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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO. ER-2024-0319

DIRECT TESTIMONY

OF

JOSEPH S. WEISS

ON

BEHALF OF

UNION ELECTRIC COMPANY

D/B/A AMEREN MISSOURI

St. Louis, Missouri June, 2024

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1		DIRECT TESTIMONY
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3 4		JOSEPH S. WEISS
5		I. INTRODUCTION
6	Q.	Please state your name and business address.
7	A.	My name is Joseph S. Weiss. I am an Assistant Vice President with Concentric Energy
8		Advisors, Inc. ("Concentric"). My business address is 293 Boston Post Road, Suite 500,
9		Marlborough, Massachusetts 01752.
10	Q.	On whose behalf are you submitting this testimony?
11	A.	I am testifying on behalf of Union Electric Company d/b/a Ameren Missouri ("Ameren
12		Missouri" or the "Company").
13	Q.	Please describe your educational background and professional experience in the
14		energy and utility industries.
15	A.	I have over 18 years of direct experience in the public utility industry primarily as a
16		consultant. I have provided support for filings with several utility commissions and filed
17		testimony as an expert witness before the Corporation Commission of Oklahoma, the
18		Illinois Commerce Commission, the Maine Public Utilities Commission, and the Public
19		Utilities Commission of Ohio. I have also previously appeared before the Missouri Public
20		Service Commission (the "Commission") as an expert witness on cash working capital. I
21		have an M.B.A. from Southern Illinois University Edwardsville and a B.S. in Business
22		Administration with a major in Accounting and Finance from Saint Louis University. My
23		curriculum vitae, as well as a listing of my prior testimonies is provided in Schedule JSW-
24		D1.

1 Q. Please describe Concentric's activities in energy and utility engagements.

Concentric provides financial, regulatory and economic advisory services to many energy A. 2 and utility clients across North America. Our regulatory, economic, and market analysis 3 services include utility ratemaking and regulatory advisory services, energy market 4 assessments, market entry and exit analysis, corporate and business unit strategy 5 development, demand forecasting, resource planning, and energy contract negotiations. 6 Our financial advisory activities include both buy and sell side merger, acquisition and 7 divestiture assignments, due diligence and valuation assignments, project and corporate 8 9 finance services, and transaction support services. In addition, Concentric provides litigation support services on a wide range of financial and economic issues on behalf of 10 clients throughout North America. 11

12

II. PURPOSE OF TESTIMONY

13 Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to provide my assessment and recommendation
 pertaining to the reasonableness of Ameren Service Company's ("AMS") services and
 associated costs billed to Ameren Missouri.

17 III. OVERVIEW OF AMEREN MISSOURI AND KEY AFFILIATES FROM

18

WHICH IT RECEIVES OR TO WHICH IT PROVIDES SERVICES

- 19 Q. Please provide an overview of Ameren Missouri.
- A. Ameren Missouri is an operating energy company that is a subsidiary of Ameren
 Corporation. The Company provides energy to more than 1.2 million electric and 135,000

1	natural gas customers in central and eastern Missouri. The Company's service area covers
2	64 counties and more than 500 communities, including the greater St. Louis area.

Q. Please describe Ameren Corporation.

Ameren Corporation ("AMC") is the parent company of Ameren Missouri. AMC was 4 A. formed in 1997 as a result of the merger of Union Electric Company and Central Illinois 5 Public Service Company ("CIPS"). In its 1997 order approving the merger of Union 6 Electric and CIPS, the Missouri Commission also approved the formation of AMS, which 7 is a centralized service company that provides various corporate support services to AMC 8 9 affiliates at cost.

- In 2003, AMC acquired Cilcorp, and its operating utility Central Illinois Light 10 Company. AMC acquired Illinois Power Company from Dynegy in 2004. AMC's Illinois 11 utilities merged to become Ameren Illinois Company ("AIC") in 2010. 12
- Presently, AMC's operations consist of rate regulated utilities operating in 13 Missouri, Illinois, and in interstate commerce under the jurisdiction of the FERC. 14
- **Does Ameren Missouri receive services from AMC?** 15 Q.
- No. AMC has no employees and provides no services to Ameren Missouri but shares in 16 A. certain costs and benefits due to owning 100% of Ameren Missouri's stock. 17
- 18

IV. SERVICES PROVIDED BY AMS TO AMEREN MISSOURI

- 0. Please describe AMS. 19
- 20 A. AMS is a service company that was originally formed to take advantage of synergies gained by eliminating redundant functions at both Ameren Missouri and CIPS subsequent 21 to their merger that could more cost-effectively be combined into one service company. 22
- 23 Q. Was the formation of the service company required by law?

1	А.	Yes. The Public Utility Holding Company Act of 1935 ("PUHCA") directed the United
2		States Securities and Exchange Commission ("SEC") to flatten the corporate structure of
3		utilities to remove unnecessary corporate layers. Individual operating utility companies
4		were required to centralize certain business operations into central service companies, but
5		all service companies would be subject to SEC and Federal Power Commission regulation.
6		In 1977, the Federal Power Commission was replaced by the FERC.

At the time of Ameren's formation, PUHCA required the utilization of such a service company and required that services be provided at cost. As a result, when a state utility commission regulated a utility in a particular state, the ratepayers of that state would pay only the share of any common service company expenses associated with that state's electric company allocated to it under SEC-approved formulas to prevent a holding company from double recovering its expenses when it operates in more than one state and to ensure each state paid its fair share of costs.

Although PUHCA has now been largely repealed, some functions formerly assigned to the SEC under PUHCA were transferred to the FERC at the time of the PUHCA repeal by Congress' adoption of the Energy Policy Act of 2005. FERC regulations adopted under that Act continue to require the use of cost-based pricing for service companies.¹

Q. Did the Missouri PSC approve the merger of Union Electric and CIPS, as well as the formation of AMS?

¹ 18 CFR § 35.44 – Protection against affiliate cross-subsidization. Section (b)(3) of the rule states: "A franchised public utility that has captive customers or that owns or provides transmission service over jurisdictional transmission facilities, may only purchase or receive non-power goods and services from a centralized service company at cost."

1	A.	Yes. In Case No. EM-96-149, the Missouri Commission approved the merger of Ameren
2		Missouri (then doing business as Union Electric) and CIPS that resulted in the formation
3		of AMS. The Commission's order stated:
4 5 6 7 8		In addition, the Commission finds the proposed merger transaction, as reflected in the contractual agreement contained as a part of the Union Electric Company filing of November 7, 1995, and subject to the conditions and modifications as set out in the above Stipulation and Agreement, is not detrimental to the public interest.
9		The Stipulation and Agreement approved by the order specifically referenced the
10		General Services Agreement ("GSA") under which AMS agreed to provide Ameren
11		Missouri corporate support services at cost. The Stipulation states that a "Utility Service
12		Company" will "provide administrative and general or operating services to UE and [its
13		affiliates]" and defines "Service Agreement" as the GSA between AMS and its affiliates.
14		That GSA was part of the record before the Commission in the merger case. While the
15		Commission did not explicitly use the words "we hereby approve the formation of AMS,"
16		the Commission approved the merger that created the corporate structure that included
17		AMS and AMS's provision of services to Ameren Missouri and the other affiliates, and
18		clearly understood that AMS would provide services under the GSA at cost.
19	Q.	What services does AMS provide to Ameren Missouri?
20	A.	AMS provides administrative support services. AMS' services include typical corporate
21		functions such as accounting, legal, building management, information technology, etc.
22		The preponderance of transactions from AMS to Ameren Missouri pertain to corporate
23		shared services provided by AMS.
24	Q.	How does Ameren Missouri determine both the services to procure from AMS, and

the extent of the services it will receive from AMS?

1 A. As discussed in the direct testimony of Ameren Missouri witness Laura M. Moore, Ameren Missouri and AMS follow, on an ongoing basis, a Joint Planning and Procurement process 2 and a Demand Planning process. These processes, which are followed in concert with the 3 other, are used during each budget cycle and include ongoing reviews of AMS services and 4 spend as each budget year progresses. Under those processes, Ameren Missouri 5 determines its need for various services, the value of those services, and the level of the 6 services it will receive from AMS. 7

Q. Does Ameren Missouri also have the option to self-provide or use a third-party to
provide some or all of these services?

A. Yes, except for those services that necessarily arise from AMC's status as a publicly traded
 company that owns 100% of Ameren Missouri's stock, Ameren Missouri has the option to
 self-provide a service, utilize the service of a non-affiliated service provider, or retain AMS
 to provide defined services.

14 Q. Are the services provided by AMS to Ameren Missouri necessary and appropriate?

15 A. Yes. The services that Ameren Missouri receives from AMS are both necessary and 16 appropriate. The manner in which the services are provided to Ameren Missouri by AMS 17 is consistent with how numerous other regulated utility companies obtain such services.

Q. Are the services provided by AMS to Ameren Missouri covered by a Cost Allocation Manual ("CAM")?

- A. Yes. The manner by which AMS' services are provided and charged to Ameren Missouri is set forth in the GSA, which is also included as an appendix in the CAM. Among other things, the GSA or the CAM:
- Requires the services be provided at cost;

1		• Codifies recordkeeping and access to records requirements, including documentation
2		of affiliate transactions, and the continued provision of detailed affiliate transaction
3		reporting for all products and services provided by AMS (and other affiliates), not
4		just to Ameren Missouri, but to all AMC affiliates;
5		• Codifies certain detailed reporting requirements;
6		• Requires that all affiliate transactions be conducted under a written contract between
7		Ameren Missouri and AMS; and
8		• Requires the formation and implementation of an Ameren Missouri CAM Team to
9		aid in Ameren Missouri's compliance with the Affiliate Transactions Rules.
10	Q.	Are the services provided by AMS to Ameren Missouri the same as those which AMS
11		provides to Ameren Illinois?
12	A.	Yes. The services provided by AMS to Ameren Missouri and Ameren Illinois are
13		essentially the same.
14	Q.	Are service companies, such as AMS, common in the energy industry?
15	A.	Yes. As a result of industry mergers and acquisitions, many stand-alone, single
16		jurisdictional energy companies have merged or been acquired. In an effort to increase
17		efficiencies, ensure consistent practices throughout the organization, and reduce costs, the
18		post-merger integration of common functions at an affiliated service company has been a
19		common trend throughout the United States. Service companies similar to AMS file Form
20		60 annual reports with the FERC. The Form 60 report is an annual regulatory support
21		requirement under 18 CFR 369.1 for centralized service companies. The report is designed
22		to collect financial information from centralized service companies subject to the
23		jurisdiction of the FERC.

1 Q. Have you prepared a Schedule identifying the service companies which filed a Form 60 annual report, and the affiliated companies to which the service companies 2 provided services, and the services provided? 3 Yes, I have included this information in Schedule JSW-D2. 4 A. 5 Q. Please describe what Schedule JJR-D2 shows. Schedule JSW-D2 identifies the service companies and affiliated companies to which 6 A. services are provided, as well as the services provided to the affiliated companies. 7 Schedule JSW-D2 shows that 34 utility service companies filed FERC Form 60 annual 8 reports for calendar year 2023.² Reviewing these reports, the service companies provided 9 services to 667 affiliated companies, including many regulated utilities. 10 Based upon your review of the scope of services offered by AMS to Ameren Missouri, Q. 11 are the services provided consistent with those of other service companies in the 12 energy industry? 13 Yes. In my experience, the services provided by AMS to Ameren Missouri are consistent 14 A. with those provided by other service companies to affiliated regulated utilities. Schedule 15 JSW-D2 further supports my experience and conclusion. 16 Based upon your experience, is the use of the shared services model prevalent today 17 Q. in the energy industry? 18 Yes. Based upon both my personal knowledge of the energy industry, as well as the 19 A. 20 number of Form 60 reports filed with the FERC, service companies continue to be widely used throughout the energy industry in the United States. 21 Q. To what do you attribute the extensive use of service companies? 22

² Schedule JSW-D2 represents the service companies that filed the FERC Form 60 for 2023, but presents data from the 2022 filing.

A. Beyond the fact that the PUHCA required the use of service companies, many of the 1 mergers that have been consummated in the energy industry have been premised, in part, 2 upon the realization that the combined companies could produce savings from the 3 elimination of duplication in public company/back room" functions, and many non-4 customer-facing corporate functions. There are economies of scale that can be achieved 5 by eliminating duplicative roles and functions when two companies merge (e.g., one 6 accounting, human resources, information technology, procurement, etc. function). 7 Further, the merged companies would most likely be able to perform required tasks with 8 9 fewer staff than the individual operating companies were able to achieve. This approach benefits the holding company (here AMC) and the customers of its operating utilities 10 (including Ameren Missouri) alike because between rate reviews the lower overall costs 11 the service company delivers inures to the benefit of shareholders and ultimately to the 12 benefit of customers in the form of lower cost of service and rates. 13

14

V. COST OF AMS' SERVICES

15 Q. Does AMS direct charge for its services when the service is only to one affiliate?

16 A. Yes, it does.

Q. When the direct assignment of costs is not possible, are AMS' services provided to
 Ameren Missouri and its other affiliated companies at the fully distributed cost of
 providing those services?

A. Yes, they are (and that is true for directly charged services as well). All costs incurred by AMS are either directly charged (when the cost applies only to one affiliate) or allocated using a service request system, but regardless of how the cost of the services are charged,

they are always priced at AMS's fully distributed cost with no mark-up or profit
 component.

