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Staff – Exhibit 206
Brad Fortson Testimony
Direct
File No. EO-2023-0136

Exhibit No.:
Issues: *Directory of Staff witnesses; Past MEEIA Cycles; 2023 IRP preferred resource plan; EO in fourth MEEIA cycle;*
Witness: *Brad J. Fortson*
Sponsoring Party: *MoPSC Staff*
Type of Exhibit: *Direct Testimony*
Case No.: *EO-2023-0136*
Date Testimony Prepared: *March 1, 2024*

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENERGY RESOURCES DEPARTMENT

DIRECT TESTIMONY

OF

BRAD J. FORTSON

**UNION ELECTRIC COMPANY
d/b/a AMEREN MISSOURI**

CASE NO. EO-2023-0136

*Jefferson City, Missouri
March, 2024*

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OF
BRAD J. FORTSON**

**UNION ELECTRIC COMPANY
d/b/a AMEREN MISSOURI
CASE NO. EO-2023-0136**

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1 A. Staff’s overall position in its direct testimony is that it is not reasonable at this
2 time for the Commission to approve a MEEIA program portfolio and its extraordinary
3 ratemaking authority. Staff’s direct testimony in this case outlines concerns with the ability
4 to design a MEEIA portfolio that complies with statutory requirements at this time,
5 and provides recommendations for a process to execute if the Commission directs the parties
6 to proceed with a MEEIA portfolio at this time.¹

7 Q. Why is Staff taking this approach to MEEIA at this time?

8 A. As further detailed throughout mine and other Staff witnesses’ direct testimony
9 in this case, conditions surrounding MEEIA, and the entire electric industry as a whole, have
10 changed, and to date, analysis does not support that ratepayers break even or benefit from a
11 MEEIA cycle 4 at this time. In fact, changing conditions have been a major contributing factor
12 to the 2022, 2023, and 2024 one-year MEEIA extensions as opposed to the multiyear
13 MEEIA portfolios previously approved. Ameren Missouri has now had nearly twelve years
14 of MEEIA programs. The Federal Government has and continues to influence the energy
15 efficiency market through tax incentives, and there has and continues to be state and federal
16 loans and grants, including the recent passage of the Inflation Reduction Act (“IRA”), all of
17 which also provide no shortage of work for contractors. Federal Energy Independence and
18 Security Act (“EISA”) energy efficiency baselines continue to increase. Low-hanging fruit
19 like lighting and home energy report programs have ran their course. Naturally occurring
20 energy efficiency, building code standards, and appliance efficiency inherently increase with
21 time. Ameren Missouri’s energy and capacity position has changed due to the Midcontinent

¹ My testimony discusses Earnings Opportunity development, Ms. Lange’s testimony discusses avoided revenue mechanism development, Mr. Luebbert’s testimony discusses program design as an iterative process related to avoided cost and earnings opportunity quantifications.

1 Independent System Operator’s (“MISO”) capacity requirements, MISO’s planning resource
2 auction seasonality, and the early retirement of the Rush Island Energy Center due to a federal
3 court ruling that Ameren Missouri violated the Clean Air Act. There are also a number of
4 issues with Ameren Missouri’s current demand-side programs investment mechanism
5 (“DSIM”) that will be addressed in Staff’s direct testimony as well.

6 **STAFF WITNESSES AND ISSUES**

7 Q. How is Staff’s direct testimony organized?

8 A. My direct testimony will describe an overview of Staff’s position, Ms. Lange’s
9 direct testimony will provide an overview of MEEIA and the MEEIA statute, Mr. Luebbert’s
10 direct testimony will provide a more detailed discussion of the complications and interactions
11 of the actual operation of MEEIA and the development of a MEEIA portfolio that complies
12 with statutory requirements, in particular, the requirement that a MEEIA portfolio is beneficial
13 to all customers in the customer class in which the programs are proposed regardless of
14 whether the programs are utilized by all customers.

