following recommendations in the audit report:

a) Larkin recommends that AEP Ohio be required to prepare an annual reconciliation of the DIR plan capital expenditures to the DIR distribution plant changes (Staff Ex. 1 at 3-6).

b) Larkin recommends that future DIR plan reports include only Ohio distribution spending (Staff Ex. 1 at 3-7).

(30) In the 2014 DIR Case, Baker Tilly performed the audit of the DIR and filed its report on August 6, 2015 (Staff Ex. 4). In the report. Baker Tilly makes the following recommendations:

a) Baker Tilly made three recommendations pertaining to the organization of the quarterly DIR filings to correct certain descriptions and improve the clarity of the filings (Staff Ex. 4 at 8).

b) Based on the fact that there were differences in meter quantities in the Meter Data System and PowerPlan system. Baker Tilly recommends that AEP Ohio recalculate the meter portion of the DIR calculation in prior years and make an adjustment in its next DIR update filing (Staff Ex. 4 at 12).

c) Baker Tilly recommends that AEP Ohio show the actual monthly DIR revenues as an additional column to the revenue requirement in its next DIR update filing to show the total revenue requirement undercollection through each month of the DIR. According to Baker Tilly, this will help provide transparency in showing the total DIR revenues collected versus the revenue requirement and the over- or undercollection through the entire timeframe of the DIR. Through a formal data request, AEP Ohio provided the auditor a monthly schedule that helps delineate the DIR over- or under-collection through the timeframe of the DIR. (Staff Ex. 4 at 18,21, Ex. A.)

d) Baker Tilly notes that the current over- or under-collection schedule of the quarterly DIR filings shows the over- or under-collection amount of the DIR to include the deferred asset recovery rider (DARR) trueup revenue. For the sake of clarity. Baker Tilly recommends that the DARR true-up revenue be calculated separately from the over- or under-collection calculation that compares the DIR revenues from the DIR revenue requirement. Further, AEP Ohio should consider stating that the DARR true-up revenue is a life-to-date cumulative balance and not an incremental balance that is included with each successive DIR filing. By way of a formal data request, AEP Ohio provided the auditor a monthly schedule that helps delineate the DIR over- or under-collection and the DARR collection through the timeframe of the DIR. (Staff Ex. 4 at 20, 21, Ex. A.)

(31) The Blue Ridge compliance audit report was filed on August 4, 2016, and included the following ten recommendations:

a) Blue Ridge recommends, should the Company receive the refunds being pursued as a result of the vendor contract audits' determination of overpaying vendors for services, the DIR of the year in which the refund is received should reflect the appropriate impact of the refund(s) (Staff Ex. 7 at 25).

b) Blue Ridge recommends AEP Ohio provide a reconciliation in future filings comparing the amount of plant recovered in the enhanced service reliability rider and gridSMART rider with the amount shown excluded within the DIR (Staff Ex. 7 at 30,45-46).

c) Blue Ridge recommends that, in addition to the jurisdictional allocations and accrual rates for each account, the information also be provided by subaccount (Staff Ex. 7 at 30,45).

d) Blue Ridge recommends, if a Lotus Notes database is going to be used by management to approve projects, a form be attached to the project documentation to support the approval, providing an audit trail (Staff Ex. 7 at 37).

e) Blue Ridge recommends that AEP Ohio be required to provide the Commission information on the work orders in the sample selection that are greater than 15 percent over budget. That information should provide the detailed reason the work order was over budget. If a change order or estimate revision was initiated that increased the original estimate, the Company should provide that change documentation along with all necessary management approvals. (Staff Ex. 7 at 38.)

f) Blue Ridge recommends that work order costs associated with cost elements 141,145,154, and 155 be removed from the DIR. These are costs that, in Blue Ridge's opinion, are not payroll, payroll related, or an appropriate overhead cost that benefits the project(s). (Staff Ex. 7 at 38-39,52.)

g) Blue Ridge recommends, in regard to work order 7900299 involving $669,609 for the purchase of meters from an affiliate, AEP Ohio demonstrate to the Commission that the purchase of the meters from AEP Ohio affiliates represents the lowest cost alternative to the Company (Staff Ex. 7 at 39).

h) Blue Ridge recommends, in regard to work order 7900299 involving the purchase of 4,955 meters at a total cost of $5,924,249, AEP Ohio provide to the Commission a comparison of the actual meter costs, without the capitalized labor or other installation costs, with other similar meter type costs, supporting the fact that this purchase was in line with other similar purchases (Staff Ex. 7 at 39).

i) Blue Ridge recommends the Company continue to monitor inactive work orders that appear on the inactive work order report and strive to resolve outstanding issues within a reasonable timeframe of six months (Staff Ex. 7 at 41).

j) Blue Ridge recommends AEP Ohio adhere to its stated policy to not hold work orders open to collect additional charges past 90 days (Staff Ex. 7 at 41).

Pages 9-11, V. Consideration of the Stipulation

A. Summary of the Stipulation

(32) As noted previously, on December 19, 2017, AEP Ohio, Staff, and OMAEG filed a Stipulation that purports to resolve all the issues in the consolidated DIR cases. Kroger also signed the Stipulation as a non-opposing party. (Joint Ex. 1 at 1,3,11). Below is a summary of the Stipulation:

a) The Signatory Parties recommend that the Commission adopt without modification the terms and conditions of the Stipulation to fully adjudicate and resolve these proceedings (Joint Ex. 1 at 3).

<u>The Scope of the Stipulation</u>

b) The Signatory Parties agree to pursue a settlement package in accordance with the following provisions, with the end result being to fully address all of the issues in the 2013 DIR Case, 2014 DIR Case, and 2015 DIR Case. Audit recommendations not addressed in the Stipulation have either been implemented or are in the process of being implemented. (Joint Ex. 1 at 3.)

c) The Signatory Parties agree that the Company will provide the actual system average interruption frequency index and customer average interruption duration index reliability performance for 2011 and 2012 for the combined CSP and OP, both including and excluding major events pursuant to Ohio Adm. Code 4901:1-10-01(T), so that reliability performance before the approval of the DIR and after the implementation of the DIR can be more accurately compared (Joint Ex. 1 at 3-4).

d) The Signatory Parties agree that, in preparing its annual DIR work plan, AEP Ohio will continue to prioritize, to the extent practical and reasonable, programs that are intended to reduce outage events, customers interrupted, and customer minutes interrupted based on the causes that each represent at least ten percent of the customers interrupted as reflected in the annual reliability report pursuant to Ohio Adm. Code 4901:l-10-10(C)(3)(a). Separate and apart from the Company's normal interactions with Staff, the Company agrees to meet annually with the Signatory Parties and non-opposing parties to explain the extent in which the DIR work plan is being adapted to address causes within the Company's control that each represent at least ten percent of the outages in the annual reliability report and/ or to explain the rationale for why such adaptation is not practical or reasonable. The Company will also provide annual updates to the Signatory Parties and non-opposing parties demonstrating the quantifiable impact that those DIR programs have had on customer reliability performance. (Joint Ex. 1 at 4.)

<u>2013 DIR Case Plan and Audit Recommendations</u>

e) The Signatory Parties agree that AEP Ohio has implemented the recommendations made in the Larkin audit report in the 2013 DIR Case and no further action is required. Specifically, as of the transfer of Wheeling Power Company, the DIR plan reports include only Ohio distribution spending. Accordingly, AEP Ohio has implemented quarterly processes of reconciling the total distribution plant with distribution capital expenditures. (Joint Ex. 1 at 4.)

f) The Signatory Parties' understanding is that the Commission did not require either in its Opinion and Order or Entry on Rehearing in the ESP 2 Case, which authorized the DIR, that the DIR be based on a cost benefit analysis. The Signatory Parties agree that that Company should estimate, if practical, a quantifiable benefit for any DIR programs that are expected to have a reliability improvement. The Company agrees to quantify the expected reliability benefit of such programs in the DIR work plan. (Joint Ex. 1 at 5.)

g) The Signatory Parties agree that the data related to the DIR plan provided by the Company to Staff was sufficient to address the directives of the Commission's Order in the ESP 2 Case and no further action is required in these proceedings (Joint Ex. 1 at 5).

h) The Signatory Parties agree that the DIR plan implemented through a collaboration of Staff and the Company was reasonable and no further changes or actions are required 0oint Ex. 1 at 5).

<u>2014 DIR Case Plan and Audit Recommendations</u>

i) The Signatory Parties agree that AEP Ohio has implemented the necessary clarification items from the Baker Tilly audit report (Joint Ex. 1 at 5).

j) The Signatory Parties agree that the Company has made the appropriate adjustments to the meter data as discussed in the Baker Tilly audit report and no additional actions are required 0oint Ex. 1 at 5).

k) The Signatory Parties agree that the stipulated property tax rate used by the Company was appropriate and no further action is required (Joint Ex. 1 at 5).

l) The Signatory Parties agree that the Company's implementation of the tax accounting changes pursuant to the tangible property regulations is progressing in a timely manner and the Company will provide for the Commission's review of the quantification of these changes once the value has been recognized for tax purposes. The Company's implementation of such a change will be subject to further review and final approval in the annual compliance audits during which its implementation is occurring, but the question of whether the Company should have implemented the capital repairs deduction earlier than 2017 is fully and finally resolved through the Company making a one-time reduction to the 2018 DIR revenue requirement of $2,142,337.62. (Joint Ex. 1 at 5-6.)

m) The Signatory Parties agree that the data provided by the Company related to the DIR plan was sufficient to address the directives of the Commission's Order in the ESP 2 Case. AEP Ohio will commit to improve planning coordination between AEP Ohio's Distribution, Transmission, and Station organization. No additional action is required as a result of the 2034 DIR Case. (Joint Ex. 1 at 6.)

n) The Signatory Parties agree that the capitalization policy change was permissible within the Generally Accepted Accounting Principles (GAAP). The Signatory Parties further agree that the Company will clearly state any impending capitalization policy changes in its quarterly filings, directly quantifying the value, if possible, and working with Staff on alternative calculations if actual quantification is not possible. Such changes shall be subject to the Commission's approval and the Signatory Parties recommend the Commission approve such changes upon the effective date of the DIR quarterly filing unless otherwise suspended by the Commission. (Joint Ex. 1 at 6.)

<u>2015 DIR Case Audit Recommendations</u>

o) The Signatory Parties agree that the capitalization policy change, as it related to 2014, was permissible within GAAP. The Signatory Parties further agree that the Company will clearly state any impending capitalization policy changes in its quarterly filings, quantifying the value, if possible, and working with Staff on alternative calculations if quantification is not possible. Such changes shall be subject to the Commission's approval and the Signatory

Parties recommend the Commission approve such changes upon the effective date of the DIR quarterly filing unless otherwise suspended by the Commission. (Joint Ex. 1 at 6-7.)

p) The Signatory Parties agree that the Company has implemented the Commission's directive to adjust the property tax in the DIR from the ESP 3 Case and no further action is required 0oint Ex. 1 at 7). ESP 3 Case, Opinion and Order (Feb. 25, 2015) at 44,46.

q) The Signatory Parties agree that the Company's implementation of the tax accounting changes pursuant to the tangible property regulations is progressing in a timely manner and the Company will provide to the Commission for its review the quantification of these changes once the value has been recognized for tax purposes. The Company's implementation of such a change will be subject to further review and final approval in the annual compliance audits during which its implementation is occurring. (Joint Ex. 1 at 7.)

r) The Signatory Parties agree that Blue Ridge's audit recommendations (a) through (e) and (g) through 0, as reflected above, have been resolved through its audit report in the 2016 DIR audit in Case No. 17-38-EL-RDR, and no further action is required. The Company will continue to monitor work orders that appear on the inactive work order report and will continue to monitor that no work orders remain open past 90 days. (Joint Ex. 1 at 7.)

s) The Signatory Parties agree that Blue Ridge's audit recommendation (f), as reflected above, is better addressed as part of the base distribution case to be filed by June 1, 2020. The Signatory Parties further agree that no such adjustment was made to the rate base in the Company's last base rate filing, in Case No. 11-351-EL-AIR, et al. (Joint Ex. 1 at 7-8.)

