

Donald A. Fontana, PE

Current Position:

I am a Senior Professional Engineer in the Engineering Analysis Department – Industry Analysis Division of the Missouri Public Service Commission.

Educational Background and Work Experience:

I received a Bachelor of Science degree in Civil Engineering from the University of Missouri – Columbia in 1998, and I am a Registered Professional Engineer in the State of Missouri.

After graduation, I was initially employed as a consultant Designer (Engineer-In-Training) by Central Missouri Professional Services from June 1998 through May 2003.

I was next employed as a Design Engineer and Project Manager by the Missouri Department of Conservation from May 2003 to March 2007. I obtained licensure in Missouri as a Professional Engineer in 2004 (License Number 2004017168).

I was next employed by the City of Jefferson City, Missouri – Department of Public Works from March 2007 to November 2024, as the City’s Stormwater Engineer and Floodplain Administrator.

I have been employed as a staff member with the Missouri Public Service Commission from December 2024 through the present (currently May 2026). To date, I have not testified before the Missouri Public Service Commission.

Testimony Filed:

Case Number	Utility	Testimony	Issue
EA-2025-0028	Ameren Missouri	Staff Report	Application Requirements, Qualifications, Public Interest, Recommended Conditions
EA-2024-0292	Evergy Missouri West	Staff Report	Application Requirements, Qualifications, Siting Study, Recommended Conditions
EA-2025-0075	Evergy Missouri West / Evergy Missouri Metro	Staff Report	Qualifications, Siting Study, Recommended Conditions
EA-2025-0087	Ameren Transmission Company of Illinois (ATXI)	Staff Report	Qualifications, Public Interest, Recommended Conditions, Routing Study
EA-2025-0222	Ameren Transmission Company of Illinois (ATXI)	Staff Report	Executive Summary, Tartan Analysis – Need, Tartan Analysis – Routing and Conditions

Case Number	Utility	Testimony	Issue
EA-2025-0238	Ameren Missouri	Staff Report	Tartan Public Interest – Consumer Comments, BESS Safety, Contributed to the Restoration/ Operational Plans section
EA-2025-0239	Ameren Missouri	Staff Report	<u>General</u> – Review Application Rule Requirements <u>Tartan Factors</u> – Qualification of Ameren to Construct, Own, Operate, and Maintain <u>Public Interest</u> – Consumer Comments -Siting Evaluation -Construction Reporting/ Bid Evaluation (RFP Scoring)
EA-2026-0018	Ameren Missouri	Memorandum	<u>General</u> – Review Application Rule Requirements <u>Tartan Factors</u> – Qualification of Ameren to Construct, Own, Operate, and Maintain <u>Public Interest</u> – Consumer Comments -Siting Evaluation -Construction
EE-2026-0234	Ameren Missouri	Memorandum	Review, evaluation and recommendation for a Vegetation Management Variance
WR-2025-0292	Environmental Utilities, LLC	Staff Report	Depreciation Rate Recommendation

Jared Giaccone

Present Position:

I am a Utility Regulatory Audit Supervisor with the Missouri Public Service Commission. I have been employed by the Missouri Public Service Commission Since April 2019.

Educational Background and Work Experience:

I earned a Bachelor of Science degree in Business Administration with an emphasis in Accounting in 2007 from DeVry University in Kansas City, MO. I was previously employed in sales and finance operations for semi-truck dealerships. Prior to that, I was a Compliance Auditor with the Missouri Gaming Commission for 6 years.

Case Participation:

<u>Company Name</u>	<u>Case Number</u>	<u>Case Type</u>	<u>Utility Type</u>
Spire	GA-2026-0282	Certificate of Convenience and Necessity (CCN)	Gas— Expansion
Spire	GU-2026-0225	Accounting Authority Order (AAO)	Gas
Empire	EA-2025-0299	Certificate of Convenience and Necessity (CCN)	Electric— New Simple Cycle Gas
Empire	ER-2024-0261	Rate Case	Electric
Ameren	GR-2024-0369	Rate Case	Gas
MRG Utilities, LLC	WA-2025-0090 SA-2025-0091 <i>*Withdrawn by Company*</i>	Certificate of Convenience and Necessity (CCN)	Water— New Utility Sewer— New Utility
Confluence Rivers Utility Operating Company, Inc.	SM-2025-0080 <i>*Withdrawn by Company*</i>	Certificate of Convenience and Necessity (CCN)	Sewer— Merger
Evergy Missouri West	ER-2024-0189	Rate case	Electric
Confluence Rivers Utility Operating Company, Inc.	SM-2024-0130	Acquisition of a regulated utility and transfer of Certificate of Convenience and Necessity (CCN)	Sewer— Merger
Confluence Rivers Utility Operating Company, Inc.	WA-2023-0450 SA-2023-0451	Certificate of Convenience and Necessity (CCN)	Water— Acquisition Sewer— Acquisition
Evergy Missouri Metro	EO-2023-0423	Other-Construction Audit	Electric
Evergy Missouri West	EO-2023-0424	Other-Construction Audit	Electric

<u>Company Name</u>	<u>Case Number</u>	<u>Case Type</u>	<u>Utility Type</u>
Spire	GA-2023-0374	Certificate of Convenience and Necessity (CCN)	Gas—Expansion
Liberty Utilities (Midstates Natural Gas)	GT-2023-0229	Infrastructure System Replacement Surcharge (ISRS)	Gas
Ameren	ER-2022-0337	Rate case	Electric
Ameren	EC-2023-0037	Complaint	Electric
Evergy Missouri Metro	ER-2022-0129	Rate case	Electric
Evergy Missouri West	ER-2022-0130	Rate case	Electric
Evergy Missouri Metro Evergy Missouri West	EA-2022-0043	Certificate of Convenience and Necessity (CCN)	Electric—New Solar
Spire	GR-2021-0108	Rate case	Gas
Missouri-American Water Company	SA-2021-0074	Certificate of Convenience and Necessity (CCN)	Sewer—Acquisition
Spire	GO-2021-0030	Infrastructure System Replacement Surcharge (ISRS)	Gas
Raytown Water Company	WR-2020-0264	Rate case	Water
Spire	GO-2020-0230	Infrastructure System Replacement Surcharge (ISRS)	Gas
Spire	GO-2020-0229	Infrastructure System Replacement Surcharge (ISRS)	Gas
Empire	ER-2019-0374	Rate case	Electric
Spire	GO-2019-0357	Infrastructure System Replacement Surcharge (ISRS)	Gas
Spire	GO-2019-0356	Infrastructure System Replacement Surcharge (ISRS)	Gas

Randall T. Jennings

Present Position:

I began employment with the Missouri Public Service Commission in October 2021 as a Utility Regulatory Auditor and was later promoted to the position of Senior Utility Regulatory Auditor; both in the Financial Analysis Department of the Financial and Business Analysis Division. In July 2024 I moved to the Tariff and Rate Design Department of the Industry Analysis Division as a Research and Data Analyst and in November 2025, I was promoted to the position of Senior Research and Data Analyst with the same department.

Educational Background and Work Experience:

I earned a Bachelor of Science degree in Business Administration from Drury University in Springfield, MO. I was previously employed as a Regulatory Auditor and Supervisor with the Missouri Division of Professional Registration for 11 years and prior to that as an Investigator for the Missouri Attorney General for 8 years.

Case Participation:

<u>Company Name</u>	<u>Case Number</u>	<u>Case Type / Type of Testimony or Filing</u>	<u>Utility</u>
The Raytown Water Company	WF-2021-0427	Finance – Staff Memorandum	Water
Evergy Missouri West, Inc., d/b/a Evergy Missouri West	EF-2022-0103	Finance – Staff Memorandum	Electric
Summit Natural Gas of Missouri, Inc.	GR-2022-0122	Tariff Revision – Rebuttal & Surrebuttal Testimony	Gas
Missouri American Water Company	WF-2022-0161	Finance – Staff Memorandum	Water
Union Electric Company, d/b/a Ameren Missouri	EF-2022-0164	Finance – Staff Memorandum Financing Compliance – Staff Memorandum	Electric
Spire Missouri Inc.	GF-2022-0169	Finance – Staff Memorandum	Gas
Summit Natural Gas of Missouri, Inc.	GF-2022-0216	Finance – Staff Memorandum	Gas
S.K. & M. Water and Sewer Company	SR-2022-0239 WR-2022-0240	Rate Case – Staff Memorandum	Water
Missouri American Water Company	WR-2022-0303	Rate Case – Direct, Rebuttal & Surrebuttal Testimony	Water
Argyle Estates Water Supply	WR-2022-0345	Rate Case – Staff Memorandum	Water
Liberty Utilities (Midstates Natural Gas) Corp., d/b/a Liberty	GF-2023-0280	Finance – Staff Memorandum	Gas
The Raytown Water Company	WR-2023-0344	Rate Case – Direct, Rebuttal & Surrebuttal Testimony	Water
Evergy Metro Inc., d/b/a Evergy Missouri Metro	EF-2023-0425	Finance – Staff Memorandum	Electric
Union Electric Company, d/b/a Ameren Missouri	EO-2023-0448	Nuclear Decommissioning – Rebuttal & Surrebuttal Testimony	Electric
Evergy Missouri West, Inc., d/b/a Evergy Missouri West	ER-2024-0189	RESRAM Prudence – Staff Memorandum	Electric
Evergy Missouri West, Inc., d/b/a Evergy Missouri West	EA-2024-0292	CCN – Staff Recommendation	Electric
Union Electric Company, d/b/a Ameren Missouri	ER-2024-0319	RESRAM Prudence – Staff Memorandum	Electric
Holtgrewe Farms Water Company, LLC	SR-2024-0344 WR-2024-0343	Rate Case – Staff Memorandum	Sewer Water

<u>Company Name</u>	<u>Case Number</u>	<u>Case Type / Type of Testimony or Filing</u>	<u>Utility</u>
Missouri American Water Company	WF-2024-0353	Finance – Staff Memorandum	Water
Union Electric Company, d/b/a Ameren Missouri	ER-2025-0119	RESRAM Adjustment Mechanism – Memorandum	Electric
Evergy Missouri West, Inc., d/b/a Evergy Missouri West	ET-2025-0121	RESRAM Tariff Sheet – Memorandum	Electric
Evergy Missouri Metro, Inc., d/b/a Evergy Missouri Metro	EO-2025-0173	DSIM Rider Rate Adjustment and Rate Tariff Sheet – Memorandum	Electric
Evergy Missouri West, Inc., d/b/a Evergy Missouri West	EO-2025-0174	DSIM Rider Rate Adjustment and Rate Tariff Sheet – Memorandum	Electric
The Empire District Electric Company d/b/a Liberty	ER-2024-0261	Rate Case – Direct and Rebuttal Testimony	Electric
Union Electric Company, d/b/a Ameren Missouri	EA-2025-0239	CCN – Staff Recommendation	Electric
Evergy Missouri Metro, Inc., d/b/a Evergy Missouri Metro	EO-2025-0325	DSIM Rider Rate Adjustment and Rate Tariff Sheet – Memorandum	Electric
Evergy Missouri West, Inc., d/b/a Evergy Missouri West	EO-2025-0326	DSIM Rider Rate Adjustment and Rate Tariff Sheet – Memorandum	Electric
Union Electric Company, d/b/a Ameren Missouri	ER-2026-0081	RESRAM Adjustment Mechanism – Memorandum	Electric
Evergy Missouri West, Inc., d/b/a Evergy Missouri West	ET-2026-0086	RESRAM Adjustment Mechanism – Memorandum	Electric
Evergy Missouri Metro, Inc., d/b/a Evergy Missouri Metro	EO-2026-0138	DSIM Rider Rate Adjustment and Rate Tariff Sheet – Memorandum	Electric
Evergy Missouri West, Inc., d/b/a Evergy Missouri West	EO-2026-0139	DSIM Rider Rate Adjustment and Rate Tariff Sheet – Memorandum	Electric

Sarah L.K. Lange

I received my J.D. from the University of Missouri, Columbia, in 2007, and am licensed to practice law in the State of Missouri. I received my B.S. in Historic Preservation from Southeast Missouri State University, and took courses in architecture and literature at Drury University. Since beginning my employment with the MoPSC I have taken courses in economics through Columbia College and courses in energy transmission through Bismarck State College, and have attended various trainings and seminars, indicated below.

I began my employment with the Commission in May 2006 as an intern in what was then known as the General Counsel's Office. I was hired as a Legal Counsel in September 2007, and was promoted to Associate Counsel in 2009, and Senior Counsel in 2011. During that time my duties consisted of leading major rate case litigation and settlement, and presenting Staff's position to the Commission, and providing legal advice and assistance primarily in the areas of depreciation, cost of service, class cost of service, rate design, tariff issues, resource planning, accounting authority orders, construction audits, rulemakings and workshops, fuel adjustment clauses, document management and retention, and customer complaints.

In July 2013 I was hired as a Regulatory Economist III in what is now known as the Tariff / Rate Design Department. In this position my duties include providing analysis and recommendations in the areas of RTO and ISO transmission, rate design, class cost of service, tariff compliance and design, and regulatory adjustment mechanisms and tariff design. I also continue to provide legal advice and assistance regarding generating station and environmental control construction audits and electric utility regulatory depreciation. I have also participated before the Commission under the name Sarah L. Kliethermes.

Presentations

Midwest Energy Policy Series – Impact of ToU Rates on Energy Efficiency (August 14, 2020)

Billing Determinants Lunch and Learn (March 27, 2019)

Support for Low Income and Income Eligible Customers, Cost-Reflective Tariff Training, in cooperation with U.S.A.I.D. and NARUC, Addis Ababa, Ethiopia (February 23-26, 2016)

Fundamentals of Ratemaking at the MoPSC (October 8, 2014)

Ratemaking Basics (Sept. 14, 2012)

Participant in Missouri's Comprehensive Statewide Energy Plan working group on Energy Pricing and Rate Setting Processes.

Relevant Trainings and Seminars

FRI Advanced Seminar on Transformation Utility Pricing & Rate Design (April 7 - 9, 2025)

Regional Training on Integrated Distribution System Planning for Midwest/MISO Region (October 13-15, 2020)

"Fundamentals of Utility Law" Scott Hempling lecture series (January – April, 2019)

Today's U.S. Electric Power Industry, the Smart Grid, ISO Markets & Wholesale Power Transactions (July 29-30, 2014)

MISO Markets & Settlements training for OMS and ERSC Commissioners & Staff (January 27–28, 2014)

Validating Settlement Charges in New SPP Integrated Marketplace (July 22, 2013)

PSC Transmission Training (May 14 – 16, 2013)

Grid School (March 4–7, 2013)

Specialized Technical Training - Electric Transmission (April 18–19, 2012)

The New Energy Markets: Technologies, Differentials and Dependencies (June 16, 2011)

Mid-American Regulatory Conference Annual Meeting (June 5–8, 2011)

Renewable Energy Finance Forum (Sept. 29–Oct 3, 2010)

Utility Basics (Oct. 14–19, 2007)

Testimony and Staff Memoranda

Company	Case No.
The Empire District Electric Company d/b/a Liberty In the Matter of the Application of The Empire District Electric Company d/b/a Liberty for a Certificate of Convenience and Necessity to Support Resource Adequacy	EA-2025-0299
Union Electric Company d/b/a Ameren Missouri In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and Certificates of Public Convenience and Necessity Authorizing it to Construct Renewable Generation Facilities	EA-2025-0239
Evergy Metro, Inc. d/b/a Evergy Missouri Metro Evergy Missouri West, Inc. d/b/a Evergy Missouri West In the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of New or Modified Tariffs to Permit Customers to Opt-Out of Time of Use Rates	ET-2026-0074
Union Electric Company d/b/a Ameren Missouri In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and Certificates of Public Convenience and Necessity Authorizing it to Construct a New Generation Facility and Battery Energy Storage System	EA-2025-0238
Union Electric Company d/b/a Ameren Missouri In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of New Modified Tariffs for Service to Large Load Customers	ET-2025-0184
Evergy Metro, Inc. d/b/a Evergy Missouri Metro Evergy Missouri West, Inc. d/b/a Evergy Missouri West In the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of New and Modified Tariffs for Service to Large Load Customers	EO-2025-0154
The Empire District Electric Company d/b/a Liberty In the Matter of the Petition 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	ER-2024-0261
Evergy Metro, Inc. d/b/a Evergy Missouri Metro In the Matter of the Tariff Filings of Evergy Metro, Inc. d/b/a Evergy Missouri Metro.	ET-2025-0286
Evergy Missouri West, Inc. d/b/a Evergy Missouri West In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Permission and Approval of Certificates of Public Convenience and Necessity Authorizing It to Construct, Install, Own, Operate, Manage, Maintain and Control Two Solar Generation Facilities.	EA-2024-0292