15 Table 1, below, provides additional specificity concerning Staff’s witnesses and the
16 issues they address.

1

Table 1: Staff witness and issues	
Witness Name	Issues
Brad J. Fortson	Conditions surrounding MEEIA; Directory of Staff witnesses; Past MEEIA Cycles; 2023 IRP preferred resource plan; Earnings Opportunity for fourth MEEIA cycle; the need for accurate, independent EM&V
Sarah L.K. Lange	Overview of MEEIA; MEEIA enabling statute; Avoided revenue mechanism if a fourth MEEIA cycle is authorized;
J Luebbert	Avoided Costs and avoided Earnings Opportunity; Additional context for MEEIA complications; Designing a MEEIA compliant portfolio
Justin Tevie	Importance of accurate energy and demand savings estimates
Mark Kiesling	Energy Independence and Security Act standards; Other sources for energy efficiency funding
Marina Stever	MEEIA cost recovery to date; Rider EEIC filing timing
Jordan Hull	ARCs and BDR budgets; Changes in MISO PRA
Amy Eichholz	Low-income program tariffs; Residential low-income program design; low-income federal assistance; Low-income non-MEEIA programs
Hari Poudel	Throughput Disincentive; Evaluation, Measurement & Verification; Rebound effect; Rate case annualization

2 **EVIDENCE AVAILABLE TO THE COMMISSION IN PRIOR MEEIA CYCLES**

3 Q. Has the Commission previously authorized MEEIA Cycles for
4 Ameren Missouri?

5 A. Yes. On January 20, 2012, Ameren Missouri filed its *Application to Approve*
6 *DSIM Filing, Request for Variances and Motion to Adopt Procedural Schedule*

1 and its *2013 – 2015 Energy Efficiency Plan* (“MEEIA Cycle 1”) in Case No. EO-2012-0142.
2 This case ultimately settled, and on August 1, 2012, the Commission approved the
3 *Unanimous Stipulation and Agreement Resolving Ameren Missouri’s MEEIA Filing*.

4 On December 22, 2014, Ameren Missouri filed its *Application to Approve*
5 *DSIM Filing, Request for Variances and Motion to Adopt Procedural Schedule* and its
6 *Ameren Missouri Energy Efficiency Plan 2016 – 2018* (“MEEIA Cycle 2”) in
7 Case No. EO-2015-0055. An October 22, 2015, Commission *Report and Order* rejected
8 Ameren Missouri’s MEEIA Cycle 2 filing, but as a part of the order the Commission
9 encouraged Ameren Missouri to consider the Commission’s decision and to present a new
10 MEEIA plan that all parties and the Commission could support. Ameren Missouri proposed
11 a new plan, and on February 10, 2016, the Commission approved the *Non-Unanimous*
12 *Stipulation and Agreement and Tariff Revision*.

13 On June 4, 2018, Ameren Missouri filed its *Application To Approve DSIM And*
14 *Demand-Side Management Portfolio And Plan, Request For Variances, And Motion To Adopt*
15 *Procedural Schedule* (“MEEIA Cycle 3”) in Case No. EO-2018-0211. This case ultimately
16 settled, and on December 5, 2018, the Commission approved the *Stipulation and Agreement*.
17 The parties agreed to a 3-year plan from 2019 – 2021.² Since then, the parties have agreed,
18 and the Commission has approved, three subsequent 1-year extensions for 2022, 2023,
19 and 2024.

20 Q. What program budgets were agreed to through the settlements of the previous
21 MEEIA cycles?

² The low-income programs were approved for six years (2019 – 2024).

1 A. For MEEIA Cycle 1, a program budget of approximately \$147.3 million, for
2 MEEIA Cycle 2, a program budget of approximately \$158 million, and for MEEIA Cycle 3,
3 a program budget of approximately \$448,220,000 (includes the years 2019 – 2024),
4 for a combined total of approximately \$753,520,000 (2013 – 2024).³

5 Q. What net benefits have been achieved through the Ameren MEEIA Cycles
6 to date?

7 A. That is hard to say, because the calculation of net benefits is very subjective,
8 based on assumptions, and it has never been verified that the benefits ever really happened.