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(49) Based on the record, the Stipulation meets the criteria used by the Commission to evaluate stipulations, is a reasonable resolution of the issues, and should be adopted.

<u>Case No. 16-1852-EL-SSO, et. al.</u>

On April 25, 2017, the Commission modified and approved the stipulation and recommendation filed by the signatory parties on August 25, 2017. Regarding the DIR, the following is relevant.

Pages 18–20

3. Distribution Investment Rider and AIR Case Commitment

(45) In order to help address concerns about some of the distribution riders becoming excessive and to recalibrate the costs being reflected in base rates versus riders, AEP Ohio agrees to file a base distribution case by June 1, 2020 (Joint Ex. 1 at 4).

(46) The Distribution Investment Rider (DIR) will continue through the extended ESP term, subject to the conditions noted below. The DIR is updated quarterly with rates effective 60 days after filing unless otherwise ordered by the Commission. The DIR will continue to be subject to an annual compliance audit, which may be conducted by an independent auditor under the direction of Staff, the cost of which will be recoverable through the DIR. The annual authorized DIR revenue caps will be modified as follows. The calendar 2018 DIR revenue cap will be $215 million, which will increase to $240 million in 2019, $265 million in 2020, and, unless otherwise changed by the 2020 AIR rate case order, $290 million in 2021. Starting in 2019, the unused revenue cap from the prior year will be limited up to $5 million for carryover to the following year (e.g., the 2019 cap could be up to $245 million if there is a $5 million or more unused revenue requirement [referring to unspent funds, not uncollected funds] from 2018; the 2020 cap could be up to $270 million if there is a $5 million or more unused revenue requirement from 2019; etc.). If in any year, the unused revenue cap is greater

than $5 million, the revenue cap for the subsequent year(s) will be lowered by any amount greater than $5 million. If no distribution rate case application is filed by June 1,2020, the DIR mechanism will sunset on December 31,2020, and the DIR revenue cap for 2021 and beyond will be zero. It is contemplated that new distribution rate cases will be filed every fifth year following the next AIR case filing, at which time the DIR baseline, if the DIR is still in use, will be reset in a manner consistent with the new rate base. (Joint Ex. 1 at 4-5.)

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(48) The proposal to adjust the DIR revenue requirement by the theoretical reserve amortization established in Case No. 11-351-EL-AIR, et al., will be adjusted as follows. Effective January 1, 2018, AEP Ohio will update its depreciation rates to those rates indicated by the November 29, 2016 Depreciation Study (filed in Case Nos. 13-2385-EL-SSO, et al.) and will amortize the theoretical reserve imbalance of approximately $240 million indicated by the Depreciation Study, adjusted for the 2016 and 2017 amortization and a reallocation based on the retirement of non-advanced metering infrastructure meters, pursuant to the amortization schedule in Attachment A to the Stipulation. AEP Ohio commits to submit to Staff an updated theoretical reserve study every year prior to the rate case. AEP Ohio also commits that, for any reserve under accrual, there will not be any amortization to correct it until either the next two rate cases or the reserve recovers from the accelerated gridSMART generated retirements, whichever happens first. (Joint Ex. 1 at 5-6.)

(49) Upon approval of the Stipulation, the return on equity (ROE) of 10.0 percent will prospectively be used for all riders that have a capital component until new rates are effective with a new authorized ROE under the next AIR rate case order. If AEP Ohio completes a new long-term debt financing or refinancing prior to the next base rate case, the Company agrees to update its weighted average cost of capital (WACC) rate within 90 days of closing for such transaction (to the extent such an update would be favorable to ratepayers). [AEP Ohio is anticipating refinancing of long-term debt in 2018] Subject to such update, the pre-tax weighted costs of capital will be 10.82 percent as reflected in Attachment B. AEP Ohio's cost of capital will be updated based on the outcome of the next AIR case. This provision is a one-time concession for purposes of resolving the issues in these cases without precedent in any future proceeding. (Joint Ex. 1 at 6.)

<u>Case Nos. 17-38-EL-RDR and 18-230-EL-RDR</u>

On June 17, 2020, the Commission issued an Opinion and Order adopting the stipulation and recommendations filed on July 2, 2019, by the Company and Staff resolving all issues related to the DIR audits for 2016 and 2017. OPC was opposed to the Stipulation and a evidentiary hearing was held on August 30, 2019.

In the 2016 Audit report, Blue Ridge had 12 recommendations. The Signatory Parties agreed to action follows each recommendation.

2016 Report Recommendation 1: Blue Ridge recommends that work order costs associated with cost elements 141, 143, 145, 154, and 155 be removed from the DIR. According to Blue Ridge, these are costs that are not payroll, payroll related, or appropriate overhead that benefit the project(s). (Staff Ex. 1 at 14, 22-23, 51.)

> The Signatory Parties agree that the Commission approved Stipulation in Case Nos. 14-255-EL-RDR, 15-66-EL-RDR and 16-21-EL-RDR provided that this issue is better addressed as part of the base distribution case to be filed by June 1, 2020.

2016 Report Recommendation 2: Blue Ridge recommends that, if the Distribution Business Rules for Authorizing Capital Projects document is still in use in its current form, it should make mention within the document of the superseding status of the 2016 new Improvement Requisition Policy and Procedures (Staff Ex. 1 at 14, 32).

> The Signatory Parties agree that the 2017 DIR audit report determined that no additional work is required for this 2016 recommendation because the Distribution Business Rules for Authorizing Capital Projects is no longer in use.

2016 Report Recommendation 3: Blue Ridge recommends that AEP Ohio highlight and quantify the capitalization change regarding the establishment of a retirement unit for Energy Control Devices and Displays and any other changes to the capitalization policy in the DIR filing preceding the implementation of the change (Staff Ex. 1 at 14, 32, 40).

> The Signatory Parties agree that the 2017 DIR audit report determined that no additional work is required for this 2016 recommendation because the requirement has been agreed to as part of the Stipulation approved in Case Nos. 14-255-EL-RDR, 15-66-EL-RDR, and 16-21-EL-RDR.

2016 Report Recommendation 4: Blue Ridge recommends that AEP Ohio, in compliance with the Commission's order, provide the reconciliation of the DIR account balances to the Federal Energy Regulatory Commission (FERC) Form 1 within the DIR filings, as ordered by the Commission (Staff Ex. 1 at 14, 34, 39).

> The Signatory Parties agree that to the extent there is a difference between the FERC FORM 1 and the DIR filings that the Company will state such difference in the letter accompanying the quarterly DIR filings or state that no such difference exists if that is the case.

2016 Report Recommendation 5: Blue Ridge recommends that AEP Ohio follow through with the error discovered regarding the retirements for work order 42263333 and reclassify the associated $145,000 to the proper work order (Staff Ex. 1 at 14, 36).

> The Signatory Parties agree that the 2017 DIR audit report determined that no additional work is required for this 2016 recommendation because AEP Ohio has made the correction.

2016 Report Recommendation 6: Blue Ridge recommends that the vegetation management schedule in the DIR include the plant accounts and subaccounts (Staff Ex. 1 at 14, 38).

> The Signatory Parties agree that the 2017 DIR audit report determined that no additional work is required for this 2016 recommendation. AEP Ohio has clarified that the vegetation management schedule in the DIR does include all the vegetation accounts and subaccount.

2016 Report Recommendation 7: Blue Ridge recommends that the issue of AEP Ohio's inclusion of capital spares in the DIR be given further review. AEP Ohio should look into borrowing capital spares, if it makes economic sense, or, at a minimum, perform an analysis to compare renting versus purchase of a capital asset. (Staff Ex. 1 at 14, 46-48.)

> The Signatory Parties agree that a further review by the next DIR auditor of the capital spares activity will be conducted in a future DIR audit.

2016 Report Recommendation 8: Blue Ridge recommends that AEP Ohio, in order to complete the project justification, document all alternatives (operational and/or economic), providing the reason(s) one alternative is better than another and, if savings are estimated, indicate how those savings are to be realized. If no alternatives were considered, AEP Ohio should document its reason(s). (Staff Ex. 1 at 14, 48-49.)

> The Signatory Parties agree with this recommendation that the Company continue its current practice and no changes to that practice are necessary at this time. The documentation in the

Alternatives Considered project justification will be again reviewed in a future audit to determine if AEP is consistently conducting an alternatives review.

2016 Report Recommendation 9: Blue Ridge recommends that AEP Ohio continue to manage to the budget and document reasons for overage or underage of actual charges whether those reasons are outside or within the direct control of the Company, in order to demonstrate that the budget variance did not result from lack of budget management control (Staff Ex. 1 at 14, 50).

The Signatory Parties agree with this recommendation that the Company continue its current practice and no changes to that practice are necessary at this time.

2016 Report Recommendation 10: Blue Ridge recommends that, when large projects are developed, AEP Ohio place greater emphasis on ensuring that the work plan is complete and that the contractors performing the work understand the requirements from both work and safety perspectives (Staff Ex. 1 at 14, 51).

The Signatory Parties support this recommendation but do not believe that specific changes to AEP Ohio's processes are needed at this time.

2016 Report Recommendation 11: Blue Ridge recommends that AEP Ohio continue to monitor inactive work orders that appear on the report, striving to resolve outstanding issues within a reasonable time frame of six months to reduce the total dollar value of inactive work orders. Blue Ridge acknowledges that work orders may remain inactive for reasons outside of AEP Ohio's control and that monitoring is conducted on the inactive work order report. However, due to the significant duration of some inactive work orders, Blue Ridge continues to stress the importance of ensuring that outstanding issues able to be resolved are resolved. (Staff Ex. 1 at 14-15, 52-53.)

The Signatory Parties agree with this recommendation that the Company continue its current practice and no changes to that practice are necessary at this time.

2016 Report Recommendation 12: Blue Ridge recommends that AEP Ohio correct the Standard Fringe Factor that included the non-productive time rate twice. The impact was an overstatement of the fringe benefit loading rate by approximately 15 percent. As this rate is used for the capitalization of meter and line transformer installations and removal costs, its overstatement results in an overstatement of these capital amounts. Blue Ridge notes that AEP Ohio is developing an analysis of the impact and will provide it later. Blue Ridge recommends that AEP Ohio calculate the impact of the overstatement and adjust the DIR. (Staff Ex. 1 at 15, 55.)

The Signatory Parties agree that the 2017 DIR audit report determined that no additional work is required for this 2016 recommendation. AEP Ohio has made the correction.

In its 2017 report, Blue Ridge had five recommendations.

2017 Report Recommendation 1: Blue Ridge recommends that AEP Ohio, in its vegetation management policy, better define capital and expense work associated with clearing of rights of way (ROW), in order to be in accordance with the FERC Code of Accounts for those activities. Specifically, Blue Ridge advises that any vegetation management activity on an existing ROW, other than what may come about because of storm restoration, should be considered expense. (Staff Ex. 2 at 15, 34.)

