

Exhibit No.:
Issue(s): Depreciation
Witness: Malachi Bowman
Sponsoring Party: MoPSC Staff
Type of Exhibit: Direct Testimony
Case No.: ER-2024-0261
Date Testimony Prepared: July 2, 2025

MISSOURI PUBLIC SERVICE COMMISSION

INDUSTRY ANALYSIS DIVISION

ENGINEERING DEPARTMENT

DIRECT TESTIMONY

OF

MALACHI BOWMAN

**THE EMPIRE DISTRICT ELECTRIC COMPANY,
d/b/a Liberty**

CASE NO. ER-2024-0261

*Jefferson City, Missouri
July 2025*

DIRECT TESTIMONY

OF

MALACHI BOWMAN

**THE EMPIRE DISTRICT ELECTRIC COMPANY,
d/b/a Liberty**

CASE NO. ER-2024-0261

Q. Please state your name and business address.

A. My name is Malachi Bowman and my business address is Missouri Public Service Commission, P.O. Box 360, Jefferson City, Missouri 65102.

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

A. I am employed by the Missouri Public Service Commission (“Commission”) as an Associate Engineer in the Engineering Analysis Department of the Industry Analysis Division.

Q. Please describe your educational background and relevant work experience.

A. I received my Bachelors of Science degree in Mechanical Engineering from the University of Kansas in 2020. I was employed as a Sales Engineer in the commercial heating, ventilation, & air conditioning (HVAC) industry from 2022-2024. I have been employed by the Commission since April of 2024 as an Associate Engineer. A list of my case participation is included in schedule MB-d1.

EXECUTIVE SUMMARY

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to recommend the continued use of the depreciation rates which were ordered in The Empire District Electric Company's ("Empire")

1 last rate case, Case No. ER-2021-0312 (“2021 rate case”), and recommend a depreciation rate
2 for account 370.1, AMI-Meters.

3 **DEPRECIATION DESCRIPTION**

4 Q. What is depreciation?

5 A. Depreciation is defined as “the loss in service value not restored by current
6 maintenance, incurred in connection with the consumption or prospective retirement of utility
7 plant in the course of service from causes which are known to be in current operation and against
8 which the utility is not protected by insurance. Among the causes to be given consideration are
9 wear and tear, decay, action of the elements, inadequacy, obsolescence, changes in the art,
10 changes in demand, and requirements of public authorities.”¹

11 The objective of depreciation is to determine the depreciation expense attributable to
12 each year’s operation and for the utility to recover the capital invested in depreciable plant over
13 its useful life. The most common method of allocation, the straight-line method, distributes an
14 equal amount between review periods, thus a depreciation rate (%) is used.

15 Q. Is Empire requesting updated depreciation rates in this case?

16 A. No. However, Empire witness Charlotte Emery used a depreciation rate for
17 account 370.1, AMI – Meters, in her direct workpapers which is not contained in the currently
18 ordered rates.²

19 Q. Did Empire submit its depreciation study, database, and property unit catalog in
20 this case?

¹ Definition from NARUC USOA for Class A and B Water Utilities 1973

² The currently ordered rates were not included in settlement documents in ER-2021-0312, but the parties agreed to utilize Staff witness Cedric E. Cunigan’s depreciation rates which are attached to his rebuttal testimony (See ER-2021-0312 - Item 93).

1 A. No. However, Empire submitted these items in the 2021 rate case.
2 Electric utilities are required to conduct depreciation studies every three to five years to comply
3 with Commission Rule 20 CSR 4240-3.160(1)(A).³ Although four years have passed since
4 Empire conducted its last depreciation study, it is within reason for Empire to wait until its next
5 rate case to perform a new depreciation study.

6 Q. Did Staff perform a depreciation study for this case?

7 A. No. Staff last performed a depreciation study during the 2021 rate case.
8 Staff typically performs depreciation studies when a utility submits its depreciation study,
9 database, and property unit catalog.

10 **AMI-METERS DEPRECIATION RATE**

11 Q. Why is Staff recommending a depreciation rate for account 370.1?

12 A. Witness Emery included a depreciation rate for account 370.1 in workpaper 6.3,
13 but no rate was ordered for this account in prior rate cases. After reviewing Empire's previous
14 depreciation study,⁴ Staff recognizes that Empire recommended a depreciation rate of 5% for
15 the account which was based on an estimated 20-year life and 0% net salvage value, but no rate
16 for this account was ordered. At the time of the depreciation study, there was no data included
17 in this account to perform an analysis. Based upon analysis done for similar accounts,⁵
18 Staff considers a 20-year life and 0% net salvage value as reasonable in the absence of an
19 updated depreciation study. Staff is recommending a 5% depreciation rate for account 370.1

³ 20 CSR 4240-3.160(1)(A) states "an electric utility need not submit a depreciation study, database or property unit catalog to the extent that the commission's staff received these items from the utility during the three (3) years prior to the utility filing for a general rate increase or before five (5) years have elapsed since the last time the commission's staff received a depreciation study, database and property unit catalog from the utility."