9 Q. Please explain.

10 A. The independence of EM&V is crucial to identifying net benefits achieved in
11 a MEEIA cycle. 20 CSR 4240-20.093(8) states in part that “The utility shall provide oversight
12 and guidance to the independent EM&V contractor, but shall not influence the independent
13 EM&V contractor’s report(s).” It is hard, if not impossible, for EM&V to not be influenced
14 by the utility when the utility is providing most of the inputs the EM&V contractor is relying
15 on for final EM&V results.

16 In developing prior MEEIA cycles, the benefits used as a part of the cost-effectiveness
17 calculation are the energy and demand savings multiplied by the avoided energy, capacity,
18 and transmission and distribution costs (“avoided costs”) based on deemed energy and
19 demand savings values for each measure in Ameren Missouri’s MEEIA portfolio.⁴

³ Staff witness Marina Stever includes in her direct testimony the amount of program costs recovered by Ameren Missouri to date.

⁴ The total number of measures purchased (or given away) are multiplied by each measures deemed energy and demand savings.

1 Q. To what extent has the Commission had an opportunity to determine whether
2 those benefits truly materialized?

3 A. There is an EM&V process, but that process to date has relied on several
4 assumptions, and the verification has occurred for a relatively small sample size of measures.
5 Further, after final EM&V reports are filed for any given program year, there is not a process
6 in place to ensure those evaluated savings actually occurred as they were deemed to have. For
7 example, MEEIA Cycle 1 savings targets heavily relied on compact fluorescent lamps
8 (“CFLs”). If you assume a 9-year useful life like Ameren Missouri did, CFLs installed in
9 2015 (the final year of MEEIA Cycle 1) would have lasted until 2023. Due to
10 potential CFL concerns (e.g. contain mercury and disposal of broken or burned-out CFLs) and
11 the prominence of LED light bulbs (e.g. more efficient than CFLs), we know that all
12 CFLs installed in 2015 did not last until 2023. However, Ameren Missouri has been
13 compensated for the persistence of savings that were assumed for the 9-year deemed savings
14 of CFLs.

15 The energy and demand savings results of the EM&V are then multiplied by the
16 avoided costs that were considered earlier during program design.

17 Q. Has the Commission had an opportunity to review whether or not the statutory
18 requirement that a MEEIA portfolio is beneficial to all customers in the customer class in
19 which the programs are proposed regardless of whether the programs are utilized by all
20 customers had been in fact met for prior MEEIA cycles?

21 A. Not to date. Per 20 CSR 4240-20.092(1)(C) “Avoided costs or avoided utility costs
22 means the cost savings obtained by substituting demand-side programs for existing and new
23 supply-side resources...” However, as discussed by Mr. Luebbert, avoided energy costs are

1 | flown through the Ameren Missouri FAC, and avoided capacity costs may or may not
2 | materialize, particularly if renewable energy products with low variable costs are the avoided
3 | supply-side resource.

4 | **2023 IRP PREFERRED RESOURCE PLAN**

5 | Q. Can you highlight Ameren Missouri's preferred resource plan from its 2023
6 | integrated resource plan filed in Case No. EO-2024-0020?

7 | A. Yes. Ameren Missouri's preferred resource plan includes the following:

- 8 | • 2,800 MWs of new wind and solar generation by 2030, representing an
9 | investment of approximately \$5-6 billion.
- 10 | • 2,600 MWs of new wind and solar generation after 2030, bringing the total
11 | new wind and solar generation to 5,400 MWs.
- 12 | • Retirement of all of Ameren Missouri's coal-fired generating capacity by 2042.
13 | (This includes the early retirement of the Rush Island Energy Center by the
14 | end of 2024 due to a federal court ruling that Ameren Missouri violated the
15 | Clean Air Act.)
- 16 | • 800 MWs of simple cycle gas-fired combustion turbine generators by 2027.⁵
- 17 | • 1,200 MWs of gas-fired combined cycle generation by 2032.
- 18 | • 1,200 MWs of as-yet-unspecified clean dispatchable generation in each of
19 | 2040 and 2043.
- 20 | • Electrification of transportation and other sectors.

⁵ On February 27, 2024, Ameren Missouri filed its *Notice of Case Filing*, giving notice that it will file an application for a CCN to construct a simple cycle natural gas generation facility.