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Company	Case No.
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust its Revenues for Electric Service.	ER-2024-0319
Evergy Missouri West, Inc. d/b/a Evergy Missouri West In the Matter of Evergy Missouri West, Inc. dba Evergy Missouri West's Request for Authority to Implement a General Rate Increase for Electric Service.	ER-2024-0189
Evergy Metro, Inc. d/b/a Evergy Missouri Metro Evergy Missouri West, Inc. d/b/a Evergy Missouri West In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's and Evergy Missouri West, Inc. d/b/a Evergy Missouri West's Solar Subscription Rider Tariff Filings	ET-2024-0182
Evergy Metro, Inc. d/b/a Evergy Missouri Metro Evergy Missouri West, Inc. d/b/a Evergy Missouri West The Staff of the Missouri Public Service Commission, Complainant, v Evergy Metro, Inc. d/b/a Evergy Missouri Metro's and Evergy Missouri West, Inc. d/b/a Evergy Missouri West	EC-2024-0092
Evergy Metro, Inc. d/b/a Evergy Missouri Metro Evergy Missouri West, Inc. d/b/a Evergy Missouri West In the Matter of the Joint Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of Tariff Revisions to TOU Program	ET-2024-0061
Union Electric Company d/b/a Ameren Missouri In the Matter of the Petition of Union Electric Company d/b/a Ameren Missouri for a Financing Order Authorizing the Issue of Securitized Utility Tariff Bonds for Energy Transition Costs related to Rush Island Energy Center	EF-2024-0021
Evergy Metro, Inc. d/b/a Evergy Missouri Metro Evergy Missouri West, Inc. d/b/a Evergy Missouri West In the Matter of Requests for Customer Account Data Production from Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West	E0-2024-0002
Evergy Metro, Inc. d/b/a Evergy Missouri Metro Evergy Missouri West, Inc. d/b/a Evergy Missouri West In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's Request to Revise Its Solar Subscription Rider	EO-2023-0423 EO-2023-0424
Evergy Metro, Inc. d/b/a Evergy Missouri Metro Evergy Missouri West, Inc. d/b/a Evergy Missouri West In the Matter of Evergy Metro, Inc. d/b/a Evergy Missouri Metro's Notice of Intent to File an Application for Authority to Establish a Demand-Side Programs Investment Mechanism	EO-2023-0369 EO-2023-0370

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Company	Case No.
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's 4 th Filing to Implement Regulatory Changes in Furtherance of Energy Efficiency as Allowed by MEEIA	ER-2023-0136
Union Electric Company d/b/a Ameren Missouri In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Certificates of Convenience and Necessity for Solar Facilities	EA-2023-0286
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust its Revenues for Electric Service	ER-2022-0337
NextEra Energy Transmission Southwest, LLC In the Matter of the Application of NextEra Energy Transmission Southwest, LLC for a Certificate of Public Convenience and Necessity to Construct, Install, Own, Operate, Maintain, and Otherwise Control and Manage a 345 kV Transmission Line and associated facilities in Barton and Jasper Counties, Missouri	EA-2022-0234
Spire Missouri, Inc. In the Matter of Spire Missouri Inc.'s d/b/a Spire Request for Authority to Implement a General Rate Increase for Natural Gas Service Provided in the Company's Missouri Service Areas	GR-2022-0179
Evergy Missouri West, Inc. dba Evergy Missouri West In the Matter of Evergy Missouri West, Inc. dba Evergy Missouri West for a Financing Order Authorizing the Financing of Extraordinary Storm Costs Through an Issuance of Securitized Utility Tariff Bonds	EF-2022-0155
Evergy Metro, Inc. dba Evergy Missouri Metro Evergy Missouri West, Inc. dba Evergy Missouri West In the Matter of Evergy Metro, Inc. dba Evergy Missouri Metro's Request for Authority to Implement a General Rate Increase for Electric Service. In the Matter of Evergy Missouri West, Inc. dba Evergy Missouri West's Request for Authority to Implement a General Rate Increase for Electric Service.	ER-2022-0129 ER-2022-0130
The Empire District Electric Company d/b/a Liberty In the Matter of the Petition of The Empire District Electric Company d/b/a Liberty to Obtain a Financing Order that Authorizes the Issuance of Securitized Utility Tariff Bonds for Energy Transition Costs Related to the Asbury Plant	EO-2022-0193
The Empire District Electric Company d/b/a Liberty In the Matter of the Petition of The Empire District Electric Company d/b/a Liberty to Obtain a Financing Order that Authorizes the Issuance of Securitized Utility Tariff Bonds for Qualified Extraordinary Costs	EO-2022-0040
Ameren Transmission Company of Illinois In the Matter of the Application of Ameren Transmission Company of Illinois for a Certificate of Convenience and Necessity Under Section 393.170 RSMo Relating to Transmission Investments in Southeast Missouri	EA-2022-0099

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Company	Case No.
The Empire District Electric Company d/b/a Liberty 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	ER-2021-0312
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Adjust its Revenues for Electric Service	ER-2021-0240
Ameren Transmission Company of Illinois In the Matter of the Application of Ameren Transmission Company of Illinois for a Certificate of Public Convenience and Necessity to Construct, Install, Own, Operate, Maintain, and Otherwise Control and Manage a 138 kV Transmission Line and associated facilities in Perry and Cape Girardeau Counties, Missouri	EA-2021-0087
Evergy Affiliates In the Matter of the Application of Evergy Metro, Inc. d/b/a Evergy Missouri Metro and Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Approval of a Transportation Electrification Portfolio	ET-2021-0151
Spire Missouri, Inc. In the Matter of Spire Missouri Inc.'s d/b/a Spire Request for Authority to Implement a General Rate Increase for Natural Gas Service Provided in the Company's Missouri Service Areas	GR-2021-0108
Union Electric Company d/b/a Ameren Missouri In the Matter of the Request of Union Electric Company d/b/a Ameren for Approval of its Surge Protection Program	ET-2021-0082
Union Electric Company d/b/a Ameren Missouri In the Matter of the Request of Union Electric Company d/b/a Ameren Missouri to Implement the Delivery Charge Adjustment for the 1st Accumulation Period beginning September 1, 2019 and ending August 31, 2020	GT-2021-0055
The Empire District Electric Company In the Matter of The Empire District Electric Company's Tariffs Approval of a Transportation Electrification Portfolio for Electric Customers in its Missouri Service Area	ET-2020-0390
The Empire District Electric Company In the Matter of The Empire District Electric Company's Tariffs to Increase Its Revenues for Electric Service	ER-2019-0374
Union Electric Company d/b/a Ameren Missouri In the Matter of of Union Electric Company d/b/a Ameren Missouri's Tariffs to Decrease Its Revenues for Electric Service	ER-2019-0335
KCP&L Greater Missouri Operations Company In the Matter of KCP&L Greater Missouri Operations Company Request for Authority to Implement Rate Adjustments Required by 4 CSR 240-20.090(8) And the Company's Approved Fuel and Purchased Power Cost Recovery Mechanism	ER-2019-0413

Company	Case No.
Union Electric Company d/b/a Ameren Missouri In the Matter of of Union Electric Company d/b/a Ameren Missouri's Tariffs to Increase Its Revenues for Natural Gas Service	GR-2019-0077
Union Electric Company d/b/a Ameren Missouri In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri Revised Tariff Sheets	ET-2019-0149
The Empire District Electric Company In the Matter of The Empire District Electric Company's Revised Economic Development Rider Tariff Sheets	ET-2019-0029
The Empire District Electric Company In the Matter of a Proceeding Under Section 393.137 (SB 564) to Adjust the Electric Rates of The Empire District Electric Company	ER-2018-0366
Union Electric Company d/b/a Ameren Missouri In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and a Certificate of Public Convenience and Necessity Authorizing it to Construct a Wind Generation Facility	EA-2018-0202
Kansas City Power & Light Company KCP&L Greater Missouri Operations Company In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service	ER-2018-0145 ER-2018-0146
Union Electric Company d/b/a Ameren Missouri In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of Efficient Electrification Program	ET-2018-0132
Union Electric Company d/b/a Ameren Missouri In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of 2017 Green Tariff	ET-2018-0063
Laclede Gas Company Laclede Gas Company d/b/a Missouri Gas Energy In the Matter of Laclede Gas Company's Request to Increase Its Revenue for Gas Service, In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to Increase Its Revenue for Gas Service.	GR-2017-0215 GR-2017-0216
Kansas City Power & Light Company In the Matter of Kansas City Power & Light Company's Demand Side Investment Rider Rate Adjustment And True-Up Required by 4 CSR 240-3.163(8)	ER-2017-0316
Kansas City Power & Light Company In the Matter of Kansas City Power & Light Company's Demand Side Investment Rider Rate Adjustment And True-Up Required by 4 CSR 240-3.163(8)	ER-2017-0167
KCP&L Great Missouri Operations Company In the Matter of KCP&L Greater Missouri Operations Company's Annual RESRAM Tariff Filing	ET-2017-0097

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Company	Case No.
Grain Belt Express Clean Line, LLC In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing It to Construct, Own, Operate, Control, Manage, and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood - Montgomery 345 kV Transmission Line	EA-2016-0358
Kansas City Power & Light Company In the Matter of Kansas City Power & Light Company's Demand Side Investment Rider Rate Adjustment And True-Up Required by 4 CSR 240-3.163(8)	ER-2016-0325
Kansas City Power & Light Company In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service	ER-2016-0285
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri for Permission and Approval and a Certificate of Public Convenience and Necessity Authorizing it to Offer a Pilot Subscriber Solar Program and File Associated Tariff	EA-2016-0207
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase Its Revenues for Electric Service	ER-2016-0179
KCP&L Great Missouri Operations Company In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service	ER-2016-0156
Empire District Electric Company In the Matter of The Empire District Electric Company's Request for Authority to Implement a General Rate Increase for Electric Service	ER-2016-0023
Ameren Transmission Company of Illinois In the Matter of the Application of Ameren Transmission Company of Illinois for Other Relief or, in the Alternative, a Certificate of Public Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage a 345,000-volt Electric Transmission Line from Palmyra, Missouri to the Iowa Border and an Associated Substation Near Kirksville, Missouri	EA-2015-0146
Ameren Transmission Company of Illinois In the Matter of the Application of Ameren Transmission Company of Illinois for Other Relief or, in the Alternative, a Certificate of Public Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage a 345,000-volt Electric Transmission Line in Marion County, Missouri and an Associated Switching Station Near Palmyra, Missouri	EA-2015-0145

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Company	Case No.
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's 2nd Filing to Implement Regulatory Changes in Furtherance of Energy Efficiency as Allowed by MEEIA	EO-2015-0055
Kansas City Power & Light Company In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service	ER-2014-0370
Empire District Electric Company In the Matter of The Empire District Electric Company for Authority to File Tariffs Increasing Rates for Electric Service Provided to Customers in the Company's Missouri Service Area	ER-2014-0351
Union Electric Company d/b/a Ameren Missouri City of O'Fallon, Missouri, and City of Ballwin, Missouri, Complainants v. Union Electric Company d/b/a Ameren Missouri, Respondent	EC-2014-0316
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase Its Revenues for Electric Service	ER-2014-0258
Union Electric Company d/b/a Ameren Missouri Noranda Aluminum, Inc., et al., Complainants, v. Union Electric Company d/b/a Ameren Missouri, Respondent	EC-2014-0224
Grain Belt Express Clean Line, LLC In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing It to Construct, Own, Operate, Control, Manage, and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood - Montgomery 345 kV Transmission Line	EA-2014-0207
KCP&L Great Missouri Operations Company In the Matter of KCP&L Greater Missouri Operations Company's Application for Authority to Establish a Renewable Energy Standard Rate Adjustment Mechanism	EO-2014-0151
Kansas City Power & Light Company In the Matter of Kansas City Power & Light Company's Filing for Approval of Demand-Side Programs and for Authority to Establish A Demand-Side Programs Investment Mechanism	EO-2014-0095
Veolia Energy Kansas City, Inc. In the Matter of Veolia Energy Kansas City, Inc. for Authority to File Tariffs to Increase Rates	HR-2014-0066

CREDENTIALS AND CASE PARTICIPATION OF
SHAWN E. LANGE, PE

PRESENT POSITION:

I am the Engineering Manager of the Engineering Analysis Department, Industry Analysis Division, of the Missouri Public Service Commission.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

In December 2002, I received a Bachelor of Science Degree in Mechanical Engineering from the University of Missouri, at Rolla now known as the Missouri University of Science and Technology. I joined the Commission Staff in January 2005. I am a registered Professional Engineer in the State of Missouri and my license number is 2018000230.

TESTIMONY FILED:

Case Number	Utility	Testimony	Issue
ER-2005-0436	Aquila Inc.	Direct	Weather Normalization
		Rebuttal	Weather Normalization
		Surrebuttal	Weather Normalization
ER-2006-0314	Kansas City Power & Light Company	Direct	Weather Normalization
		Rebuttal	Weather Normalization
ER-2006-0315	Empire District Electric Company	Direct	Weather Normalization
		Surrebuttal	Weather Normalization
ER-2007-0002	Union Electric Company d/b/a AmerenUE	Direct	Weather Normalization
ER-2007-0004	Aquila Inc.	Direct	Weather Normalization
ER-2007-0291	Kansas City Power & Light Company	Staff Report	Weather Normalization
		Rebuttal	Weather Normalization
ER-2008-0093	Empire District Electric Company	Staff Report	Weather Normalization
ER-2008-0318	Union Electric Company d/b/a AmerenUE	Staff Report	Weather Normalization

*cont'd \ Case Participation of
Shawn E. Lange, PE*

Case Number	Utility	Testimony	Issue
ER-2009-0089	Kansas City Power & Light Company	Staff Report	Net System Input
ER-2009-0090	KCP&L Greater Missouri Operations Company	Staff Report	Net System Input
ER-2010-0036	Union Electric Company d/b/a AmerenUE	Staff Report	Net System Input
ER-2010-0130	Empire District Electric Company	Staff Report	Variable Fuel Costs
		Surrebuttal	Variable Fuel Costs
ER-2010-0355	Kansas City Power & Light Company	Staff Report	Variable Fuel Costs
ER-2010-0356	KCP&L Greater Missouri Operations Company	Staff Report	Engineering Review-Sibley 3 SCR
ER-2011-0004	Empire District Electric Company	Staff Report	Variable Fuel Costs
ER-2011-0028	Union Electric Company d/b/a Ameren Missouri	Staff Report	Net System Input
ER-2012-0166	Union Electric Company d/b/a Ameren Missouri	Staff Report	Weather Normalization
		Surrebuttal	Weather Normalization Maryland Heights In-Service
ER-2012-0174	Kansas City Power & Light Company	Staff Report	Weather Normalization Net System Input Variable Fuel Costs
		Surrebuttal	Weather Normalization
ER-2012-0175	KCP&L Greater Missouri Operations Company	Staff Report	Weather Normalization Net System Input
		Surrebuttal	Weather Normalization
ER-2012-0345	Empire District Electric Company	Rebuttal	Interim Rates
		Staff Report	Weather Normalization
EC-2014-0223	Noranda Aluminum v. Ameren Missouri	Rebuttal	Weather Normalization
EA-2014-0207	Grain Belt Express CCN	Rebuttal	Certificates of Convenience/Feasibility Analysis
		Surrebuttal	

*cont'd \ Case Participation of
Shawn E. Lange, PE*

Case Number	Utility	Testimony	Issue
ER-2014-0258	Union Electric Company d/b/a Ameren Missouri	Staff Report	Net System Input Variable Fuel Costs
ER-2014-0351	Empire District Electric Company	Staff Report	Net System Input Variable Fuel Costs
ER-2014-0370	Kansas City Power & Light Company	Staff Report	Net System Input Variable Fuel Costs
		True-up Direct	Variable Fuel Costs La Cygne In-service
EA-2015-0146	ATXI CCN	Rebuttal	Certificates of Convenience/Feasibility Analysis
		Surrebuttal	
ER-2016-0023	Empire District Electric Company	Staff Report	Net System Input Variable Fuel Costs
		Surrebuttal	Variable Fuel Costs
ER-2016-0179	Union Electric Company d/b/a Ameren Missouri	Staff Report	Variable Fuel Costs
EA-2016-0385	Grain Belt Express CCN	Rebuttal	Certificates of Convenience/Feasibility Analysis
		Surrebuttal	
ER-2018-0145	Kansas City Power & Light Company	Staff Report	Variable Fuel Costs Market Prices
		Rebuttal	Variable Fuel Costs Market Prices
		True-up Direct	Variable Fuel Costs Market Prices
EA-2018-0327	ATXI CCN	Rebuttal	Certificates of Convenience/Feasibility Analysis
EA-2019-0021	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificates of Convenience/Feasibility Analysis
EA-2019-0010	Empire District Electric Company	Staff Report	Certificates of Convenience/Feasibility Analysis
EC-2020-0408	MLA v. Grain Belt Complaint	Staff Recommendation	Formal Complaint
EA-2021-0167	ATXI CCN	Staff Recommendation	Certificates of Convenience/Feasibility Analysis
EA-2021-0087	ATXI CCN	Staff Report	