⁴ ER-2021-0312, Item 267, Schedule daw-2_part2, Page 110

⁵ ER-2024-0319, Stipulation and Agreement, Exhibit E, A 5.58% depreciation rate based on a 20-year life with a -1% net salvage was ordered by the Commission for Ameren Electric's AMI Meter account

1 until Empire submits a new depreciation study, database, and property unit catalog.
2 At that time, Staff will perform its depreciation study and assign an updated rate for the account.

3 **CONCLUSION**

4 Q. What are Staff's recommendations for this case regarding depreciation rates?

5 A. Staff recommends the continued use of the depreciation rates currently in effect
6 for Empire as ordered in its last rate case. Staff also recommends the new depreciation rate for
7 account 370.1. These rates are attached to my testimony under schedule MB-d2.

8 Q. Does this conclude your direct testimony?

9 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION

OF THE STATE OF MISSOURI

In the Matter of the Request of The Empire)
District Electric Company d/b/a Liberty for)
Authority to File Tariffs Increasing Rates)
for Electric Service Provided to Customers)
in Its Missouri Service Area)
Case No. ER-2024-0261

AFFIDAVIT OF MALACHI BOWMAN

STATE OF MISSOURI)
)
COUNTY OF COLE) ss.

COMES NOW MALACHI BOWMAN and on his oath declares that he is of sound mind and lawful age; that he contributed to the foregoing *Direct Testimony of Malachi Bowman*; and that the same is true and correct according to his best knowledge and belief.

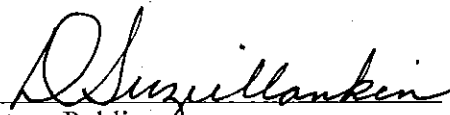
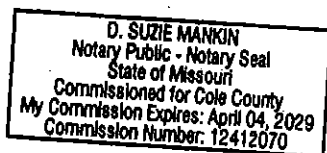
Further the Affiant sayeth not.



MALACHI BOWMAN

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 25th day of June 2025.


Notary Public

CREDENTIALS AND CASE PARTICIPATION OF
MALACHI BOWMAN

PRESENT POSITION:

I am an Associate Engineer in the Engineering Analysis Department, Industry Analysis Division, of the Missouri Public Service Commission.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

I received my Bachelors of Science degree in Mechanical Engineering from the University of Kansas in December of 2020. I was employed as a Sales Engineer in the commercial heating, ventilation, & air conditioning (“HVAC”) industry from 2022-2024. I have been employed by the Commission since May of 2024 as an Associate Engineer.

CASE PARTICIPATION:

Company	Case Number	Issues
Missouri-American Water Company	WR-2024-0320	Depreciation
Holtgrewe Farms	WR-2024-0343 & SR-2024-0344	Depreciation
Ameren Missouri	EA-2024-0237	CCN – Staff Report
Ameren Transmission Company of Illinois	EA-2024-0302	CCN – Staff Report
Ameren Transmission Company of Illinois	EA-2025-0087	CCN – Staff Report
Ameren Missouri (Gas)	GR-2024-0369	Depreciation
Spire (Gas)	GR-2025-0107	Depreciation

**Liberty Empire Depreciation Rates
ER-2024-0261**

DEPRECIABLE GROUP	Net Salvage %	Depreciation Rate
<u>Production Plant</u>		
311 Structures and Improvements		
IATAN 1	-7	1.99%
IATAN 2	-7	2.08%
IATAN COMMON	-7	2.22%
PLUM POINT	-7	2.41%
312 Boiler Plant Equipment		
IATAN 1	-10	3.57%
IATAN 2	-10	3.10%
IATAN COMMON	-10	3.11%
PLUM POINT	-10	3.23%
312.1 Unit Train/Train Lease		
IATAN 1 UNIT TRAIN	0	17.89%
PLUM POINT TRAIN LEASE	0	7.98%
UNIT TRAIN PLUM POINT	0	8.45%
314 Turbogenerator Units		
IATAN 1	-15	4.00%
IATAN 2	-15	2.58%
IATAN COMMON	-15	2.68%
PLUM POINT	-15	2.84%
315 Accessory Electric Equipment		
IATAN 1	-8	3.37%
IATAN 2	-8	2.56%
IATAN COMMON	-8	2.62%
PLUM POINT	-8	2.72%
316 Misc. Power Plant Equipment		
IATAN 1	-4	2.96%
IATAN 2	-4	0.00%
IATAN COMMON	-4	3.15%
PLUM POINT	-4	3.01%
 <u>Hydro Plant</u>		
331 Structures & Improvements	-10	2.94%
332 Reservoirs, Dams,& Waterways Water Wheels, Turbines	-10	2.15%
333 Generators	-10	6.60%
334 Accessory Electric Equipment	-10	2.72%
335 Misc. Power Plant Equipment	0	3.56%
 <u>Other Production Plant</u>		
341 Structures & Improvements		
ASBURY WIND SERVICES	-2	2.07%
ENERGY CENTER	-2	7.33%
ENERGY CENTER FT8	-2	3.37%
RIVERTON 12	-2	2.57%