The Signatory Parties agree to the following:

a. AEP Ohio will start expensing inside and outside ROW tree removals starting with the new base rates becoming effective after the upcoming AIR case.[138] The period between the date of this settlement and the date the new rates become effective as a result of the AIR filing will be referred to as the "transition period." The Company will continue its current accounting approach for tree removal during the transition period. During the transition period, outside ROW tree work will only be capitalized if it involves removal of danger trees. In this context, a danger tree is a tree that is structurally unsound (e.g., has signs of disease, extreme leaning, or other defects such as splits, etc.) and could strike the power lines when it falls.

b. For initial clearing of ROW and for widening projects, tree removal for the expanded ROW portion may still be capitalized during and beyond the transition period. Initial clearing shall be defined as the activity to remove vegetation from a company ROW when that ROW is first established (including tree growth regulator and first herbicide application). When a ROW is permanently expanded beyond the previously established ROW, the activity to remove vegetation from the area necessary to widen the existing ROW to the newly expanded ROW may be capitalized. The Company will document the circumstances when it is necessary to permanently expand a ROW.

c. During the transition period, the Company will, through a mutually acceptable process, periodically work with Staff to update and coordinate on danger tree program activity and anticipated funding levels.

d. The Company will provide baseline data for outside ROW tree outages for the relevant circuits in a timely manner. During the transition period, the Company will provide data showing outside ROW tree outages for each circuit where danger tree work was performed for each year following completion of such work.

e. The Company commits to achieving an improvement in the outside ROW tree outages based on danger tree removal work done during the transition period, as compared to the baseline outage data for the period prior the transition period. The improvement will be measured by the Companywide number of outside ROW outages caused by danger trees for each year during the transition period and for the two years subsequent to the transition period (this is the measurement period). The Company may exclude outages during the measurement any outside ROW tree outage that was caused by a tree falling onto the line that was not a danger tree (e.g., a lightning strike or storm caused the tree to fall). If there is not an improvement for a given year during measurement period, the Company will submit a written report to the Signatory Parties analyzing and explaining why there was no measured improvement for that circuit and submit a new plan for achieving an improvement. For example, one such explanation might be that the areas where danger tree work was completed improved while other areas where work has not yet been completed deteriorated.

2017 Report Recommendation 2: Consistent with its audit report for 2016, Blue Ridge recommends that AEP Ohio comply with the Commission's February 25, 2015 Opinion and Order in Case No. 13-2385-EL-SSO, et al., by including the reconciliation of the DIR account balances to the FERC Form 1 within the DIR filing (Staff Ex. 2 at 15, 35, 40).

[138] If FERC issues accounting guidance in the future that supports a different result, the Signatory Parties reserve the right to request Commission approval of a new capitalization policy to supersede this agreement.

The Signatory Parties agree that to the extent there is a difference between the FERC FORM 1 and the DIR filings that the Company will state such difference in the letter accompanying the quarterly DIR filings or that no such difference exists if that is the case.

2017 Report Recommendation 3: Blue Ridge recommends that the Commission consider the capital status of cost element 148, along with the other incentive associated cost elements identified by Blue Ridge in the audit report for 2016, in the next base distribution case to be filed by June 2020 (Staff Ex. 2 at 15, 48-50).

The Signatory Parties agree that the Commission approved Stipulation in Case Nos. 14-255-EL-RDR, 15-66-EL-RDR and 16-21-EL-RDR provided that this issue is better addressed as part of the base distribution case to be filed by June 1, 2020.

2017 Report Recommendation 4: Blue Ridge recommends that large projects be more closely scoped out in the field to try to mitigate potential impediments that could increase the project estimate or extend the schedule, delaying project completion (Staff Ex. 2 at 15, 56).

The Signatory Parties support this recommendation but do not believe that specific changes to AEP Ohio's processes are needed at this time.

2017 Report Recommendation 5: Blue Ridge recommends that the next DIR audit review compliance with the Commission's final decision in AEP Ohio's tax reform docket, Case No. 18-1007-EL-UNC, to facilitate the Company's implementation of the Tax Cuts and Jobs Act (Staff Ex. 2 at 15, 65).

The Signatory Parties agree with this recommendation.

Case No. 18-1451-EL-ATA TCJA

On October 3, 2018, the Commission approved the joint stipulation and recommendation filed by the parties on September 26, 2018, resolving the issues related to AEP Ohio's implementation of the Tax Cuts and Jobs Act of 2017. The following summarizes the approved stipulation and recommendations that are relevant to the DIR

{¶16} As previously stated, a Stipulation signed by all of the parties was filed on September 26, 2018. The following is a summary of the Stipulation and is not intended to supersede or replace the Stipulation:

(1) The application filed in the Tariff Case should be approved to provide the benefits of the federal tax cuts to consumers.

(2) For the normalized accumulated deferred income tax (ADIT) balance, AEP Ohio will begin flowing the amortization of excess ADIT (EDIT) (effective January 1, 2018) back to customers upon approval of the stipulation by the Commission. The normalized EDIT balance as of June 30, 2018, is $278 million. Mechanically, the Distribution Investment Rider (DIR) will be the rider mechanism used to incorporate (1) a credit for the amount of amortization for normalized ADIT recorded by AEP Ohio each month, and (2) a corresponding decrease from the January 1,2018 level of the ADIT component of the DIR rate base calculation. As reflected in Attachment A to the Stipulation, the annual DIR revenue caps adopted in Case No. 16-1852-EL-SSO, et al. (ESP Case), will not be impacted through the effect of the amortization of the EDIT.[139] Upon Commission approval of the Stipulation, the calculation reflected in Attachment A to

[139] The incremental revenue requirement associated with the amortization of the EDIT will be recovered through the DIR but excluded for purposes of calculating the annual revenue cap.

exclude the TCJA impacts from the DIR annual revenue caps will be used for future DIR filings. The amount of the amortization credit is limited to the amount needed to ensure compliance with tax normalization requirements and avoid a tax normalization violation. The actual amount of normalized ADIT flowing back to customers through the DIR will reflect the final, audited balance, including a federal and state tax gross up, which may be different from the amount listed above. If the normalized EDIT balance is not yet fully credited to customers and the DIR is terminated under Paragraph III.C.2 of the adopted stipulation in the ESP Case (for failure to file a rate case by June 2020), the Company will flow the remaining uncredited amount through the TSCR but with the same allocation as the DIR.

(3) AEP Ohio will return to customers amounts identified as nonnormalized EDIT over a period beginning with the first billing cycle after the approval of the Stipulation. The credit shall continue until the amount identified by this paragraph has been returned to customers or December 31, 2024, whichever occurs first. Any unreturned credit or excess credit shall be treated as a liability or asset and addressed in the next succeeding rate case of the Company. The actual amount of non-normalized EDIT flowing back to customers under this provision will reflect the final, audited balance, including a federal and state tax gross up, which may be different from the amount identified by the Company on December 31, 2017 (i.e., $177.6 million). The amount will be credited to customers in the following manner. One half of the amount to be credited to customers under this paragraph shall be allocated to residential and non-residential customers on the basis of a 5 Coincident Peaks (5CP) methodology. The 5CP methodology shall be established based on AEP Ohio's 5CP for the 2017 calendar year. One half of the amount to be credited to customers under this paragraph shall be allocated to residential and non-residential customers based on 2017 kilowatt hour (kWh) sales. Those allocations shall remain fixed for the term of the TSCR. To provide an illustration as to the allocation of the total non-normalized EDIT to be returned to customers if the amount to be credited to customers under this provision is $177.6 million, the amount to be credited using the procedures described above shall be allocated in an amount of $69 million for residential customers and $108.6 million for non-residential customers. The resulting amounts shall be returned to customers as a credit that shall be calculated on the basis of dollars/kWh. Notwithstanding the prior sentence, $48.2 million of the amount allocated to residential customers will be used as a one-time offset to the amount currently deferred as the residential Pilot Throughput Balancing Adjustment Rider (PTBAR) under-recovery. The remaining $20.8 million residential allocation and the total $108.6 million non-residential allocation will be credited through the TSCR. Attachment B provides a demonstration of the method that will be applied to the final balances of non-normalized EDIT in establishing the final allocations to residential and nonresidential customers.

(4) AEP Ohio agrees to include a credit of $20.4 million to customers annually through the TSCR, in order to reflect reduced federal income tax expense associated with the TCJA. This credit will be allocated to customer classes based on a percentage of base distribution revenues. AEP Ohio will include a one-time carrying charge in the initial TSCR rate based on the long-term debt rate to reflect the time lag in implementing the federal income tax savings in rates (applied from January 1, 2018, through the initial effective date of the TSCR). Presuming the TSCR is approved effective November 2018, the initial level will be in effect for 14 months (through the end of 2019), reflecting both: (1) 14 months of the annualized $20.4 million credit ($23.8 million), and (2) $17.4 million (the prorated portion of the 2018 credit through October 2018, including carrying charges). Beginning January 2020, the TSCR will reflect $20.4 million annually. The basis for the values listed in the preceding sentences are set forth in Attachment C, which also contains values for an example that presumes the TSCR is approved effective December 2018, If the Commission approves the TSCR effective after December 2018, the

signatory parties request that the Commission specify how the initial level of the TSCR will be established in a manner consistent with the terms of the Stipulation. The component of the TSCR reflecting AEP Ohio's obligation to convey the federal income tax expense credit of $20.4 million will expire on the same date that new base distribution rates become effective as a result of the rate case to be filed in June 2020 under R.C. 4909.18. In addition, AEP Ohio agrees to contribute $1 million annually to the Neighbor-to-Neighbor Fund for bill assistance to its low income residential customers (starting in 2018 and continuing through 2021); in 2022, the Company will provide a final report to Staff and OCC accounting for the $4 million for low income billing assistance. For purposes of implementing the PTBAR starting in 2018, neither the test year revenue nor the actual energy revenue collected from customers shall be adjusted to reflect the TSCR credit; this will help ensure that the PTBAR continues to function as originally approved by the Commission.

……

(7) Upon issuance of a final, non-appealable order approving the Stipulation, the issues raised by AEP Ohio in the Tax COI Case will be considered fully resolved and the Company waives the right to pursue the claims raised in its February 9, 2018 application for rehearing.

Case No. 19-0065-EL-RDR

On July 31, 2019, Vantage Energy Consulting, LLC filed its report on the compliance of Ohio Power Company's 2018 DIR. As of the date of this report, no further action has been docketed.

Case No. 20-0169-EL-RDR

On August 28, 2020, Blue Ridge Consulting Services, Inc. filed its report on the compliance of Ohio Power Company's 2019 DIR. As of the date of this report, no further action has been docketed.

Case No. 20-0585-EL-AIR, et al. (Rate Case)

On June 1, 2020, the Company filed an application to increase its electric distribution rates. On November 25, 2020, Staff issued its report. On March 12, 2021, a joint stipulation and recommendation was filed. On November 17, 2021, the PUCO issued an Opinion and Order adopting the joint stipulation and recommendations resolving all issues.

Key points in the Staff Report related to the DIR are as follows.
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Distribution Investment Rider

Per the Commission Order in Case No. 16-1852-EL-SSO, upon approval of AEP Ohio's next rate case all plant-in-service being recovered through the DIR as of the date certain will be rolled into rate base and the annual revenue caps for the DIR will be set in a manner consistent with the new rate base. In this Application, AEP Ohio proposed revenue caps for 2021 through 2024 and included several modifications to the DIR calculation.

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Distribution Investment Rider

Staff accepted the Company's methodology to compute adjusted test year operating income to eliminate revenues and corresponding expenses for the DIR in order to conform to standard practice of removing rider revenues and expenses from base rates. This flow through adjustment decreases test year operating income by $242,341,365, as shown on Schedule C-3.16.

Key points in the joint stipulation and recommendation related to the DIR are as follows.