Q. How does the Commission's affiliate transaction rule, 20 CSR 4240-20.015, define "fully distributed cost" or "FDC"?

5 A. Section (1)(F) of the Rule defines fully distributed cost as "a methodology that examines 6 all costs of an enterprise in relation to all the goods and services that are produced. FDC 7 requires recognition of all costs incurred directly or indirectly used to produce a good or 8 service. Costs are assigned either through a direct or allocated approach. Costs that cannot 9 be directly assigned or indirectly allocated (e.g., general and administrative) must also be 10 included in the FDC calculation through a general allocation."

Q. Does Ameren Services Company profit from the services provided to its affiliated companies?

A. No. All AMS charges reflect the direct cost of providing that service or product. There is
 no profit margin built into the charges, and AMS operates on a zero-profit basis.

Q. Are the costs of AMS's services the same as if Ameren Missouri were to self-provide the services?

- A. The services are, at worst, the same as if Ameren Missouri were to self-provide the services.
 It is more likely, however, that due to the economies of scale realized by centralizing the
 shared services at AMS, the services are provided at a cost lower than if Ameren Missouri
- 20 were to self-provide the services on a stand-alone basis.
- 21 Q. Please explain.

A. There are inherent efficiencies realized by consolidating common functions at one
 company, as opposed to requiring each operating company to individually perform each

1		service. Given that AMS provides similar services to Ameren Missouri, AIC, and other
2		affiliated companies, AMS is likely able to perform the required services with fewer
3		personnel, and thus at a lower cost, than if each AMC subsidiary were to be individually
4		fully staffed to provide all services. In other words, there are economies of scale realized
5		by consolidating similar functions across the AMC companies.
6	Q.	Based upon your review of the manner by which AMS charges Ameren Missouri for
7		its services, can you conclude that AMS's costs are market based?
8	A.	Yes. AMS is a large scale, efficient organization which provides services at cost, without
9		mark-up or profit, where the costs consist primarily of the wages, salaries and benefits of
10		AMS employees. The wages, salaries and benefits AMS pays and provides are market
11		based. Therefore, it is reasonable to conclude that AMS's costs are market based.
12	Q.	Please explain.
13	A.	The cost of goods and services provided by AMS to its affiliated companies consists of
14		two primary cost components $-(1)$ wages and benefits of AMS employees and (2) goods
15		and materials.
16		With regard to wages and benefits, employees of AMC subsidiaries receive market-
17		based wages and benefits. To ensure that the employees are provided a reasonable
18		compensation package, the AMS Human Resources Department routinely benchmarks
19		total compensation packages (i.e., wages and benefits) against local, regional and national
20		companies. Its goal is to provide a total compensation package that represents the median
21		of the market (i.e., 50 th percentile). Therefore, the total cost of Ameren Missouri's and
22		AMS' total wages and benefits are reflective of the market. Ameren Missouri witness
23		Kelly Hasenfratz discussed how the Company establishes market-based total compensation

- and benefits in her direct testimony filed in File No. ER-2019-0335 and I have confirmed
 with the Company that the testimony in that proceeding continues to accurately reflect
 Ameren's market-based approach to total compensation.
- Further, AMS provides its goods and services to Ameren Missouri at cost (i.e.,
 without mark-up or profit). All other non-affiliated service providers' services would
 include a mark-up and/or profit component in the pricing of their goods and services.

In addition, AMS' procurement of labor and other goods and services at market prices and its subsequent charging for its services at cost means that the cost of goods and services provided to Ameren Missouri by AMS can reasonably be concluded to be both priced at or below market and priced at cost. This is because the wages and benefits paid to all employees of the Ameren companies are benchmarked at the 50th percentile of market and, similarly, AMS uses procurement procedures and policies for non-employee-related costs also designed to ensure that good and services are obtained at market prices.

Q. What additional steps has Ameren Missouri taken to ensure the reasonableness of the cost of services provided to it by AMS?

A. Ameren Missouri has formed a CAM team and meets extensive reporting and recordkeeping requirements, going well beyond existing legislative and regulatory requirements, to continually oversee the dealings between AMS and Ameren Missouri. In my experience, Ameren Missouri is going beyond typical practices in overseeing such dealings including by use of a dedicated team to oversee CAM compliance, as well as with its reporting activities to monitor and enforce compliance with the requirements set forth in the CAM.

Q. Do you believe that Ameren Missouri would be able to procure the services provided by AMS from an unaffiliated company at a lower cost?

AMS follows well-established and well-designed procurement policies and 3 A. No. procedures that provide for solicitation of competitive bids when appropriate so that it is 4 obtaining qualified service providers and other goods it needs to provide its services at 5 reasonable, market-based prices. Given that AMS provides its services to Ameren 6 Missouri at cost, and that it benchmarks its wages, salaries and benefits to the market, I do 7 not believe that Ameren Missouri could procure its services at a lower cost from a non-8 9 affiliated service provider.

Q. Are there examples of services that AMS has outsourced, on behalf of Ameren Missouri, to a non-affiliated service provider?

A. Yes. Examples of services outsourced by AMS, on behalf of Ameren Missouri, include lock box services, administrative work involving buying, selling, registering shares of Ameren stock, printing and distribution of customer bills, certain vegetation management services, and janitorial services. AMS also uses outside services and suppliers in some instances as it provides its services to the affiliates when specialized knowledge or expertise is needed, or to supplement AMS employee resources when appropriate.

Q. Are there Missouri legal requirements that govern a utility's transactions with affiliated companies?

A. Yes, 20 CSR 4240-20.015 and 20 CSR 4240-40.015 set out the Commission's rules for affiliated transactions for electric and gas utilities, respectively. Ameren Missouri is both an electric and gas utility, and the Company's CAM applies to both electric and gas utility affiliate transactions. The rules are intended to prevent regulated utilities from subsidizing

their nonregulated operations. Put another way and as I discuss below, the regulations are 1 designed to prevent unfair preferential treatment of affiliates to the detriment of the 2 Company's customers. In order to accomplish this objective, the rule sets forth financial 3 and evidentiary standards and recordkeeping requirements applicable to any Commission-4 regulated electrical corporation whenever such corporation participates in transactions with 5 any affiliated entity (except with regard to HVAC services as defined in section 386.754, 6 RSMo.). The rule and its effective enforcement are intended to provide the public with the 7 assurance that their rates are not adversely impacted by the utilities' nonregulated activities. 8 9 Q. Has the Commission described the intent of the affiliate transaction rules in prior orders? 10 Yes, on at least two occasions. In its July 1, 2008 Report and Order in File No. EM-2007-A. 11 0374, the Commission granted Greater Missouri Operations ("GMO") and KCP&L a 12 variance to the Affiliate Transactions Rule for all transactions between GMO and KCP&L, 13 except for wholesale power transactions, which would be based on rates approved by the 14 FERC. At page 264, of the Commission's Report and Order, it noted that "the purpose of 15 the Commission's Affiliate Transactions Rule is to prevent cross-subsidization of regulated 16 utility's non-regulated operations, not to prevent transactions at cost between two regulated 17 affiliates." In 2018 when the Commission approved the merger of Great Plains Energy 18 (KCP&L's and GMO's parent) and Westar Energy, it essentially extended that variance to 19 20 Westar Energy, KCP&L and GMO's affiliated utility in Kansas operating under the

21 supervision of the Kansas Corporation Commission.³

³ File No. EM-2018-0012

Q. Is it possible that by centralizing the shared services Ameren Missouri could potentially be subsidizing non-regulated affiliates?

First, AMC has no material non-regulated operations. Second, as previously 3 A. No. mentioned, AMS' services are provided at cost, which is determined by prevailing 4 wages/benefits and actual incurred expenses. Therefore, there is no issue of potential 5 6 subsidies from ratepayers to unregulated affiliates. The pricing of affiliated services only has a material effect on which jurisdiction's customers are responsible for, and benefit 7 from, the cost of providing a service. Essentially, all costs are attributable to one set of 8 9 regulated customers or the other (i.e., Ameren Missouri versus AIC versus ATXI). Put another way, the cost standard for affiliate transactions is appropriate because the question 10 being addressed is what costs (which are in any event consistent with the market) should 11 be included in the rates for each set of customers in the AMC utility family. 12

13 Q. Are AMS' costs billed to affiliated companies subject to regulatory review other than

14

by the Missouri Commission?

A. Yes. AMS' costs billed to its affiliated FERC rate regulated subsidiaries have been, and
 continue to be, reviewed by the FERC. The FERC audit staff has not found any significant
 deficiencies in in its most recent audit and the FERC has never disallowed any of AMS'
 charges to the Company's transmission customers.⁴

⁴ The audit in Docket No. FA10-3-000 identified two immaterial AMS accounting items affecting the Company's tariff billings. The costs disallowed were for lobbying and charitable contributions recorded to O&M accounts that should have been recorded to account 426.1, a below-the-line accounts, which is not an includible account in the Midwest ISO Attachment O template. The audit in Docket No. FA20-6-000 found nine areas of noncompliance. The Company did not contest Staff's proposed findings in the Draft Report and agreed to implement the recommendations contained therein. Ameren submitted an implementation plan with the Division of Audits and Accounting. None of the findings involved improper AMS charges and the resulting accounting adjustments for Ameren Missouri were less than \$500,000.

1		The Illinois Commerce Commission ("ICC") also reviews AMS' charges to AIC
2		during rate proceedings. The ICC has accepted AMS' charges, as well as the allocation
3		methodology, which reflects fully distributed cost.
4	Q.	What do AMS' costs consist of?
5	A.	AMS costs consist of non-fuel operations and maintenance ("O&M") costs, with more than
6		91% of those O&M costs consisting of administrative and general ("A&G") costs, and the
7		cost of other services that under accounting rules are not considered O&M but are instead
8		capitalized on the receiving affiliates' books.
9	Q.	In your opinion, would a reasonable manager, in possession of and with regard for
10		the relevant facts, select AMS to provide these services?
11	A.	Yes. In reaching that conclusion, the facts that would influence the decision maker are:
12		• AMS has provided these services every year for over 25 years and is uniquely qualified
13		to provide continuity of accounting, human resources, legal, payroll, information
14		technology and other services that if Ameren Missouri were a standalone company,
15		Ameren Missouri would have to provide for/or obtain for itself;
16		• As explained in the next section of my testimony, the data indicates that AMS has
17		achieved significant reductions (in real terms) in the cost of providing services;
18		• AMS provides these services on a zero-profit basis which no other provider could do
19		on a sustainable basis;
20		• AMS provides these services to all of Ameren Missouri's regulated affiliates and no
21		regulator has, to date, found these costs to be unreasonable or imprudently incurred;

1		• AMS from time-to-time engages in various exercises that include benchmarking itself
2		to other companies to help ensure that its costs are market-based and uses competitive
3		bidding in accordance with corporate policies for procurement; and
4		• Ameren Missouri can, if it so chooses, reduce the services it takes from AMS in given
5		areas and either self-provide a service or obtain it elsewhere.
6		Simply put, these facts provide a very compelling case that selecting AMS as the service
7		provider is not only a reasonable decision, but also the best decision that the Company can
8		make. This decision by Ameren Missouri is unquestionably prudent.
9		VI. HISTORICAL COST ANALYSIS
10	Q.	Have you prepared an analysis of how Ameren Missouri's customers have benefited
11		from the formation of AMS?
12	A.	Yes. An analysis of Ameren Missouri's administrative and general ("A&G") expense
12 13	А.	Yes. An analysis of Ameren Missouri's administrative and general ("A&G") expense levels from 1999 to 2023 was prepared to determine if its customers have benefited from
	А.	
13	А.	levels from 1999 to 2023 was prepared to determine if its customers have benefited from
13 14	А.	levels from 1999 to 2023 was prepared to determine if its customers have benefited from the formation of AMS concurrent with the merger with CIPS, CILCO and IP. In the twelve
13 14 15	A.	levels from 1999 to 2023 was prepared to determine if its customers have benefited from the formation of AMS concurrent with the merger with CIPS, CILCO and IP. In the twelve months ending March 31, 2024, 91% of the operation and maintenance expense dollars
13 14 15 16	А. Q.	levels from 1999 to 2023 was prepared to determine if its customers have benefited from the formation of AMS concurrent with the merger with CIPS, CILCO and IP. In the twelve months ending March 31, 2024, 91% of the operation and maintenance expense dollars allocated to the Ameren Missouri electric distribution business from AMS included within
13 14 15 16 17		levels from 1999 to 2023 was prepared to determine if its customers have benefited from the formation of AMS concurrent with the merger with CIPS, CILCO and IP. In the twelve months ending March 31, 2024, 91% of the operation and maintenance expense dollars allocated to the Ameren Missouri electric distribution business from AMS included within the revenue requirement were booked to administrative and general expenses.
 13 14 15 16 17 18 	Q.	levels from 1999 to 2023 was prepared to determine if its customers have benefited from the formation of AMS concurrent with the merger with CIPS, CILCO and IP. In the twelve months ending March 31, 2024, 91% of the operation and maintenance expense dollars allocated to the Ameren Missouri electric distribution business from AMS included within the revenue requirement were booked to administrative and general expenses. Please explain the analysis.
 13 14 15 16 17 18 19 	Q.	levels from 1999 to 2023 was prepared to determine if its customers have benefited from the formation of AMS concurrent with the merger with CIPS, CILCO and IP. In the twelve months ending March 31, 2024, 91% of the operation and maintenance expense dollars allocated to the Ameren Missouri electric distribution business from AMS included within the revenue requirement were booked to administrative and general expenses. Please explain the analysis. Starting with data from 1990, the reported A&G expense levels were collected as reported

1	The same analysis was performed for the acquisition of CILCO in 2003 and Illinois Power
2	in 2004.

As shown in Schedule JSW-D3, the A&G cost levels for the merged companies are consistently lower than the sum of the individual stand-alone operating companies' escalated A&G expense levels. This indicates that the merged companies' costs, including AMS' allocated costs, are lower than they would likely have been absent the mergers.