*cont'd \ Case Participation of
Shawn E. Lange, PE*

Case Number	Utility	Testimony	Issue
			Certificates of Convenience/Feasibility Analysis
ER-2021-0240	Union Electric Company d/b/a Ameren Missouri	Staff Report	Variable Fuel Costs Atchison wind farm Construction Audit and in-service review
		Rebuttal	Atchison in-service and Variable Fuel Costs
		True-up Direct	Variable Fuel Costs
ER-2021-0312	Empire District Electric Company	Staff Report	Transmission and Distribution Investment
EA-2022-0043	Evergy Metro and Evergy West Hawthorn Solar CCN	Staff Report	Certificates of Convenience/Feasibility Analysis
EA-2022-0099	ATXI CCN	Staff Direct Testimony	Certificates of Convenience/Feasibility Analysis
EA-2022-0244	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificates of Convenience/Feasibility Analysis
EA-2022-0245	Union Electric Company d/b/a Ameren Missouri	Staff Rebuttal Testimony	Certificates of Convenience/Feasibility Analysis
ER-2022-0337	Union Electric Company d/b/a Ameren Missouri	Direct Testimony	Variable fuel Costs
		Rebuttal Testimony	Variable fuel Costs
		Surrebuttal/True-up Direct	Variable fuel Costs
		True-up Rebuttal	Variable fuel Costs
EA-2022-0328	Evergy Missouri West	Staff Rebuttal Testimony	Certificates of Convenience/Feasibility Analysis
EA-2023-0017	GrainBelt Express	Staff Rebuttal Testimony	Certificates of Convenience/Feasibility Analysis
EA-2023-0226	Union Electric Company d/b/a Ameren Missouri	Staff Memo	Certificates of Convenience/Feasibility Analysis

*cont'd \ Case Participation of
Shawn E. Lange, PE*

Case Number	Utility	Testimony	Issue
ET-2023-0249	Union Electric Company d/b/a Ameren Missouri	Staff Memo	Cogeneration and Net Metering rate
EA-2024-0286	Union Electric Company d/b/a Ameren Missouri	Rebuttal Testimony	Certificates of Convenience/Feasibility Analysis
EF-2024-0021	Union Electric Company d/b/a Ameren Missouri	Rebuttal	Financing Order Authorizing the Issue of Securitized Utility Tariff Bonds
ER-2024-0189	Evergy Missouri West	Rebuttal	Variable Fuel Cost
EA-2024-0237	Union Electric Company d/b/a Ameren Missouri	Staff Memo/Report	Certificates of Convenience/Feasibility Analysis
ER-2024-0319	Union Electric Company d/b/a Ameren Missouri	Staff Direct	Variable Fuel Costs
		Staff True-up Direct	Variable Fuel Cost
EA-2024-0302	ATXI	Staff Memo/Report	Certificates of Convenience/Feasibility Analysis
EA-2024-0292	Evergy Missouri West	Staff Memo/Report	Certificates of Convenience/Feasibility Analysis
EA-2025-0075	Evergy Missouri West	Staff Memo/Report	Certificates of Convenience/Feasibility Analysis
EA-2025-0028	Union Electric Company d/b/a Ameren Missouri	Staff Memo/Report	Certificates of Convenience/Feasibility Analysis
ER-2024-0261	Empire District Electric Company	Direct Testimony	Variable Fuel Cost
		Surrebuttal/True-up Direct	Variable Fuel Cost

*cont'd \ Case Participation of
Shawn E. Lange, PE*

Case Number	Utility	Testimony	Issue
EA-2025-0238	Union Electric Company d/b/a Ameren Missouri	Staff Memo/Report	Certificates of Convenience/Feasibility Analysis
EA-2025-0239	Union Electric Company d/b/a Ameren Missouri	Staff Memo/Report	Certificates of Convenience/Feasibility Analysis

Credentials and Background of J Luebbert

I have a Bachelor of Science degree in Biological Engineering from the University of Missouri. My work experience prior to becoming of member of the Missouri Public Service Commission Staff includes three years of regulatory work for the Missouri Department of Natural Resources.

I am currently employed as the manager of the Tariff/Rate Design Department of the Industry Analysis Division of the Missouri Public Service Commission Staff. Prior to holding my current position, I was employed as Case Manager of the Commission Staff Division, Associate Engineer of the Engineering Analysis Department of the Industry Analysis Division, and as a Utility Engineering Specialist III in the Energy Resources Department of the Commission Staff Division. I have been employed at the Missouri Public Service Commission since March 2016 and am responsible for preparing staff recommendations and ensuring that Staff presents recommendations in a neutral, independent manner to inform the Commission of Staff's position and possible alternatives.

Case Participation of J Luebbert

Case Number	Company	Issues
EO-2015-0055	Ameren Missouri	Evaluation, Measurement, and Verification
EO-2016-0223	Empire District Electric Company	Integrated Resource Planning Requirements
EO-2016-0228	Ameren Missouri	Utilization of Generation Capacity, Plant Outages, and Demand Response Program
ER-2016-0179	Ameren Missouri	Heat Rate Testing
ER-2016-0285	Kansas City Power & Light Company	Heat Rate Testing

cont'd Case Participation
J Luebbert

Case Number	Company	Issues
EO-2017-0065	Empire District Electric Company	Utilization of Generation Capacity and Station Outages
EO-2017-0231	Kansas City Power & Light Company	Utilization of Generation Capacity, Heat Rates, and Plant Outages
EO-2017-0232	KCP&L Greater Missouri Operations Company	Utilization of Generation Capacity, Heat Rates, and Plant Outages
EO-2018-0038	Ameren Missouri	Integrated Resource Planning Requirements
EO-2018-0067	Ameren Missouri	Utilization of Generation Capacity, Heat Rates, and Plant Outages
EO-2018-0211	Ameren Missouri	Avoided Costs and Demand Response Programs
EA-2019-0010	Empire District Electric Company	Market Protection Provision
GO-2019-0115	Spire East	Policy
GO-2019-0116	Spire West	Policy
EO-2019-0132	Kansas City Power & Light Company	Avoided Cost, SPP resource adequacy requirements, and Demand Response Programs
ER-2019-0335	Ameren Missouri	Unregulated Competition Waivers and Class Cost Of Service
ER-2019-0374	Empire District Electric Company	SPP resource adequacy
EO-2020-0227	Evergy Missouri Metro	Demand Response programs
EO-2020-0228	Evergy Missouri West	Demand Response programs
EO-2020-0262	Evergy Missouri Metro	Demand Response programs
EO-2020-0263	Evergy Missouri West	Demand Response programs
EO-2020-0280	Evergy Missouri Metro	Integrated Resource Planning Requirements
EO-2020-0281	Evergy Missouri West	Integrated Resource Planning Requirements
EO-2021-0021	Ameren Missouri	Integrated Resource Planning Requirements
EO-2021-0032	Evergy	Renewable Generation and Retirements
GR-2021-0108	Spire Missouri	Metering and Combined Heat and Power
ET-2021-0151	Evergy	Capacity costs
ER-2021-0240	Ameren Missouri	Market Prices, Construction Audit, Smart Energy Plan, AMI
ER-2021-0312	Empire District Electric Company	Construction Audit, Market Price Protection, PISA Reporting

cont'd Case Participation
J Luebbert

Case Number	Company	Issues
EO-2022-0193	Empire District Electric Company	Retirement of Asbury
ER-2022-0129	Evergy Missouri Metro	MEEIA annualization
ER-2022-0130	Evergy Missouri West	MEEIA annualization, Schedule SIL revenue and incremental costs
EF-2022-0155	Evergy Missouri West	Customer event balancing
EC-2022-0315	Evergy Missouri West	Compliance with Stipulation and Agreement, Commission Order, and Schedule SIL
GR-2022-0179	Spire Missouri	Compressed Natural Gas
EA-2022-0244	Ameren Missouri	Huck Finn Solar CCN
EA-2022-0245	Ameren Missouri	Boomtown Solar CCN
EA-2022-0328	Evergy Missouri West	Persimmon Creek CCN
ER-2022-0337	Ameren Missouri	Billing determinant adjustments
EA-2023-0286	Ameren Missouri	Solar CCNs
EO-2024-0002	Evergy Missouri West Evergy Missouri Metro	Data retention
EO-2023-0136	Ameren Missouri	MEEIA program design, avoided costs
EO-2023-0369 EO-2023-0370	Evergy Missouri Metro Evergy Missouri West	MEEIA program design, tariffs
EA-2024-0237	Ameren Missouri	Economic Feasibility
ER-2024-0261	Empire District Electric Company	Large Load Customer Service tariff
EA-2024-0292	Evergy Missouri West	Economic Feasibility and Decisional Prudence
EA-2025-0075	Evergy Missouri West	Economic Feasibility and Decisional Prudence
EA-2025-0087	Ameren Transmission Company of Illinois	Economic Feasibility
EO-2025-0154	Evergy Missouri Metro Evergy Missouri West	Large Load Customer Service tariff / RTO impact
ET-2025-0184	Ameren Missouri	Large Load Customer Service tariff / RTO impact
EA-2025-0238	Ameren Missouri	Public interest
OO-2025-0233	Empire District Electric Company	Billing determinants and estimated interval data

CREDENTIALS AND CASE PARTICIPATION OF
HARI K. POUDEL, PhD

Current Position

Currently, I am employed as an economist in the Tariff/Rate Department of the Industry Analysis Division at the Missouri Public Service Commission ("Commission"). The Department of Tariff and Rate Design take part in and offers advice on matters filed with the Commission, such as rate, complaint, application, territorial agreements, sale, and merger. The Department also handles rate design, weather variables, and weather normalization tasks and offers technical assistance. I am primarily responsible for using quantitative economic techniques and statistical analysis to address energy-related challenges that influence utility ratemaking. I am also responsible for the class cost of service study and rate design. Therefore, the economist performs core functions like determining a utility's legitimate revenue requirement, designing rate structures for different customer classes, and reviewing economic modeling.

Educational Credentials and Work Experience

I received a Doctor of Philosophy in Public Policy from the University of Missouri, Columbia, Missouri in May 2020. I also received a graduate certificate in Public Utility Regulation & Economics from the New Mexico State University in May 2025. In 2008, I received a Master's in Agricultural Economics degree from Hohenheim University in Germany.

I've been employed with the Missouri Public Service Commission since October 25, 2021, in the Tariff/Rate Department of the Industry Analysis Division as a Regulatory Economist. Prior to joining the Commission, I was a Research/Data Analyst for the Missouri Department of Health

Continued
Hari K. Poudel, PhD

and Senior Services. I analyzed public health data that directly affects Missourians in my capacity as an analyst.

Testimonies/Memorandum

SN	Case Number	Company Name	Issue
1.	GR-2021-0320	Liberty Utilities	Tariff Compliance
2.	GR-2022-0235	Spire Missouri, Inc.	Weather Normalization Adjustment Rider (WNAR)
3.	ER-2022-0146	Ameren Missouri	Rider Energy Efficient Investment Charge (EEIC)
4.	GT-2022-0233	Liberty Utilities	Weather Normalization Adjustment Rider (WNAR)
5.	ER-2022-0129 & ER-2022-0130	Evergy Metro, Inc. & Evergy Missouri West, Inc.	General Rate Case
6.	ER-2022-0337	Ameren Missouri	365-Day Adjustment, Weather Variables, Weather Normalization, Hourly Load Requirement Energy Efficiency Adjustment
7.	GO-2023-0002	Spire	Weather Normalization Adjustment Rider (WNAR)
8.	GT-2023-0088	Liberty Utilities	Weather Normalization Adjustment Rider (WNAR)
9.	GT-2023-0274	Liberty Utilities	Weather Normalization Adjustment Rider (WNAR)
10.	EA-2023-0286	Ameren Missouri	Economic Feasibility
11.	GT-2024-0054	Liberty Utilities (Midstates Natural Gas)	Weather Normalization Adjustment Rider (WNAR)
12.	GT-2024-0055	The Empire District Gas Company	Weather Normalization Adjustment Rider (WNAR)
13.	GR-2024-0107	Ameren Missouri	Weather Normalization Adjustment Rider (WNAR)
14.	EO-2023-0136	Ameren Missouri	Throughput Disincentive, Marginal Rate Analysis, Rebound Effect, Rate Case Annualization
15.	EO-2023-0369 & EO-2023-0370	Evergy Metro, Inc. & Evergy Missouri West, Inc.	MEEIA (Throughput Disincentive, Rebound Effect, Rate Case Annualization)
16.	EA-2023-0286	Ameren Missouri	Economic Feasibility

Continued
Hari K. Poudel, PhD

17.	ER-2024-0189	Evergy Missouri West, Inc.	MEEIA, Net Margin Rate, Economic Development Riders, PISA Compliance
18.	GR-2024-0106	Liberty Utilities	Weather Normalization, 365 Days-Adjustment
19.	ER-2024-0319	Ameren Missouri	Energy Efficiency Adjustment, Marginal Rate Analysis, Rebound Effect, Economic Development Riders
20.	ER-2024-0319	Ameren Missouri	Rate Design
21.	EA-2024-0292	Evergy Missouri West, Inc.	Economic Feasibility
22.	ER-2024-0261	Empire	Energy Efficiency Adjustment, Lighting Revenue
23.	ER-2024-0261	Empire	Rate Design Class Cost of Service
24.	EA-2025-0238	Ameren Missouri	Economic Feasibility
25.	EA-2025-0239	Ameren Missouri	Economic Feasibility

Educational and Employment Background and Credentials
of
Trevor Rucker

I earned a Bachelor of Science in Nuclear Engineering degree with a minor in Mathematics from the Missouri University of Science and Technology in May 2017, and a Master of Business Administration with a concentration in Management from Maryville University in December 2019. I am registered as an Engineer Intern in Missouri. I began employment at the Missouri Public Service Commission (“Commission”) in June 2018 as a Utility Operations Technical Specialist in the Water & Sewer Department. I was promoted to a Utility Engineering Specialist (renamed to Associate Engineer) in the Safety Engineering Department in December 2018. I transferred to the Engineering Analysis Department in May 2025 and am currently employed as an Associate Engineer.

The following is a listing of cases before the Commission in which I have previously provided testimony or analysis through affidavits:

Company	Case Number	Filing Description	EFIS Date Filed
Missouri-American Water Company	WC-2019-0004	Staff Report	10/5/2018
Missouri-American Water Company	WM-2019-0018	Staff Recommendation	11/16/2018
Roeslein Alternative Energy Services, LLC	GE-2020-0238	Staff Recommendation	4/7/2020
Spire Missouri, Inc.	GC-2021-0135	Staff Report	2/26/2021
City of New Florence, Missouri	GS-2017-0324	Progress Report	12/19/2022

Company	Case Number	Filing Description	EFIS Date Filed
Spire Missouri, Inc.	GS-2022-0047	Staff Report	11/15/2023
Spire Missouri, Inc.	GS-2022-0047	Staff's Reply	2/1/2024
Spire Missouri, Inc.	GC-2024-0260	Staff's Response	12/9/2024
Summit Natural Gas of Missouri, Inc.	GS-2025-0197	Incident Report	1/6/2025
Empire District Electric Company d/b/a Liberty	EC-2026-0048	Staff Report	11/14/2025
Union Electric Company d/b/a Ameren Missouri	EA-2025-0238	Staff Rebuttal Report	12/12/2025
Union Electric Company d/b/a Ameren Missouri	EA-2025-0238	Surrebuttal Testimony	1/16/2026
Evergy Metro Inc., d/b/a Evergy Missouri Metro	EC-2026-0064	Staff Report	1/30/2026
Union Electric Company d/b/a Ameren Missouri	EC-2026-0156	Staff Report	3/13/2026

CREDENTIALS AND CASE PARTICIPATION OF
JUSTIN TEVIE

Present Position:

I am an Economics Analyst in the Tariff/Rate Design Department, Industry Analysis Division, of the Missouri Public Service Commission.

Educational Background and Work Experience:

In 2013, I obtained a graduate degree in Economics from the University of New Mexico. In 2019, I joined the Missouri Department of Mental Health as a Research Analyst assisting with data analysis and federal reporting. Prior to that, I was a Forecast Analyst at Department of Social and Health Services in the State of Washington assisting with forensic caseload forecasting and reporting.

Case No.	Company	Testimony	Issue
ER-2022-0337	Ameren Missouri	Direct	Locational Market prices
		Rebuttal	
		True-up	
EO-2023-0136	Ameren Missouri	Direct	Savings shapes, program evaluation, EM & V, Principal-Agent problem, and employment
		Rebuttal	
		Surrebuttal	
ER-2023-0184	Evergy Missouri West	Staff Recommendation	MEEIA Cycle 3
ER-2023-0411	Evergy Missouri West	Staff Recommendation	MEEIA Cycle 3
EA-2023-0131	Empire	CCN	Economic feasibility
ER-2024-0186	Evergy Missouri West	Staff Recommendation	MEEIA Cycle 3

Case No.	Company	Testimony	Issue
ER-2024-0184	Evergy Missouri Metro	Staff Recommendation	MEEIA Cycle 3
ER-2023-0369	Evergy Missouri West	Direct	MEEIA Cycle 4 Savings shapes, program evaluation, EM & V, Principal- Agent problem
		Rebuttal	
ER-2023-0370	Evergy Missouri Metro	Direct	MEEIA Cycle 4 Savings shapes, program evaluation, EM & V, Principal- Agent problem
		Rebuttal	
ER-2024-0189	Evergy Missouri West	Direct	Special Incremental Load/NUCOR Locational Market Prices
		Rebuttal	
		Surrebuttal/True up	
		True-up rebuttal	
GR-2024-0106	Liberty MidStates Utilities	Direct	Transport Revenues
		Rebuttal	
		Surrebuttal	
ER-2024-0319	Ameren Missouri	Direct Testimony	Locational Market Prices
EA-2024-0292	Evergy Missouri West	Solar CCN	Economic Feasibility and resource adequacy.
EA-2025-0075	Evergy Missouri West	Natural Gas CCN	Economic Feasibility, interconnection costs and resource adequacy.