Pages 5–9

C. Distribution Investment Rider

1. For 2021, the Distribution Investment Rider ("DIR") revenue cap will be $57 million. For 2022, the base DIR revenue cap will be $91 million. The 2022 base DIR revenue cap will be increased to $96 million if, in 2021, AEP Ohio achieves the 2021 reliability standard set forth in paragraph III.C.4 below. For 2023, the base DIR revenue cap will be $116 million. The 2023 base DIR revenue cap will be increased by $5 million (to $121 million) if, in both 2021 and 2022, AEP Ohio achieves the applicable annual reliability standards set forth in paragraph III.C.4. The 2023 base DIR revenue cap will be separately increased by an additional $5 million (to up to $126 million in total) if, in 2022, AEP Ohio achieves the 2022 reliability standard set forth in paragraph III.C.4.

2. For January 2024 through May 2024, the base DIR revenue cap will be $51.25 million. The 2024 base DIR revenue cap will be increased by $2 million (to $53.25 million) if, in 2023, AEP Ohio achieves the 2023 reliability standard set forth in paragraph III.C.4. The 2024 base DIR revenue cap will be separately increased by $2 million (to up to $55.25 million), if in each of 2021, 2022 and 2023, AEP Ohio achieves the applicable annual reliability standards set forth in paragraph III.C.4. The 2024 base DIR revenue cap will be separately increased by $2 million (to up to $57.25 million in total), if in both 2021 and 2022, AEP Ohio achieves the applicable annual reliability standards set forth in paragraph III.C.4.

3. Accumulated deferred income taxes will continue to be excluded from the DIR annual revenue cap calculation. The Signatory Parties agree that the formula change attached as Attachment B to this Stipulation should be accepted to ensure that AEP Ohio is better able to collect its revenue requirement up to the Commission-approved revenue caps.

4. For purposes of paragraphs III.C.1 and III.C.2 above, the DIR performance-based trigger standards for 2021 through 2023 shall be as follows:

Year	SAIDI
2021	87.8
2022	86.8
2023	85.8

For each annual period, the Company will report the prior year's reliability performance on or before March 31. Staff will review and verify the performance results within 20 days.

5. The standards set forth in paragraph III.C.4 are consistent with the data presented in the Company's filing in Case No. 20-1111-EL-ESS, but they are tied to the list of specific outage descriptions set forth in the table below. The DIR performance-based standards agreed upon do not limit any positions that Signatory Parties may take involving the establishment of new distribution reliability performance standards in Case No. 20-1111-ELESS or any future case regarding the establishment of reliability performance standards.

CONTROLLABLE CAUSES (INCLUDED)	
D-Station	DISTRIBUTION STATION
D-Line Equip	EQUIPMENT FAILURE
Weather	WEATHER - FLOOD/SLIDE
	WEATHER - HIGH WINDS (EXCEEDING 60 MPH)
	WEATHER - HURRICANE
	WEATHER - ICE (1/2 INCH OR > 6 " SNOW)
	WEATHER - LIGHTNING
	WEATHER - TORNADO
	WEATHER - UNKNOWN
Remaining Cause:	ANIMAL - BIRD
	ANIMAL - NON BIRD
	CONTAMINATION/FLASHOVER
	CORROSION
	ERROR - FIELD
	ERROR - OPERATIONS
	FACILITATION OF WORK
	OTHER
	OVERLOAD
	UNBALANCE
Unk (non-weath)	UNKNOWN (NON WEATHER)

6. AEP Ohio will continue to file an annual DIR Work Plan. For each project or work order completed under the discretionary programs of the DIR, AEP Ohio also will track and permit Staff, Ohio Manufacturers' Association Energy Group ("OMAEG") and the Office of the Ohio Consumers' Counsel ("OCC") to review the following information: (a) circuit(s) impacted; (b) number of hours; (c) description of issue(s) being addressed; (d) outage history; (e) work completed; (f) whether equipment is new or replaced; (g) if available, the age and manufacturer of original equipment that is replaced; (h) if new, purpose of install; (i) expected reliability improvement; (j) how improvement will be measured; and (k) circuit design capacity in MW, where available.

7. AEP Ohio may petition the Commission for permission to extend the DIR beyond May 30, 2024, and adjust the revenue cap applicable to said extension. In order to make such a petition, AEP Ohio must file a standard service offer ("SSO") application on or before May 30, 2023. In the absence of an order authorizing an SSO to commence June 1, 2024, or an order under this provision extending the DIR, the DIR rate shall be set at $0 beginning June 2, 2024.

Key points in the Opinion and Order related to the DIR follows.

D. Summary of Stipulation
…
1. Approval of Application
{¶ 47} The Signatory Parties recommend that AEP Ohio's application be approved as modified by the recommendations in the Staff Report, unless otherwise modified in the Stipulation, in order to fully resolved all of the issues raised in these proceedings (Joint Ex. 1 at 3).

2. RATE BASE, OPERATING INCOME, RATE OF RETURN, AND REVENUE REQUIREMENT
{¶ 48} AEP Ohio's rate base, rate of return, and recommended revenue requirement shall be as set forth in the Stipulated Schedules A-1, B-1, and C-1, which are attached as Attachment A and

incorporated by reference. Specifically, the stipulated schedules modify the schedules in the Staff Report in the following respects:

a. The value of AEP Ohio's property used and useful in the rendition of distribution of electric power (rate base) is $3,088 million, as shown on Stipulated Schedules A-1 and B-1.

...

f. The Signatory Parties agree to an overall rate of return of 7.28 percent, reflecting a cost of long-term debt of 4.4 percent and a return on equity of 9.7 percent. The capital structure of 45.57 percent debt and 54.43 percent equity, as proposed in AEP Ohio's application and adopted in the Staff Report, will be retained.

(Joint Ex. 1 at 3-4.)

...

3. DISTRIBUTION INVESTMENT RIDER

{¶ 53} For 2021, the DIR revenue cap will be $57 million. For 2022, the base DIR revenue cap will be $91 million. The 2022 base DIR revenue cap will be increased to $96 million, if, in 2021, AEP Ohio achieves the 2021 reliability standard set forth below. For 2023, the base DIR revenue cap will be $116 million. The 2023 base DIR revenue cap will be increased by $5 million (to $121 million), if, in both 2021 and 2022, AEP Ohio achieves the applicable annual reliability standards set forth below. The 2023 base DIR revenue cap will be separately increased by an additional $5 million (to up to $126 million in total), if, in 2022, AEP Ohio achieves the 2022 reliability standard set forth below. Joint Ex. 1 at 6.)

{¶ 54} For January 2024 through May 2024, the base DIR revenue cap will be $51.25 million. The 2024 base DIR revenue cap will be increased by $2 million (to $53.25 million), if, in 2023, AEP Ohio achieves the 2023 reliability standard set forth below. The 2024 base DIR revenue cap will be separately increased by $2 million (to up to $55.25 million), if, in each of 2021, 2022, and 2023, AEP Ohio achieves the applicable annual reliability standards set forth below. The 2024 base DIR revenue cap will be separately increased by $2 million (to up to $57.25 million in total), if, in both 2021 and 2022, AEP Ohio achieves the applicable annual reliability standards set forth below. (Joint Ex. 1 at 6.)

{¶ 55} Accumulated deferred income taxes will continue to be excluded from the DIR annual revenue cap calculation. The Signatory Parties agree that the formula change attached as Attachment B to the Stipulation should be accepted to ensure that AEP Ohio is better able to collect its revenue requirement up to the Commission-approved revenue caps. (Joint Ex. 1 at 7.)

{¶ 56} For purposes of the above paragraphs, the DIR performance-based trigger standards for 2021 through 2023, based on the system average interruption duration index (SAIDI), shall be as follows:

Year	SAIDI
2021	87.8
2022	86.8
2023	85.8

For each annual period, AEP Ohio will report the prior year's reliability performance on or before March 31. Staff will review and verify the performance results within 20 days. (Joint Ex. 1 at 7.)

{¶ 57} The above standards are consistent with the data presented in AEP Ohio's filing in Case No. 20-1111-EL-ESS, but they are tied to the list of specific outage descriptions set forth in the table below. The DIR performance-based standards agreed upon do not limit any positions that Signatory Parties may take involving the establishment of new distribution reliability performance standards in Case No. 20-1111-EL-ESS or any future case regarding the establishment of reliability performance standards.

Controllable Causes (Included)	
D-Station	Distribution Station
D-Line Equip	Equipment Failure
Weather	Weather-Flood/Slide Weather-High Winds (exceeding 60 MPH) Weather-Hurricane Weather-Ice (1/2 inch or 6” Snow) Weather-Lightning Weather-Tornado Weather-Unknown
Remaining Cause	Animal-Bird Animal-Non-Bird Contamination/Flashover Corrosion Error – Field Error – Operations Facilitation of Work Other Overload Unbalance
Unk (Non-Weath)	Unknown (Non-Weather)

(Joint Ex. 1 at 7-8.)

{¶ 58} AEP Ohio will continue to file an annual DIR Work Plan. For each project or work order completed under the discretionary programs of the DIR, AEP Ohio also will track and permit Staff, OMAEG, and OCC to review the following information: (a) circuit(s) impacted; (b) number of hours; (c) description of issue(s) being addressed; (d) outage history; (e) work completed; (f) whether equipment is new or replaced; (g) if available, the age and manufacturer of original equipment that is replaced; (h) if new, purpose of install; (i) expected reliability improvement; 0) how improvement will be measured; and (k) circuit design capacity in megawatts (MW}, where available. (Joint Ex. 1 at 8.)

{¶ 59} AEP Ohio may petition the Commission for permission to extend the DIR beyond May 30, 2024, and adjust the revenue cap applicable to said extension. In order to make such a petition, AEP Ohio must file a standard service offer (SSO) application on or before May 30, 2023. In the absence of an order authorizing an SSO to commence June 1, 2024, or an order under this provision extending the DIR, the DIR rate shall be set at $0 beginning June 2, 2024. (Joint Ex. 1 at 8-9.)

Case No. 21-0016-EL-RDR

On September 1, 2021, Blue Ridge Consulting Services, Inc. filed its report on the compliance of Ohio Power Company's 2020 DIR. As of the date of this report, no further action has been docketed.

Case No. 22-89-EL-RDR

On September 27,2022, Blue Ridge Consulting Services, Inc. filed its report on the compliance of Ohio Power Company's 2021 DIR. As of the date of this report, no further action has been docketed

Case No. 23-0023-EL-SSO

In Case No. 20-585-EL-AIR, the Commission approved new distribution rates. The Commission also order that AEP Ohio may petition the Commission for permission to extend the DIR beyond May 30, 2024, and adjust the revenue cap applicable to said extension. In order to make such a petition, AEP Ohio must file a standard service offer (SSO) application on or before May 30, 2023. In the absence of an order authorizing an SSO to commence June 1, 2024, or an order under this provision extending the DIR, the DIR rate shall be set at $0 beginning June 2, 2024.

On January 6, 2023, AEP Ohio sought approval of an electric security plan (also referred to as the "ESP" or the "proposed ESP" or "ESP V") that will commence upon the expiration of the current ESP IV (June 1, 2024) and continue through May 31, 2030. The Application also sought continuation of the DIR. As of the date of the filing of the report, no Order has been issued.

Application (January 6, 2023)

B. Distribution Rates

A major focus of the proposed ESP V is an extension and modification of its comprehensive distribution reliability strategic plan to further improve grid resiliency and the customer experience. The foundation of this plan is a group of programs, supported by current riders, already approved by the Commission in ESP I, ESP II, ESP III, and ESP IV as well as the addition of new programs that will build upon and enhance existing efforts to maximize grid resiliency and the customer experience.