Q. Have you also performed an assessment of Ameren Missouri's costs compared to
 those of similar utilities?

9 A. Yes. I updated the benchmarking analysis performed in File Nos. ER-2019-0335, ER-

2021-0240, and ER-2022-0337 to include an analysis through 2023. I compared Ameren
 Missouri's total non-fuel O&M expense and A&G expense against three peer groups:

1. National Electric Utilities with regulated generation and greater than 50,000
 customers;⁵

Midwest Electric Utilities with regulated generation and greater than 50,000 customers; and

16 3. National Electric Utilities with regulated generation and 500,000 to 2,000,000
 17 customers.

18 Q. What years did the benchmarking analyses review?

A. The six most recent years for which data were available (i.e., 2018-2023) were used to
 perform the analyses. This represents the years reviewed in File No. ER-2019-0335, File

⁵ Hawaii Electric Light Company, Hawaiian Electric Company, and Maui Electric Company do not file their Electric Financials and Operating data with FERC, but to the Public Utilities Commission of Hawaii. The Public Utilities Commission of Hawaii has different deadlines than FERC and then that data is manually processed by S&P. As of the completion of this analysis the data had not been processed by S&P, so these three companies are not included in the peer group.

1	No. ER-2021-0240, and File No. ER-2022-0337 updated with current data and 2022 and
2	2023 added to the analyses.

3 Q. What was the source of the data used to perform the benchmarking analyses?

- 4 A. The analyses utilized data obtained from the S&P Global Market Intelligence platform.
- 5 The source of the data was the annual FERC Form 1 filings made by electric utilities.
- 6 Q. Did you make any adjustments to the source data?
- 7 A. No.
- 8 Q. How did you normalize the benchmarking analyses to account for differences in the 9 size of the utilities?
- A. To normalize issues related to the size of the companies in the comparison, all costs were
 evaluated on a per customer basis.
- Q. How did Ameren Missouri compare to its peers when reviewing total non-fuel O&M
 cost per customer of the national electric utilities with regulated generation peer
 group⁶?
- A. As shown on Schedule JSW-D4, Ameren Missouri has had below (i.e., better than) the
 national average non-fuel O&M costs in all six years analyzed. Ameren Missouri's total
 non-fuel O&M cost per customer was 14.75% below the national average in 2023.
- Q. How did Ameren Missouri compare to its peers when reviewing just the A&G portion
 of these O&M expenses on a per customer basis?
- A. As shown on Schedule JSW-D5, Ameren Missouri's A&G expense per customer has been
 below the national average A&G expense in all six years analyzed. In 2023, Ameren
- 22 Missouri's A&G cost per customer was 35.73% below the national average.

⁶ Additionally, the peer group included criteria that companies must have greater than 50,000 customers.

Q. Is it possible that these results are biased by the inclusion of higher-cost utilities on 1 the east and west coasts, as opposed to Midwestern utilities? 2 A. No, in fact Ameren Missouri's costs are even more competitive when compared to Midwest 3 utilities.⁷ As shown on Schedule JSW-D6, Ameren Missouri posted results that were 4 25.65% below the average for Midwest utilities for total non-fuel O&M costs in 2023 and 5 6 has been considerably below the regional average each year analyzed. On this basis of comparison, Ameren Missouri is a top performer. 7 Q. How did Ameren Missouri compare to its Midwest peers when reviewing A&G 8 9 expense per customer? As shown on Schedule JSW-D7, Ameren Missouri's A&G cost per customer was more A. 10 than 36% below the regional average in 2023. 11 Q. When the comparisons are limited to the larger utilities, which presumably have 12 economies of scale as AMS has been able to achieve, how does Ameren Missouri 13 compare to the national averages? 14 As shown on Schedule JSW-D8, when compared to national electric utilities with regulated 15 A. generation and between 500,000 and 2 million customers, Ameren Missouri achieved 16 slightly lower-than-average cost levels for total non-fuel O&M in 2023, 4.38% below the 17 large utility peer group average, and has achieved lower-than-average cost levels for total 18 non-fuel O&M each year of the analysis. Even when compared to the smaller subset of 20 19 20 other large utilities, Ameren Missouri is performing well. Q. When compared to the larger companies, how did Ameren Missouri look for just the 21 A&G portion of O&M expense?

⁷ Additionally, the peer group included criteria that companies must have greater than 50,000 customers.

A. As shown on Schedule JSW-D9, Ameren Missouri's A&G cost per customer was below
 the large company peer group average by 21.78% in 2023 and has achieved lower-than average cost levels for A&G each year of the analysis.

4 Q. What can be concluded from the results of these analyses?

As a result of the mergers of Union Electric, CIPS, CILCO, and IP, the Company has been A. 5 able to drive down costs of the businesses. The source of reduced costs is from the 6 consolidation of common corporate and A&G functions which now reside at AMS. These 7 savings result from the elimination of duplicative positions (e.g., a CEO and CFO and 8 9 Treasurer at each operating company, multiple CIOs, multiple General Counsels, etc.) as well as economies of scale attributable to the provisioning of services by a smaller number 10 of employees than the four individual companies could have achieved separately. In 11 addition, AMS and Ameren Missouri engage in continuous improvement and customer 12 affordability efforts that should be expected to contribute to bringing down Ameren 13 Missouri's largest measure of controllable cost, Total Non-Fuel O&M per customer, which 14 is in fact below the peer group average levels for all three of the peer groups I have 15 examined. The numbers indicate that these efforts have delivered significant savings for 16 customers, while maintaining compensation at competitive levels for employees working 17 at AMC subsidiaries. 18

19 **Q.**

Have you expanded the benchmarking?

A. Yes. I have done some additional benchmarking to further assess Ameren Missouri's
 financial and operational performance.

Q. In general, what steps did you take in constructing this additional benchmarking
analysis?

A. The first step of the benchmarking analysis was to define the timeframe over which the analysis was to be performed. The second step was to develop the composition of the peer group used to compare to Ameren Missouri. The third step was to define the financial and operational metrics to be used in the benchmarking and to collect the necessary data to evaluate these metrics.

Q. Ho

6

. How did you select the companies to include in your benchmarking peer group?

A. My objective in determining the peer group was to achieve the largest group of companies
for which consistent data were available and which were, broadly speaking, operationally
similar to Ameren Missouri. Because Ameren Missouri is a large primarily electric utility
with ownership in generating resources, I established a peer group of companies with
electric-only utility operations that have between 500,000 and 2 million customers and own
generating resources. This produced a peer group of 20 comparable companies.

13 Q. What data sources did you rely on for the performance metrics that you developed?

A. I obtained much of the data from FERC Form 1 and U.S. Securities and Exchange
Commission ("SEC") Form 10-K reports (as reported by S&P Cap IQ Pro).

Q. What metrics did you use to assess Ameren Missouri's financial and operational performance?

A. I evaluated Ameren Missouri's performance across a variety of financial and operational metrics to evaluate the Company's cost efficiency. Regarding cost efficiency – the ability to maximize output and minimize costs, I considered expense performance metrics:

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23

- Total Non-Fuel O&M expenses
- Non-Fuel Production O&M expenses
- Transmission O&M expenses

1		Distribution O&M expenses
2		• Administrative and General ("A&G") expenses
3		Customer expenses
4	Q.	Did the metrics account for companies of different sizes?
5	A.	Yes. Most metrics are calculated on an expense per customer or an expense per MWh sold
6		basis.
7	Q.	Have you provided the results of the expense performance metrics?
8	A.	Yes. Schedule JSW-D10 thru Schedule JSW-D23 provides the results of each of the
9		expense performance metrics listed above.
10	Q.	Overall, how did Ameren Missouri compare to its peers in regards to the expense
11		performance metrics?
12	A.	In reviewing the four primary operating functions (generation, transmission, distribution,
13		and customer service), and administrative and general expenses, Ameren Missouri is a
14		strong performer in controlling its expenses per customer. Ameren Missouri was below
15		the peer group mean in every year of the analysis for Non-Fuel Production O&M expenses
16		per customer and Transmission O&M expenses per customer. Ameren Missouri was below
17		the peer group mean for 4 of the 6 years of the analysis for Non-Fuel Nuclear Production
18		O&M per Nuclear MWh Produced, but this expense was above the peer group mean in
19		2021 and just above the peer group mean in 2023. This atypical increase in 2021 was due
20		to the shutdown of the Callaway Energy Center Nuclear Plant for several months. ⁸ While
21		Ameren Missouri was above the group mean in 5 of the 6 years of the analysis for

⁸ Since the denominator of this metric is the annual nuclear MWh produced, the decrease in production caused by a plant shut down for part of the year causes this total metric to increase in that year. Ameren Missouri's Callaway Energy Center shut down in December 2020 as a result of an equipment failure. The plant was back online in August of 2021.

Distribution O&M expenses per customer, its ranking has stayed relatively consistent over each year examined and was below the peer group mean in 2022. Ameren Missouri was below the peer group mean in Administrative and General expenses per customer in every year of the analysis.

Which metrics provide the best indication of Ameren Missouri's overall performance

5 6 Q.

relative to the peer groups?

A. While each metric is significant and may help identify particular areas of strength or 7 weakness, the best indication of Ameren Missouri's overall level of performance in terms 8 9 of cost control, which also provides a good indication of the reasonableness of AMS costs since it provides significant services to Ameren Missouri, is Total Non-Fuel O&M 10 This category covers all four primary operating functions expenses per customer. 11 (generation, transmission, distribution, and customer service), and includes all 12 administrative and general functions which, as noted, make up nearly all AMS O&M costs. 13 Further, this metric has the advantage of removing the effects of differences in fuel costs, 14 which can vary due to availability, location, and state or local environmental policies. 15

Q. Please discuss how Ameren Missouri compares to its peers in regards to the Total Non-Fuel O&M expense metric.

A. Ameren Missouri's performance controlling its non-fuel O&M expense per customer and per MWh sold is strong in each year of my analysis coming in below the peer group average in each year examined in the per customer analysis and right around the peer group average for each year in the per MWh sold analysis.

1		VII. CONCLUSIONS
2	Q.	Based upon your review of AMS and the services that it provides to its affiliated
3		companies, what are your observations and conclusions?
4	A.	My observations and conclusions are as follows:
5		• The use of a shared services organizations, such as AMS, is reasonable and consistent
6		with utility industry practices and its use by Ameren Missouri for the services provided
7		in the test year was prudent and reasonable;
8		• The scope of services offered by AMS to its affiliated companies is consistent with
9		other utility shared services companies with which I am familiar; and
10		• Customers of Ameren Missouri have benefited from the existence of, and services
11		provided by, AMS.
12	Q.	Please summarize what information was relied upon to form the basis of your
13		opinions on prudence and reasonableness.
14	A.	The support I have relied on in arriving at my opinions in this case includes:
15		• My own analysis of utility holding companies, service companies, Ameren Missouri's
16		A&G costs over time, and my benchmarking of Ameren Missouri's non-fuel O&M and
17		A&G costs versus national averages and Midwest utilities presented in my direct
18		testimony.
19		Multiple versions of Ameren Missouri's Cost Allocation Manual
20		• Documentation pertinent to the Joint Planning and Procurement and Demand Planning
21		Processes for 2022 and 2023, and Ms. Moore's direct testimony in this case discussing
22		those processes.

1	• All the testimony submitted in Ameren Missouri's recent electric rate cases (File No.
2	ER-2019-0335 ER-2021-0240, and ER-2022-0337) on affiliate transactions, including
3	Ameren Missouri's filed testimony of Mr. Tom Byrne, Ms. Laura Moore, Mr. Ber
4	Hasse, Ms. Kelly Hasenfratz and Mr. Mitchell Lansford, Staff testimony of Mr. Mark
5	Oligshlaeger and Ms. Kimberly K. Bolin, and the testimony of the Office of Public
6	Counsel witness Mr. Schallenberg.
7	• All of the data request responses provided on the topic of affiliate transaction costs and
8	compliance in the electric rate cases, which includes a very large volume of material
9	on the following topics:
10	• Details of numerous affiliate transactions
11	• Ameren Missouri's corporate policies and procedures for purchasing such
12	services
13	 Ameren Missouri's and AMS's bidding procedures
14	• Organization charts for Ameren Missouri and its affiliates
15	 Information on shared employees
16	• Ameren Missouri's Joint Planning and Procurement procedure
17	 Vendor lists and information for Ameren Missouri and AMS
18	• Details of corporate contracts for AMS
19	• Details of real estate transactions and costs for Ameren Missouri
20	 Cost allocation methodologies
21	 Compensation studies
22	• Tax allocation agreements
23	 Employee training processes

1		• Audits of affiliate transactions
2		• Determinations of the fair market price
3		 AMS's and Ameren Missouri's budgeting processes
4	•	All of the testimony submitted in the CAM docket (File No. EO-2017-0176) including
5		the testimony of Mr. Hasse, Ms. Moore and Mr. Byrne
6	•	All of the data requests responses provided in the CAM docket, which represent another
7		very large volume of information on affiliate transactions, compliance procedures, cost
8		benchmarking and many other topics
9	•	All of the similar material filed in Ameren Missouri's recent gas rate case (File No.
10		GR-2021-0241)
11	•	All of the filings in the Commission's recent affiliate transactions rule workshop (File
12		No. AW-2018-0394)
13	•	Regulatory actions for past Ameren Missouri rate cases and in past rate cases for its
14		utility affiliates, all of which provided for cost recovery for affiliate provided A&G
15		services (e.g., File No. ER-2016-0179 and Illinois Commerce Commission Docket No.
16		16-0262)
17	•	The Commission's decisions in similar cases for other Missouri utilities, including
18		cases for KCP&L (File Nos. EM-2007-0374 and EE-2017-0113), Laclede Gas (File
19		No. GR-2017-0215), and Empire District Electric (File No. AO-2012-0062)
20	•	Missouri and federal statutes relating to the treatment of costs of affiliate transactions
21		In aggregate, my testimony reflects my review of thousands of pages of material in
22		preparing the opinions expressed in my testimony, and my experience in utility
23		regulation.