- 1 • Continued replacement of aging distribution infrastructure and the
2 development and deployment of smart grid, communications, and other
3 advanced technologies on the distribution system, along with investments in
4 transmission infrastructure.
- 5 • Continuation of energy efficiency and demand response programs.

6 Q. To be clear, even with the MEEIA energy and demand savings to date, and the
7 inclusion of an energy efficiency and demand response portfolio included in its current
8 preferred resource plan, Ameren Missouri is not only planning a 2,800 MW renewable
9 generation buildout within the next six years, but also 800 MWs of dispatchable generation
10 within the next four years and another 1,200 MWs of dispatchable generation within the next
11 eight years. So after 12 years of MEEIA, what capacity costs are being avoided?

12 A. In Case No. EO-2024-0020, Staff submitted data request (“DR”) 0002 asking,
13 “What, if any, future supply-side generation will be deferred by the RAP⁶ DSM⁷ portfolio
14 selected as part of Ameren Missouri’s preferred resource plan in this case?” Ameren Missouri
15 responded, “A comparison of Plan C (preferred plan with RAP DSM) and Plan I
16 (same attributes as Plan C except for no additional DSM) demonstrates that RAP DSM helps
17 avoid two additional 1200 MW combined cycle resources in 2028 and 2043.”

18 Q. Can you simplify what Staff’s DR was asking, and Ameren Missouri’s
19 response to Staff’s DR?

20 A. Yes. Staff asked Ameren Missouri what generation facility investment(s) will
21 be deferred (or avoided) with the inclusion of a certain level (RAP) of energy efficiency and

⁶ Realistic Achievable Potential.

⁷ Demand-Side Management.

1 demand response programs over the twenty-year planning period of the plan it chose as its
2 preferred plan. Ameren Missouri responded that the twenty-year plan it chose as its preferred
3 plan that included a certain level (RAP) of energy efficiency and demand response programs
4 compared to the same twenty-year plan that did not include the same level (RAP) of energy
5 efficiency and demand response programs would avoid Ameren Missouri needing to build
6 two 1,200 MW combined cycle resources in 2028 and 2043.

7 Q. Based on past experience, is it reasonable to expect that a fourth MEEIA cycle
8 will materially avoid or defer supply-side investments?

9 A. No. Under the preferred resource plan, Ameren Missouri is planning relatively
10 near-term and long-term renewable buildout (2,800 MWs by 2030 and 2,600 MWs after 2030)
11 coupled with non-renewable additions (800 MWs of simple cycle gas-fired combustion
12 turbine generators by 2027, 1,200 MWs of gas-fired combined cycle generation by 2032,
13 and 1,200 MWs of as-yet-unspecified clean dispatchable generation in each of 2040 and
14 2043). Ameren Missouri has aggressively promoted its lessened reliance on coal generation
15 and expansion of renewable generation. Further, based on past experience, generation
16 ratebase has grown under prior MEEIA cycles.

17 On October 25, 2011, in File No. EO-2012-0127, Ameren Missouri filed a notice of
18 change in preferred plan. The new preferred plan

19 ...was reached as a result of the Commission's order in Case No. ER-
20 2011-0028, in which Ameren Missouri's request for relief with respect
21 to the throughput disincentive associated with implementation of
22 energy efficiency was denied. As the Commission has clearly indicated
23 that appropriate resolution for energy efficiency cost recovery issues is
24 available through a filing by Ameren Missouri under the Missouri
25 Energy Efficiency Investment Act (MEEIA), the Company has
26 indicated its intention to make such a filing in the first quarter of 2012.
27 In the interim, the Company cannot subject its investors to the

1 increasing ongoing financial penalty they would incur without
2 appropriate relief....