Case No.	Company	Testimony	Issue
ER-2024-0261	Empire District Electric	Direct Surrebuttal	Market Prices Economic Development Rider
EA-2025-0238	Ameren Missouri	Rebuttal	Economic feasibility, interconnection cost, request for proposal
EA-2025-0239	Ameren Missouri	Rebuttal	Economic feasibility, interconnection costs

Credentials and Background of

Seoung Joun Won, PhD

I am currently employed as a Regulatory Compliance Manager in the Financial Analysis Department of the Financial and Business Analysis Division of the Missouri Public Service Commission. I have been employed at the Missouri Public Service Commission since May 2010.

I received my Bachelor of Arts, Master of Arts, and Doctor of Philosophy in Mathematics from Yonsei University and my Bachelor of Business Administration in Financial Accounting from Seoul Digital University in Seoul, South Korea, and earned my Doctor of Philosophy in Economics from the University of Missouri - Columbia. Also, I passed several certificate examinations for Finance Specialist in South Korea such as Accounting Management, Financial Risk Manager, Enterprise Resource Planning Accounting Consultant, Derivatives Investment Advisor, Securities Investment Advisor, and Financial Planner.

Prior to joining the Commission, I taught both undergraduate and graduate level mathematics at the Korean Air Force Academy and Yonsei University for 13 years. I served as the director of the Education and Technology Research Center in NeoEdu for 5 years. Before starting my current position at the Missouri Public Service Commission, I had served as a regulatory economist in Tariff/Rate Design Department.

My current duties at the Commission include financial analysis of rate of return and cost of equity, valuation analysis on merger and acquisition, due diligence review and supporting economic and statistical analysis.

List of Previous Testimony Filed

Seoung Joun Won, PhD

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
GO-2026-0122	Spire Missouri, Inc. d/b/a Spire	Financial Capability
GA-2026-0121	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EA-2026-0018	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2025-0239	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EF-2026-0106	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
EA-2025-0238	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2025-0222	Ameren Transmission Company of Illinois	Financial Capability
WA-2025-0298	Missouri-American Water Company	Financial Capability
EA-2025-0087	Ameren Transmission Company of Illinois	Financial Capability
EA-2025-0075	Evergy Metro Inc., d/b/a Evergy Missouri Metro; Evergy Missouri West, Inc. d/b/a Evergy Missouri West	Financial Capability
GR-2025-0107	Spire Missouri, Inc. d/b/a Spire	Rate of Return, Capital Structure
EA-2024-0292	Evergy Missouri West, Inc. d/b/a Evergy Missouri West	Financial Capability
EA-2025-0028	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
GA-2025-0181	Spire Missouri, Inc. d/b/a Spire	Financial Capability
GR-2024-0369	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
EA-2024-0302	Ameren Transmission Company of Illinois	Financial Capability

cont'd List of Previous Testimony Filed

Seoung Joun Won, PhD

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
ER-2024-0319	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
GA-2024-0361	Spire Missouri, Inc. d/b/a Spire	Financial Capability
WM-2025-0017	Missouri-American Water Company	Merger and Acquisition
EA-2024-0237	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
GF-2025-0053	Spire Missouri, Inc. d/b/a Spire	Financing Authority
EF-2025-0047	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
ER-2024-0212	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
WF-2024-0353	Missouri-American Water Company	Financing Authority
WA-2024-0325	Missouri-American Water Company	Financial Capability
ER-2024-0189	Evergy Missouri West, Inc. d/b/a Evergy Missouri West	Rate of Return, Capital Structure
GA-2024-0257	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EO-2023-0448	Union Electric Co., d/b/a Ameren Missouri	Nuclear Decommissioning
GA-2024-0243	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EA-2024-0147	Ameren Transmission Company of Illinois	Financial Capability
EA-2023-0131	Empire District Electric Company, d/b/a Liberty	Financial Capability
EF-2024-0192	Evergy Metro, Inc. d/b/a Evergy Missouri Metro	Financing Authority

cont'd List of Previous Testimony Filed

Seoung Joun Won, PhD

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
WF-2024-0135	Liberty Utilities (Missouri Water) LLC d/b/a Liberty	Financing Authority
EF-2024-0099	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
GA-2024-0100	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EA-2023-0286	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
GA-2023-0441	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EF-2023-0425	Evergy Metro Inc., d/b/a Evergy Missouri Metro	Financing Authority
SA-2023-0435	Missouri-American Water Company	Financial Capability
WA-2023-0434	Missouri-American Water Company	Financial Capability
GA-2023-0389	Spire Missouri, Inc. d/b/a Spire	Financial Capability
GA-2023-0374	Spire Missouri, Inc. d/b/a Spire	Financial Capability
GF-2023-0280	Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty	Financing Authority
WA-2023-0345	Missouri-American Water Company	Financial Capability
EA-2023-0226	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2023-0017	Grain Belt Express LLC	Financial Capability
GA-2023-0038	Spire Missouri, Inc. d/b/a Spire	Financial Capability
EF-2022-0151	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
EA-2022-0328	Evergy Missouri West, Inc. d/b/a Evergy Missouri West	Financial Capability

cont'd List of Previous Testimony Filed

Seoung Joun Won, PhD

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
ER-2022-0337	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
EA-2022-0245	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2022-0244	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
EA-2022-0234	NextEra Energy Transmission Southwest, LLC	Financial Capability
GR-2022-0179	Spire Missouri, Inc., d/b/a Spire	Rate of Return, Capital Structure
GF-2022- 0169	Spire Missouri, Inc.	Financing Authority
EF-2022-0164	Union Electric Co., d/b/a Ameren Missouri	Financing Authority
WF-2022-0161	Missouri-American Water Company	Financing Authority
ER-2022-0130	Evergy Missouri West, Inc., d/b/a Evergy Missouri West	Rate of Return, Capital Structure
ER-2022-0129	Evergy Metro Inc., d/b/a Evergy Missouri Metro	Rate of Return, Capital Structure
EF-2022- 0103	Evergy Missouri West, Inc.	Financing Authority
WF-2022-0066	Missouri American Water Company	Financing Authority
WF-2021-0427	Raytown Water Company	Financing Authority
GR-2021-0320	Empire District Gas Company	Rate of Return, Capital Structure
ER-2021-0312	Empire District Electric Company	Rate of Return, Capital Structure
GR-2021-0241	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure
ER-2021-0240	Union Electric Co., d/b/a Ameren Missouri	Rate of Return, Capital Structure

cont'd List of Previous Testimony Filed

Seoung Joun Won, PhD

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
GR-2021-0108	Spire Missouri, Inc.	Rate of Return, Capital Structure
EA-2021-0087	Ameren Transmission Company of Illinois	Financial Capability
EA-2020-0371	Union Electric Co., d/b/a Ameren Missouri	Financial Capability
SR-2020-0345	Missouri American Water Company	Rate of Return, Capital Structure
WR-2020-0344	Missouri American Water Company	Rate of Return, Capital Structure
EF-2020-0301	Every Missouri Metro	Financing Authority
WR-2020-0264	Raytown Water Company	Rate of Return, Capital Structure
WR-2020-0053	Confluence Rivers Utility Operating Company, Inc.	Rate of Return, Capital Structure
HM-2020-0039	Veolia Energy Kansas City, Inc. AIP Project Franklin Bidco	Merger and Acquisition
EO-2019-0133	KCP&L Greater Missouri Operations Company, Every Metro	Business Process Efficiency
EO-2019-0132	Kansas City Power & Light Company, Every Metro	Business Process Efficiency
GR-2019-0077	Union Electric Co., d/b/a Ameren Missouri	Weather & Normalization, Net System Input
GO-2019-0059	Spire West, Spire Missouri, Inc.	Weather Variables
GO-2019-0058	Spire East., Spire Missouri, Inc.	Weather Variables
ER-2018-0146	KCP&L Greater Missouri Operations Co.	Weather & Normalization, Net System Input
ER-2018-0145	Kansas City Power & Light Co.	Weather & Normalization, Net System Input

cont'd List of Previous Testimony Filed

Seoung Joun Won, PhD

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
GR-2018-0013	Liberty Utilities (Midstates Natural Gas) Corp.	Weather Variables
GR-2017-0216	Missouri Gas Energy (Laclede), Spire Missouri, Inc.	Weather Variables
GR-2017-0215	Laclede Gas Co., Spire Missouri, Inc.	Weather Variables
ER-2016-0285	Kansas City Power & Light Co.	Weather & Normalization, Net System Input
ER-2016-0179	Union Electric Co., d/b/a Ameren Missouri	Weather & Normalization, Net System Input
ER-2016-0156	KCP&L Greater Missouri Operations Co.	Weather & Normalization, Net System Input
ER-2016-0023	Empire District Electric Company	Weather & Normalization, Net System Input
ER-2014-0370	Kansas City Power & Light Co	Weather & Normalization, Net System Input
ER-2014-0351	Empire District Electric Company	Weather & Normalization, Net System Input
ER-2014-0258	Union Electric Co., d/b/a Ameren Missouri	Weather & Normalization, Net System Input
EC-2014-0223	Noranda Aluminum, Inc., et al, Complaint v. Union Electric Co., d/b/a Ameren Missouri	Weather Variables
GR-2014-0152	Liberty Utilities (Midstates Natural Gas) Corp.	Weather Variables
GR-2014-0086	Summit Natural Gas of Missouri, Inc.	Weather Variables
HR-2014-0066	Veolia Energy Kansas City, Inc.	Weather Variables, Revenue

cont'd List of Previous Testimony Filed

Seoung Joun Won, PhD

<u>Case Number</u>	<u>Company</u>	<u>Issue</u>
GR-2013-0171	Laclede Gas Co.	Weather Variables
ER-2012-0345	Empire District Electric Company	Weather Variables, Revenue
ER-2012-0175	KCP&L Greater Missouri Operations Co.	Weather Variables
ER-2012-0174	Kansas City Power & Light Co.	Weather Variables
ER-2012-0166	Union Electric Co., d/b/a Ameren Missouri	Weather Variables, Revenue
HR-2011-0241	Veolia Energy Kansas City, Inc.	Weather Variables
ER-2011-0028	Union Electric Co., d/b/a Ameren Missouri	Weather Variables, Revenue
ER-2011-0004	Empire District Electric Company	Weather Variables, Revenue
GR-2010-0363	Union Electric Co., d/b/a Ameren Missouri	Weather Variables
ER-2010-0356	KCP&L Greater Missouri Operations Co.	Weather Variables
ER-2010-0355	Kansas City Power & Light Co.	Weather Variables, Revenue

Work Related Publication

Won, Seoung Joun, X. Henry Wang, and Henry E. Warren. "Climate normals and weather normalization for utility regulation." *Energy Economics* (2016).

Summary of Application Filing Requirements

Liberty filed an Application pursuant to Section 393.170.1, RSMo; Section 393.170.3 RSMo; 20 CSR 4240-2.060 and 20 CSR 4240-20.045 for a Certificate of Convenience and Necessity (CCN) to construct, install, own, operate, maintain, and otherwise control and manage a new F-class combustion turbine generator having a generating capacity of approximately 250 MW.¹ The new electrical generating infrastructure will be located at Liberty's existing State Line Power Station in Joplin, Missouri (Jasper County, Missouri).

20 CSR 4240-2.060

20 CSR 4240-2.060(1)(A) requires the legal name of each applicant, a brief description of the legal organization of each applicant, whether a Missouri corporation, foreign corporation, partnership, proprietorship, or other business organization, the street and mailing address of the principal office or place of business of each applicant and each applicant's electronic mail address, fax number and telephone number, if any.

- Application, paragraph 10.
- Liberty has satisfied this requirement.

20 CSR 4240-2.060(1)(B) requires if any applicant is a Missouri corporation, a Certificate of Good Standing from the secretary of state.

- Liberty is a Kansas corporation with its principal office and place of business located in Joplin, Missouri.
- This requirement does not apply.

¹ EA-2025-0299 CCN Application Page 3, Paragraph 8; and Page 6, Paragraph 23.

20 CSR 4240-2.060(1)(C) requires if any applicant is a foreign corporation, a certificate from the secretary of state that it is authorized to do business in Missouri.

- A certificate from the Missouri Secretary of State that Liberty, a foreign corporation, is authorized to do business in Missouri was filed with the Commission in Case No. EM-2000-369.²
- Liberty has met this requirement.

20 CSR 4240-2.060(1) (D) requires if any applicant is a partnership, a copy of the partnership agreement.

- This requirement does not apply.

20 CSR 4240-2.060(1)(E) requires if any applicant does business under a fictitious name, a copy of the registration of the fictitious name with the secretary of state.

- Liberty does not do business under a fictitious name in Missouri.

20 CSR 4240-2.060(1)(F) requires if any applicant is a political subdivision, a specific reference to the statutory provision and a specific reference to any other authority, if any, under which it operates.

- This requirement does not apply.

20 CSR 4240-2.060(1)(G) requires if any applicant has submitted the applicable information as set forth in subsections (1)(B)–(F) of this rule in a previous application, the

² EA-2025-0299 CCN Application Page 3, Paragraph 11.

same may be incorporated by reference to the case number in which the information was furnished, so long as such applicable information is current and correct.

- This requirement does not apply.

20 CSR 4240-2.060(1)(H) requires a brief statement of the character of business performed by each applicant.

- Liberty provides a brief statement describing the character of their business in Application Paragraph 10 noting that “Liberty is engaged, generally, in the business of generating, purchasing, transmitting, distributing, and selling electricity.”
- Liberty has satisfied this requirement.

20 CSR 4240-2.060(1)(I) requires name, title, address, and telephone number of the person to whom correspondence, communications, and orders and decision of the commission are to be sent, if other than to the applicant’s legal counsel.

- The required information is contained on Page 10 of the Application.
- Liberty has satisfied this requirement.

20 CSR 4240-2.060(1)(J) requires if any applicant is an association, other than an incorporated association or other entity created by statute, a list of all of its members.

- This requirement does not apply to Liberty.

20 CSR 4240-2.060(1)(K) requires a statement indicating whether the applicant has any pending action or final unsatisfied judgments or decisions against it from any state or federal

agency or court which involve customer service or rates, which action, judgment, or decision has occurred within three (3) years of the date of the application.

- Liberty represents that other than dockets pending before the Commission, Liberty has no pending actions or final unsatisfied judgments or decisions against it from any state or federal court or agency involving customer service or rates.
- Liberty has addressed this requirement.

20 CSR 4240-2.060(1)(L) require a statement that no annual report or assessment fees are overdue.

- Liberty has no overdue or unpaid annual reports or assessment fees.
- Liberty has satisfied this requirement.

20 CSR 4240-2.060(1)(M) requires all applications shall be subscribed and verified by affidavit under oath by one (1) of the following methods: if an individual, by that individual; if a partnership, by an authorized member of the partnership; if a corporation, by an authorized officer of the corporation; if a municipality or political subdivision, by an authorized officer of the municipality or political subdivision; or by the attorney for the applicant if the application includes or is accompanied by a verified statement that the attorney is so authorized.

- An affidavit providing the authorized officer verification required by 20 CSR 4240- 2.060(1)(M) is attached on Page 10 of the Application.
- Liberty has satisfied this requirement.

20 CSR 4240-20.045

20 CSR 4240-20.045(3)(A) requires the application shall include facts showing that granting the application is necessary or convenient for the public service.

- Liberty addresses their reasoning of whether the Project is necessary and convenient for public service in Paragraph 7, Pages 2 – 3 of the Application.
- Liberty has met this requirement.

20 CSR 4240-20.045(3)(B) requires if an asset to be operated or constructed is outside Missouri, the application shall include plans for allocating costs, other than regional transmission organization/independent system operator cost sharing, to the applicable jurisdiction.

- This requirement does not apply.

20 CSR 4240-20.045(3)(C) requires if any of the items required under this rule are unavailable at the time the application is filed, the unavailable items may be filed prior to the granting of authority by the commission, or the commission may grant the certificate subject to the condition that the unavailable items be filed before authority under the certificate is exercised.

- Liberty has not identified items that are unavailable at the time of the filing of the Application.

20 CSR 4240-20.045(6)(A) requires a description of the proposed route or site of construction.

- The proposed site of construction is described on Page 4, Paragraph 15 of the Application:
- Liberty has satisfied this requirement.

20 CSR 4240-20.045(6)(B) requires a list of all electric, gas, and telephone conduit, wires, cables, and lines of regulated and nonregulated utilities, railroad tracks, and each underground facility, as defined in section 319.015, RSMo, which the proposed construction will cross.

- On Page 4, Paragraph 15 of the Application, Liberty states “Other than Liberty’s own electric transmission lines and the gas pipeline that serves this property, the proposed construction will cross no electric, gas, or telephone conduit, wires, cables, and lines of regulated and nonregulated utilities, railroad tracks, or underground facility, as defined in RSMo. §319.015”.
- Liberty has satisfied this requirement.