1. Continuation and Modification of Existing Programs and Riders

The existing programs, which AEP Ohio requests authority to continue and modify as part of the proposed ESP V, include the replacement of aging infrastructure through the Distribution Work Plan that includes updates to the Distribution Investment Rider ("DIR") and the Enhanced Service Reliability Rider ("ESRR"). The Distribution Work Plan is necessary to ensure reliability as the AEP Ohio distribution network continues to grow as a result of customer retention, new customer growth, and adoption of innovative technologies that expand the need for a robust distribution network. The Company also proposes continuation and modification to the Bad Debt Rider ("BDR"), and the Smart City Rider.

a. Distribution Investment Rider ("DIR")

The Company proposes to continue the DIR that has previously been approved in the Company's prior ESPs, with modifications; namely, new annual revenue caps on spending to be established for the term of the proposed ESP V, which excludes "obligation to serve" customer investments. The DIR program supports the replacement of aging infrastructure and the improvement of system reliability. Established in ESP II and continued in ESP III and ESP IV, the DIR will continue under the proposed ESP V to provide capital funding for distribution assets needed to support distribution asset management programs, distribution capacity and infrastructure additions driven by customer demand. Company witness Kratt's testimony explains the current state and functionality of AEP

Ohio's distribution system as well as the need for DIR including the need to excise any new customer/growth related distribution infrastructure investment from the DIR caps. Company witness Forbes' testimony explains the planned investments supporting the Company's proposed annual DIR. Company witness Swick explains the need and types of physical security investments proposed under the DIR Work Plan. Company witness Mayhan describes proposed revenue requirement caps for reliability investments from the June 2024 through May 2027 and that the Company will revisit revenue caps for reliability investments under the DIR Work Plan for the remaining years of ESP V (June 1, 2027 through May 31, 2030). Company witness Newman explains the economic benefits of the DIR Work Plan.

Case No. 23-106-EL-RDR

The findings and recommendations from this audit is the subject of this report.

APPENDIX B: DATA REQUESTS AND INFORMATION PROVIDED

1-1. **PRIORITY: DIR Filings**: Please provide, in electronic format, the work papers and schedules that support the Rider DIR filings for each quarter in 2022. Please provide any source data in its original electronic format

1-2. **PRIORITY: Work Orders in DIR**: Please provide in Microsoft Excel format a list of work orders by FERC account, including project identification numbers, that comprise plant to be recovered through Rider DIR for the period January 1, 2022, through December 31, 2022. Include the description, dollar amount, completion date, and whether the work was an addition or replacement. Please specifically identify blanket project work orders and associated project identification numbers.

1-3. **PRIORITY: Rider DIR Preparation**

- Please provide a narrative of all changes, if any, from the prior year filing in how the Rider DIR is prepared. Include sources for all components, how components are gathered and entered, and approval requirements (i.e., who is authorized to approve, for what items are approvals needed, and when are approvals needed in the process).
- Please provide any changes from the prior year filing regarding those persons who provide and/or compile information for the filing. Please provide the name, title, and department of each such person. Each person should be available for interview.

1-4. **PRIORITY: Major Projects**: Please provide a list of all non- blanket major projects over $500,000 included in plant in service for 2022, Include a description of the project and the associated work order number.

1-5. **PRIORITY: Responsible Persons:** Please provide any additions to or changes from last year regarding those persons who provide and/or compile information for the filing. Please provide the name, title, and department of each such person for any changes.

#	Name	Position
1	Jaime Mayan	Director Regulatory Services
2	Jack Kincaid	Director of Accounting
3	Shannon Liggett	Account Supv.
4	Matthew Curtis	Managing Director D Procurement & SC Ops
5	Ryan Forbes	Director Distribution Engineering
6	Matthew Murray	Accountant Supv.
7	Rich Williamson	Manager of Regulatory Pricing & Analysis
8	Thomas Sulhan	Managers of Property Accounting
9	Jason Yoder	Director Regulatory Accounting Service
10	Curt Heitkamp	Regulatory Case Manager

1-6. **PRIORITY: DIR Workorder Population Recon:** Please provide a reconciliation of the list of work orders provided in Data Request 1.2 to the amounts included in the December 31, 2022, DIR Filing.

1-7. **PRIORITY: FERC Form 1 Recon:** Please provide a reconciliation of the Rider DIR balances to the balances in the 2022 FERC Form 1.

1-8. **Prior DIR Audit Adjustments and Recommendations:** Case No. 22-89-EL-RDR. The 2021 DIR Compliance Audit Report included the following recommendations. Please provide the status of the adjustments/recommendations.

- **Adjustment #1**: At this time the Commission has not decided the disputed recommendation in Case Nos. 20-0169-EL-RDR and 21-0016-EL-RDR concerning the Company's override of Line 41 limitation in the DIR formula. Moreover, no parties have filed comments supporting the Company's viewpoint in response to the respective audit reports Blue Ridge submitted on August 28, 2020, and September 1, 2021. As Blue Ridge cannot rely on the inference that the updated DIR formula for investments after December 31, 2019, should apply retrospectively, we carry forward the prior audit recommendation. The impact reduces the Company's under-recovered DIR revenue position and fully adjusted revenue requirement as of December 31, 2021, by $2.96 million.
- **Adjustment #2**: For months in which the Company is below the revenue cap, any 2021 plant adjustment that Blue Ridge proposes will flow through to the Fully Adjusted Revenue Requirement via the over/under adjustment at Line 41 of the Q4 2021 filing. The Company was above the revenue cap for the entire year. Therefore, the impact of the plant adjustments was zero.

Blue Ridge identified two work orders associated with projects considered not used and useful:
2a. Work Order W0032169: Land purchased for project was not used and useful as of 12/31/21. The Company made the transfer back to CWIP in 2022. Thus, the DIR is overstated by $510,000 (amount subject to check by the Company).
2b. Work Order T10192037: Mount St. Station is useful but not used in rendering service to the customer; therefore, the DIR is overstated by $3,492,382 (amount subject to check by the Company).

- **Recommendation #1**: Blue Ridge recommends that the Companies continue to make a concerted effort to reduce the volume of backlog work orders, both in quantity and dollar value.
- **Recommendation #2**: Blue Ridge continues to recommend that the Company establish a tracking mechanism to ensure that work orders are unitized on a timely basis. Failure to do so might result in inaccurate charges to depreciation and the reserve because unitizations are not performed timely.
- **Recommendation #3**: Blue Ridge recommends the Commission require the Company to make an adjustment to reverse the impact of the ADIT reclass entry it recorded in October 2021 so that it does not over-recover relative to the Case No. 20-0585-EL-AIR benchmark in future filings or explain why any adjustment to reverse the impact would not be appropriate.
- **Recommendation #4:** Blue Ridge notes that cost element 143 appears to include a small amount of costs related to non-construction activities (e.g., grievance settlements, signing bonus, and educational assistance). Although the amounts are negligible, Blue Ridge recommends that charges should be better defined and monitored going forward to ensure non-construction costs are not included as capitalized costs recovered through the DIR.

1-9. **PRIORITY: Organization Chart:** Please provide a current organization chart of the Company.

1-10. **FERC and Other Regulatory Audits**: Please provide a copy of all FERC and/or other regulatory audit reports, if any, that were issued during 2022. Also provide the Company's response to any findings and the ultimate resolution of those findings.

1-11. **Policies and Procedures**: Please identify any and all changes since the 2021 Rider DIR filing in the policies and procedures and/or flowcharts for the following activities that provide input into the Rider DIR revenue requirements and cost of service models

(a) Plant Accounting
  5.1. Capitalization
  5.2. Preparation and approval of work orders
  5.3. Recording of CWIP, including the systems that feed the CWIP trial balance;
  5.4. Application of AFUDC
  5.5. Recording and closing of additions, retirements, cost of removal and salvage to plant
  5.6. Unitization process based on the retirement unit catalog
  5.7. Application of depreciation
  5.8. Contributions in Aid of Construction (CIAC)
  5.9. Damage Claims.
(b) Purchasing/Procurement
(c) Accounts Payable/Disbursements
(d) Accounting/Journal Entries
(e) Payroll (direct charged and allocated)
(f) Taxes (Accumulated Deferred Income Tax, Federal, State, and local Income Tax)
(g) Insurance recovery
(h) Allocations
(i) Work Management System
(j) Information Technology
(k) Capital Spares
(l) Vegetation Management

1-12. **Policies and Procedures**: Please specifically explain any changes since the 2021 Rider DIR filing in any of the policies and procedures that affect the Rider DIR revenue requirements and cost of service models that would have a bearing on any shift in the recording of costs from operating expense to capital.

1-13. **Budget**: Please provide the budget supporting the Compliance Filings under audit. Also, please include the assumptions supporting the budget/projected data.

1-14. **Budget**: Please provide the total actual capital dollars spent and the approved budget by operating company and by functional area (i.e., Transmission, Distribution, General, and Other Plant) for the time period under audit.

1-15. **Policies and Procedures**: Please explain the Companies' cost containment strategies and practices in relation to use of outside and inside contractors.

1-16. **Storm Costs:** Please provide copies of any post-storm assessments that review the detail of the project costs for proper accounting classification.

1-17. **Replacement Programs**: Did the companies have any large construction and/or replacement programs in 2021, such as pole replacement, meters, underground lines, etc.? If so, for each, please identify the program, company, and project or work orders associated with the program.

1-18. **Approval Signatures:** Please provide the Level of Signature Authority (LOSA) document that supports the approval of capital projects put in service from January 1, 2022, through December 31, 2022. Please provide the titles and PRA Role for the employees who were listed as Required Signatures for the Funding and Approval on any of the projects.

1-19. **Internal Audits:** Please provide a list of internal audits completed in 2022 or in progress as of December 31, 2022, that includes audits of any Company systems that feed CWIP. List the name of the audit, scope, objective, and when the work was performed. The DIR represents CWIP closed to Plant. Therefore, any feeder system that charges distribution work orders (such as Payroll, M&S, Transportation, Employee Expenses, Overheads, Contractor Costs, etc.) has costs closing to Plant in Service through CWIP and would be included in the DIR.

1-20. **SOX Compliance Audits**: Utility Plant in Service is fed from CWIP. Therefore, any system that feeds CWIP, including but not limited to WMS, Payroll, M&S, Overheads, AFUDC, Transportation, and direct contractor charges through purchasing, could have an impact on UPIS and, therefore, the DIR. Please provide any SOX compliance audits performed in 2022 on any of those feeder systems that in one form or another feed CWIP or any other SOX compliance work that impacts the preparation of the DIR. Include whether the controls passed or failed and, if failed, the severity and impact of the failure on the DIR.

1-21. **Variance Analysis**: Please provide a Microsoft Excel spreadsheet in FERC Form 1 format (by FERC 300 account) of the beginning and ending period balances, additions, retirements, transfers, and adjustments for the period January 1, 2022, through December 31, 2022.

1-22. **Variance Analysis**: Please provide a Microsoft Excel spreadsheet of the jurisdictional accumulated reserve for depreciation balances by FERC 300 account for January 1, 2022, through December 31, 2022.

1-23. **Budget:** Please provide the 2022 capital budget supporting the plant spend in the 2022 DIR Compliance Filings. Also, please include the assumptions supporting the budget/projected data.

1-24. **Capital Dollars Spent:** Please provide the 2022 total actual capital dollars spent as compared to the approved budget.

1-25. **DIR Plan:** Please provide the 2022 DIR Plan provided to Staff showing the estimated and actual spend on Ohio Distribution plant.

1-26. **DIR Plan Reconciliation to DIR Compliance Filing:** Please reconcile the DIR Plan provided to Staff to the capital dollars included within the DIR.

1-27. **Unitization Backlog**: Please provide, by company, information regarding the backlog in the unitization of work orders for 2022. Please provide the number of work orders and the length of time in months by functional area (i.e., Distribution, Transmission, General, and Other).