3 Q. What did the preferred plan include?

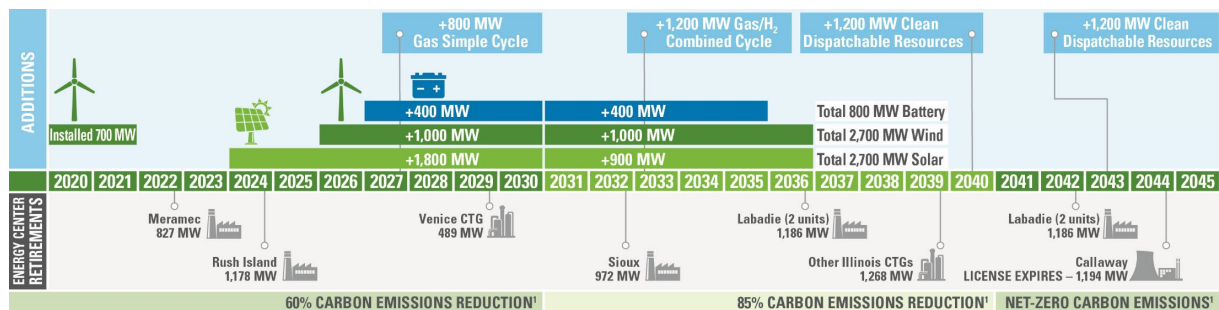
4 A. The EO-2012-0127 preferred resource plan reflected the addition of a new
5 600 MW combined cycle gas generator in 2029, and renewable resource additions to comply
6 with the Missouri Renewable Energy Standard, as were described in EO-2011-0271.

7 Q. What renewable resource additions were contemplated in EO-2011-0271?

8 A. The preferred plan identified in EO-2011-0271 called for approximately
9 240 MW of wind resources and 10 MW of landfill gas to be added through 2030.

10 Q. What is Ameren Missouri’s current preferred plan?

11 A. Ameren Missouri’s current preferred plan is to install an 800 MW gas unit in
12 2027, a 1,200 MW gas unit in 2033, and to add 2,800 MW of renewables before 2030,
13 and 1,900 MW of renewables through 2036.



NOTE: Final timing of Rush Island retirement is dependent on a revised order from the U.S. District Court. The company continues to evaluate the potential for additional energy efficiency and demand response programs. Reductions are presented as of the end of the period indicated and based off 2005 levels. Wind and solar additions, energy center retirements by end of indicated year.

1. Ameren’s goals encompass both Scope 1 and 2 emissions including other greenhouse gas emissions of methane, nitrous oxide and sulfur hexafluoride. This goal is dependent on a variety of factors including cost-effective advancements in innovative clean energy technologies as well as constructive federal and state energy and economic policies.

14 Q. Have the retirements of Meramac and Rush Island benefited ratepayers by
15 reducing revenue requirement?
16

17 A. No, because Ameren Missouri has replaced these low-cost resources with
18 high-cost resources to meet it’s “energy need.”

1 Q. Has Ameren Missouri filed testimony emphasizing the value of Rush Island as
2 meeting Ameren Missouri's "energy need?"

3 A. Yes. Ajay Arora, at page 13 – 14 of his direct testimony in
4 File No. EA-2023-0286 includes the following exchange:

5 Q. Please discuss the Company's need for energy resources and how
6 the Solar Projects help fulfill that need.

7 A. As discussed above, Ameren Missouri's coal facilities are reaching
8 end of life, and three of the Company's four coal facilities will retire no
9 later than 2030: the Meramec Energy Center retired at the end of 2022,
10 the Rush Island Energy Center will retire by 2025, and the Sioux
11 Energy Center will retire by 2030. As illustrated in Company witness
12 Michels' Direct Testimony, these retirements are triggering a dramatic
13 swing in the Company's energy position over the next few years, from
14 its current and historical abundantly long position to having a shortage
15 of energy starting in 2028 assuming normal generation and load. The
16 shortage grows steadily thereafter. Specifically, even under normalized
17 planning conditions, Ameren Missouri becomes short by
18 approximately 1 million megawatt-hours ("MWhs") as early as 2028,
19 by approximately 2 million MWhs by 2029, approximately 6 million
20 by 2031 and approximately 14 million MWhs by 2037, if no new
21 generation resources are added. In fact, the Company's supply of
22 energy is barely above its needs even as early as 2026 and woefully
23 below the energy buffer the Company has maintained historically to
24 protect our customers from shortages in energy supply and/or exposure
25 to market price spikes. Energy shortages in 2028 and 2029 could be
26 increased by an additional 3 million MWhs with recognition of a high
27 price on carbon emissions, which would also mean there is no excess
28 energy at all by 2026. The renewable energy resources the Company
29 plans to add through 2030 reduces this shortage. I should note that the
30 Company's energy positions just discussed above are probably even
31 tighter given that they do not yet account for the lower generation likely
32 to result from the recent CSAPR modifications mentioned above.