1 Q. Does this conclude your direct testimony?

2 A. Yes, it does.



JOSEPH S. WEISS

ASSISTANT VICE PRESIDENT

Mr. Weiss has worked on projects involving revenue requirements, class cost of service, allocation and rate design, cash working capital, rate of return, affiliate transactions, and rate case preparation for gas and electric utilities. As a consultant, Mr. Weiss has provided support for filings with several utility commissions and filed testimony as an expert witness on cash working capital before the Corporation Commission of Oklahoma, the Missouri Public Service Commission, the Illinois Commerce Commission, the Maine Public Utilities Commission, and the Public Utilities Commission of Ohio. He has strong quantitative and research skills and experience in accounting issues. Prior to joining Concentric Energy Advisors, Mr. Weiss was a Consultant with Navigant Consulting, Inc. and has worked for a large Midwest investor-owned utility. Mr. Weiss has an M.B.A. from Southern Illinois University Edwardsville and a B.S. in Business Administration (magna cum laude) with a major in Accounting and Finance from Saint Louis University.

Representative Project Experience

Rates/Regulatory Projects

- Worked on a draft report concerning the gas/electric interdependency of the Pacific Northwest Region.
- Supported lead-lag analysis and testimony for a Canadian electric utility.
- Provided rate case support of a gas rate case filing for a Midwestern gas utility. Work included assisting with a lead-lag study.
- Involved in the calculation and support of a return on equity for a natural gas company.
- Assisted with the preparation of six gas and electric rate case filings for a Midwestern utility. The project included work associated with a gas and electric lead-lag study and the preparation of the minimum filing requirements associated with the rate case. Project included post filing support which involved providing responses and corrections to deficiencies identified by the Illinois Commerce Commission in filing requirements and providing required data in response to data requests of the Illinois Commerce Commission.
- Assisted in the effort to collect and organize plant addition documentation for six Midwest utilities associated with the state commission's audit of rate base.
- Involved in the preparation of an electric rate case filing for an electric transmission and distribution provider in Texas. Work included the completion of the rate filing package associated with the rate case.
- Managed the preparation of the minimum filing requirements for a Midwestern holding company that held three different utility companies. Also managed the preparation of a lead-lag study for the utility. Project included post filing support which involved providing responses and corrections to deficiencies identified by the Illinois Commerce Commission in



filing requirements and providing required data in response to data requests of the Illinois Commerce Commission.

- Managed the preparation of a lead-lag study for an electric rate case filing for a utility in Missouri.
- Worked on the completion of the revenue requirement and filing requirements for an interstate pipeline's rate filing.
- Assisted with a review of the reasonableness of the allocation of shared services costs assigned by Ameren Service Company to the Illinois operating utilities. The review included an assessment of the reasonableness of the accumulated costs, allocation factors employed and resulting allocated costs to each operating utility for the services provided. Concentric also benchmarked the costs of services to assess the reasonableness of the allocated costs compared to other companies.
- Provided testimony analyzing the services and related costs provided by companies affiliated with Ameren Missouri.
- Assisted with an allocated cost of service study and rate design related to an electric rate filing for a Midwestern utility.
- Managed the calculation of the revenue requirement and preparation of a lead-lag study for a gas rate case filing for a utility in Missouri.
- Managed the completion of a lead-lag study for an electric rate fling for a Midwestern utility.
- Managed the preparation of gas and electric rate case filings for a Midwestern utility. The project included work associated with a gas and electric lead-lag study and the preparation of the minimum filing requirements associated with the rate case which included the filing of a future test year. Project included post filing support which involved providing responses and corrections to deficiencies identified by the Illinois Commerce Commission in filing requirements, providing required data in response to data requests of the Illinois Commerce Commission, and assisting company with review and development of testimony
- Managed the completion of the revenue requirement and filing requirements for an interstate pipeline's rate filing.
- Managed the completion of a lead-lag study for an electric filing for a Midwestern utility as well as post-filing support.
- Helped to develop a revenue requirement model to comply with a new performance-based formula ratemaking process for a Midwest electric utility.
- Managed the preparation of an initial formula rate filing for a Midwestern electric utility. The project included work associated with the preparation of the minimum filing requirements and the formula rate template. Project included post filing support which involved providing responses and corrections to deficiencies identified by the Illinois Commerce Commission in filing requirements, providing required data in response to data requests of the Illinois Commerce Commission, and assisting company with review and development of testimony.



- Managed the completion of the revenue requirement and minimum filing requirements for an electric rate filing for a utility in Illinois under new legislation as well as subsequent filings. The work included support throughout the rate case process.
- Assisted with an allocated cost of service study related to a gas rate filing for a Northeastern utility.
- Filed expert testimony in support of the company's cash working capital requirement before the Oklahoma Corporation Commission.
- Managed the preparation of minimum filing requirements utilizing a future test year for a gas filing for a Midwestern utility in multiple rate case filings.
- Managed the completion of lead-lag studies and associated testimony on behalf of our client. Testified to the results of the studies before the Illinois Commerce Commission.
- Prepared a lead-lag study and associated testimony on behalf of our client. Testified to results of the study before the Missouri Public Service Commission.
- Prepared a lead-lag study as well as assistance with the development of the revenue requirement and associated testimony on behalf of our client. Testimony was filed as part of as rate proceeding before the Idaho Public Utilities Commission. The work included support throughout the rate case process.
- Managed the completion of a lead-lag study and associated testimony on behalf of the client in its two most recent rate proceedings. Testimony was filed as part of a rate proceeding before the State Corporation Commission of Virginia.
- Managed the preparation of the Minimum Filing Requirements for a Midwestern gas utility's rate filing utilizing a future test year before the Illinois Commerce Commission and the Company's subsequent filing.
- Managed the completion of a lead-lag study and associated testimony on behalf of the client. Also assisted the client with the development of the revenue requirement. Testimony was filed as part of a rate proceeding before the Maine Public Utilities Commission.
- Managed the completion of a lead-lag study and associated testimony on behalf of the client as part of a rate proceeding before the Tennessee Public Utility Commission.
- Prepared a lead-lag study and associated testimony on behalf of the client. Testimony was filed as part of a rate proceeding in West Virginia.
- Managed the completion of a lead-lag study and associated testimony on behalf of the client. Testimony was filed as part of a rate proceeding before the Georgia Public Service Commission.
- Assisted with the preparation of testimony related to shared services and benchmarking in multiple rate proceedings before the Missouri Public Service Commission.
- Market Research Experience
- Conducted research on gas and electric revenue decoupling mechanisms.
- Researched recent and proposed pipeline projects.



• Research to support expert testimony in a return on equity rate proceeding.

Professional History

Concentric Energy Advisors, Inc. (2007 – Present)

Assistant Vice President Senior Project Manager Project Manager Senior Consultant Consultant

Navigant Consulting, Inc. (2006 - 2007)

Consultant

Ameren Corporation (2005 – 2006) Consultant and Tax Intern

Education

Saint Louis University B.S.B.A., Accounting and Finance, magna cum laude, December 2005

Southern Illinois University Edwardsville

M.B.A., August 2013



SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT					
Illinois Commerce Commission									
Ameren Illinois Company	01/15	Ameren Illinois Company	Docket #15-0142	Cash Working Capital (Gas)					
Ameren Illinois Company	04/15	Ameren Illinois Company	Docket #15-0305	Cash Working Capital (Electric)					
Ameren Illinois Company	01/18	Ameren Illinois Company	Docket #18-0463	Cash Working Capital (Gas)					
Ameren Illinois Company	04/18	Ameren Illinois Company	Docket #18-0807	Cash Working Capital (Electric)					
Ameren Illinois Company	02/20	Ameren Illinois Company	Docket #20-0308	Cash Working Capital (Gas)					
Ameren Illinois Company	04/20	Ameren Illinois Company	Docket #20-0381	Cash Working Capital (Electric)					
Ameren Illinois Company	04/21	Ameren Illinois Company	Docket #21-0365	Cash Working Capital (Electric)					
Ameren Illinois Company	01/23	Ameren Illinois Company	Docket #23-0067	Cash Working Capital (Gas)					
Ameren Illinois Company	01/23	Ameren Illinois Company	Docket #23-0082	Cash Working Capital (Electric)					
Maine Public Utilities Co	nmission								
Bangor Natural Gas Company	03/21	Bangor National Gas Company	Docket # 2021-00024	Cash Working Capital (Gas)					
Central Maine Power Company	08/22	Central Maine Power Company	Docket #2022- 00152	Cash Working Capital (Electric)					
Missouri Public Service Commission									
Ameren Missouri	07/14	Ameren Missouri	ER 2014-0258	Cash Working Capital (Electric)					



SPONSOR	DATE	CASE/APPLICANT	DOCKET	SUBJECT					
Public Utilities Commission of Ohio									
Northeast Ohio Natural Gas Corporation	4/23	Northeast Ohio Natural Gas Corporation	Case No. 23-0154- GA-AIR	Cash Working Capital (Gas)					
Oklahoma Corporation Commission									
Arkansas Oklahoma Gas Corporation	01/13	Arkansas Oklahoma Gas Corporation	Cause No. PUD 201200236	Cash Working Capital (Gas)					
Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²						
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1	AES US Services, LLC	 AES Southland Energy, LLC AES Huntington Beach Energy AES Alamitos Energy, LLC AES Clean Energy Services, LLC Indianapolis Power & Light Company IPALCO Enterprises, Inc. AES NA Central, LLC AES Renewable Holdings, LLC The AES Corporation AES Alamitos, LLC AES Big Sky, LLC DPL Inc. AES Ohio Generation, LLC The Dayton Power and Light Company AES Huntington Beach, LLC AES North America Development, LLC AES Hawaii, LLC Miami Valley Insurance Company Macgregor Park, Inc. Miami Valley Lighting, LLC NA Pua Makani Power Partners, LLC AES Shady Point, LLC 	 COO Office Market Operations SY Battery Operations Commercial Operation OPS Monitoring & Ctrl Plant Managers Storms Systems Operations VP, T&D Operations Settlements Customer Service T&D Metering Service Safety Environmental Mgt Strat Acct & Cus Pro Growth & Strg Invest Infrstctr Security Reliability Programs Vendor Discounts US SBU Leader DE Accounting Management - CFO Accounts Payable Technical Accounting FP&A Controller Financial Reporting Fixed Asset Accounting Fixed Asset Accounting Fixed Asset Accounting Treasury 						

¹ Represents the service companies that filed the FERC Form 60 for 2023, but data presented is from the 2022 filing.

² Represents the service companies that filed the FERC Form 60 for 2023, but data presented is from the 2022 filing.

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 Regulatory Accounting Tax Accounting Revenue Accounting Internal Audit IT Governce & Scrity IT Management Cyber Security IT Enterprise Apps IT Collaboration Svc IT Infrastructure IT Networks IT Generation Apps Legal Services Regulatory Affairs Local HR Benefits O&M Talent COE Payroll Total Rewards COE Purchasing Management Logistic & Mat Management A&PM Norms & STDS Asset Management-T&D Insurance A&PM NERC Compliance A&PM Outages & Project Risk Management A&PM Technical Eng Customer Experience Communications

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 Employee Overhead Dollar Pension Clearing Payroll Taxes O&M Digital Customer Exp Operations Tech Digital Prod & ECO IT Digital Operation Digital Sol & Innov Digital Work Exp Emp Overhead Hours O&M US Business Resilience Government Affairs Regulatory New Products US Utilities President Chief Customer Officer
2	Alliant Energy Corporate Services, Inc	 Alliant Energy Corporation Alliant Energy SPE LLC Wisconsin Power and Light Company Interstate Power and Light Company Alliant Energy Resources, LLC Travero, Inc. Cedar Rapids and Iowa City Railway Company Logistics Park Dubuque, Inc. Williams Bulk Transfer Inc. Alliant Energy Investments, Inc. Iowa Land and Building Company Alliant Energy Generation, Inc. Sheboygan Power, LLC Alliant Energy Finance, LLC AE Growth & Development, LLC Comprehensive Energy Solutions, LLC AE Development Holdco, LLC Logistics Park Cedar Rapids, LLC 	 Accounting Operating Administrative Electric production business units – electric production management and administrative services Electric and gas delivery business units – electric and gas delivery management and administrative services Other business units – other management and administrative services Corporate Income tax expenses and benefits incurred Assets owned by the Service Company that provide benefits to the Associate Companies Corporate Secretary Customer Service, Customer Assistance and Customer Relations Design and administration of demand-side management programs

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 Travero Logistics, LLC Travero EQ LLC Regen Fiber LLC 	 Customer billing and payment processing Operations of call center Customer Service, Customer Assistance, Customer Relations, and Research on Product Development and Testing Design and administration of sales and customer assistance programs (other than demand side management programs) Electric Distribution Engineering and Construction Environmental Affairs Facilities Finance Fuels Gas Transmission and Distribution Engineering and Construction Human Resources Information Systems Insurance and Risk Management Internal Auditing Investor Relations Legal Materials Management Power Engineering and Construction Planning System Planning – planning of additions to electric generation and distribution systems Generation Control Center – coordination of the operation of electric generating units Distribution Control Centers – coordination of the operation of electric generating units Energy Market Operations – procures and sells electricity

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
	Ameren Services	• Amoron Corneration	 Transmission – provides expertise regarding transmission service from transmission providers, policy development and representation in various venues Public and Community Affairs Regulatory Shareowner Services Transportation
3	Ameren Services Company	 Ameren Corporation Ameren Development Corporation Union Electric Company Ameren Transmission Company of Illinois Ameren Energy Medina Valley Cogen, LLC Ameren Illinois Company ATX Southwest, LLC ATX East, LLC Ameren Transmission Company, LLC Lucky Corridor, LLC Company 	 Power Ops and Energy Mgmt Controller AER Controllers Ameren Communications Ameren Cyber Ameren Services Center B&CS Executive Continuous Improvement & ATO Controller Corporate Dev, Environmental & Innovation Corporate Internal Audit Corporate Policy, Analysis & Environmental Corporate Strategy, Innovation, Environmental and Risk Corporate Tax Customer & Digital Support Services Customer Experience Digital Facilities & Property Management Financial Services Fuel Human Resources IL Elec Ops & Tech Svcs.