20 CSR 4240-20.045(6)(C) requires a description of the plans, specifications, and estimated costs for the complete scope of the construction project that also clearly identifies what will be the operational features of the asset once it is fully operational and used for service.

- Liberty hired 1898 & Co. to perform a ** [REDACTED] [REDACTED] **. The project will be constructed under an Engineer, Procure, and Construct (EPC) contract. At the time filing of the Application, plans and specifications, apart from designation of Liberty’s preference for a 250 MW F-class combustion turbine generator were unavailable. In response to a DR, Company Witness Shaen Rooney stated that DR No. 0059 will be supplemented when a site plan is developed. ** [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] **

- Liberty has addressed this requirement.

20 CSR 4240-20.045(6)(D) requires the projected beginning of construction date and the anticipated fully operational and used for service date of the asset.

- The anticipated start of construction is proposed for late 2028 or early 2029, and the new unit is anticipated to be available for service by the second quarter of 2030.³
- Liberty has satisfied this requirement.

³ EA-2025-0299 CCN Application, Page 4, Paragraph 18.

20 CSR 4240-20.045(6)(E) requires a description of any common plant to be included in the construction project.

- EA-2025-0299 CCN Application, Page 6, Paragraph 26 states “The asset will include a new generator step-up transformer, and a new 0.3-mile-long transmission line will connect the plant to a new position in the Company’s existing State Line substation. The scope of construction includes site preparation; foundation installation; electrical, gas and fuel oil interconnects; mechanical and electrical construction; installation of the owner-provided equipment; construction of new liquid fuel storage tanks; and commissioning and testing.”
- Liberty has satisfied this requirement.

20 CSR 4240-20.045(6)(F) requires plans for financing the construction of the asset.

- Liberty's plans for financing the proposed project were provided and explained in EA-2025-0299 CCN Application Pages 7 – 8, Paragraph 32.
- Liberty has satisfied this requirement.

20 CSR 4240-20.045(6)(G) requires a description of how the proposed asset relates to the electric utility’s adopted preferred plan under 4 CSR 240-22.

- ** [REDACTED]
- [REDACTED] **

- Liberty has satisfied this requirement.

20 CSR 4240-20.045(6)(H) requires an overview of the electric utility’s plan for this project regarding competitive bidding, although competitive bidding is not required, for the design, engineering, procurement, construction management, and construction of the asset.

- Liberty’s CCN Application initially addressed this requirement on Page 8, Paragraph 33. ** [REDACTED]
- Liberty has satisfied this requirement.

20 CSR 4240-20.045(6)(I) requires an overview of plans for operating and maintaining an asset.

- Liberty's overview of plans for operating and maintaining the asset was provided on pages 6 and 7, Paragraphs 26 through 27 of the EA-2025-0299 CCN Application.
- Liberty has satisfied this requirement at a high level, but in the Engineering Conditions section of the report, Staff recommends the Commission require a site-specific Operation and Maintenance Plan, and a Restoration Plan to address unplanned outages.

20 CSR 4240-20.045(6)(J) requires an overview of plans for restoration of safe and adequate service after significant, unplanned/forced outages of an asset.

- Liberty's overview of plans for restoration of safe and adequate service after significant, unplanned/forced outages of the asset is provided on Page 7, Paragraph 28 of the EA-2025-0299 CCN Application.
- Liberty has satisfied this requirement.

SPP Accredited Capacity Determination

Section 3.1 of Southwest Power Pool (“SPP”) Open Access Transmission Tariff (“OATT”) Business Practice 8400, revision date 11/4/2025, shows that the accredited capacity (“ACAP”) for a conventional resource is determined by using Equations 1 and 2, where EFORd is the Equivalent Forced Outage Rate and EFOF is the Equivalent Forced Outage Factor. The EFOF component of the Conventional Resource Performance Adjustment is only applicable to the winter planning season.

Equation 1

$$ACAP = \text{Net Generating Capability}^1 \times (1 - \text{Conventional Resource Performance Adjustment}^2)$$

Equation 2

Conventional Resource Performance Adjustment

$$= EFORd + (EFOF \times \text{Incremental Outage Impact}^3 / \text{total system EFOF impact})$$

¹ Net Generating Capability is defined in Attachment AA of SPP’s OATT, effective date 4/1/2026, as “A resource’s gross maximum output sustained over a one-hour period, demonstrated with a capability test, reduced by any power used for unit auxiliaries, and modified for environmental, seasonal, operational, and fuel limitations. For resources qualified as internal to the SPP Balancing Authority Areas, the resources shall meet the testing requirements in accordance with the SPP Planning Criteria. Resources qualified as external to the SPP Balancing Authority Areas shall adhere to the testing requirements of the Balancing Authority where the resource(s) is located.”

² Conventional Resource Performance Adjustment is defined in Attachment AA of SPP’s OATT, effective date 4/1/2026, as “The historical performance adjustment for conventional resources using the combination of a modified demand Equivalent Forced Outage Rate (“EFORd”) method and Equivalent Forced Outage Factor (“EFOF”) method adjusted for Incremental Outage Impact in accordance with this Attachment AA and the SPP Business Practices. A resource’s EFOF shall only be considered during the Winter Season. Conventional resources are defined as thermal fuel type resources, pump storage hydroelectric resources, and hydroelectric resources with reservoir storage capability not subject to hourly river flow limitations similar to run-of-river hydro.”

³ Incremental Outage Impact (“IOI”) is defined in Attachment AA of SPP’s OATT, effective date 4/1/2026, as “The incremental impact of simultaneous conventional resource forced outages in excess of the normally modeled forced outages experienced during timeframes of extreme temperatures from the LOLE Study. This value shall be assessed in accordance with the LOLE Study scope and SPP Business Practices. Incremental Outage Impact shall only be considered during the Winter Season.”

**** Denotes Confidential Information ****

Case No. EA-2025-0299
Schedule 3.1

The exact Net Generating Capability of the Project will not be known until the Project is put into service and the output can be tested in accordance with SPP's procedure.

** [REDACTED] ** proposal for the Project lists the nameplate capacity of the Project as

** [REDACTED] ** and the contract capacity as ** [REDACTED] **. ⁴ The contract capacity likely

represents the output of the Project as demonstrated during testing, which would be more

representative of the Net Generating Capability of the Project. Therefore, for the purposes

of Staff's Report, Staff will use the contract capacity of ** [REDACTED] ** as the Net

Generating Capability for the Project. In order to estimate the contract capacity for a

J-Class CT, Staff used the same percentage of the nameplate capacity as for the F-Class CT

for the Project.

Section 3.8 of SPP OATT Business Practice 8400, revision date 11/4/2025, covers Conventional Resource Performance Adjustments for new resources. Section 3.8.2 states that the class average EFORd will be used for years where historical data does not yet exist for new resources. The resource's design performance projections (EFORd projections) may be used in lieu of the class average EFORd. Staff does not have EFORd projections for the Project, so Staff will use the class average EFORd. Section 3.8.3 states that newly constructed resources will be assigned an initial EFOF value of 0%, with the initial EFOF value being phased as historical data is available. Staff will use an EFOF value of 0% because there is no operating history for the Project.

⁴ Liberty 1x0 Thermal_Proposal_03.04.06 attachment to Empire's response to Staff Data Request 0086, Schedule 3.20 of Staff Rebuttal Report.

Case No. EA-2025-0299

Schedule 3.1

The Summer 2026 class average EFORd for a combustion turbine with onsite fuel storage is 9.90%.⁵ The Winter 2026-2027 EFORd for a combustion turbine with onsite fuel storage is 13.24%.⁶ The Summer 2025 class average EFORd for a combustion turbine with onsite fuel storage is 9.67%.⁷ The Winter 2025-2026 EFORd for a combustion turbine with onsite fuel storage is 10.48%.⁸

Staff Witness: Trevor Rucker

⁵ SPP Conventional Resources Class Averages – Summer 2026, published October 1, 2025.

⁶ SPP Conventional Resources Class Averages – Winter 2026-27, published March 31, 2026.

⁷ Conventional Resources Class Averages – Informational, published April 30, 2025.

⁸ Conventional Resources Class Averages – Informational, published April 30, 2025.

Case No. EA-2025-0299

SCHEDULE 3.2

HAS BEEN DEEMED

CONFIDENTIAL

IN ITS ENTIRETY

Case No. EA-2025-0299

SCHEDULE 3.3

HAS BEEN DEEMED

CONFIDENTIAL

IN ITS ENTIRETY

Data Response Display - EA-2025-0299 - 0027.1

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0027.1

Requested Date

2/4/2026

Due Date

2/24/2026

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Trevor Rucker (trevor.rucker@psc.mo.gov)

Brief Description

In-Service Dates

Description

In its response to Staff Data Request 0027, Liberty provided a milestone timeline that showed an in-service date for the CTG project of April 2030. Paragraph 18 of Liberty's Application also stated that the CTG project will be available for service in Q2 of 2030. In Liberty's IRP Preferred Plan Update filed in Commission Case No. EO-2024-0280, Liberty showed that a single cycle frame gas combustion turbine would be set for operation by 2029. Please explain the different dates for the CTG project to go into operation/service. Data Request by Trevor Rucker (trevor.rucker@psc.mo.gov).

Request Security

Public (DR)

Response Date

4/9/2026

Response

Supplement Provided by Shaen Rooney - See Attached

Objections

Response Security

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0027.1 Supplement 1.pdf	117.04 KB	Public (DR)

Total: 1 file(s), 117.04 KB



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0027.1

Data Request Received: 2026-02-04
Request No. 0027.1
Submitted by: Trevor Rucker, trevor.rucker@psc.mo.gov

Supplement Response Date: 2026-04-09
Witness/Respondent: Shaen Rooney

REQUEST:

In its response to Staff Data Request 0027, Liberty provided a milestone timeline that showed an in-service date for the CTG project of April 2030. Paragraph 18 of Liberty's Application also stated that the CTG project will be available for service in Q2 of 2030. In Liberty's IRP Preferred Plan Update filed in Commission Case No. EO-2024-0280, Liberty showed that a single cycle frame gas combustion turbine would be set for operation by 2029. Please explain the different dates for the CTG project to go into operation/service.

SUPPLEMENTAL RESPONSE 04/09/2026:

The explanation of the differing in in-service dates provided in the original response is still valid. As development has advanced and the schedule has been refined, the expected in-service date has moved from April 2030 to August 2030.

ORIGINAL RESPONSE 02-24-2026:

The differing in-service dates for the combustion turbine generator ("CTG") reflect the progression from planning-level assumptions used in the Integrated Resource Plan ("IRP") to more refined development estimates as the project has advanced through regulatory and procurement processes.

The Company's April 1, 2025 triennial IRP included a natural-gas-fired generating unit with a planning-level in-service assumption of 2029. That assumption was contingent upon implementation of the Southwest Power Pool's Expedited Resource Adequacy Study ("ERAS") construct, which SPP filed at the Federal Energy Regulatory Commission ("FERC") on May 22, 2025 and which FERC approved on July 21, 2025. Consistent with IRP practice, the 2029 date reflected a planning assumption used for portfolio evaluation rather than a final construction or commercial-operation commitment.

On October 15, 2025, the Company filed a Change in Preferred Resource Plan pursuant to 4 CSR 240-22.080(12). Preparation of that filing required completion of the analyses prescribed by the rule, which were conducted over a period of time prior to the October 15 filing date. During that analytical timeframe, there was less certainty regarding turbine procurement, engineering, and construction scheduling than exists today. As a result, the Company retained the IRP planning assumption for the CTG in that filing. The October 15 filing primarily addressed the removal of a previously assumed committed solar resource, removal of demand side programs, and the extension of an existing power purchase agreement to maintain adequate capacity margins until the CTG could be constructed.

On October 24, 2025, the Company filed its Certificate of Convenience and Necessity (“CCN”) application for the CTG. The CCN rules require a description of the projected construction schedule and anticipated in-service date based on the best information available at the time of filing. Given evolving turbine-supply and construction-schedule considerations and the absence of a finalized turbine supply agreement, the Company indicated in that filing that the CTG anticipates achieving commercial operation in the second quarter of 2030. That estimate reflects a development-level schedule based on updated procurement and construction information that became clearer after completion of the analyses supporting the October 15 Preferred Plan Update.

Because the Company has not yet finalized turbine procurement and construction contracts, the precise commercial-operation date remains subject to refinement. The IRP and Change in Preferred Resource Plan reflect planning-level assumptions available at the time those analyses were conducted, while the CCN filing reflects the most current project-development estimate available at the time of that filing. The Company will continue to update stakeholders as additional certainty becomes available. If the final in-service date is determined to be materially inconsistent with the Preferred Resource Plan, the Company will provide an appropriate Preferred Plan update consistent with 4 CSR 240-22.080(12).

Case No. EA-2025-0299

SCHEDULEs 3.5 through 3.10

HAVE BEEN DEEMED

CONFIDENTIAL

IN ENTIRETY

Data Response Display - EA-2025-0299 - 0089.0

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0089.0

Requested Date

3/20/2026

Due Date

4/9/2026

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Trevor Rucker (trevor.rucker@psc.mo.gov)

Brief Description

Interconnection Agreement

Description

Please provide a copy of the Generator Interconnection Agreement (“GIA”) for the Project. If the GIA has not been finalized and signed, please provide an estimated date for completion, and provide a copy of the finalized and signed GIA in a supplemental response. Data Request by Trevor Rucker (trevor.rucker@psc.mo.gov).

Request Security

Public (DR)

Response Date

4/2/2026

Response

Provided by Shaen Rooney - See Attached

Objections**Response Security**

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0089.pdf	108.15 KB	Public (DR)
Total: 1 file(s), 108.15 KB		



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0089

Data Request Received: 2026-03-20

Response Date: 2026-04-02

Request No. 0089

Witness/Respondent: Shaen Rooney

Submitted by: Trevor Rucker, trevor.rucker@psc.mo.gov

REQUEST:

Please provide a copy of the Generator Interconnection Agreement (“GIA”) for the Project. If the GIA has not been finalized and signed, please provide an estimated date for completion, and provide a copy of the finalized and signed GIA in a supplemental response.

RESPONSE:

The GIA has not yet been finalized and signed. Based on SPP’s interconnection queue study schedule (updated 3/25/26) and SPP’s expected study duration of 45 days, the Interconnection Facilities Study report should post on approximately April 20, 2026. Draft GIAs should begin to be tendered for negotiation shortly after. Negotiation and execution could take 90-150 days; however, as Empire is both the Interconnection Customer and the Transmission Owner, negotiation is greatly streamlined. If the draft GIA is tendered for negotiation before May 1, it would be reasonable to expect that the GIA will be fully executed by the end of May.

Case No. EA-2025-0299

SCHEDULE 3.12

HAS BEEN DEEMED

CONFIDENTIAL

IN ITS ENTIRETY

Data Response Display - EA-2025-0299 - 0033.1

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0033.1

Requested Date

12/23/2025

Due Date

1/12/2026

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Trevor Rucker (trevor.rucker@psc.mo.gov)

Brief Description

ERAS Process

Description

A. Please explain if Liberty is still eligible for approximately 525 MW under the ERAS process or if Liberty is now limited to 250 MW based on Liberty's selection of generation technology for this project. B. Please explain if Liberty still has the flexibility under the ERAS process to interconnect any of the four (4) generation technologies evaluated in Schedule SR-3. C. Please explain at what point Liberty must provide an exact amount of capacity and/or an exact generation technology to SPP for which Liberty is planning to interconnect to SPP's system. Please provide dates. Data Request by Trevor Rucker (trevor.rucker@psc.mo.gov).

Request Security

Confidential (DR)

Response Date

1/12/2026

Response

Response provided by Shaen Rooney - see attached

Objections**Response Security**

Public (DR)

Rationale**Attachments ▼**

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0033.1.pdf	111.72 KB	Public (DR)

Total: 1 file(s), 111.72 KB



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0033.1

Data Request Received: 2025-12-23

Response Date: 2026-01-12

Request No. 0033.1

Witness/Respondent: Shaen Rooney

Submitted by: Trevor Rucker, trevor.rucker@psc.mo.gov

REQUEST:

A. Please explain if Liberty is still eligible for approximately 525 MW under the ERAS process or if Liberty is now limited to 250 MW based on Liberty's selection of generation technology for this project.

B. Please explain if Liberty still has the flexibility under the ERAS process to interconnect any of the four (4) generation technologies evaluated in Schedule SR-3.

C. Please explain at what point Liberty must provide an exact amount of capacity and/or an exact generation technology to SPP for which Liberty is planning to interconnect to SPP's system. Please provide dates.

RESPONSE:

A. The approximate 525 MW of capacity referenced under the Southwest Power Pool's ("SPP") Expedited Resource Adequacy Study ("ERAS") reflected Liberty's Load Responsible Entity ("LRE"), ceiling calculated pursuant to Section 7 of Attachment AW of the SPP Open Access Transmission Tariff ("OATT"). Upon submission of an ERAS application for 250 MW, the LRE ceiling is no longer applicable, and Liberty will not be able to pursue additional capacity through the ERAS process above the original submission.