33 Q. How does this relate to development of an Earnings Opportunity for a fourth
34 MEEIA Cycle?

35 A. As discussed by Mr. Luebbert, the intent of the Earnings Opportunity as a
36 component of a MEEIA mechanism should be to compensate shareholders for return not

1 earned on investments not made. The EO should be designed to result in utility shareholders
2 receiving compensation to approximate the present value of the earnings opportunity on
3 capacity-related investments that they would receive if the utility did not facilitate
4 DSM programs, all else being equal. The inclusion of an EO is to remove a disincentive for
5 utility promotion of ratepayer-funded DSM programs. However, since Ameren Missouri
6 began facilitating ratepayer-funded programs through MEEIA, Ameren Missouri has grown
7 its gross and net ratebase related to generation capacity while reducing its MW of
8 accredited capacity.

9 **EARNINGS OPPORTUNITY IN FOURTH MEEIA CYCLE**

10 Q. Should Ameren Missouri receive an EO if no opportunity for investment is
11 being avoided or deferred due to its MEEIA programs?

12 A. No. Section 393.1075.3 RSMo states in part that, “In support of this policy,
13 the commission shall: (3) Provide timely earnings opportunities associated with cost-effective
14 measurable and verifiable efficiency savings.” Section 393.1075.4 further states in part that,
15 “Recovery for such programs shall not be permitted unless the programs... are beneficial to
16 all customers in the customer class in which the programs are proposed, regardless of whether
17 the programs are utilized by all customers.” However, there are two separate issues requiring
18 consideration: (1) are costs avoided sufficient to be beneficial to the relevant customers to
19 authorize a MEEIA cycle, and (2) has an earnings opportunity been avoided for shareholders
20 justifying inclusion of an EO mechanism in that MEEIA cycle.

21 Q. In order for all customers to benefit, MEEIA rates, offset by FAC impact,
22 must be lower than the increase to general rates that would have occurred due to new
23 supply-side investment. Is it possible to avoid costs without avoiding earnings opportunities?

1 A. Yes. To authorize a MEEIA cycle the Commission must conclude that
2 program participants and non-participants (all customers) will benefit from such programs.
3 Avoiding or deferring a supply-side investment(s) is a source of avoided costs that is also a
4 source of an avoided earnings opportunity.

5 Q. Commission rule 20 CSR 4240-20.094(4)(C)4. states:

6 (C) Demonstration of cost-effectiveness for each demand-side program
7 and for the total of all demand-side programs of the utility. At a
8 minimum, the electric utility shall provide all workpapers, with all
9 models and spreadsheets provided as executable versions in native
10 format with all links and formulas intact, and include:

11 4. The impacts from all demand-side programs included in the
12 application on any postponement or new supply-side resources and the
13 early retirement of existing supply-side resources, **including annual**
14 **and net present value of any lost utility earnings related thereto.**
15 [emphasis added]
16

17 Has Staff prepared this calculation for its direct testimony in this case?

18 A. No. This provision requires demonstration that the demand-side programs in **that**
19 MEEIA application impacts any postponement or new supply-side resources and the early
20 retirement of existing supply-side resources, including annual and net present value of any
21 lost utility earnings (EO) related to **that** MEEIA application. Based on the preferred resource
22 plan discussion above, any current or near-term MEEIA application is not expected to
23 postpone or avoid the need for 800 MWs of simple cycle gas-fired combustion turbine
24 generators by 2027. It would also then appear that previous MEEIA cycles had no impact in
25 Ameren Missouri deferring or avoiding a gas-fired plant in 2027. As previously mentioned,
26 on February 27, 2024, Ameren Missouri filed its *Notice of Case Filing*, giving notice that it
27 will file an application for a CCN to construct a simple cycle natural gas generation facility.
28 Therefore, unless (1) programs are carefully designed to avoid or defer a supply side resource

1 and (2) sufficient modeling is performed to provide clear and demonstrable evidence that it is
2 avoiding or deferring supply-side generation, any fourth MEEIA cycle should not include an
3 EO. Program design, avoided costs, and earnings opportunity are further discussed in
4 Mr. Luebbert's direct testimony.