1-28. **Unitization Backlog**: Please provide the dollar value of the work order backlog by work order classification (Distribution, Transmission, General, and Other). For any individual specific work order/project over $250,000, and not a blanket or program, please provide the work order / project number and a short description of the project.

1-29. **Depreciation:** Please provide any changes that have taken place in the approved depreciation accrual rates by FERC 300 account in 2022. Please indicate the Commission order that approved the rates for each company and the Service Company.

1-30. **Depreciation:** Does the Company use a depreciation rate for any FERC 300 sub account that has not been approved by the Commission? If so, please provide the following for any changes made in 2021.

(a) FERC 300 account, sub account

(b) Depreciation accrual rate used
(c) Analysis supporting the use of the accrual rate
(d) Effective date of the rate
(e) Any filings with the Commission for approval

1-31. **ADIT**: Please provide a list of ADIT included within Rider DIR for 2022.

1-32. **Excess ADIT**: Please provide a reconciliation of the Excess ADIT balance reflected in the DIR as of January 1, 2022, and December 31, 2022.

1-33. **Tax Changes and Provision**s:
(a) Describe the process used to review tax changes and provisions.
(b) Provide a list of tax changes and provisions that have been considered during 2022 that could affect items that are reflected in Rider DCR.
(c) Describe how tax changes and provisions have been incorporated into the items reflected in the Rider and quantify the effect of those changes.

1-34. **Riders/Surcharges:** Please provide a comprehensive list of riders and surcharges that were in effect for the Company during 2022. Of the list of riders, please indicate which, if any, provide for recovery of Distribution Plant. For each of those riders, please show in detail how AEP coordinated cost recovery between them and Rider DIR. Include supporting workpapers.

1-35. **Exclusions:** Please provide project ID and a list of work orders by FERC account used for the following types of work in the testing period January 1, 2022, through December 31, 2022.
(a) gridSMART Phase 2 Rider
(b) Enhanced Service Reliability Rider (ESRR)
(c) Energy Efficiency and Peak Demand Reduction (EE/PDR)
(d) Any other capital work recovered through a rider other than those listed above or through the Rider DIR

1-36. **Exclusions:** Please confirm that the following information provided in prior audits is still correct.
- Storm Damage Recovery Rider (SDRR) allows recovery of O&M related incremental storm restoration costs from major storms that are above the baseline of $5.12 million. Capital expenditures for all major and non-major storms are recovered through the DIR. (2019 – Data Request 2-027)
- SMARTCity Rider allows the Company to recover the O&M related Smart City technologies. There are no capital activities for SMARTCity initiatives. (2019 – Data Request 2-028)

1-37. **Exclusions:** Enhanced Service Reliability Riders (vegetation management program): Please provide each ESRR rider filing for capital assets placed in service during 2022. If the capital amount recovered is different from the amounts reflected in the quarterly DIR filings, please reconcile and explain the difference.

1-38. **Exclusions**: gridSMART Phase II: Please provide each gridSMART Phase II rider filing for capital assets placed in service during 2022. If the capital amount recovered is different from the amounts reflected in the quarterly DIR filings, please reconcile and explain the difference.

1-39. **Exclusions**: Energy Efficiency and Peak Demand Reduction Cost Recovery Riders: Please provide each EE/PDR rider filing for capital assets placed in service during 2022. If the capital amount recovered is different from the amounts reflected in the quarterly DIR filings, please reconcile and explain the difference.

1-40. **Plant Held for Future Use**: Please provide any 2022 changes to the description provided in the 2020 audit of the item(s) included within the exclusion labeled Remove Plant for Future Use.

1-41. **Inactive Work Orders:** Please provide an “inactive work order report” as of 12/31/22.

1-42. **Base Distribution Revenues**: Please provide screen shots of the query used to determine the base distribution revenues for each month of 2022 that can be used to verify the amounts of base distribution revenue included in the Company’s quarterly DIR filings for 2022.

1-43. **Insurance Recoveries:** Please provide a list of Insurance Recoveries charged to capital from January 1, 2022, through December 31, 2022. Please separate damage claim recoveries from other recoveries.

1-44. **Insurance Recoveries:** Please provide a list with explanations of any pending insurance recoveries not recorded or accrued that would be charged to capital. Indicate the type of recovery, estimated amount, and when receipt is expected. Please separate damage claim recoveries from other recoveries.

1-45. **DIR Program Spend**: Please provide the projected and actual capital spend in 2022 for each DIR program.

1-46. **AFUDC**: Please provide the AFUDC interest rate for 2022, including the calculation and supporting documentation.

1-47. **Budget:** Please provide a Ohio Power/AEP document that approves the capital budget.

1-48. **Budget vs. Actual:** Please provide a variance analysis, cumulative by year, that shows budget by category, actual, variance, and explanations for variances over and under budget, broken down, if possible, between blanket and specific projects.

2.1. **Workorder Sample -** Reference Company response to BR-1-002. Please refer to the attached list of work orders selected from the population of work orders provided in response to the reference data request. For each work order on the attached list, please provide the following information in Microsoft Excel spreadsheets:

a. Detailed description, scope, and objective of the work, including service area location and any other identifiers (budget mapping)
b. A report at a project level with a reference to the sample workorder that includes
    i. Approval at the highest Management level based on the dollar value of the work order in accordance with the Level of Signature Authority (LOSA) document in effect at the time the work order was prepared.
    ii. Work order identification as either addition, replacement, non-project allocation, or other.
    iii. For specific work orders (non blankets) detailed project justification along with alternatives considered.
    iv. Budget and actual costs with explanation for cost variances +/- 15%
    v. Estimated and actual in-service dates with explanation for delays > 90 days.
c. Estimates for cost of construction, material, labor, AFUDC, overheads, retirements, cost of removal, salvage and CIAC's.
d. Work Order supporting cost detail by cost categories. Examples: labor, material, AFUDC, A&G, transportation etc.
e. Supporting detail for retirements, cost of removal and salvage, if applicable, charged or credited to plant (units and dollars) for replacement workorders from the Power Plan Fixed Asset system.
f. An updated list of cost elements
g. Cost element detail that shows the individual workorder, FERC account, and amount as selected in the sample. Considering that a workorder may consist of more than one FERC accounts, the cost element detail can also include other WBS or Projects as long as the individual FERC account charge selected in the sample is visible.

Notes:

- Blue Ridge removed the 106 Reversals (credits) from the work order selection. We understand that the 106 reversals (Credits) moves the charges from completed construction not classified to Utility Plant in Service (UPIS). We will audit the charges in UPIS (FERC 101 Debits) and Debits to FERC 106 that have not been reclassified to UPIS.
- To avoid unnecessary work by ensuring gathered data is what we need, please send a sample of the detail that will be provided.
- In the interest of time and associated deadlines, please provide the data in batches as they are completed.

Work Order	Activity Cost
7900199	$34,044,377.95
7900299	$5,420,618.22
42710211	$2,573,087.63
42738032	$6,601,239.70
42811601	$1,641,844.89
BOP0000001	$12,463,603.91
BOP0000018	$1,540,519.14
DOP0316665	$40,056.47
DOP0325743	$407,420.22

Work Order	Activity Cost
DOP0329033	$3,676,890.22
DOP0336788	$44,146.22
DOP0337873	$100,755.46
DOP0339472	$42,130.08
DOP0340318	$1,592,663.20
DOP0344522	$3,977,325.74
DOP0345440	$312,466.90
DOP0346488	$466,160.32
DOP0347900	$344,652.96
DOP0348921	$182,372.26
DOP0351337	$64,256.78
DOP0351997	$659,521.03
DOP0352332	$165,180.07
DOP0353096	$1,324,391.19
DOP0353810	$29,049.45
DOP0354526	$15,506.00
DOP0356674	$35,830.58
DOP0357254	$335,918.84
DOP0358111	$189,515.84
DOP0358843	$136,755.36
DOP0359914	$147,515.15
DOP0360545	$7,642,630.18
DOP0361148	$98,040.93
T10065134	$1,660,101.44
T10074241	$620,142.81
T10091877	$2,077,757.49
T10120323	$6,425,858.54
T10211060	$2,261,245.66
T10245851	$1,950,243.29
T10298956	$1,909,077.51
T10322979	$1,002,820.45
T10378842	$1,006,478.88
T10388906	$1,918,874.33
TS0243076	$1,523,974.83
TS0259676	$125,782.21
W0033215	$157,229.02
W0035210	$15,582,565.25

3.1. Follow-up to Data Request response BR-01-043-Insurance Recoveries. Please provide the accounting for the insurance claim charged to capital in 2022 of $884,411. Include the work order number and indicate whether this was a credit to the DIR. If not a credit to the DIR, please explain why.

3.2. Follow-up to Data Requests response BR-01-019-Internal Audits. The response indicated that no internal audits were completed in 2022 of any Company systems that feed CWIP. The intent of the Data Request was to review all internal audits completed in 2022, including those that feed CWIP. Please provide a list of internal audits completed in 2022 or in progress as of December 31, 2022.

4.1. **Variance Analysis**: Follow-up to BR-01-021. For each of the following accounts, please explain fully why Additions are significantly greater than Retirements

a. 36216 Station Equipment—SmartGrid
b. 36600 Underground Conduit
c. 37300 Street Lghting & Signal Sys

4.2. **Variance Analysis**: Follow-up to BR-01-021. For each of the following accounts, please explain fully why Retirements are high in relation to Additions.

a. 36000 Land
b. 37000 Meters

c. 37016 AMI Meters

4.3. **Variance Analysis**: Follow-up to BR-01-022. For each of the following accounts, please explain fully why Cost of Removal is greater than Retirements.
a. 36400 Poles, Towers, and Fixtures
b. 36600 Underground Conduit

4.4. **Variance Analysis**: Follow-up to BR-01-022. For each of the following accounts, please explain fully why Cost of Removal is high in relation to Retirements.
a. 36000 Land
b. 36900 Services

5.1. **Work Order Testing:** Follow-up to Data Request Response BR-02-001, Work Order 42738032. For the period July 2020 through January 2022, the work order accrued AFUDC of approximately $427,000. During that period the Company had other charges of approximately $4,350. Of those charges, $1,120 were either utility payments or overheads. In addition, the work order did not have any charges between November 2020 through August 2021. Please justify why the Company continued to accrue AFUDC when very little, if any, activity was taking place on the project during the period July 2020 through January 2022.

5.2. **Work Order Testing:** Follow-up to Data Request Response BR-02-001, Work Order T10245851. Please explain why the Company continued to accrue AFUDC of $52,228 for the period December 2020 through April 2021 when there was no other project activity.

5.3. **Work Order Testing:** Follow-up to Data Request Response BR-02-001, Work Order 42710211. For the period June 2017 through September 2021, the work orders accrued AFUDC of approximately $950. During that period the Company had other charges of $8,640. Of those charges, $1,277 were either utility payments or overheads. Please justify why the Company continued to accrue AFUDC when very little, if any, activity was taking place on the project during the period from June 2017 through September 2021.

5.4. **Work Order Testing:** Follow-up to Data Request Response BR-02-001, Work Order TS0243076—Mobile OP-23 Rebuild, Program TA2016913—Capital Spares.
a. Please provide a list of the Capital Spares purchased in 2022. Include the size of the spare, cost of the spare, lead time to purchase the spare, and the current status of the spare (either in service, reserve, or other).
b. Please provide a list of Capital Spares refurbished in 2022. Include the size of the spare, cost to refurbish, and current status of the spare (either in service, reserve, or other).

5.5. **Work Order Testing:** Follow-up to Data Request Response BR-02-001, Work Order T10388906. The scope of work indicated that the customer would pay a CIAC of $1.7m. The cost detail did not indicate a CIAC was recorded.
a. Was the CIAC collected?
b. If so, when was it recorded?
c. if not collected, why was it not?