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 IL Energy Transtn, Econ, Comm & Bus Dev IL Gas Ops & Distribution IL Gas Ops & Tech Svcs. IL Ops Administrative IL Regulatory & Financial Services Illinois Administration Legal, Fed Reg & Compliance Missouri Business Services Missouri Economic, Community & Business Dev Missouri Gas Operations Missouri Strategic Initiatives & Operations Support MO Regulatory MO Renewables Development & Environmental Power Ops & Engineering Safety, Security & Ops Oversight Supply Chain Sustainability, Philanthropy & DE&I Trans Ops Plan Policy and Reg Treasurer UE Generation – Nuclear
4	American Electric Power Service Corporation	 Abstract Digital AEP Amazon AEP Appalachian Transmission Company, Inc. AEP Clean Energy Resources LLC AEP Coal, Inc. AEP Credit, Inc. AEP Energy Partners, Inc. AEP Energy Service Gas Holding Company AEP Energy Services, Inc. AEP Energy Supply LLC AEP Energy, Inc. 	 CCO – Administration CCO – Energy Supply CCO – Grid Solutions CCO – Regulated Commercial Operations CEO – Audit Services CEO – Administration CEO – Corporate Human Resources CEO – Legal CEO – Legal CEO – Strategy & Transformation CFO – Administration CFO – Corporate Accounting

Line No. Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
	 AEP Generating Company AEP Generation Resources AEP Indiana Michigan Transmission Company, Inc. AEP Investments, Inc. AEP Kentucky Coal, LLC AEP Kentucky Transmission Company, Inc. AEP Nonutility Funding LLC AEP Ohio Transmission Company, Inc. AEP Ohio Transmission Company, Inc. AEP Oklahoma Transmission Company, Inc. AEP Osite Partners, LLC AEP Renewables, LLC AEP Renewables, LLC AEP Renewables, LLC AEP Retail Energy Partners LLC AEP Table Services, LLC AEP Table Services, LLC AEP Transmission Company, LLC AEP Transmission Company, LLC AEP Transmission Partner LLC AEP Transmission Partner LLC AEP West Virginia Transmission Company, Inc. American Electric Power Company Apple Blossom Wind, LLC Auwahi Wind Energy, LLC Blackhawk Coal Company Bold Transmission, LLC BSE Solutions LLC Central Appalachian Coal Company Conesville Coal Preparation Company CSW Energy, Inc. 	 CFO - Corporate Planning & Budgeting CFO - Investor Relations CFO - Tex Services CFO - Treasury & Risk Chief Info & Tech - Business Operations & Performance Chief Info & Tech - Information Technology Chief Info & Tech - Operations & Performance Transformation Chief Info & Tech - Real Estate & Workplace Services Chief Info & Tech - Security Energy Delivery - Administration Energy Delivery - Operations Energy Delivery - Project & Construction Management Energy Delivery - Vegetation Management Energy Services - Corporate Safety & Health Energy Services - Supply Chain & Fleet Operations External Affairs - Customer Solutions External Affairs - Federal Affairs External Affairs - Regulatory Services Generation - Engineering & Field Services Generation - Engineering & Field Services

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 Desert Sky Wind Farm LLC Dolet Hills Lignite Co, LLC Electric Transmission America Electric Transmission TX, LLC Franklin Real Estate Company Grid Assurance LLC Indiana Michigan Power Company Jacumba Solar LLC Kentucky Power Company Kingsport Power Company Kyte Works, LLC NM Renewable Development, LLC Ohio Franklin Realty, LLC Ohio Franklin Realty, LLC Ohio Power Company, Oxbow Lignite Company of Oklahoma RITELine Indiana, LLC Sempra Renewables, LLC Solar LLCs Southern Appalachian Coal Company Southwestern Electric Power Company Transource Maryland Transource Missouri, LLC Transource West Virginia, LLC United Sciences Testing, Inc. Wheeling Power Company 	 Generation – Project Controls & Construction Services Utilities – Customer Operations & Support Utilities – Utility Operations
5	ATC Management Inc	 American Transmission Company LLC ATC Development Manager Inc. 	 Accounting & Finance Administrative Compensation & Benefits Corporate Communications

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 Facilities Human Resources Prevention and Response Corporate Security Asset Maintenance & Commissioning Asset Planning & Engineering Audit & Risk Management Business Administration Services Data Analytics Project Controls Office (Supports construction efforts by providing estimating, scheduling and cost engineering services) Supply Chain Business Partner Services (Develops reporting and procedures to support Construction, Asset Management and other departments and includes the asset accounting function) Construction Corporate Information Technology Information Infrastructure General Counsel Legal Policy & Strategy Officers Management External Affairs Real Estate Environmental Government and Public Affairs & Local Relations Customer Relations

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
6	Avangrid Service Company	 IB. Distrib. Electrica SA Avangrid Networks, Inc. New York State Electric & Gas Corporation Rochester Gas and Electric Corporation RGS Energy Group, Inc. Central Maine Power Company CMP Group, Inc. The Union Water Power Company Maine Electric Power Company, Inc. Norvarco Chester SVC Partnership Avangrid Enterprises, Inc. Maine Natural Gas Corporation Avangrid New York Transco NECEC Transmission LLC UIL Holdings Corporation The United Illuminating Company Connecticut Natural Gas Corporation The Southern Connecticut Gas Company The Berkshire Gas Company 	 System Planning Governing Bodies Innovation, Environment & Quality Real Estate and General Services Corporate Security IT Human Resources Purchasing Insurance Finance and Treasury Risks Investor Relations Control Administration Tax Communications Legal Services Corporate Development DG Businesses and Regulation External Audit Secretary of the Board Internal Audit Compliance Technical Services
7	Black Hills Service Company, LLC	 Wyodak Resources Development Corp Black Hills Wyoming , LLC Black Hills Electric Generation, LLC Black Hills Non-Regulated Holdings, LLC Black Hills Colorado IPP, LLC N780BH, LLC Black Hills Colorado Wind, LLC Northern Iowa Wind Power, LLC 	NONE LISTED

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
8	CenterPoint Energy Service Company, LLC	 BHERR Assets BHE Renewable Resources LLC Black Hills Corporation Black Hills Exploration and Production, Inc Black Hills Exploration and Production, Inc Black Hills Wyoming Gas, LLC Black Hills Power, Inc Cheyenne Light Fuel and Power Company Black Hills Energy Service Company Black Hills Energy Service Company, LLC Black Hills Kansas Gas Utility Company, LLC Black Hills Colorado Electric, LLC Black Hills Colorado Gas, Inc. Black Hills Colorado Gas, Inc. Black Hills Shoshone Pipeline, LLC Black Hills Nebraska Gas, LLC Black Hills Nebraska Gas, LLC Black Hills Nebraska Gas, LLC Black Hills Wyoming Gas, LLC CenterPoint Energy Houston Electric, LLC CenterPoint Energy Resources Corp. CenterPoint Energy Properties, Inc. CenterPoint Energy Properties, Inc. CenterPoint Energy Properties, Inc. CenterPoint Energy Minnesota Gas Minnesota Intrastate Pipeline Company CenterPoint Energy Intrastate Pipelines, LLC CenterPoint Energy Investment Management, Inc. CenterPoint Energy Investment Management, Inc. CenterPoint Energy Investment Management, Inc. CenterPoint Energy Inc. Utility Holding, LLC 	Administrative and service functions involving system-wide coordination, strategy and compliance functions

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
9	Columbia Pipeline Group Service Company	 Labo Land Holdings, LLC CenterPoint Energy Home Service Plus, LLC CenterPoint Energy Intelligent Energy Solutions , LLC CenterPoint Energy Midstream Administration Energy Systems Group, LLC CNP Foundation, Inc. Indiana Gas Company, Inc. Vectren Energy Delivery of OH, Inc. Vectren Utility Holdings, Inc. Vectren Energy Services Corporation Vectren Capital, Corp. Vectren Corp Southern Indiana Gas & Electric Company Columbia Gas Transmission LLC Columbia Gulf Transmission Co Crossroads Pipeline Company Portland Natural Gas Transmission 	 President & CEO Executive V.P Commercial Operation Project Planning and Operationss CFO Controller - Financial Reporting & Corporate Accounting Cost Accounting and Business Unit Accounting Financial Planning & Budget Reporting - Risk Management Department of Taxation Capital Markets & Treasury Stakeholder Relations & Technical Services & General Counsel Internal Audit & Compliance - SOX Compliance Legal - Land/Litigation Legal - Corporate/Commercial Legal - Compliance & Ethics

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
	Service Company Dominion Energy Services, Inc.	 96WI 8ME LLC Atlanta Farms Solar Project, LLC Bellflower Holdings, LLC Birdseye Renewable Energy, LLC Blackville Solar LLC Blue Ocean Energy Marine BrightSuite Home, LLC BrightSuite, Inc. Buckingham Solar I LLC Clipperton Holdings LLC CNG Coal Company Correctional Solar LLC Denmark Solar, LLC Dominion Privatization Holding Dominion AcP Holding, Inc. Dominion Capital, Inc. Dominion Energy Fuel Services, Inc. Dominion Energy Kewaunee, Inc. Dominion Energy Nuclear Connecticut, Inc. Dominion Energy Payroll Company, Inc Dominion Energy Privatization Texas, LLC 	 Human Resources Compensation & Benefits HR Operations Information Services Facility Services & Supply Chain Accounting Payroll Processing Accounts Payable Processing Accounts Payable Processing Fixed Assets Accounting Information Technology, Electronic Transmission and Computer Services and Software Pooling LDC/EDC Computer Applications Other Computer Applications, including Software/Hardware Pooling Telecommunications Applications Human Resources Business Services Facility Services Fleet Administration Security Gas Supply Risk Management Corporate Planning Supply Chain Purchasing Tax Tax Accounting and Compliance
		 Dominion Energy Questar Corporation Dominion Energy RNG Holdings II, Inc. Dominion Energy RNG Holdings, Inc. 	 Customer Payment (Remittance) Processing Treasury/Finance Treasury and Cash Management Office Space & Equipment

Line No. Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
	 Dominion Energy South Carolina, Inc. Dominion Energy Technical Solutions, Inc. Dominion Energy, Inc. Dominion Generation, Inc. Dominion Generation, Inc. Dominion Greenbrier, Inc. Dominion Lands, Inc. Dominion Nuclear Projects, Inc. Dominion Privatization Pennsylvania, LLC Dominion Privatization South Carolina, LLC Dominion Retail Gas Holdings, Inc. Dominion Solar Projects D, Inc. Dominion Solar Projects V, Inc. Dominion Solar Projects V, Inc. Dominion Solar Projects VI Dominion Solar Projects VI Dominion Solar Services, Inc. Dominion Solar Services, Inc. Cominion Solar Projects VI Cominion Solar Services, Inc. Cominion Solar Projects VI Cominion Solar	 Corporate Office & Electricity Other Service: Accounting Services Audit Business Planning Corporate Secretary Energy Marketing Environment Executive External Affairs General Services Legal Operations Travel Services Aviation

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 Pikeville Farm, LLC Public Service Company of North Carolina Questar Gas Company Questar InfoComm, Inc. Ridgeland Solar Farm I, LLC SCANA Corporation Scott-II Solar LLC Seabrook Solar, LLC Siler Solar, LLC South Carolina Generating Company, Inc. Southampton Solar LLC Summit Farms Solar, LLC Sussex Drive Solar Project, LLC The East Ohio Gas Company Trask East Solar, LLC Virginia Electric and Power Company Virginia Power Services Energy Corp., Inc. Virginia Power Services, LLC VP Property, Inc. Wakefield Solar, LLC Wexpro Development Company Witkinson Solar LLC Yemassee Solar LLC Yemassee Solar LLC 	
11	Duke Energy Business Services, LLC	 Bison Insurance Company, Ltd Cinergy Corp Cinergy Receivables, LLC DE Commercial Enterprises Inc. DE Renewables Commercial LLC 	 Information Systems Meters Transportation System Maintenance Marketing and Customer Relations