5 Q. Does this conclude your direct testimony in this proceeding?

6 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of Union Electric Company d/b/a)
Ameren Missouri's 4th Filing to Implement)
Regulatory Changes in Furtherance of Energy) Case No. EO-2023-0136
Efficiency as Allowed by MEEIA)
)

AFFIDAVIT OF BRAD J. FORTSON

STATE OF MISSOURI)
) ss.
COUNTY OF COLE)

COMES NOW BRAD J. FORTSON and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Direct Testimony of Brad J. Fortson*; and that the same is true and correct according to his best knowledge and belief.

Further the Affiant sayeth not.

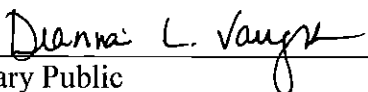


BRAD J. FORTSON

JURAT

Subscribed and sworn before me, a duly constituted and authorized Notary Public, in and for the County of Cole, State of Missouri, at my office in Jefferson City, on this 28th day of February 2024.

DIANNA L. VAUGHT
Notary Public - Notary Seal
State of Missouri
Commissioned for Cole County
My Commission Expires: July 18, 2027
Commission Number: 15207377



Notary Public

Brad J. Fortson

Education and Employment Background

I am the Regulatory Compliance Manager of the Energy Resources Department, Industry Analysis Division of the Missouri Public Service Commission. Prior to my current position, I was employed at the Missouri Public Service Commission as a Regulatory Economist from December 2012 through March 2015 and August 2015 through February 2019.

I received an Associate of Applied Science degree in Computer Science in May 2003, Bachelor of Science degree in Business Administration in May 2009, and Master of Business Administration degree with an emphasis in Management in May 2012, all from Lincoln University, Jefferson City, Missouri.

Prior to first joining the Commission, I worked in various accounting positions within four state agencies of the State of Missouri. I was employed as an Account Clerk II for the Inmate Finance Section of the Missouri Department of Corrections; as an Account Clerk II for the Accounts Payable Section of the Missouri Department of Health and Senior Services; as a Contributions Specialist for the Employer Accounts Section of the Missouri Department of Labor and Industrial Relations; and as an Accountant I for the Payroll Section of the Missouri Office of Administration. From April 1 through July 31, 2015, I worked for the Missouri Office of Public Counsel before joining the Commission once again.

Case Participation History

Case Number	Company	Issue	Exhibit
HR-2014-0066	Veolia Energy Kansas City	Revenue by Class and Rate Design	Staff Report
GR-2014-0086	Summit Natural Gas of Missouri, Inc.	Large Volume Service Revenue	Staff Report
ER-2014-0258	Union Electric Company d/b/a Ameren Missouri	Revenue by Class and Rate Design	Staff Report

ER-2014-0258	Union Electric Company d/b/a Ameren Missouri	Revenue by Class and Rate Design	Staff Report, Rebuttal & Surrebuttal Testimony
ER-2014-0351	The Empire District Electric Company	Revenue by Class and Rate Design	Staff Report & Rebuttal Testimony
ER-2014-0351	The Empire District Electric Company	Revenue by Class and Rate Design	Rebuttal Testimony
EO-2015-0240	Kansas City Power & Light Company	Custom Program Incentive Level	Direct Testimony
EO-2015-0241	KCP&L Greater Missouri Operations Company	Custom Program Incentive Level	Direct Testimony
ER-2016-0023	The Empire District Electric Company	DSM Programs and MEEIA Filings	Staff Report
ER-2016-0023	The Empire District Electric Company	DSM Programs and MEEIA Filings	Staff Report, Rebuttal & Surrebuttal Testimony
EM-2016-0213	The Empire District Electric Company (merger case)	DSM Programs and MEEIA Filings	Rebuttal & Surrebuttal Testimony
ER-2016-0156	KCP&L Greater Missouri Operations Company	MEEIA summary and LED street lighting	Staff Report
EO-2016-0183	Kansas City Power & Light Company	MEEIA prudence review	Staff Report
EO-2016-0223	The Empire District Electric Company	Triennial compliance filing	Staff Report
ER-2016-0285	Kansas City Power & Light Company	LED street lighting	Staff Report
ER-2016-0179	Union Electric Company d/b/a Ameren Missouri	LED street lighting	Staff Report
ER-2016-0285	Kansas City Power & Light Company	Response to Commissioner questions	Staff Report
ER-2016-0179	Union Electric Company d/b/a Ameren Missouri	Response to Commissioner questions	Staff Report
EO-2017-0209	Kansas City Power & Light Company	MEEIA prudence review	Staff Report
EO-2017-0210	KCP&L Greater Missouri Operations Company	MEEIA prudence review	Staff Report
EO-2015-0055	Union Electric Company d/b/a Ameren Missouri	Flex pay pilot program	Rebuttal Testimony
GR-2018-0013	Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities	Red Tag Program and Energy Efficiency Program Funding	Staff Report, Rebuttal & Surrebuttal Testimony