The Company evaluated whether to accelerate a second combustion turbine ("CT") as identified in its 2025 Triennial Integrated Resource Plan ("IRP") or to replace the proposed CT with a higher-capacity J-class CT to potentially capture economies of scale. However, IRP-identified incremental need of ~240 MW and analyses indicating a materially higher risk of additional schedule and cost impacts, primarily driven by an increased likelihood of network upgrades, the Company selected a 250 MW facility as reflected in its Certificate of Convenience and Necessity ("CCN") application.

B. Based on the technical parameters submitted in Liberty's ERAS application, any change in resource type would require SPP to determine whether the modification is considered material. If deemed

material, the change could invalidate the existing ERAS study and jeopardize the application's eligibility under Attachment AW.

C. The MW capacity and generation technology were specified in Liberty's original ERAS application submitted on September 26, 2025. The ERAS submission and modification window closed on October 2, 2025, after which changes to the application were no longer permitted under Attachment AW.

Case No. EA-2025-0299

SCHEDULEs 3.14 through 3.16

HAVE BEEN DEEMED

CONFIDENTIAL

IN ENTIRETY

Data Response Display - EA-2025-0299 - 0038.0

Request Summary ▼

Submission No.	EA-2025-0299
Request No.	0038.0
Requested Date	11/24/2025
Due Date	12/14/2025
Issue	General Information & Miscellaneous Other
Requested From	Liberty (Empire) (Electric) (Investor) Regulatory Information (regulatory.information@libertyutilities.com)
Requested By	MO PSC Staff (Other) Paul Graham (paul.graham@psc.mo.gov) Jared Giacone (jared.giacone@psc.mo.gov)
Brief Description	Natural gas fuel supply and extension costs
Description	1) Please identify the existing transmission pipelines that are able to supply natural gas to the State Line generating station. 2) Please explain whether Empire has confirmed with the transmission owner that sufficient natural gas supply exists for an additional combustion turbine that is the subject of this CCN and whether additional use will or could change the terms of existing pricing and how. 3) Please explain who will be responsible for the natural gas pipeline extension costs, including, but not limited to, whether Empire has to contribute funds to the transmission owner as contributions in aid of construction ("CIAC") for either the entire amount of the extension costs or for a partial amount of the extension costs, and whether Empire will own and be responsible for constructing and maintaining the extension. Requested by: Jared Giacone (jared.giacone@psc.mo.gov)
Request Security	Public (DR)
Response Date	12/15/2025
Response	Provided by Aaron Doll - See Attached
Objections	
Response Security	Public (DR)
Rationale	

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0038.pdf	107.88 KB	Public (DR)
Total: 1 file(s), 107.88 KB		



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0038

Data Request Received: 2025-11-24
Request No. 0038
Submitted by: Jared Giacone, Jared.Giacone@psc.mo.gov

Response Date: 2025-12-15
Witness/Respondent: Aaron Doll

REQUEST:

- 1) Please identify the existing transmission pipelines that are able to supply natural gas to the State Line generating station.
- 2) Please explain whether Empire has confirmed with the transmission owner that sufficient natural gas supply exists for an additional combustion turbine that is the subject of this CCN and whether additional use will or could change the terms of existing pricing and how.
- 3) Please explain who will be responsible for the natural gas pipeline extension costs, including, but not limited to, whether Empire has to contribute funds to the transmission owner as contributions in aid of construction ("CIAC") for either the entire amount of the extension costs or for a partial amount of the extension costs, and whether Empire will own and be responsible for constructing and maintaining the extension.

RESPONSE:

1. Southern Star Central Pipeline is the only pipeline available to deliver to the generators at the State Line facility.
2. Capacity in the area of the pipeline that is deliverable to the State Line facility is currently fully subscribed. Empire has executed a call option agreement with a natural gas wholesaler to have the ability to procure deliverable volumes to the State Line facility with enough capacity to operate the new generator. This agreement commences in March 2029 and has a 10-year term. All costs associated with the agreement are variable in nature and should be reflected in the unit's total fuel-related cost and included in the calculation of its daily market offer in the Southwest Power Pool Integrated Marketplace.
3. At the time of this request, there has not been an extension to the pipeline announced or planned. Investment may be needed for a lateral extension of the existing pipeline to the new generator, but the specific details are not known at this time.

Data Response Display - EA-2025-0299 - 0065.0

Request Summary ▼

Submission No.	EA-2025-0299
Request No.	0065.0
Requested Date	12/23/2025
Due Date	1/12/2026
Issue	General Information & Miscellaneous Other
Requested From	Liberty (Empire) (Electric) (Investor) Regulatory Information (regulatory.information@libertyutilities.com)
Requested By	MO PSC Staff (Other) Paul Graham (paul.graham@psc.mo.gov) Trevor Rucker (trevor.rucker@psc.mo.gov)
Brief Description	Natural Gas Pipeline Facilities
Description	A. Please provide a detailed description of the existing and to be built Southern Star and Liberty natural gas pipeline facilities required for the Project. Please include discussion of all existing and to be built pipe, components, equipment, and appurtenances. B. Please provide the specifications for the existing and to be built Southern Star and Liberty natural gas pipeline facilities required for the Project. Please include at a minimum: 1) length, 2) diameter, 3) normal operating pressure, 4) maximum operating pressure, 5) pipe grade, 6) wall thickness, 7) material, and 8) any other relevant specifications. Data Request by Trevor Rucker (trevor.rucker@psc.mo.gov).
Request Security	Public (DR)
Response Date	1/12/2026
Response	Response provided by Shaen Rooney - see attached
Objections	
Response Security	Public (DR)
Rationale	

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0065.pdf	107.66 KB	Public (DR)

Total: 1 file(s), 107.66 KB



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0065

Data Request Received: 2025-12-23

Response Date: 2026-01-12

Request No. 0065

Witness/Respondent: Shaen Rooney

Submitted by: Trevor Rucker, trevor.rucker@psc.mo.gov

REQUEST:

A. Please provide a detailed description of the existing and to be built Southern Star and Liberty natural gas pipeline facilities required for the Project. Please include discussion of all existing and to be built pipe, components, equipment, and appurtenances. B. Please provide the specifications for the existing and to be built Southern Star and Liberty natural gas pipeline facilities required for the Project.

Please include at a minimum: 1) length, 2) diameter, 3) normal operating pressure, 4) maximum operating pressure, 5) pipe grade, 6) wall thickness, 7) material, and 8) any other relevant specifications.

RESPONSE:

Based on initial conversations with Southern Star Central, the current UltraSonic meter located at the plant is rated for 130,000 dekatherms per day. With the current deliverable volumes for existing generation and the added volumes needed to supply the project, the current equipment is insufficient. A second run of the current equipment will need to be installed to meet the additional capacity. Initial specification are as follows:

1. Length: 40 feet
2. Diameter: 10 inch
3. Normal Operating Pressure: 570 psig (average)
4. Maximum Operating Pressure: 720 psig
5. Pipe Grade: x52 (subject to change based on final design engineering scope)
6. Wall Thickness: 0.365 (subject to change based on final design engineering scope)
7. Material: Steel
8. Other: Would include additional 10" Ultrasonic Meter

Data Response Display - EA-2025-0299 - 0038.2

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0038.2

Requested Date

12/18/2025

Due Date

1/7/2026

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Jared Giacone (jared.giacone@psc.mo.gov)

Brief Description

Future natural gas procurement

Description

1) Does the natural gas wholesaler who the call option agreement is with own primary firm capacity on the Southern Star Central Pipeline? If so, how much primary firm capacity do they own? 2) What is the maximum total capacity on the transmission pipeline in the area of the proposed generator? 3) Please identify the industry and customer/entity of other primary firm capacity users that the wholesale call option entity supplies in the area of the proposed generating asset. 4) Please identify the industry and customer/entity of other primary firm capacity users in the area of the proposed generating asset. 5) How much of the total capacity is considered primary firm capacity on the transmission line? 6) Will the wholesaler inject natural gas into the transmission pipeline at a rate that equals what the proposed generating unit burns? 7) If the wholesaler must inject natural gas into the transmission line, are there multiple injection points? What is the distance from the proposed site to the wholesaler's injection point(s)? 8) Will Empire know the price of natural gas before or after it is transported and burned at the proposed generator? 9) Is the call option a pricing provision at a strike price when gas is ordered or is it a supply "swing" contract at a stated price? 10) Is the call option for supply only or does it include capacity rights, storage rights or transportation obligations? If not part of the call option, what is the arrangement for capacity rights, storage rights and transportation? 11) How will Empire ensure that the wholesaler has adequate transmission pipeline capacity to serve the proposed site and all other firm obligation customers, especially in times of duress? Requested by: Jared Giacone (jared.giacone@psc.mo.gov)

Request Security

Confidential (DR)

Response Date

1/7/2026

Response

Response provided by Aaron Doll - see attached

Objections**Response Security**

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0038.2.pdf	113.99 KB	Public (DR)

Total: 1 file(s), 113.99 KB



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0038.2

Data Request Received: 2025-12-18

Response Date: 2026-01-07

Request No. 0038.2

Witness/Respondent: Aaron Doll

Submitted by: Jared Giacone, Jared.Giacone@psc.mo.gov

REQUEST:

1. Does the natural gas wholesaler who the call option agreement is with own primary firm capacity on the Southern Star Central Pipeline? If so, how much primary firm capacity do they own?
2. What is the maximum total capacity on the transmission pipeline in the area of the proposed generator?
3. Please identify the industry and customer/entity of other primary firm capacity users that the wholesale call option entity supplies in the area of the proposed generating asset.
4. Please identify the industry and customer/entity of other primary firm capacity users in the area of the proposed generating asset.
5. How much of the total capacity is considered primary firm capacity on the transmission line?
6. Will the wholesaler inject natural gas into the transmission pipeline at a rate that equals what the proposed generating unit burns?
7. If the wholesaler must inject natural gas into the transmission line, are there multiple injection points? What is the distance from the proposed site to the wholesaler's injection point(s)?
8. Will Empire know the price of natural gas before or after it is transported and burned at the proposed generator?
9. Is the call option a pricing provision at a strike price when gas is ordered or is it a supply "swing" contract at a stated price?
10. Is the call option for supply only or does it include capacity rights, storage rights or transportation obligations? If not part of the call option, what is the arrangement for capacity rights, storage rights and transportation?
11. How will Empire ensure that the wholesaler has adequate transmission pipeline capacity to serve the proposed site and all other firm obligation customers, especially in times of duress?

RESPONSE:

1. The supplier does have primary receipts and delivery of natural gas on Southern Star Pipeline. Exact quantities of capacity are unknown to Empire.
2. Current infrastructure at the plant limits delivery to the plant to the current max consumption of the two existing generators. However, with upgrades to the existing valve configuration, deliverable capacities sufficient to meet new proposed demand will be available. Limitations on the capacity are due to the valve and not pipeline sizing.
3. This information is unknown to Empire.
4. This information is unknown to Empire..
5. Southern Star has stated through exploratory negotiations that their pipeline is fully subscribed for the delivered market area
6. Southern Star Central Pipeline does not require injections to match nominations/burns unless there are circumstances that require them. These situations are normally communicated in advance and are resultant from high demand on the pipeline, i.e. winter weather events. However, over the long term, the pipeline does require receipts to match deliveries.
7. Southern Star Central has numerous injection sites on the pipeline. These include producers and storage. The wholesaler's receipt points are not completely known to Empire, but the wholesaler does have the ability to procure volumes at the Jane/EGT location when available, approximately 50 miles.
8. The agreement with the wholesaler has two options. One option is a monthly volume that is delivered each day of the month. This option is priced off the monthly index which is known after the procurement but before actual consumption. The second option is daily volumes. This option is priced off the daily index which is calculated based on the daily sales. This price is available after the purchase and after a portion of the fuel is consumed.
9. The call option is the option to purchase physical delivered natural gas at a preset adder to an index price.
10. The option is for delivered volumes of physical supply.
11. Empire has historically utilized the wholesaler during all types of high demand events without issue. Any failure of a purchase or delivery will be handled under the stipulations stated in the NAESB contract. Additionally, Empire plans to have backup fuel supply on-site for natural gas service interruptions.

Case No. EA-2025-0299

SCHEDULE 3.20

HAS BEEN DEEMED

CONFIDENTIAL

IN ITS ENTIRETY

Case No. EA-2025-0299

SCHEDULES 4.1 and 4.2

HAVE BEEN DEEMED

CONFIDENTIAL

IN ENTIRETY

Data Response Display - EA-2025-0299 - 0003.0

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0003.0

Requested Date

11/12/2025

Due Date

12/2/2025

Issue

General Information & Miscellaneous

Financing Issues

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Seoungjoun Won (seoungjoun.won@psc.mo.gov)

Brief Description

Capital Structure

Description

Please provide Empire District Electric Company's capital structure as of September 30, 2025, and the pro forma capital structure showing the impact of the proposed transaction in the Application in an executable MS Excel format. Please update the information as of December 31, 2025, when it is available. Requested by: Seoung Joun Won (Seoungjoun.Won@psc.mo.gov)

Request Security

Public (DR)

Response Date

2/6/2026

Response

Supplement response provided by Shaen Rooney - see attached

Objections**Response Security**

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0003 Supplement.pdf	107.68 KB	Public (DR)
Total: 1 file(s), 107.68 KB		



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0003

Data Request Received: 2025-11-12
Request No. 0003
Submitted by: Seoung Joun Won, seoungjoun.won@psc.mo.gov

Response Date: 2025-02-06
Witness/Respondent: Shaen Rooney

REQUEST:

Please provide Empire District Electric Company's capital structure as of September 30, 2025, and the pro forma capital structure showing the impact of the proposed transaction in the Application in an executable MS Excel format. Please update the information as of December 31, 2025, when it is available.

SUPPLEMENTAL RESPONSE 2/06/2026:

For the December 31, 2025 data please refer to the attachment labeled: "Missouri EA-2025-0299 DR0002 CONFIDENTIAL SUPPLEMENT.xls" provided within the Company's response to MPSC Data Request 0002, specifically, tab titled: "Metrics" lines 30-37.

ORIGINAL RESPONSE 12/5/2025:

Please refer to the attachment labeled: "Missouri EA-2025-0299 DR0002.xls" provided within the Company's response to MPSC Data Request 0002, specifically, tab titled: "Metrics" lines 30-37.

Case No. EA-2025-0299

SCHEDULE 4.4

HAS BEEN DEEMED

CONFIDENTIAL

IN ITS ENTIRETY

Data Response Display - EA-2025-0299 - 0083.0

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0083.0

Requested Date

2/6/2026

Due Date

2/26/2026

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Justin Tevie (justin.tevie@psc.mo.gov)

Brief Description

Interconnection cost

Description

It appears that Empire will take advantage of the existing interconnection rights at the State Line facility. Please state whether there will be any additional interconnection costs associated with this project. J Tevie (justin.tevie@psc.mo.gov)

Request Security

Public (DR)

Response Date

2/24/2026

Response

Response provided by Shaen Rooney see attached

Objections**Response Security**

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0083.pdf	128.24 KB	Public (DR)

Total: 1 file(s), 128.24 KB



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0083

Data Request Received: 2026-02-06

Response Date: 2026-02-24

Request No. 0083

Witness/Respondent: Shaen Rooney

Submitted by: Justin Tevie, justin.tevie@psc.mo.gov

REQUEST:

It appears that Empire will take advantage of the existing interconnection rights at the State Line facility. Please state whether there will be any additional interconnection costs associated with this project.

RESPONSE:

Although the State Line Power Plant's existing interconnection service is fully allocated to the units currently in operation, the project will utilize the existing transmission infrastructure at the site. The addition of a new generating unit will require interconnection-related investments.

Interconnection costs fall into two primary categories:

Interconnection Facilities: Equipment and facilities dedicated solely to connecting the new generator to the transmission system.

Network Upgrades: Broader transmission system enhancements required to accommodate additional generation output.

For this project, costs will be incurred for interconnection facilities, including the installation of a new interconnection position within the State Line substation. Based on the transmission studies performed for Liberty, no network upgrades are currently anticipated. However, this outcome may change if actual system conditions differ substantially from the assumptions used in those studies.

Data Response Display - EA-2025-0299 - 0069.0

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0069.0

Requested Date

12/23/2025

Due Date

1/12/2026

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Trevor Rucker (trevor.rucker@psc.mo.gov)

Brief Description

Generation Technology Selection

Description

Paragraph 21 of the Application states "The F-class combustion turbine was selected as the preferred solution because it offered the lowest installed capacity cost per kilowatt..." Paragraph 36 of the Application states "The technology selection process, supported by independent studies, demonstrates that the F-class turbine offers the lowest installed capacity cost per kilowatt among feasible alternatives." Lines 11-16 on page 8 of the Direct Testimony of Shaen T. Rooney discusses how the J-Class Frame unit was approximately \$200 per kW less expensive than the F-Class Frame unit, but Liberty still chose the F-Class turbine. Schedule SR-3 reflects the cost per kW difference discussed in the Direct Testimony of Shaen T. Rooney. A. Please explain the cost per kW discrepancy between Liberty's Application and the direct testimony filed in support of the Application. B. Please explain in detail why Liberty selected the simple cycle F-Class Frame gas turbine rather than the simple cycle J-Class Frame gas turbine. Please include discussion of all factors that were taken into consideration. Data Request by Trevor Rucker (trevor.rucker@psc.mo.gov).