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 DE Transmission Holding Company, LLC DEGS NC Solar LLC DEGS Solar, LLC DEGS Wind I, LLC Duke Energy Carolinas, LLC Duke Energy Corporate Services, Inc. Duke Energy Florida (f/k/a Progress Energy Florida) Duke Energy Florida (f/k/a Progress Energy Florida) Duke Energy Kentucky, Inc. Duke Energy Ohio, Inc. Duke Energy Ohio, Inc. (Non-Reg) Duke Energy Pipeline Holding Duke Energy Registration Services, Inc. Duke Energy Services Inc. Duke Energy Services Inc. Duke Energy Services Inc. Duke Energy Services Inc. Duke Generation Services Holding Co. Inc. Duke Technologies, Inc. Frontier Windpower II LLC KO Transmission Piedmont Natural Gas Company Inc. REC Solar Commercial Corp. Symphony Breeze, LLC Symphony Sun, LLC 	 Transmission and Distribution Engineering and Construction Power Engineering and Construction Human Resources Supply Chain Facilities Accounting Power and Gas Planning and Operations Public Affairs Legal Rates Finance Rights of Way Internal Auditing Environmental, Health and Safety Fuels Investor Relations Planning Executive Nuclear Development
12	Entergy Enterprises, Inc	 EAM Nelson Holding, LLC EK Holding III, LLC Entergy Asset Management Entergy Finance Company, LLC Entergy Global, LLC Entergy Int Holdings Ltd, LLC-E Entergy Int Investments No 2 	 Corporate Finance and Accounting Information Technology Nuclear Operations Power Generation

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 Entergy International Ltd, LLC Entergy Nuc Finance Holding Inc. Entergy Nuclear Fitzpatrick, LLC Entergy Nuclear Holding Corp-No. 1 Entergy Nuclear Vermont Investment Corp. Entergy Nuclear Nebraska, LLC Entergy Nuclear Operations, Inc. Entergy Nuclear Palisades, LLC Entergy Nuclear Power Mktg, LLC Entergy Power E&C Holding, LLC Entergy Power RS LLC Entergy Power RS LLC Entergy Power RS LLC Entergy Services, LLC Entergy Ventures, Inc. EP Gas Operations Corp. EWO Marketing, LLC EWO WIND II - EPGC Merchant Holdings Prop, LLC TLG Services, Inc. Vermont Yankee Asset Retirement Management, LLC AR Searcy Project Company, LLC Deferred 	
13	Entergy Nuclear Operations, Inc	 Entergy Arkansas, LLC Entergy Enterprises, Inc. Entergy Louisiana LLC Entergy Operations Inc. Entergy Services LLC 	 Corporate Finance and Accounting Information Technology Nuclear Operations

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
14	Entergy Operations, Inc	 Deferred Entergy Arkansas, LLC Entergy Enterprises, Inc. Entergy Louisiana LLC Entergy Mississippi LLC Entergy New Orleans LLC Entergy Nuclear Operations Inc. Entergy Operations Inc. Entergy Services LLC Entergy Texas, Inc. System Energy Resources, Inc. Deferred 	 Corporate Finance & Accounting Information Technology Nuclear Operations
15	Entergy Services, LLC	 Entergy Arkansas, LLC Entergy Corporation Entergy Enterprises, Inc. Entergy Louisiana LLC Entergy Mississippi LLC Entergy New Orleans LLC Entergy Operations Inc. Entergy Services Holding Inc. Entergy Services LLC Entergy Texas, Inc. Entergy Utility Holding Co, LLC Morpheus One Holdings, LLC System Energy Resources, Inc. AR Searsy Partnership, LLC MS Sunflower Project Co, LLC Deferred 	 Corporate Distribution Finance & Accounting Gas Operations Information Technology Nuclear Operations Power Generation President Transmission
16	Evergy Services, Inc.	None Listed	• Evergy Services, Inc. did not provide services to Evergy, Inc. or its subsidiaries during 2022.

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
17	Eversource Energy Service Company	 Connecticut Light and Power Company Eversource Energy Parent Eversource Energy Transmission Ventures Inc. Eversource Gas Company of Massachusetts Eversource Gas Transmission II LLC Eversource Investment LLC Eversource Investment Service Company Eversource UNG Service Company LLC Eversource Water Ventures Harbor Electric Energy Company Hopkinton LNG Corp. HWP Company North Atlantic Energy Service Corporation North Atlantic Energy Service Company Northeast Generation Services Company Northern Pass Transmission LLC NSTAR Electric Company NU Enterprises Properties Inc. Public Service Company of New Hampshire Renewable Properties Inc. The Rocky River Realty Company Yankee Energy System Inc. 	 Benefits Building Rent and Maintenance Corporate Relations COVID-19 Customer Group Depreciation Electric Distribution Energy Supply Engineering Enterprise Risk Management Finance and Accounting General Administration Human Resources Information Technology Internal Audit + Security Investor Relations Legal Miscellaneous Operations Administration Operations Services Safety Supply Chain + Real Estate + Materials Taxes Transmission
18	Exelon Business Services Company, LLC	 Yankee Gas Services Company Atlantic City Electric Co. ATNP Finance Company Baltimore Gas and Electric Company BGE Home Products & Services, LLC CER Generation LLC (Hillabee) Commonwealth Edison Company Constellation Energy Comm Grp. 	 Corporate Governance Areas Communications Corporate Governance (including Corporate Secretary) Corporate Security Executive Finance

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 Constellation Energy Nuclear Group, LLC (dba CENG, LLC) Constellation NewEnergy, Inc Constellation Power, Inc. Constellation Solar Holdings, LLC. Delmarva Power & Light Co. Distrigas of Massachusetts LLC Exelon Clearsight, LLC Exelon Corporation Exelon Enterprises Company, LLC Exelon Framingham, LLC Exelon Generation Company, LLC Exelon New Boston, LLC Exelon New England Holdings, LLC Exelon New England Holdings, LLC Exelon New England Holdings, LLC Exelon Transmission Company, LLC Exelon West Medway, LLC Exelon Wind, LLC Exelon Wind, LLC Exelon Wind, LLC Exelon Wind, LLC Exelon Wyman, LLC PECO Energy Company PEPCO Holdings Inc. PHI Service Company. Potomac Electric Power Co. RITELine Transmission 	 General Company Activities including interest, severance, and income taxes Government Affairs and Public Policy Legal Services Exclon Utility Focused Items Transmission Operations and Planning Human Resources Human Resources Real Estate Real Estate Services Supply Supply – purchasing / activities related to materials Supply – purchasing / activities related to services Supply – combined materials and services related purchasing / activities Supply Administration Credit card Program Administration Information Technology (IT) IT related to utility customer systems, IT projects and applications IT governance and other items of general nature
19	FirstEnergy Service Company	 AET PATH Company, LLC Allegheny Generating Company Allegheny Energy Supply, LLC Allegheny Ventures American Transmission Systems, Inc. Bay Shore Power Company FirstEnergy Corp. FirstEnergy Properties, Inc. 	 President & CEO Support Transmission, Distribution Operations Support SVP & Chief Financial Officer Strategy, LT planning & Business Performance Support Information Technology Support Supply Chain Support Accounting & Tax Support

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 FirstEnergy Transmission, LLC FirstEnergy Ventures Corporation Jersey Central Power & Light Company Metropolitan Edison Company Mid-Atlantic Interstate Transmission, LLC Monongahela Power Company Ohio Edison Company PATH Allegheny Trans. Co. PATH Allegheny VA Trans. Pennsylvania Electric Company Suvon, Inc. The Cleveland Electric Illuminating Company The Potomac Edison Company The Toledo Edison Company West Penn Power Company West Penn Power Company 	 Treasury Support Risk Support Internal Auditing Support Legal Support Rates & Regulatory Affairs Support External Affairs Support Corporate Responsibility & Communications Support Corporate Affairs & Community Involvement Support Human Resources & Corporate Services Support Ethics & Compliance Support Investor Relations, Corp Responsibility & Communications Support
20	LG&E and KU Services Company	 Louisville Gas and Electric Company Kentucky Utilities Company Western Kentucky Energy Corp. FCD LLC LG&E and KU Capital LLC PPL Services Corporation PPL Electric Utilities Corporation PPL Strategic Development, LLC PPL Rhode Island Holdings, LLC The Narragansett Electric Company 	 Customer Service Sales and Marketing Economic Development and Major Accounts Meter Reading Services Cash Remittance Billing Integrity Energy Efficiency Smart Grid Strategy Field Services CCS Retail Business Readiness Project Engineering System Laboratory Generation Generation Services and Safety Fuel Procurement

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 Project Development Strategy Reliability and Tariffs Operations and Construction Reliability and Compliance Energy Marketing Market Forecasting Load Forecasting Generation Planning and Analysis Network Trouble and Dispatch Electric Engineering Distribution Asset Management Forestry Substation Construction and Maintenance Budgeting Financial Planning Accounting and Reporting Property Accounting Revenue Accounting Payroll Tax Accounting Compliance and Reporting Audit Services Sarbanes-Oxley Compliance Treasury and Corporate Finance Risk Management Credit Administration Energy Marketing Trading Controls Supply Chain Accounts Payable IT Security IT Applications Development and Support

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
21	Liberty Energy Utilities (New Hampshire) Corp	• None Listed	 IT Infrastructure and Operations IT Governance IT Business Services IT Major Projects Legal Compliance Environmental Affairs Regulatory Affairs Government Affairs Management Internal Communications External and Brand Communications Public Affairs Management Facilities and Buildings Security Production Mail Document Process Management and Performance Right-of-Way Transportation HR Benefits Other HR Services Health and Safety Executive Management No services listed
22	National Grid Engineering & Survey, Inc	 Boston Gas Company Brooklyn Union Gas-KEDNY Colonial Gas Company Massachusetts Electric Co. Nantucket Electric Co. 	 Operations Maintenance and Construction Electric Power Plant Operations Management of Complex Construction Projects Resource Planning Response and Operations Performance Activities

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 NE Hydro-Trans Corp. NE Hydro-Trans Elec Co. New England Power Company NG Development Holdings KS Gas East Corp-KEDLI NG Generation LLC NG Glenwood Energy Center NG LNG LP Regulated Entity NG Port Jeff Energy Center NG Services, Inc. National Grid USA Parent NGUSA Service Company Niagara Mohawk Power Corp. Transgas Inc. Narragansett Electric Co. 	
23	National Grid USA Service Company Inc	 Boston Gas Company Brooklyn Union Gas-KEDNY Colonial Gas Company Massachusetts Electric Co. Nantucket Electric Co. Narragansett Electric Co. NE Electric Trans Corp. NE Hydro-Trans Clec Co. NE Hydro-Trans Elec Co. New England Power Co. NG Development Holdings NG Engineering Srvcs, LLC KS Gas East Corp-KEDLI NG Generation LLC NG Glenwood Energy Center NG LNG LP Regulated Entity NG NEHoldings 2 LLC 	 US Human Resources Compensation, Benefits & Pensions HR SVP Labor & Employee Relations Talent & Diversity Talent Acquisition US HR Business Partner US Finance Business Partnering Controllership US Finance Risk Control & Compliance US CFO Total US IT US CIO Global Solution Development RTB Infrastructure & Operations Commercial

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 NG Port Jeff Energy Center NG Services, Inc. National Grid USA Parent Niagara Mohawk Power Corp. Transgas Inc. NG Electric Services PSEG Electric Serv TSA Co. NG North America Inc. NG Ventures Consolidated NG Billing Entity 	 Security LOCKED-IS Legacy Org US Legal Regulatory Strategy Litigation, Environment & Employ US General Counsel US Human Resources Global HRD Global HR Business Partners HR IT & Digital Global Finance Claims Investment Management US Insurance M&A US Treasury Global Legal Internal Compliance Records Management US Legal Senior Counsel Corporate Corporate Affairs Global Corporate Affairs Audit US Audit New York and New England Gas – Capital Delivery Capital Delivery Programs Capital Delivery – Electric Capital Delivery – Gas

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 Capital Project Development Contract Management Project Controls & Estimating Billing, Collections & Compliance Fleet Management Corporate Affairs Chief Customer Officer Sales & Solutions Customer Process Enablement Customer Process Enablement Customer Sales & Solutions National Grid Partners Marketing & Product Growth COO Electric - NY NE Transf Process Digital Data Elec Planning & Performance Management Emergency Planning & Electric Services Maintenance & Const NY & NE Elec. Asset Mgmt & Engineering – NYE & NE New York & New England Gas COO Gas NY & NE Ops Strategy & Performance – NY Gas G&E –Gas Enablement Project Ops Strategy & Performance – NE Gas US Gas Engineering Work & Resource Management US Procurement Consolidated Chief Procurement Officer OP Support Process & Pef-NY US Procurement Global SHE NE President US Policy & Social Impact NY President Performance & Strategy-NY

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 RI President Performance & Strategy-RI Safety, Health & Environment – NY & NE Corporate Safety Health & Field Safety, -NY US Human Resources Health & Wellbeing Process Safety Safety Policy & Programs SHE-VP US Business Assurance VP Strategy & Regulation New England Pricing New York Revenue Reqmt. New York Revenue Reqmt. Reg Process Excellence Reg Strategy & Int Analytics Strategy & Regulation SVP Business Planning, Development & Process Electric Transformation Power Plant Operations Combustion Turbines GenCo Admin Services Tx Planning & Asset Mgmt. Transmission, Gen & Energy AMI & Grid Mod Analytics & Performance BE-Internal Consultancy BMS, Assurance & Risk Chief Customer Officer TO Chief Transformation Officer GBE – Gas Enablement Project