RIVERTON 9, 10, 11	-2	6.57%
STATE LINE 1	-2	0.73%
STATE LINE CC	-2	2.36%
STATE LINE COMMON	-2	2.31%

342 Fuel Holders, Producers & Access.

ASBURY WIND SERVICES	-2	1.29%
ENERGY CENTER	-2	0.00%
ENERGY CENTER FT8	-2	2.95%
RIVERTON 12	-2	2.20%
RIVERTON 9, 10, 11	-2	4.18%
STATE LINE 1	-2	1.51%
STATE LINE CC	-2	0.00%
STATE LINE COMMON	-2	0.00%

343 Prime Movers

ENERGY CENTER	-2	5.34%
ENERGY CENTER FT8	-2	4.06%
RIVERTON 12	-2	2.84%
RIVERTON 9, 10, 11	-2	5.77%
STATE LINE 1	-2	2.92%
STATE LINE CC	-2	2.80%
STATE LINE COMMON	-2	3.38%

344 Generators

ENERGY CENTER	-1	5.79%
ENERGY CENTER FT8	-1	4.61%
RIVERTON 12	-1	2.86%
RIVERTON 9, 10, 11	-1	4.21%
STATE LINE 1	-1	3.69%
STATE LINE CC	-1	2.96%

345 Accessory Electric Equipment

ASBURY WIND SERVICES	-5	0.63%
ENERGY CENTER	-5	5.67%
ENERGY CENTER COMMON	-5	3.45%
RIVERTON 12	-5	2.91%
RIVERTON 9, 10, 11	-5	5.45%
STATE LINE 1	-5	2.97%
STATE LINE CC	-5	2.58%
STATE LINE COMMON	-5	2.99%

346 Misc. Power Plant Equipment

ASBURY WIND SERVICES	-5	1.96%
ENERGY CENTER	-5	0.44%
ENERGY CENTER FT8	-5	3.20%
RIVERTON 12	-5	2.39%
RIVERTON 9, 10, 11	-5	6.27%
STATE LINE 1	-5	3.59%
STATE LINE CC	-5	2.80%

STATE LINE COMMON	-5	1.80%
Wind Production	0	3.33%
Solar Production	0	4.00%
<u>Transmission Plant</u>		
352 Structures & Improvements	-10	1.07%
353 Station Equipment	-20	2.44%
354 Towers & Fixtures	-10	1.17%
355 Poles & Fixtures	-100	3.60%
356 Overhead Conductors & Devices	-25	1.82%
<u>Distribution Plant</u>		
361 Structures & Improvements	-10	1.94%
362 Station Equipment	-15	2.11%
364 Poles, Towers & Fixtures	-125	5.05%
365 Overhead Conductors & Devices	-100	3.10%
366 Underground Conduit	-20	1.76%
367 Underground Conductors & Devices	-25	1.56%
368 Line Transformers	-10	1.88%
369 Overhead Services	-100	3.32%
370 Meters	-2	4.39%
370.1 AMI – Meters	0	5.00%
371 Installations on Customers' Premises	-40	3.48%
373 Street Lighting & Signal Systems	-60	3.90%
375 Charging Stations	0	5.00%
<u>General Plant</u>		
390 Structures & Improvements	-10	1.73%
391.1 Office Furniture & Equipment	0	5.00%
391.3 Computer Equipment	0	20.00%
392 Transportation Equipment	10	5.20%
393 Stores Equipment	0	2.86%
394 Tools, Shop & Garage Equipment	0	5.00%
395 Laboratory Equipment	0	5.00%
396 Power Oper. Eqpt.	0	4.62%
397 Communication Equipment	0	6.67%
398 Miscellaneous Equipment	0	2.94%