Request Security

Public (DR)

Response Date

1/12/2026

Response

Response provided by Shaen Rooney - see attached

Objections**Response Security**

Public (DR)

Rationale

Attachments ▼

Name

Size

Security

Missouri EA-2025-0299 Missouri Public Service Commission 0069.pdf

109.53 KB

Public (DR)

Total: 1 file(s), 109.53 KB



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0069

Data Request Received: 2025-12-23
Request No. 0069
Submitted by: Trevor Rucker, trevor.rucker@psc.mo.gov

Response Date: 2026-01-12
Witness/Respondent: Shaen Rooney

REQUEST:

Paragraph 21 of the Application states “The F-class combustion turbine was selected as the preferred solution because it offered the lowest installed capacity cost per kilowatt...” Paragraph 36 of the Application states “The technology selection process, supported by independent studies, demonstrates that the F-class turbine offers the lowest installed capacity cost per kilowatt among feasible alternatives.” Lines 11-16 on page 8 of the Direct Testimony of Shaen T. Rooney discusses how the J-Class Frame unit was approximately \$200 per kW less expensive than the F-Class Frame unit, but Liberty still chose the F-Class turbine. Schedule SR-3 reflects the cost per kW difference discussed in the Direct Testimony of Shaen T. Rooney.

- A. Please explain the cost per kW discrepancy between Liberty’s Application and the direct testimony filed in support of the Application.

- B. Please explain in detail why Liberty selected the simple cycle F-Class Frame gas turbine rather than the simple cycle J-Class Frame gas turbine.

RESPONSE:

- A. There is no discrepancy – Liberty’s application does not include comparisons of \$/kW between generating technologies.
- B. Although the J-class turbine is estimated to cost approximately \$200/kW less than the F-class turbine, it offers a nameplate capacity that is 75% greater. This larger capacity drives an estimated 60% increase in total project costs. These additional costs would be incurred to install 170 MW of capacity five years ahead of schedule, as outlined in the Company’s 2025 IRP preferred plan. After careful consideration, the Company determined that accelerating this investment would not align with stakeholder priorities, particularly regarding affordability given the Company’s existing firm load.

Data Response Display - EA-2025-0299 - 0079.0

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0079.0

Requested Date

1/23/2026

Due Date

2/12/2026

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Hari Poudel (hari.poudel@psc.mo.gov)

Brief Description

Project selection

Description

Please refer to Table 1: Evaluated Generation Technologies on page 8 of Mr. Rooney's Direct Schedule SR-3: Why did Empire select the F-Class over J-Class among the four evaluated generation technologies, despite the F-Class's higher \$/kW? Please frame your answer from a cost-effective standpoint. DR Requested by: Hari Poudel (Hari.Poudel@psc.mo.gov)

Request Security

Confidential (DR)

Response Date

2/11/2026

Response

Response provided by Shaen Rooney see attached

Objections**Response Security**

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0079.pdf	106.38 KB	Public (DR)
Total: 1 file(s), 106.38 KB		



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0079

Data Request Received: 2026-01-23

Response Date: 2026-02-11

Request No. 0079

Witness/Respondent: Shaen Rooney

Submitted by: Hari Poudel, hari.poudel@psc.mo.gov

REQUEST:

CONFIDENTIAL: Please refer to Table 1: Evaluated Generation Technologies on page 8 of Mr. Rooney's Direct Schedule SR-3: Why did Empire select the F-Class over J-Class among the four evaluated generation technologies, despite the F-Class's higher \$/kW? Please frame your answer from a cost-effective standpoint.

RESPONSE:

Please see the Company's response to Staff Data Request 0069. Additionally, from a cost-effectiveness standpoint, accelerating this investment would require customers to bear higher near-term costs without a commensurate need for capacity given the Company's existing firm load. Accordingly, the Company determined that proceeding with the larger turbine at this time would not align with stakeholder priorities, particularly with respect to affordability.



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Office Public Counsel Data Request - 8556

Data Request Received: 2026-04-02
Request No. 8556
Submitted by: John Robinett, John.Robinett@opc.mo.gov

Response Date: 2026-04-14
Witness/Respondent: Shaen Rooney

REQUEST:

Please provide a detailed narrative of all Liberty’s actions related to the process of acquiring major components for the project Liberty submitted for the ERAS process.

RESPONSE: **CONFIDENTIAL PURSUANT TO 20 CSR 4240-2.135(2)(A)4**

Please see the Company’s first supplemental response to Staff’s data request 0076. Liberty’s actions to acquire major components for the ERAS generation project followed a structured procurement process driven by the fixed ERAS schedule and severe supply-chain constraints affecting large gas-fired generation equipment. After completion of the 2025 technology and site selection studies identifying a single F-class simple-cycle combustion turbine at the State Line facility as the preferred resource, Liberty submitted its ERAS interconnection request to the Southwest Power Pool on September 26, 2025, including the required deposit, and the project was accepted into the ERAS study window. Beginning in May 2025, Liberty initiated direct market outreach to all original equipment manufacturers capable of supplying an F-class combustion turbine to evaluate owner-direct procurement of the combustion turbine generator, generator step-up transformer, and other long-lead equipment. As market conditions tightened, indicative turbine pricing increased materially—by more than **** [REDACTED] **** between September 2025 and January 2026—and manufacturing slots were largely fully allocated, with lead times extending into the 36- to 52-month range, shifting both price and schedule risk to buyers.

Based on these procurement outcomes, Liberty determined that owner-direct purchase of major equipment could not reliably support compliance with the ERAS commercial operation deadline. In response, Liberty expanded its procurement approach in late 2025 and early 2026 to include experienced developers holding pre-existing turbine reservations secured prior to the recent escalation in demand. Through that process, Liberty **** [REDACTED] ****

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED].** Liberty pursued this procurement pathway while advancing internal governance reviews, obtaining Board authorization in March 2026 to enter into Project Agreements and guarantees.

Case No. EA-2025-0299

SCHEDULE 6.1

HAS BEEN DEEMED

HIGHLY CONFIDENTIAL

IN ITS ENTIRETY

Case No. EA-2025-0299

SCHEDULE 6.2

HAS BEEN DEEMED

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IN ITS ENTIRETY



The Empire District Electric Company d/b/a Liberty

Case No. EA-2025-0299

Office Public Counsel Data Request - 8530

Data Request Received: **2026-04-02**

Response Date: 2026-04-14

Request No. 8530

Witness/Respondent: Shaen Rooney

Submitted by: John Robinett, John.Robinett@opc.mo.gov

REQUEST:

As part of its decision on which technology to go forward with in this Certificate of Convenience and Necessity ("CCN") case, did Liberty receive estimates/bids for the cost of a J Class turbine?

RESPONSE:

An estimate for a J-class turbine was included in the Technology Assessment (attached as Schedule SR-3 to the direct testimony of Company witness Shaen Rooney). The Company did not request budgetary proposals for supply of a J-class turbine, as the F-class turbine was the most cost-effective generator to meet the Company's capacity need as identified in its 2025 IRP Preferred Plan.

Case No. EA-2025-0299

SCHEDULE 6.4

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Case No. EA-2025-0299

SCHEDULE 6.5

HAS BEEN DEEMED

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Data Response Display - EA-2025-0299 - 0089.0

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0089.0

Requested Date

3/20/2026

Due Date

4/9/2026

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Trevor Rucker (trevor.rucker@psc.mo.gov)

Brief Description

Interconnection Agreement

Description

Please provide a copy of the Generator Interconnection Agreement (“GIA”) for the Project. If the GIA has not been finalized and signed, please provide an estimated date for completion, and provide a copy of the finalized and signed GIA in a supplemental response. Data Request by Trevor Rucker (trevor.rucker@psc.mo.gov).

Request Security

Public (DR)

Response Date

4/2/2026

Response

Provided by Shaen Rooney - See Attached

Objections**Response Security**

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0089.pdf	108.15 KB	Public (DR)
Total: 1 file(s), 108.15 KB		



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0089

Data Request Received: 2026-03-20

Response Date: 2026-04-02

Request No. 0089

Witness/Respondent: Shaen Rooney

Submitted by: Trevor Rucker, trevor.rucker@psc.mo.gov

REQUEST:

Please provide a copy of the Generator Interconnection Agreement (“GIA”) for the Project. If the GIA has not been finalized and signed, please provide an estimated date for completion, and provide a copy of the finalized and signed GIA in a supplemental response.

RESPONSE:

The GIA has not yet been finalized and signed. Based on SPP’s interconnection queue study schedule (updated 3/25/26) and SPP’s expected study duration of 45 days, the Interconnection Facilities Study report should post on approximately April 20, 2026. Draft GIAs should begin to be tendered for negotiation shortly after. Negotiation and execution could take 90-150 days; however, as Empire is both the Interconnection Customer and the Transmission Owner, negotiation is greatly streamlined. If the draft GIA is tendered for negotiation before May 1, it would be reasonable to expect that the GIA will be fully executed by the end of May.

Combustion Turbine Unit In-Service Test Criteria
(Nameplate Capacity of \geq 95 MW)

1. All major construction work is complete.
2. All preoperational tests have been successfully completed.
3. Unit successfully meets all contract operational guarantees.
4. Unit successfully demonstrates its ability to initiate the proper start sequence resulting in the unit operating from zero (0) rpm (or turning gear) to full load when prompted at a location (or locations) from which it is normally operated.
5. If unit has fast start capability, the unit demonstrates its ability to meet the fast start capability.
6. Unit successfully demonstrates its ability to initiate the proper shutdown sequence from full load resulting in zero (0) rpm (or turning gear) when prompted at a location (or locations) from which it is normally operated.
7. Unit successfully demonstrates its ability to operate at minimum load for one (1) hour.
8. Unit successfully demonstrates its ability to operate at or above 95% of nominal capacity for four (4) continuous hours.
9. Unit successfully demonstrates its ability to produce an amount of energy (MWh) within a 72-hour period that results in a capacity factor of at least 50% during the period when calculated by the formula: capacity factor = (MWh generated in 72 hours) / (nominal capacity x 72 hours).
10. Sufficient transmission interconnection facilities shall exist for the total plant design net electrical capacity at the time the unit is declared fully operational and used for service.
11. Sufficient transmission facilities shall exist for the total plant design net electrical capacity from the generating station into the utility service territory at the time the unit is declared fully operational and used for service.
12. If unit has dual fuel capability, the unit successfully demonstrates its ability to start on the back up/secondary fuel as described in Item No. 4.
13. If unit has dual fuel capability, the unit successfully demonstrates its ability to transfer between the two fuels while on line.

Selective Catalytic Reduction Unit (“SCR”) In-Service Criteria

1. All major construction work is complete
2. All preoperational tests have been successfully completed.
3. Equipment successfully meets operational contract guarantees.
4. The equipment shall be operational and demonstrate its ability to operate at a NO_x reduction efficiency equal to or greater than 83.7% over a continuous four (4) hour period while the generating unit is operating at or above 95% of its design load.
5. The equipment shall also demonstrate its ability to operate at a NO_x reduction efficiency equal to or greater than 79.2% over a continuous 120-hour period while the generating unit is operating at or above 80% of its design load.
6. Continuous emission monitoring systems (CEMS) are operational and demonstrate the capability of monitoring the NO_x emissions to satisfy the parameters listed in items four (4) and five (5) above.

Case No. EA-2025-0299

SCHEDULE 8

HAS BEEN DEEMED

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	2030 - 2039	2040 - 2049	2050 - 2059	2030 - 2059 Years 1-30 average for lifespan of Plant	2060 - 2069	2070 - 2079	2030 - 2079 Total
Usage assuming perfect ratemaking, with no New Large Load							
Average annual bill increase for each Residential customer	\$ 231.25	\$ 163.15	\$ 94.00	\$ 162.80	\$ 20.87	\$ 13.28	\$ 5,225.60
Average annual bill increase for each General Service customer	\$ 273.39	\$ 187.79	\$ 100.43	\$ 187.20	\$ 25.94	\$ 16.51	\$ 6,040.58
Average annual bill increase for each Large General customer	\$ 5,402.18	\$ 3,691.17	\$ 1,944.08	\$ 3,679.14	\$ 489.47	\$ 311.46	\$ 118,383.57
Average annual bill increase to each Small Primary customer	\$ 20,463.83	\$ 13,481.54	\$ 6,311.67	\$ 13,419.01	\$ 1,932.17	\$ 1,229.50	\$ 434,187.00
Average annual bill increase for each Large Power customer	\$ 146,192.30	\$ 91,012.02	\$ 33,917.92	\$ 90,374.08	\$ 16,436.32	\$ 10,458.96	\$ 2,980,175.20
Average annual bill increase for each Transmission Service customer	\$ 389,125.82	\$ 221,227.12	\$ 46,025.93	\$ 218,792.96	\$ 50,664.68	\$ 32,239.55	\$ 7,392,831.09
Average annual bill increase for each Lighting Service customer	\$ 1,304.89	\$ 887.94	\$ 464.18	\$ 885.67	\$ 0.32	\$ 0.20	\$ 26,575.26
Usage assuming perfect ratemaking, with 100 MW New Large Load							
Average annual bill increase for each Residential customer	\$ 212.89	\$ 151.07	\$ 88.39	\$ 150.78	\$ 18.72	\$ 11.91	\$ 4,829.79
Average annual bill increase for each General Service customer	\$ 252.39	\$ 174.77	\$ 95.69	\$ 174.28	\$ 23.26	\$ 14.80	\$ 5,609.18
Average annual bill increase for each Large General customer	\$ 4,990.49	\$ 3,439.06	\$ 1,857.45	\$ 3,429.00	\$ 438.92	\$ 279.30	\$ 110,052.19
Average annual bill increase to each Small Primary customer	\$ 18,975.66	\$ 12,651.40	\$ 6,169.16	\$ 12,598.74	\$ 1,732.62	\$ 1,102.52	\$ 406,313.57
Average annual bill increase for each Large Power customer	\$ 136,285.98	\$ 86,388.93	\$ 34,871.39	\$ 85,848.77	\$ 14,738.83	\$ 9,378.79	\$ 2,816,639.17
Average annual bill increase for each Transmission Service customer	\$ 365,692.00	\$ 214,134.60	\$ 56,371.46	\$ 212,066.02	\$ 45,432.19	\$ 28,909.95	\$ 7,105,401.91
Average annual bill increase for each Lighting Service customer	\$ 1,207.91	\$ 828.84	\$ 444.14	\$ 826.96	\$ 0.28	\$ 0.18	\$ 24,813.55
Annual bill to New Large Load customer	\$ 4,753,697.52	\$ 2,956,177.36	\$ 1,094,999.83	\$ 2,934,958.24	\$ 592,231.11	\$ 376,855.55	\$ 97,739,613.72

	2030 - 2079 Min	2030 - 2079 Max	2030	2031	2032	2033	2034	2035
Usage assuming perfect ratemaking, with no New Large Load								
Average annual bill increase for each Residential customer	\$ 9.87	\$ 261.65	\$ 261.65	\$ 254.92	\$ 248.18	\$ 241.43	\$ 234.67	\$ 227.91
Average annual bill increase for each General Service customer	\$ 12.26	\$ 311.48	\$ 311.48	\$ 303.05	\$ 294.61	\$ 286.16	\$ 277.69	\$ 269.20
Average annual bill increase for each Large General customer	\$ 231.36	\$ 6,163.25	\$ 6,163.25	\$ 5,994.88	\$ 5,826.24	\$ 5,657.32	\$ 5,488.11	\$ 5,318.61
Average annual bill increase to each Small Primary customer	\$ 913.30	\$ 23,559.65	\$ 23,559.65	\$ 22,875.63	\$ 22,190.19	\$ 21,503.29	\$ 20,814.91	\$ 20,125.00
Average annual bill increase for each Large Power customer	\$ 7,597.41	\$ 170,552.04	\$ 170,552.04	\$ 165,179.03	\$ 159,791.45	\$ 154,388.99	\$ 148,971.37	\$ 143,538.28
Average annual bill increase for each Transmission Service customer	\$ (35,211.44)	\$ 462,881.55	\$ 462,881.55	\$ 446,645.04	\$ 430,352.90	\$ 414,004.03	\$ 397,597.28	\$ 381,131.51
Average annual bill increase for each Lighting Service customer	\$ 0.15	\$ 1,490.83	\$ 1,490.83	\$ 1,449.66	\$ 1,408.43	\$ 1,367.14	\$ 1,325.81	\$ 1,284.41
Usage assuming perfect ratemaking, with 100 MW New Large Load								
Average annual bill increase for each Residential customer	\$ 8.85	\$ 240.50	\$ 240.50	\$ 234.38	\$ 228.25	\$ 222.12	\$ 215.99	\$ 209.84
Average annual bill increase for each General Service customer	\$ 11.00	\$ 286.96	\$ 286.96	\$ 279.31	\$ 271.65	\$ 263.97	\$ 256.29	\$ 248.59
Average annual bill increase for each Large General customer	\$ 207.47	\$ 5,681.20	\$ 5,681.20	\$ 5,528.35	\$ 5,375.26	\$ 5,221.94	\$ 5,068.38	\$ 4,914.58
Average annual bill increase to each Small Primary customer	\$ 818.98	\$ 21,782.67	\$ 21,782.67	\$ 21,162.22	\$ 20,540.56	\$ 19,917.67	\$ 19,293.53	\$ 18,668.12
Average annual bill increase for each Large Power customer	\$ 6,966.77	\$ 158,340.51	\$ 158,340.51	\$ 153,473.60	\$ 148,594.35	\$ 143,702.50	\$ 138,797.82	\$ 133,880.03
Average annual bill increase for each Transmission Service customer	\$ (16,658.81)	\$ 432,364.28	\$ 432,364.28	\$ 417,678.79	\$ 402,946.03	\$ 388,165.05	\$ 373,334.90	\$ 358,454.58
Average annual bill increase for each Lighting Service customer	\$ 0.13	\$ 1,377.11	\$ 1,377.11	\$ 1,339.63	\$ 1,302.10	\$ 1,264.54	\$ 1,226.92	\$ 1,189.27
Annual bill to New Large Load customer	\$ 236,576.18	\$ 5,546,902.01	\$ 5,546,902.01	\$ 5,371,973.74	\$ 5,196,560.58	\$ 5,020,652.83	\$ 4,844,240.61	\$ 4,667,313.82