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
24	NiSource Corporate Services Company	 Columbia Gas of Kentucky Inc. Columbia Gas of Maryland Inc. Columbia Gas of Massachusetts Columbia Gas of Ohio Inc. Columbia Gas of Pennsylvania Columbia Gas of Virginia Inc. Columbia of Ohio Receivables Columbia of PA Receivables Columbia of PA Receivables NiSource Development Co Inc. NiSource Energy Technologies NiSource Inc. NiSource Insurance Corp Inc. Northern Indiana Public Service Company LLC Indiana Crossroads Wind Gen Rosewater Wind Farm LLC 	o US Transformation Architecture Accounting and Statistical Services Auditing Services Budget Services Business Services Corporate Services Customer Billing, Collection, and Contact Services Employee Services Engineering and Research Services Facility Services Gas Dispatching Services Information Services Information Technology Services Land/Surveying Services Legal Services Operations Support and Planning Services Purchasing, Storage and Disposition Services Regulatory Services Tax Services Transportation Services
25	Onward Energy Management, LLC	None Listed	Treasury Services None Listed
26	PHI Service Company	 Potomac Electric Company Delmarva Power & Light Company Atlantic City Electric Company Exelon Business Services Company, LLC Pepco Holdings LLC Commonwealth Edison Company Baltimore Gas and Electric Company 	 Executive Management Support Services Vehicle Resource Management Building Services Claims Administration Services Other Services Financial Services Human Resources

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 PECO Energy Company Conective Property & Investments, Inc Exelon Generation Power Conectiv LLC 	 Legal Services Customer Services Information Technology Governmental Affairs Customer Research and Account Management Services Other Government Affairs Services Communication Services Regulatory Services Customer Energy Other Regulatory Services Regulated Electric and Gas Operation Services System Operations Services Meter Maintenance and Testing Services Other Delivery Services Supply Services Other Supply Services Other Supply Services
27	PNMR Services Company	 PNM PNMR Holding Company TNMP PNMR D 	 Financial Systems Accounts Payable Asset Management Direct-PNMR Utility Co 6 Utility General Direct-PNM Utility IT Infrastructure Lewisville Building (Garden Ridge) Dallas-Las Colinas Building Downtown Albuquerque Buildings Aztec Building Maximo (PNMR)
28	PPL Services Corporation	 PPL Corporation PPL Subsidiary Holdings, LLC	Corporate Audit Services - Direct Corporate Compliance Officer

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 PPL Energy Holdings, LLC PPL Capital Funding, Inc. PPL Strategic Development, LLC PPL Power Insurance LTD PPL EU Services Corporation CEP Reserves, Inc. CEP Lending, Inc. PPL Electric Utilities Corporation PPL Translink, Inc. PPL UK Holdings, LLC PPL UK Resources Limited PPL Global, LLC PMDC International Holdings, Inc. PPL Barbados SRL PPL Atlantic Holdings, LLC PPL WPD Limited LG&E and KU Services Company PPL Rhode Island Holdings, LLC The Narragansett Electric Company PPL Distributed Energy Resources, LLC PPL Safari Holdings, LLC PPL Safari Energy, LLC PPL Canada Holdings Inc. PPL Renewables, LLC 	 Corporate Audit Services - Indirect Corporate Operations and Integration – Direct Executive VP & COO Utility Research & Development Board Services Direct Costs - Attributable; Book Investor Relations Enterprise Service Management Product Corporate Operations and Integration - Indirect Corporate Operations and Integration - Indirect Corporate Security - Direct Board Services Physical Security Protection Services Executive Services Corporate Security - Indirect Office of President – Direct: Office of President Office of President - Indirect Enterprise Security – Direct: Office of President Office of President - Indirect Financial - Direct: Office of President Board Services Financial Reporting Internal Reporting Internal Reporting Investor Relations Investor Relations Investor Relations Investor Service Fees Rating Agency Billing Cash Receipt Exception Posting Vendor Servicing (Corporate Disbursements)

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 Pensions Domestic Only Pensions Pennsylvania Only Stock Based Compensation Compensation & Benefits Insurance Services-General Payroll Services Financial - Indirect Human Resources - Direct All Employee Benefits Corporate Human Resources Services Human Resources Benchmarking Employee Communications Executive Services Board Services Employee Engagement Services Board Services Talent Management and Diversity & Inclusion Services Corporate Compensation and Benefit Services Utility Talent Acquisition Training & Development Organization Development & Effectiveness University Relations Utility Human Resources Business Partners Utility Diversity, Equity, & Inclusion Human Resources Information Systems Labor Relations HRIS Payroll Employee Ratio PPL Corporate Human Resources Susiness PPL Corporate Human Resources Strategy

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 PPL Corporate Human Resources Compliance PPL Corporate Human Resources Operations PPL Corporate Benefits PPL Corporate Diversity & Inclusion PPL Corporate Compensation PPL Corporate Organizational Development & Effectiveness PPL Corporate University Relations PPL Corporate Health Services PPL Corporate Talent Acquisition PPL Corporate Training & Development Human Resources - Indirect Information Services - Direct IT Tax Asset Management Product CaseWare Electronic Workpaper System Support Controller App System Support Corporate Systems Department Customer Experience Product Customer Experience Product Cybersecurity Department Cybersecurity Product Data and Content Department Employee Experience Product Engineering Product - Architecture Engineering and Geospatial Product Engineering Department Enterprise Service Management Product Gas Systems Product Gas Systems Product HFM System Support Infrastructure Product – Modern Workspace Infrastructure Product – Operational Systems

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 IT Infrastructure Department Infrastructure Product - Infrastructure People Systems Product Prod and Port Management Department Quantum System Support Smart Delivery Product TRAX System Support Treasury App System Support UIP System Support Wall Street System Support Wausau System Support Work Optimization Product Information Services – Indirect Office of General Counsel – Direct Corporate Compliance Annual Meeting/Proxy Board Services Cyber Security Risk Management Pension Plan - Domestic Pension Plan - PA Office of General Counsel - Indirect Public Affairs - Direct Sustainability Public Affairs - Indirect Supply Chain - Direct Supply Chain - Direct Supply Chain - Direct Supply Chain - Indirect Business Services Corporate - Direct Emergency Preparedness Business Transformation – Direct

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
			 PA and RIE Support Customer Services Corporate - Direct Training PA and RIE Support Customer Services Corporate - Indirect Distribution - Indirect Facilities Corp - Direct Facilities Corp - Direct Facilities Operations Facilities - Indirect Finance & Regulatory Affairs Corporate - Direct PA and RIE Support Finance & Regulatory Affairs Corporate - Indirect HR Business Partners - Direct HR Business Partners Support Training HR Business Partners - Indirect Operational Support - Indirect Transmission Services - Indirect Utility Communication Corporate -Direct PA and RIE Support
29	Sempra Services Corporation	Sempra Infrastructure Services Company, LLC	No services listed.
30	Southern Company Services, Inc	 The Southern Company Alabama Power Company Georgia Power Company Mississippi Power Company PowerSecure International Southern Communications Services, Inc. Southern Company Gas Southern Company Holdings, Inc. Southern Electric Generating Company Southern Nuclear Operating Company 	 Accounting, Finance, and Treasury Aerial Services Auditing Executive and Corporate External Affairs Facility and Real Estate Generation Human Resources Information Technology Legal and General Counsel

Affiliated Services Company ²
ement esearch
pany and Georgia Power ntenance services prvices, and st with respect to nuclear porate departments benefitting
esources it rvices ing

Line No.	Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²
		 Integrys Holding, Inc. Madison Gas and Electric Company Michigan Gas Utilities Corporation Minnesota Energy Resources Corporation North Shore Gas Company Peoples Energy, LLC The Peoples Gas Light and Coke Company Upper Michigan Energy Resources Corporation WEC Energy Group, Inc. WEC Infrastructure LLC W.E. Power, LLC Wisconsin Electric Power Company Wisconsin Gas LLC Wisconsin Power and Light Company Wisconsin River Power Company Wispark LLC WPPI Energy WPS Power Development, LLC 	 Environmental Executive Management External Affairs Finance Human Resources Information Technology Legal and Governance Supply Chain Operational Support and Development Wholesale Energy and Fuels
34	Xcel Energy Services Inc	 NSP-Minnesota PSCo SPS NSP-Wisconsin Xcel Energy, Inc. Xcel Energy Joint Ventures Xcel Energy Nuclear Services Idaho, LLC Nicollet Land Services, LLC Nicollet Projects I, LLC Nicollet Holdings Company Eloigne Company Xcel Energy WYCO, Inc. Capital Services, LLC 	 Executive Management Services Investor Relations Internal Audit & Risk Legal Claims Services Corporate Communications Employee Communications Corporate Strategy & Business Development Government Affairs Facilities & Real Estate Facilities Administrative Services Supply Chain Supply Chain Special Programs
Line No. Service Company	Operating Companies ¹	Services Provided by Affiliated Services Company ²	
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	 Xcel Energy Wholesale Group, Inc. Energy Impact Fund Investments, Inc. Xcel Energy Southwest Transmission Company, LLC Chippewa and Flambeau Improvement Company Xcel Energy Ventures Holdings, Inc. 1480 Welton, Inc. Xcel Energy Transmission Development Company, LLC P.S.R. Investments, Inc. WestGas Interstate, Inc. United Power & Land Company Clearwater Investments, Inc. Larimer Land Services, LLC Xcel Energy Markets Holdings, Inc. Xcel Energy Investments e-prime, Inc. Xcel Energy Investments e-prime, Inc. Xcel Energy Transmission Holding Company, LLC Xcel Energy International, Inc. Xcel Energy Communications Group, Inc. Quixx Corporation Xcel Energy Performance Contracting, Inc. Seren Innovations, Inc. Reddy Kilowatt Corporation Nicollet Project Holdings Xcel Energy Nuclear Services Oregon, LLC Xcel Energy Ventures, Inc. Xcel Energy Ventures, Inc. Nicollet Project Holdings Xcel Energy Ventures, Inc. Nicollet Project Holdings Xcel Energy Ventures, Inc. Nicollet Project Holdings Xcel Energy Ventures, Inc. Xcel Energy Nuclear Services Oregon, LLC Xcel Energy Ventures, Inc. Xcel Energy Nuclear Services Holdings, LLC NSP Lands, Inc. 	 Human Resources Finance & Treasury Accounting, Financial Reporting & Taxes Payment & Reporting Receipts Processing Payroll Rates & Regulation Environmental Services & System Planning Energy Supply Business Resources Energy Markets Regulated Trading & Marketing Energy Markets - Fuel Procurement Energy Delivery Marketing Energy Delivery Construction, Operations & Maintenance (COM) Energy Delivery Engineering/Design Marketing & Sales Customer Service Business Systems & Innovation Aviation Services Fleet 	

Total Administrative and General (\$000)

Inflated after Acquisition																			
	2005	2006	2007	2008	2009 [1]	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Union Electric	234,223	241,457	247,981	252,758	254,365	257,413	262,765	267,684	272,366	277,455	280,241	283,045	288,412	295,305	300,588	304,182	316,788	338,816	351,165
CIPS (merger completed 12/31/1997)	77,672	80,071	82,234	83,819	84,351	85,362	87,137	88,768	90,321	92,008	92,933	93,862	95,642	97,928	99,680	100,872	105,052	112,357	116,452
CILCO (acquisition closed 1/31/2003)	27,078	27,914	28,668	29,220	29,406	29,758	30,377	30,946	31,487	32,075	32,398	32,722	33,342	34,139	34,750	35,165	36,622	39,170	40,598
IP (acquisition closed 9/30/2004)	51,155	52,735	54,160	55,203	55,554	56,220	57,389	58,463	59,486	60,597	61,206	61,818	62,990	64,496	65,650	66,435	69,188	73,997	76,694
Total Ameren with Inflation after Acquisitio:	390,128	402,178	413,044	421,000	423,676	428,754	437,669	445,862	453,660	462,136	466,777	471,447	480,386	491,868	500,667	506,654	527,650	564,340	584,909
Actuals																			
Union Electric	243,224	245,282	265,020	272,687	250,628	240,384	275,201	236,903	251,904	278,701	264,623	251,783	234,050	235,012	214,437	204,068	192,583	230,619	188,547
CIPS (merger completed 12/31/1997)	41,305	39,765	39,944	47,871	40,468														
CILCO (acquisition closed 1/31/2003)	36,057	30,052	32,037	27,610	97,824														
IP (acquisition closed 9/30/2004)	67,543	67,716	61,571	86,449	77,172														
Ameren Illinois						126,171	143,958	139,418	140,454	151,672	151,661	149,707	157,181	146,610	126,801	140,380	139,515	127,478	88,022
Total Ameren Actuals after Acquisition	388,129	382,815	398,572	434,617	466,092	366,555	419,159	376,321	392,358	430,373	416,284	401,490	391,231	381,622	341,238	344,448	332,099	358,097	276,569



NOTES

[1] Amount for CILCO in 2009 ties to the Form 1 which includes \$57,483 of intercompany billings recorded in account 921. In the Company's filing in Docket #12-0001, that amount was excluded.