5.6. **Work Order Testing:** Follow-up to Data Request Response BR-02-001, Program T2018156—New Lexington-Shawnee 69 kV Rebuild, Work Order W0033215. Please explain the two land purchases of $10,000 and $121,406 in June 2020 and November 2020, respectively.

5.7. **Work Order Testing:** Follow-up to Data Request Response BR-02-001. For the following work orders, please explain why salvage was not recorded.
a. Work Order 07900299—Customer Meter/OP
b. Work Order DOP0316665—DS-OP-AI Other Make Ready
c. Work Order DOP0339472—DS-OP-Small Wire Repl Ovhd
d. Work Order DOP0340318—Cols. South Netwrok PILC
e. Work Order DOP0345440—OPPortWashMultiPhase
f. Work Order DOP0354526—DS/OP/CS-Upgrades
g. Work Order TS0259676—D/OH NonSpecific Stati CO REG
h. Work Order W0035210—LED Light Replacement

5.8. **Work Order Testing:** Follow-up to Data Request Response BR-02-001. For the following work orders, please provide the quantities that were retired.
a. Work Order 42710211—Monroe Street Distribution
b. Work Order T10091877—Trabue Sta OP-D
c. Work Order T10211060—State Mills Station Failure

d. Work Order T10298956—North Middlepoint - Station
e. Work Order T10322979—Byesville TR-1 Failure
f. Work Order T10378842—Linworth XF#3 Failure
g. Work Order T10388906—Payne Station Install/Removal
h. Work Order TS0243076—Mobile OP-23 Rebuild
i. Work Order TS0259676—D/OH NonSpecific Stati CO REG

5.9. **Work Order Testing:** Follow-up to Data Request Response BR-02-001, regarding Work Order W0035210—LED Light Replacement. Please explain why retirements were not recorded.

5.10. **Work Order Testing:** Follow-up to Data Request Response BR-02-001. For the following replacement work orders, please explain why no Cost of Removal was charged.

a. Work Order 42710211—Monroe Street Distribution
b. Work Order DOP0351337—Ds-Op-Ai Other Make Ready
c. Work Order DOP0352332—Ds-Op-Ai Other Make Ready
d. Work Order DOP0360545—OP/Wind Storm 6/13/22
e. Work Order T10091877—Trabue Sta OP-D
f. Work Order T10211060—State Mills Station Failure
g. Work Order T10298956—North Middlepoint - Station
h. Work Order T10322979—Byesville TR-1 Failure
i. Work Order T10378842—Linworth XF#3 Failure
j. Work Order T10388906—Payne Station Install/Removal
k. Work Order TS0243076—Mobile OP-23 Rebuild

5.11. **DIR Plan Reconciliation to DIR Compliance Filing:** Follow-up to Data Request Responses BR-01-001, Attachment 4, and BR-01-026, Attachment 1. Please explain where the December 2022 D Plant Balance of $7,238,049,284.67 comes from, as the 2022 FERC Form 1 and the 2022 DIR Filing show a December 2022 Distribution Plant Balance of $6,444,769,482.

5.12. **GS Exclusions:** Follow-up Data Request Response BR-01-001, Attachment 4, and Application in Case No. 23-484-EL-RDR. In the GS Phase II tab, please explain the $32,731.79 difference between the Total Distribution (A) Book Cost and the December 2022 Cumulative Gross Plant Amounts in the 2023 gridSMART. The difference appears to be in FERC Account 37016 AMI Meters.

From DIR Filing		
2021 Total Distribution (A) Book Cost	290,923,835.46	2021 BR-DR-01-001 Att 4
2022 Total Distribution (A) Book Cost	322,666,000.84	2021 BR-DR-01-001 Att 4
Difference (2022 Activity)	31,742,165.38	(A)
From 2023 GS Filing		
December 2021 Cumulative Gross Plant	290,923,835.46	Case No. 23-484-EL-RDR (workpaper 1)
December 2022 Cumulative Gross Plant	322,631,269.05	Case No. 23-484-EL-RDR (workpaper 1)
Difference (2022 Activity)	31,707,433.59	(B)
2022 Activity from DIR Filing	31,742,165.38	(A)
2022 Activity from GS Filing	31,707,433.59	(B)
Difference	(34,731.79)	(B)-(A)

5.13. Work Order Testing: Follow-up to Data Request Responses BR-01-002, BR-01-035, BR-02-001. The following work orders were not found in the list of GridSmart work orders to be excluded from the DIR (BR-01-035). Please explain why the following work orders / charges to FERC 36216-Station Equipment-SmartGrid were not excluded from the DIR.

Work Order	Description	Amount included in FERC 36216 - Station Equipment-SmartGrid	Total
42710211	Monroe Street Distribution	$31,933.76	$2,573,087.63
42738032	Reaver Substation - D Station	$87,184.92	$6,601,239.70
42811601	Newcornerstown 138/12 kVxmer	$788.82	$1,641,844.89
T10091877	Trabue Sta OP-D	$133,445.91	$2,077,757.49

T10388906	Payne Station Install/Removal	$26,691.41	$1,918,874.33

5.14. Work Order Testing: Follow-up to Data Request Response BR-02-001. The following work orders were approved in 2023 but placed in-service in 2022. Please explain the delay in approval.

Work Order	Approvals	In-Service Date
DOP0348921— St Clair Av D-Line UG—$182,372.26		202211
T10074241— Shannon Station Expansion—$620,142.81		202212

5.15. Work Order Testing: Follow-up to Data Request Response BR-02-001. The following DISTBLKOP blanket work orders were approved in 2023 but placed in-service in 2022. Please explain the delay in approval.

07900199	Customer Meter/Op	$34,044,377.95	
07900299	Customer Meter/Op	$5,420,618.22	
BOP0000001	DS/OP/CS New Customers	$12,463,603.91	
BOP0000018	OP-Failed Equip No Outage	$1,540,519.14	
DOP0316665	DS-OP-AI Other Make Ready	$40,056.47	
DOP0325743	OP/Columbus Rd Rebuild	$407,420.22	
DOP0337873	OP/Hudson Street PPR	$100,755.46	
DOP0340318	Cols. South Netwrok PILC	$1,592,663.20	
DOP0345440	OPPortWashMultiPhase	$312,466.90	
DOP0346488	DS0Op-AI-Support CS-C-I	$466,160.32	
DOP0347900	Warsaw-Nellie Relocate Line US	$344,652.96	
DOP0351337	Ds-Op-Ai Other Make Ready	$64,256.78	
DOP0352332	Ds-Op-Ai Other Make Ready	$165,180.07	
DOP0353810	Ds-Op-Ai Other Make Ready	$29,049.45	
DOP0354526	DS/OP/CS-Upgrades	$15,506.00	
DOP0356674	DS-OP-Ai Ckt Inspection	$35,830.58	
DOP0358111	1 Ph OH Line rebuild or relo	$189,515.84	
DOP0358843	DS-OP-Ai Ckt Inspection	$136,755.36	
DOP0359914	DS-OP-Ai Ckt Inspection	$147,515.15	
DOP0360545	OP/Wind Storm 6/13/22	$7,642,630.18	
DOP0361148	Single Phase UG Line Rebuild	$98,040.93	

5.16. Work Order Testing: Follow-up to response to Data Request BR-02-001. For each of the work orders in the following chart, please respond to these items:

a. Please explain why the work order closing was delayed and also calculate any over-accrual of AFUDC.
b. If the Company determines that AFUDC was not over-accrued for the project, please explain why.
c. Please provide the AFUDC by month from project inception to in-service date.

Work Order	**Description**	**Activity Cost**	**Last in-Service Date**	**Estimated Completion**	**Delay**
42738032	Reaver Substation - D Station	$6,601,239.70	12/1/22	3/31/20	975
DOP0344522	OSU - F-7705 D-Line Ug	$3,977,325.74	11/1/22	6/30/22	124
T10065134	Shawnee Station Upgrades	$1,660,101.44	12/31/22	12/1/21	395
T10091877	Trabue Sta OP-D	$2,077,757.49	12/31/22	6/1/22	213
T10211060	State Mills Station Failure	$2,261,245.66	12/31/22	6/30/21	549
T10245851	Newcornerstown 138/12 kVxmer	$1,950,243.29	4/1/22	6/15/19	1021
T10298956	North Middlepoint - Station	$1,909,077.51	12/1/22	6/1/22	183
TS0243076	Mobile OP-23 Rebuild	$1,523,974.83	2/1/22	6/1/20	913
W0033215	Shawnee Land Purchase	$157,229.02	11/1/22	6/30/22	124

5.17. Work Order Testing: Follow-up to responses to Data Requests BR-01-002, BR-01-035, and BR-02-001. Please verify that the following work orders by FERC Accounts were excluded from the DIR.

Work Order	Description	FERC Accounts included in BR-01-035	2022 Activity	Amount to Exclude (Additions+ Retirements)
DOP0325743	OP/Columbus Rd Rebuild	36500 - Overhead Conductors, Device	$407,420.22	$174,277.75
DOP0340318	Cols. South Netwrok PILC	36700 - Undergrnd Conductors,Device	$1,592,663.20	$1,127,925.58
DOP0346488	DS0Op-AI-Support CS-C-I	36500 - Overhead Conductors, Device	$466,160.32	$277,633.35
DOP0360545	OP/Wind Storm 6/13/22	36500 - Overhead Conductors, Device	$7,642,630.18	$8,011,564.68

5.18. **Work Order Testing:** Follow-up to Data Request Response BR-02-001. For the following list of work orders, the Program Revision Preparation Documentation indicated that the customer would pay a CIAC. However, the cost detail did not indicate a CIAC was recorded.

a. Was the CIAC collected?
b. If so, when was it recorded?
c. if not collected, why was it not?

Work Order	Description	CIAC Credits	Activity Cost	CIAC in Cost Detail
BOP0000001	DS/OP/CS New Customers	-$13,572,410	$12,463,604	-$2,992,910
DOP0354526	DS/OP/CS-Upgrades	-$13,572,410	$15,506	$0
DOP0316665	DS-OP-AI Other Make Ready	-$10,083,565	$40,056	$0
DOP0346488	DS0Op-AI-Support CS-C-I	-$10,083,565	$466,160	$0
DOP0351337	Ds-Op-Ai Other Make Ready	-$10,083,565	$64,257	$0
DOP0352332	Ds-Op-Ai Other Make Ready	-$10,083,565	$165,180	$0
DOP0353810	Ds-Op-Ai Other Make Ready	-$10,083,565	$29,049	$0
DOP0325743	OP/Columbus Rd Rebuild	-$1,263,273	$407,420	$0
DOP0337873	OP/Hudson Street PPR	-$1,263,273	$100,755	$0
DOP0340318	Cols. South Netwrok PILC	-$1,263,273	$1,592,663	$0
DOP0345440	OPPortWashMultiPhase	-$1,263,273	$312,467	$0
DOP0347900	Warsaw-Nellie Relocate Line US	-$1,263,273	$344,653	$0
DOP0356674	DS-OP-Ai Ckt Inspection	-$1,263,273	$35,831	$0
DOP0358111	1 Ph OH Line rebuild or relo	-$1,263,273	$189,516	$0
DOP0358843	DS-OP-Ai Ckt Inspection	-$1,263,273	$136,755	$0
DOP0359914	DS-OP-Ai Ckt Inspection	-$1,263,273	$147,515	$0
DOP0361148	Single Phase UG Line Rebuild	-$1,263,273	$98,041	$0
07900199	Customer Meter/Op	-$776,789	$34,044,378	$0
T10378842	Linworth XF#3 Failure	-$62,000	$1,006,479	$0
BOP0000018	OP-Failed Equip No Outage	-$32,675	$1,540,519	$0
DOP0360545	OP/Wind Storm 6/13/22	-$32,675	$7,642,630	$0
TS0259676	D/OH NonSpecific Stati CO REG	-$25,513	$125,782	$0
T10322979	Byesville TR-1 Failure	-$4,502	$1,002,820	$0
T10091877	Trabue Sta OP-D	-$220	$2,077,757	$0

5.19. **DIR Plan Reconciliation to DIR Compliance Filing:** Follow-up to Data Request Responses BR-01-026 Attachment 1.

a. Please explain the "known difference" indicated on the DR response attachment of Salerno 138KV Substation (DP17C14L0) $266,070.
b. Please provide a narrative as to how the EPIS Reconciliation reconciles to the DIR Compliance Filing.