ER-2018-0145	Kansas City Power & Light Company	LED street lighting, TOU rates	Rebuttal Testimony
ER-2018-0146	KCP&L Greater Missouri Operations Company	LED street lighting, TOU rates	Rebuttal Testimony
EO-2018-0211	Union Electric Company d/b/a Ameren Missouri	Program Design	Rebuttal Report & Surrebuttal Testimony
EO-2019-0132	Kansas City Power & Light Company	Program Design	Rebuttal Report & Surrebuttal Testimony
EO-2019-0376	Union Electric Company d/b/a Ameren Missouri	MEEIA prudence review	Direct Testimony
ER-2019-0374	The Empire District Electric Company	Hedging policy and EE/LI programs	Supplemental Testimony
EO-2020-0280	Evergy Metro	IRP Annual Update	Staff Report
EO-2020-0281	Evergy Missouri West	IRP Annual Update	Staff Report
ER-2020-0311	The Empire District Electric Company	Fuel Adjustment Clause	Rebuttal Testimony
EO-2020-0227	Evergy Metro and Evergy Missouri West	MEEIA prudence review	Direct Testimony
EO-2020-0262	Evergy Metro and Evergy Missouri West	FAC prudence review	Direct & Rebuttal Testimony
EO-2021-0021	Union Electric Company d/b/a Ameren Missouri	Triennial compliance filing	Staff Report
EO-2021-0035	Evergy Metro	Triennial compliance filing	Staff Report
EO-2021-0036	Evergy Missouri West	Triennial compliance filing	Staff Report
EO-2021-0416	Evergy Missouri West	MEEIA prudence review	Staff Report
EO-2021-0417	Evergy Metro	MEEIA prudence review	Staff Report
EO-2022-0061	Evergy Missouri West	Application for Special Rate	Rebuttal Testimony
EO-2022-0064	Evergy Missouri Metro	FAC prudence review	Direct Testimony
EO-2022-0065	Evergy Missouri West	FAC prudence review	Direct Testimony
EO-2022-0040	The Empire District Electric Company	Securitization	Rebuttal Testimony
EF-2022-0155	Evergy Missouri West	Securitization	Rebuttal & Surrebuttal Testimony
ER-2022-0129	Evergy Missouri Metro	FAC	Direct & Surrebuttal Testimony

ER-2022-0130	Evergy Missouri West	FAC	Direct & Surrebuttal Testimony
EA-2022-0245	Union Electric Company d/b/a Ameren Missouri	CCN	Rebuttal Testimony
EA-2022-0328	Evergy Missouri West	CCN	Rebuttal Testimony
EA-2023-0286	Union Electric Company d/b/a Ameren Missouri	CCN	Rebuttal Testimony
ER-2023-0444	Evergy Missouri West	FAC	Rebuttal Testimony
EO-2023-0276	Evergy Missouri Metro	FAC	Rebuttal Testimony
EO-2023-0277	Evergy Missouri West	FAC	Rebuttal Testimony
EF-2024-0021	Union Electric Company d/b/a Ameren Missouri	Securitization	Rebuttal Testimony