National Electric Utilities With Regulated Generation, >50k Customers

Total Non-	Fuel O&M \$	per Cus	tomer			
	Annual Value	25				
	2018	2019	2020	2021	2022	2023
Ameren Missouri	779	787	714	760	781	749
Group Mean (excluding Ameren Missouri)	880	857	836	849	897	879
	Rankings					
	2018	2019	2020	2021	2022	2023
National Electric Utilities With Regulated Generation	on, >50k Custom	ers				
Ameren Missouri	20	21	17	19	19	20
Quartile	2	2	2	2	2	2
Total Ranked	48	48	48	48	48	48



National Electric Utilities With Regulated Generation, >50k Customers

Adminstrative &	General Exp	ense \$ pe	er Custor	ner		
	Annual Value	25				
	2018	2019	2020	2021	2022	2023
Ameren Missouri	192	174	165	155	184	150
Group Mean (excluding Ameren Missouri)	233	215	221	217	223	234
	Rankings					
	2018	2019	2020	2021	2022	2023
National Electric Utilities With Regulated Generation	on, >50k Custom	ers				
Ameren Missouri	21	19	18	15	22	18
Quartile	2	2	2	2	2	2
Total Ranked	48	48	48	48	48	48



Midwest Electric Utilities With Regulated Generation, >50k Customers

Total Non-	Fuel O&M \$	per Cus	tomer			
	Annual Value	25				
	2018	2019	2020	2021	2022	2023
Ameren Missouri	779	787	714	760	781	749
Group Mean (excluding Ameren Missouri)	1,056	1,006	980	1,010	1,074	1,008
	Rankings					
	2018	2019	2020	2021	2022	2023
Midwest Electric Utilities With Regulated Generatio	n, >50k Custom	ers				
Ameren Missouri	3	3	2	3	4	5
Quartile	1	1	1	1	1	2
Total Ranked	17	17	17	17	17	17



Midwest Electric Utilities With Regulated Generation, >50k Customers

Adminstrative &	General Exp	ense \$ pe	er Custor	ner		
	Annual Value	e <i>s</i>				
	2018	2019	2020	2021	2022	2023
Ameren Missouri	192	174	165	155	184	150
Group Mean (excluding Ameren Missouri)	271	254	255	249	259	235
	Rankings					
	2018	2019	2020	2021	2022	2023
Midwest Electric Utilities With Regulated Generatio	n, >50k Custom	ers				
Ameren Missouri	5	5	5	3	7	7
Quartile	2	2	2	1	2	2
Total Ranked	17	17	17	17	17	17



National Electric Utilities With Regulated Generation & 500,000 to 2,000,000 Customers

Total No	n-Fuel O&M	\$ per Cus	stomer			
	Annual Val	ues				
	2018	2019	2020	2021	2022	2023
Ameren Missouri	779	787	714	760	781	749
Group Mean (excluding Ameren Missouri)	832	801	762	780	816	783
	Rankings	5				
	2018	2019	2020	2021	2022	2023
National Electric Utilities With Regulated Generation	n & 500,000 to 2,0	00,000 Cust	omers			
Ameren Missouri	9	10	8	8	9	10
Quartile	2	2	2	2	2	2
Total Ranked	20	20	20	20	20	20



National Electric Utilities With Regulated Generation & 500,000 to 2,000,000 Customers

Administrative 8	c General Exp	pense \$ p	er Custor	ner		
	Annual Valu	es				
	2018	2019	2020	2021	2022	2023
Ameren Missouri	192	174	165	155	184	150
Group Mean (excluding Ameren Missouri)	206	194	190	192	189	192
	Rankings					
	2018	2019	2020	2021	2022	2023
National Electric Utilities With Regulated Generation	n & 500,000 to 2,	000,000 Cus	stomers			
Ameren Missouri	9	9	9	7	12	8
Quartile	2	2	2	2	3	2
Total Ranked	20	20	20	20	20	20

Total Non-Fuel O&M per Customer Cost Efficiency



Total Non-	Total Non-Fuel O&M per Customer									
	Annual Val	ues								
	2018	2019	2020	2021	2022	2023				
Ameren Missouri	779	787	714	760	781	749				
Electric Group Mean (excl. Ameren Missouri)	832	801	762	780	816	783				
	Ranking	\$								
	2018	2019	2020	2021	2022	2023				
Electric Group:										
Ameren Missouri	9	10	8	8	9	10				
Total Ranked	20	20	20	20	20	20				

Source: SNL Interactive, FERC Form 1

Total O&M Expenses less Fuel, Purchased Power, and Other Expenses; Ult Consumer Electric Customers

Total Non-Fuel O&M per MWh Sold Cost Efficiency



Total Non-J	Fuel O&N	A per MV	Wh Sold			
	Annual Va	lues				
	2018	2019	2020	2021	2022	2023
Ameren Missouri	28.3	30.1	28.9	30.4	30.6	31.0
Electric Group Mean (excl. Ameren Missouri)	29.7	29.4	29.2	29.5	30.2	30.1
	Ranking	<i>gs</i>				
	2018	2019	2020	2021	2022	2023
Electric Group:						
Ameren Missouri	12	12	13	14	13	13
Total Ranked	20	20	20	20	20	20

Source: SNL Interactive, FERC Form 1

Total O&M Expenses less Fuel, Purchased Power, and Other Expenses; Tot Sales: Ult Cnsmr-Mwhrs Sold (MWh)

Non-Fuel Production O&M (Excluding Nuclear) per Customer Cost Efficiency



Non-Fuel Production	n O&M (Exclu	iding Nuc	lear) per C	Customer		
	Annual Va	lues				
	2018	2019	2020	2021	2022	2023
Ameren Missouri	147	146	129	149	148	140
Electric Group Mean (excl. Ameren Missouri)	211	195	175	178	183	169
	Ranking	rs				
	2018	2019	2020	2021	2022	2023
Electric Group:						
Ameren Missouri	6	7	7	9	9	10
Total Ranked	20	20	20	20	20	20

Source: SNL Interactive, FERC Form 1

Total Power Production O&M Expenses, excluding Nuclear less fuel, Purchased Power, and Other Expenses; Total Electric Customers

Non-Fuel Production O&M per MWh Produced (Excluding Nuclear) Cost Efficiency



Non-Fuel Production	on O&M per M	1Wh Produc	ced (Exclud	ing Nuclear)						
Annual Values											
	2018	2019	2020	2021	2022	2023					
Ameren Missouri	5.60	6.58	5.54	5.66	6.38	7.75					
Electric Group Mean (excl. Ameren Missouri)	9.99	9.93	11.10	10.81	10.37	10.42					
	Rai	nkings									
	2018	2019	2020	2021	2022	2023					
Electric Group:											
Ameren Missouri	4	5	3	4	7	8					
Total Ranked	20	20	20	20	20	20					

Source: SNL Interactive, FERC Form 1

Total Power Production O&M Expenses excluding Nuclear, less Fuel, Purchased Power, and Other Expenses; Total Net Generation excl Nuclear

Non-Fuel Nuclear Production O&M per Nuclear MWh Produced Cost Efficiency



Non-Fuel Nuclear Production O&M per Nuclear MWh Produced								
Annual Values								
	2018	2019	2020	2021	2022	2023		
Ameren Missouri	11.1	15.9	14.8	34.7	16.8	16.9		
Electric Group Mean (excl. Ameren Missouri)	18.7	18.0	16.6	16.9	17.7	16.1		
	Ranking	<i>gs</i>						
	2018	2019	2020	2021	2022	2023		
Electric Group:								
Ameren Missouri	1	2	3	8	5	5		
Total Ranked	8	8	8	8	8	8		

Source: SNL Interactive, FERC Form 1

Non-Fuel Nuclear O&M less Fuel Expenses; Nuclear Generation (MWh)

Transmission O&M per Customer Cost Efficiency



Transmission O&M per Customer								
Annual Values								
	2018	2019	2020	2021	2022	2023		
Ameren Missouri	80.0	85.2	84.4	90.0	90.2	84.8		
Electric Group Mean (excl. Ameren Missouri)	115.8	118.2	118.2	134.9	146.3	137.8		
	Rankinį	gs						
	2018	2019	2020	2021	2022	2023		
Electric Group:								
Ameren Missouri	10	10	11	11	10	10		
Total Ranked	20	20	20	20	20	20		

Source: SNL Interactive, FERC Form 1

Transmiss-O&M Exp; Total Electric Customers





Transmission O&M per MWh								
Annual Values								
	2018	2019	2020	2021	2022	2023		
Ameren Missouri	2.24	2.79	2.73	2.90	2.85	3.09		
Electric Group Mean (excl. Ameren Missouri)	3.27	3.39	3.55	3.92	4.19	4.20		
	Ranking	gs						
	2018	2019	2020	2021	2022	2023		
Electric Group:								
Ameren Missouri	8	10	9	10	8	12		
Total Ranked	20	20	20	20	20	20		

Transmiss-O&M Exp; Total Electricity Sales Vol





Transmission O&M per Mile of Transmission Line								
Annual Values								
	2018	2019	2020	2021	2022	2023		
Ameren Missouri	37.0	41.0	40.8	43.8	36.7	34.6		
Electric Group Mean (excl. Ameren Missouri)	26.5	25.8	24.8	25.6	29.4	28.3		
	Ranking	gs						
	2018	2019	2020	2021	2022	2023		
Electric Group:								
Ameren Missouri	16	15	16	16	15	15		
Total Ranked	20	20	20	20	20	20		

Transmiss-O&M Exp (\$000); Length of Transmission Lines (Miles)





Distribution O&M per Customer								
Annual Values								
	2018	2019	2020	2021	2022	2023		
Ameren Missouri	128	122	115	123	120	127		
Electric Group Mean (excl. Ameren Missouri)	116	120	109	116	134	119		
	Ranking	gs						
	2018	2019	2020	2021	2022	2023		
Electric Group:								
Ameren Missouri	13	11	11	12	9	12		
Total Ranked	20	20	20	20	20	20		

Distr-O&M Exp; Ult Consumer Electric Customers





Distribution O&M per MWh								
Annual Values								
	2018	2019	2020	2021	2022	2023		
Ameren Missouri	4.65	4.66	4.64	4.92	4.73	5.25		
Electric Group Mean (excl. Ameren Missouri)	4.02	4.27	4.08	4.32	4.85	4.53		
	Ranking	<i>gs</i>						
	2018	2019	2020	2021	2022	2023		
Electric Group:								
Ameren Missouri	17	14	14	15	12	16		
Total Ranked	20	20	20	20	20	20		

Distr-O&M Exp; Tot Sales: Ult Cnsmr-Mwhrs Sold (MWh)





A&G Expense per Customer								
Annual Values								
	2018	2019	2020	2021	2022	2023		
Ameren Missouri	192	174	165	155	184	150		
Electric Group Mean (excl. Ameren Missouri)	206	194	190	192	189	192		
	Ranking	<i>gs</i>						
	2018	2019	2020	2021	2022	2023		
Electric Group:								
Ameren Missouri	9	9	9	7	12	8		
Total Ranked	20	20	20	20	20	20		

A&G-O&M Exp; Ult Consumer Electric Customers





A&G Expense per MWh								
Annual Values								
	2018	2019	2020	2021	2022	2023		
Ameren Missouri	6.97	6.68	6.67	6.19	7.24	6.22		
Electric Group Mean (excl. Ameren Missouri)	7.75	7.49	7.69	7.65	7.38	7.80		
	Ranking	<i>gs</i>						
	2018	2019	2020	2021	2022	2023		
Electric Group:								
Ameren Missouri	11	11	12	10	11	10		
Total Ranked	20	20	20	20	20	20		

A&G-O&M Exp; Tot Sales: Ult Cnsmr-Mwhrs Sold (MWh)





Customer Expense per Customer								
Annual Values								
	2018	2019	2020	2021	2022	2023		
Ameren Missouri	129.1	135.4	122.2	120.9	114.1	118.6		
Electric Group Mean (excl. Ameren Missouri)	87.4	83.2	82.6	75.9	79.9	83.5		
	Ranking	gs						
	2018	2019	2020	2021	2022	2023		
Electric Group:								
Ameren Missouri	19	19	18	19	18	18		
Total Ranked	20	20	20	20	20	20		

Customer Accounts Exp; Customer Service and Info Exp; Sales Exp; Ult Consumer Electric Customers



Customer Expense per MWh

Customer Expense per MWh								
Annual Values								
	2018	2019	2020	2021	2022	2023		
Ameren Missouri	4.69	5.19	4.94	4.83	4.48	4.91		
Electric Group Mean (excl. Ameren Missouri)	3.18	3.11	3.21	2.94	3.03	3.26		
	Ranking	<i>gs</i>						
	2018	2019	2020	2021	2022	2023		
Electric Group:								
Ameren Missouri	18	20	18	18	16	16		
Total Ranked	20	20	20	20	20	20		

Source: SNL Interactive, FERC Form 1

Customer Accounts Exp; Customer Service and Info Exp; Sales Exp; Tot Sales: Ult Cnsmr-Mwhrs Sold (MWh)

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust) Its Revenues for Electric Service.

Case No. ER-2024-0319

AFFIDAVIT OF JOSEPH S. WEISS

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STATE OF MISSOURI)) \$\$ **CITY OF ST. LOUIS**)

Joseph S. Weiss, being first duly sworn states:

My name is Joseph S. Weiss, and on my oath declare that I am of sound mind and lawful

age; that I have prepared the foregoing Direct Testimony; and further, under the penalty of perjury,

that the same is true and correct to the best of my knowledge and belief.

h S. Weiss

Sworn to me this 224 day of June, 2024.