6.1. **GS Exclusions:** Follow-up to Data Request Response BR-01-035. Please confirm that BR-01-035, Attachment 1, includes gridSMART Phase 3 work orders.

6.2. **Work Order Population:** Follow-up to Data Request Response BR-01-002. Please provide Attachment 1 (additions) and Attachment 2 (retirements) in Excel format listing all work orders by FERC Account, Project ID, description, and dollar amount. Note: This should basically be the population of work orders with the addition of Project IDs associated with the work orders.

7.1. **FIELD VISITS**: As a continuation of the audit process, we have selected certain work orders / projects from the work order sample for detailed desktop audits and virtual field verification. These audit activities will be completed via video conference. The purpose of the field verification is to determine whether the assets have been installed per the work order scope and description and contain detailed information related to installation and retirement, engineering data, and other documentation that supports that the project was necessary, reasonable, prudent, and used and useful.

Blue Ridge will conduct the audit with support from experienced representatives from the Ohio PUC Staff.

To coordinate the desktop and field audits, a call will be scheduled among Blue Ridge, Staff, and AEP for on Friday, July, 21 after 10am or Tuesday, July 25 (early morning).

To assist Staff in that endeavor, please provide or have available, the following items:

a. For the day(s) of the audit:
    i. An individual(s) who can coordinate all the virtual field verification and technology to allow remote streaming of the site walk through
    ii. Representatives from AEP who can describe the projects in detail
    iii. The Project Manager or a person who was responsible for the work on each project to answer questions, if necessary
b. Prior to the day of the audit:
    i. Schematics, other drawings, and photos and any other visual aids that indicate what was built or installed
    ii. A list of material and equipment installed along with any applicable serial numbers
    iii. Project justification statement and work order completion cost data for direct cost (e.g., labor, material, equipment)
    iv. A list of major equipment removed (retired) from service and vintage year of those assets

Project	Work Order	Project Description	Activity Cost
DR19C14E0	DOP0353096	Astor - Rp Feeder Exit Cables	$ 1,324,391
DP20C08E0	DOP0329033	Bixby - UG Feeder Exits	$ 3,676,890
P16108006	42710211	Monroe Street Distribution	$ 2,573,088
P16117003	42811601	Newcornerstown 138/12 kVxmer	$ 1,641,845
P16117003	T10245851	Newcornerstown 138/12 kVxmer	$ 1,950,243
DP20C18B0	T10298956	North Middlepoint - Station	$ 1,909,078
DP21C15E0	DOP0344522	OSU - F-7705 D-Line Ug	$ 3,977,326
P20135007	T10388906	Payne Station Install/Removal	$ 1,918,874
P19017015	T10074241	Shannon Station Expansion	$ 620,143
DR21C03B0	T10065134	Shawnee Station Upgrades	$ 1,660,101
DP21C20E0	DOP0348921	St Clair Av D-Line UG	$ 182,372

8.1. **Unitization Backlog**: Follow-up to Data Request Response BR-01-027. Does the Company have any work orders with a greater-than-12-month backlog?

8.2. **Unitization Backlog**: Follow-up to 2021 Data Request Response BR-01-025 and 2022 Data Request Response BR-01-027. The Company provided the following information pertaining to the 2021 work order backlog.

Backlogged	Ohio Power - Distr		Ohio Power - Transm	
	Amount	Work Orders	Amount	Work Orders
Over 100 months	$356,488	8	$0	-
Over 48 months	$356,488	8	$222,805	5
Over 24 months	$3,965,929	89	$1,247,708	28
Over 12 months	$48,838,856	1096	$4,857,149	109
Less than 12 months	$477,783,042	10722	$51,601,638	1,158
Grand Total	**$531,345,364**	**11924**	**$57,929,300**	**1,300**

Please update the information for the backlog ending 12/31/22 using the following format.

Backlog	Ohio Power-Distri		Ohio Power-Transm	
	Amount	Work Order	Amount	Work Order
Over 100 months				
Over 48 months				
Over 24 months				
Over 12 months				
Less than 12 months				
Grand Total				

9.1. Follow-up to Data Request response BR-05-006 Work Order Testing: Program T2018156—New Lexington-Shawnee 69 kV Rebuild, Work Order W0033215. The work order covers two land purchases—one in June 2020 and another in November 2020.

a. What was the total amount paid for each parcel of land?
b. How did the Company determine the fair market value for the purchases?
c. If an independent evaluation was done to determine the fair market value of the land purchases, please provide the evaluation for each parcel.
d. If an independent evaluation was not done, please provide whatever data was used to justify the cost for each parcel.
e. If the Company paid a negotiated price for the land parcels, how much over or under the fair market value was the cost for each parcel?

9.2. Follow-up to Data Request response BR-05-019. Please answer the following questions pertaining to the below work orders

a. Were the CIAC credits received in 2022?
b. If so, why did they not show up in the cost detail provided.

Work Order	Description	CIAC Credits	Activity Cost	CIAC in Cost Detail	CIAC Credit
BOP0000001	DS/OP/CS New Customers	($13,572,410)	$12,463,604	($2,992,910)	$3,537,948
DOP0354526	DS/OP/CS-Upgrades	($13,572,410)	$15,506	$0	$161,105
DOP0316665	DS-OP-AI Other Make Ready	($10,083,565)	$40,056	$0	$10,477
DOP0352332	Ds-Op-Ai Other Make Ready	($10,083,565)	$165,180	$0	$14,198
DOP0353810	Ds-Op-Ai Other Make Ready	($10,083,565)	$29,049	$0	$12,091

9.3. Follow-up to the Field Audit conducted on August 14 and 15. Regarding Work Order DOP0353096—Astor Station, please respond to these items:

a. Please confirm that distribution feeders F 4609 and F 4601 are in service but not being used.
b. Are the costs of the F 4609 and F 4601 feeders included in the total project cost of $1,324,391, which is included in Plant in Service for this work order? If so, respond to these questions:
   i. What is the estimated cost of each of the F 4609 and F 4601 feeders?
   ii. When are these feeders expected to become operational?

9.4. Follow-up to the Field Audit conducted on August 14 and 15. Regarding Work Order DOP0329033 Bixby—UG Feeder Exits, please respond to these items:

a. Please confirm that feeder F7109 is in service but not being used.
b. Is the cost for the feeder included in the total project cost of $3,676,890, which is included in Plant in Service? If so, respond to these questions:

i. What is the estimated cost for feeder F 7109?
ii. If the primary purpose of the work order was to install and energize feeder F 7109, what additional scope was done opportunistically as a secondary benefit not necessarily required for the installation of the F 7109 feeder, and was that work in the original scope?

9.5. Follow-up to the Field Audit conducted on August 14 and 15. Regarding Work Order T10298956—North Middlepoint -Station, the scope of this work was to address forecasted capacity constraints because a customer was expected to add 650 campsites from 2021 through 2023. Please respond to these associated questions:
   a. As of December 31, 2022, how many of the approximately 650 new campsites are permanent sites?
   b. How many of the permanent sites are occupied and operational as of December 31, 2022?
   c. What is the forecasted date when all permanent new camp sites will be occupied and operational?
   d. Did the Company collect a Contribution in Aid of Construction (CIAC)? If not, why not?
   e. How many permanent campsites need to be operational in order for the Company to recover through revenue the cost of construction? .
   f. What was the peak load (demand and usage) for the permanent sites from project inception to December 31, 2022?
   g. Did the scope of work include upgrading existing sites (50 amps to 200 amps) to coincide with the new sites? If so, how many sites were updated, and of those how many are permanent and occupied?

10.1. **DIR Over/Under Calculation.** Please provide the source data and calculations used to derive the monthly inputs in column “1/12 RR Not Subject to Cap”.

10.2. **DIR Over/Under Calculation.** Please provide the source data used for the monthly inputs in column “Billed DIR”.

11.1. Follow-up to Data Request Supplemental Response BR-DR-5-010, parts a-k. Please respond to these items:
   a. Regarding part a, what is ABM Code 584?
   b. Regarding part a, was the $97,924,94 of Cost of Removal closed to utility plant (106 or 101) rather than to the reserve (108)? If not, where was the cost of removal charged?
   c. Regarding parts b–d, please confirm that these work orders were closed in 2022 to utility plant and the cost of removal to the accumulated reserve and that they were included in the CEP.
   d. Regarding parts b–d, what is the amount of cost of removal individually by work order as of December 31, 2022?
   e. Regarding parts e–k, was cost of removal recorded to the utility plant accumulated reserve (FERC 108) as of December 31, 2022? If not, were the dollars in utility plant (FERC 106 or 101) as of December 31, 2022? If neither, where were the dollars as of December 31, 2022?
   f. Regarding parts e–k, what is the amount of cost of removal, individually by work order, as of December 31, 2022?

12.1. GS Work Orders Recovered in the DIR: Follow-up to Data Request 2021 and 2022 Response BR-01-001 Attachment 4, 2022 Responses BR-01-035 and BR-06-002.

It appears that Line 1 of BR-01-001 Attachment 4 Distribution Plant includes gridSMART amounts that have not been excluded in Line 11 gridSMART II Net Plant Adjustment.

Data Request BR-06-002 provided the total population of work orders (additions and retirements) that support the incremental change from 2021 to 2022 in Distribution Plant. Data Request responses BR-01-035 and BR-06-002 were used to identify gridSMART work orders. Blue Ridge isolated the gridSMART work orders in the total population (BR-06-002) and found gridSMART work orders that were not excluded from the DIR recovery.

The population of distribution plant work orders totals $376,462,522.49. Based on a combination of Data Request responses BR-01-035 and BR-06-002 (provided in the attachment) the population includes $36,893,895.95 of gridSMART work orders. However, the DIR model excludes only $31,742,165.38 of book costs, leaving an extra $5,151,703.57 of gridSMART charges being recovered in the DIR. Please explain.

We have provided the attached to help guide you through the logic behind this request.

12.2. 2021 Adjustment #2: Follow-up to response to Data Request responses BR-01-001 Attachment 3, BR-01-002, and BR-01-008. The Company stated that the work order W0032169—Pumpkin—$510,000 adjustment was made within the Q3 2022 DIR Filing. BR-01-001 Attachment 3 indicates that work order W0032169 was removed from in-service in July 2022. Please identify the line number within the work order population where this work order was removed and provide the associated accounting entry or other support for the adjustment.

13.1. Case No. 20-0585-EL-AIR set the 2022 Revenue Cap at $91 million, plus a $5 million incentive for meeting the 2021 SAIDI metric of 87.8. Please provide supporting documentation (e.g., regulatory filing, performance report, Staff response, etc.) demonstrating that AEP met the 2021 SAIDI metric.

APPENDIX C: WORKPAPERS

Blue Ridge's workpapers were provided to the PUCO Staff per the RFP requirements. Workpapers that support Blue Ridge's analysis are listed below.

- XXX

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