	2036	2037	2038	2039	2040	2041	2042	2043
Usage assuming perfect ratemaking, with no New Large Load								
Average annual bill increase for each Residential customer	\$ 221.13	\$ 214.35	\$ 207.56	\$ 200.76	\$ 193.95	\$ 187.13	\$ 180.30	\$ 173.47
Average annual bill increase for each General Service customer	\$ 260.71	\$ 252.20	\$ 243.67	\$ 235.13	\$ 226.57	\$ 218.00	\$ 209.41	\$ 200.80
Average annual bill increase for each Large General customer	\$ 5,148.81	\$ 4,978.71	\$ 4,808.30	\$ 4,637.57	\$ 4,466.52	\$ 4,295.15	\$ 4,123.44	\$ 3,951.38
Average annual bill increase to each Small Primary customer	\$ 19,433.55	\$ 18,740.53	\$ 18,045.89	\$ 17,349.61	\$ 16,651.66	\$ 15,952.00	\$ 15,250.60	\$ 14,547.42
Average annual bill increase for each Large Power customer	\$ 138,089.41	\$ 132,624.45	\$ 127,143.07	\$ 121,644.94	\$ 116,129.74	\$ 110,597.11	\$ 105,046.71	\$ 99,478.18
Average annual bill increase for each Transmission Service customer	\$ 364,605.53	\$ 348,018.13	\$ 331,368.10	\$ 314,654.17	\$ 297,875.06	\$ 281,029.48	\$ 264,116.10	\$ 247,133.55
Average annual bill increase for each Lighting Service customer	\$ 1,242.96	\$ 1,201.46	\$ 1,159.89	\$ 1,118.27	\$ 1,076.59	\$ 1,034.84	\$ 993.03	\$ 951.16
Usage assuming perfect ratemaking, with 100 MW New Large Load								
Average annual bill increase for each Residential customer	\$ 203.69	\$ 197.53	\$ 191.37	\$ 185.20	\$ 179.02	\$ 172.83	\$ 166.63	\$ 160.43
Average annual bill increase for each General Service customer	\$ 240.88	\$ 233.16	\$ 225.43	\$ 217.68	\$ 209.92	\$ 202.15	\$ 194.36	\$ 186.56
Average annual bill increase for each Large General customer	\$ 4,760.53	\$ 4,606.22	\$ 4,451.65	\$ 4,296.83	\$ 4,141.73	\$ 3,986.35	\$ 3,830.70	\$ 3,674.76
Average annual bill increase to each Small Primary customer	\$ 18,041.40	\$ 17,413.35	\$ 16,783.95	\$ 16,153.17	\$ 15,520.97	\$ 14,887.34	\$ 14,252.24	\$ 13,615.65
Average annual bill increase for each Large Power customer	\$ 128,948.88	\$ 124,004.11	\$ 119,045.43	\$ 114,072.58	\$ 109,085.26	\$ 104,083.20	\$ 99,066.08	\$ 94,033.62
Average annual bill increase for each Transmission Service customer	\$ 343,523.09	\$ 328,539.42	\$ 313,502.51	\$ 298,411.31	\$ 283,264.72	\$ 268,061.64	\$ 252,800.93	\$ 237,481.45
Average annual bill increase for each Lighting Service customer	\$ 1,151.56	\$ 1,113.81	\$ 1,076.01	\$ 1,038.16	\$ 1,000.26	\$ 962.31	\$ 924.31	\$ 886.26
Annual bill to New Large Load customer	\$ 4,489,862.18	\$ 4,311,875.19	\$ 4,133,342.13	\$ 3,954,252.09	\$ 3,774,593.93	\$ 3,594,356.29	\$ 3,413,527.58	\$ 3,232,095.97

	2044	2045	2046	2047	2048	2049	2050	2051
Usage assuming perfect ratemaking, with no New Large Load								
Average annual bill increase for each Residential customer	\$ 166.62	\$ 159.76	\$ 152.89	\$ 146.01	\$ 139.12	\$ 132.22	\$ 125.31	\$ 118.38
Average annual bill increase for each General Service customer	\$ 192.18	\$ 183.54	\$ 174.88	\$ 166.20	\$ 157.51	\$ 148.79	\$ 140.06	\$ 131.31
Average annual bill increase for each Large General customer	\$ 3,778.98	\$ 3,606.22	\$ 3,433.10	\$ 3,259.62	\$ 3,085.75	\$ 2,911.50	\$ 2,736.86	\$ 2,561.81
Average annual bill increase to each Small Primary customer	\$ 13,842.43	\$ 13,135.59	\$ 12,426.87	\$ 11,716.22	\$ 11,003.61	\$ 10,289.00	\$ 9,572.35	\$ 8,853.62
Average annual bill increase for each Large Power customer	\$ 93,891.17	\$ 88,285.30	\$ 82,660.20	\$ 77,015.47	\$ 71,350.73	\$ 65,665.58	\$ 59,959.61	\$ 54,232.40
Average annual bill increase for each Transmission Service customer	\$ 230,080.46	\$ 212,955.42	\$ 195,756.98	\$ 178,483.67	\$ 161,134.01	\$ 143,706.46	\$ 126,199.47	\$ 108,611.44
Average annual bill increase for each Lighting Service customer	\$ 909.22	\$ 867.21	\$ 825.13	\$ 782.99	\$ 740.77	\$ 698.48	\$ 656.12	\$ 613.68
Usage assuming perfect ratemaking, with 100 MW New Large Load								
Average annual bill increase for each Residential customer	\$ 154.21	\$ 147.59	\$ 141.76	\$ 135.52	\$ 129.28	\$ 123.02	\$ 116.75	\$ 110.48
Average annual bill increase for each General Service customer	\$ 178.75	\$ 170.92	\$ 163.07	\$ 155.21	\$ 147.34	\$ 139.45	\$ 131.54	\$ 123.62
Average annual bill increase for each Large General customer	\$ 3,518.53	\$ 3,362.00	\$ 3,205.17	\$ 3,048.03	\$ 2,890.57	\$ 2,732.79	\$ 2,574.69	\$ 2,416.24
Average annual bill increase to each Small Primary customer	\$ 12,977.53	\$ 12,337.85	\$ 11,696.59	\$ 11,053.70	\$ 10,409.16	\$ 9,762.94	\$ 9,115.00	\$ 8,465.31
Average annual bill increase for each Large Power customer	\$ 88,985.50	\$ 83,921.42	\$ 78,841.05	\$ 73,744.07	\$ 68,630.14	\$ 63,498.93	\$ 58,350.09	\$ 53,183.26
Average annual bill increase for each Transmission Service customer	\$ 222,102.03	\$ 206,661.45	\$ 191,158.50	\$ 175,591.94	\$ 159,960.48	\$ 144,262.83	\$ 128,497.67	\$ 112,663.65
Average annual bill increase for each Lighting Service customer	\$ 848.15	\$ 809.98	\$ 771.76	\$ 733.48	\$ 695.14	\$ 656.74	\$ 618.28	\$ 579.76
Annual bill to New Large Load customer	\$ 3,050,049.41	\$ 2,867,375.59	\$ 2,684,061.98	\$ 2,500,095.78	\$ 2,315,463.93	\$ 2,130,153.13	\$ 1,944,149.79	\$ 1,757,440.06

	2052	2053	2054	2055	2056	2057	2058	2059
Usage assuming perfect ratemaking, with no New Large Load								
Average annual bill increase for each Residential customer	\$ 111.45	\$ 104.50	\$ 97.54	\$ 90.57	\$ 83.58	\$ 76.58	\$ 69.57	\$ 62.55
Average annual bill increase for each General Service customer	\$ 122.54	\$ 113.75	\$ 104.94	\$ 96.10	\$ 87.25	\$ 78.37	\$ 69.47	\$ 60.55
Average annual bill increase for each Large General customer	\$ 2,386.36	\$ 2,210.49	\$ 2,034.20	\$ 1,857.47	\$ 1,680.30	\$ 1,502.68	\$ 1,324.61	\$ 1,146.06
Average annual bill increase to each Small Primary customer	\$ 8,132.77	\$ 7,409.75	\$ 6,684.52	\$ 5,957.03	\$ 5,227.25	\$ 4,495.13	\$ 3,760.61	\$ 3,023.66
Average annual bill increase for each Large Power customer	\$ 48,483.53	\$ 42,712.57	\$ 36,919.07	\$ 31,102.58	\$ 25,262.64	\$ 19,398.79	\$ 13,510.54	\$ 7,597.41
Average annual bill increase for each Transmission Service customer	\$ 90,940.76	\$ 73,185.77	\$ 55,344.79	\$ 37,416.09	\$ 19,397.93	\$ 1,288.51	\$ (16,914.00)	\$ (35,211.44)
Average annual bill increase for each Lighting Service customer	\$ 571.16	\$ 528.56	\$ 485.89	\$ 443.13	\$ 400.29	\$ 357.36	\$ 314.35	\$ 271.25
Usage assuming perfect ratemaking, with 100 MW New Large Load								
Average annual bill increase for each Residential customer	\$ 104.19	\$ 97.90	\$ 91.59	\$ 85.28	\$ 78.95	\$ 72.61	\$ 66.27	\$ 59.91
Average annual bill increase for each General Service customer	\$ 115.68	\$ 107.73	\$ 99.76	\$ 91.77	\$ 83.76	\$ 75.73	\$ 67.69	\$ 59.62
Average annual bill increase for each Large General customer	\$ 2,257.46	\$ 2,098.33	\$ 1,938.84	\$ 1,778.99	\$ 1,618.77	\$ 1,458.17	\$ 1,297.19	\$ 1,135.82
Average annual bill increase to each Small Primary customer	\$ 7,813.83	\$ 7,160.52	\$ 6,505.36	\$ 5,848.29	\$ 5,189.30	\$ 4,528.32	\$ 3,865.34	\$ 3,200.30
Average annual bill increase for each Large Power customer	\$ 47,998.10	\$ 42,794.22	\$ 37,571.27	\$ 32,328.85	\$ 27,086.57	\$ 21,784.05	\$ 16,480.87	\$ 11,156.62
Average annual bill increase for each Transmission Service customer	\$ 96,759.39	\$ 80,783.48	\$ 64,734.49	\$ 48,610.96	\$ 32,411.41	\$ 16,134.30	\$ (221.91)	\$ (16,658.81)
Average annual bill increase for each Lighting Service customer	\$ 541.17	\$ 502.52	\$ 463.80	\$ 425.02	\$ 386.17	\$ 347.24	\$ 308.25	\$ 269.18
Annual bill to New Large Load customer	\$ 1,570,009.82	\$ 1,381,844.65	\$ 1,192,929.86	\$ 1,003,250.45	\$ 812,791.13	\$ 621,536.31	\$ 429,470.07	\$ 236,576.18

	2060	2061	2062	2063	2064	2065	2066	2067
Usage assuming perfect ratemaking, with no New Large Load								
Average annual bill increase for each Residential customer	\$ 24.29	\$ 23.53	\$ 22.77	\$ 22.01	\$ 21.25	\$ 20.49	\$ 19.73	\$ 18.98
Average annual bill increase for each General Service customer	\$ 30.19	\$ 29.24	\$ 28.30	\$ 27.36	\$ 26.41	\$ 25.47	\$ 24.53	\$ 23.58
Average annual bill increase for each Large General customer	\$ 569.57	\$ 551.77	\$ 533.97	\$ 516.17	\$ 498.37	\$ 480.57	\$ 462.77	\$ 444.97
Average annual bill increase to each Small Primary customer	\$ 2,248.37	\$ 2,178.10	\$ 2,107.83	\$ 2,037.57	\$ 1,967.30	\$ 1,897.03	\$ 1,826.77	\$ 1,756.50
Average annual bill increase for each Large Power customer	\$ 19,126.14	\$ 18,528.40	\$ 17,930.67	\$ 17,332.93	\$ 16,735.19	\$ 16,137.46	\$ 15,539.72	\$ 14,941.98
Average annual bill increase for each Transmission Service customer	\$ 58,955.99	\$ 57,113.48	\$ 55,270.96	\$ 53,428.45	\$ 51,585.94	\$ 49,743.42	\$ 47,900.91	\$ 46,058.40
Average annual bill increase for each Lighting Service customer	\$ 0.37	\$ 0.36	\$ 0.35	\$ 0.33	\$ 0.32	\$ 0.31	\$ 0.30	\$ 0.29
Usage assuming perfect ratemaking, with 100 MW New Large Load								
Average annual bill increase for each Residential customer	\$ 21.78	\$ 21.10	\$ 20.42	\$ 19.74	\$ 19.06	\$ 18.38	\$ 17.70	\$ 17.02
Average annual bill increase for each General Service customer	\$ 27.07	\$ 26.22	\$ 25.38	\$ 24.53	\$ 23.68	\$ 22.84	\$ 21.99	\$ 21.15
Average annual bill increase for each Large General customer	\$ 510.74	\$ 494.78	\$ 478.82	\$ 462.86	\$ 446.90	\$ 430.93	\$ 414.97	\$ 399.01
Average annual bill increase to each Small Primary customer	\$ 2,016.16	\$ 1,953.15	\$ 1,890.14	\$ 1,827.13	\$ 1,764.12	\$ 1,701.11	\$ 1,638.10	\$ 1,575.09
Average annual bill increase for each Large Power customer	\$ 17,150.85	\$ 16,614.84	\$ 16,078.84	\$ 15,542.84	\$ 15,006.83	\$ 14,470.83	\$ 13,934.82	\$ 13,398.82
Average annual bill increase for each Transmission Service customer	\$ 52,867.19	\$ 51,214.97	\$ 49,562.74	\$ 47,910.52	\$ 46,258.30	\$ 44,606.07	\$ 42,953.85	\$ 41,301.63
Average annual bill increase for each Lighting Service customer	\$ 0.33	\$ 0.32	\$ 0.31	\$ 0.30	\$ 0.29	\$ 0.28	\$ 0.27	\$ 0.26
Annual bill to New Large Load customer	\$ 689,150.12	\$ 667,612.56	\$ 646,075.00	\$ 624,537.45	\$ 602,999.89	\$ 581,462.33	\$ 559,924.78	\$ 538,387.22

	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077
Usage assuming perfect ratemaking, with no New Large Load										
Average annual bill increase for each Residential customer	\$ 18.22	\$ 17.46	\$ 16.70	\$ 15.94	\$ 15.18	\$ 14.42	\$ 13.66	\$ 12.90	\$ 12.14	\$ 11.38
Average annual bill increase for each General Service customer	\$ 22.64	\$ 21.70	\$ 20.75	\$ 19.81	\$ 18.87	\$ 17.92	\$ 16.98	\$ 16.04	\$ 15.09	\$ 14.15
Average annual bill increase for each Large General customer	\$ 427.17	\$ 409.36	\$ 391.56	\$ 373.76	\$ 355.96	\$ 338.16	\$ 320.36	\$ 302.56	\$ 284.76	\$ 266.96
Average annual bill increase to each Small Primary customer	\$ 1,686.23	\$ 1,615.97	\$ 1,545.70	\$ 1,475.43	\$ 1,405.17	\$ 1,334.90	\$ 1,264.63	\$ 1,194.37	\$ 1,124.10	\$ 1,053.83
Average annual bill increase for each Large Power customer	\$ 14,344.25	\$ 13,746.51	\$ 13,148.77	\$ 12,551.04	\$ 11,953.30	\$ 11,355.56	\$ 10,757.83	\$ 10,160.09	\$ 9,562.35	\$ 8,964.62
Average annual bill increase for each Transmission Service customer	\$ 44,215.89	\$ 42,373.37	\$ 40,530.86	\$ 38,688.35	\$ 36,845.83	\$ 35,003.32	\$ 33,160.81	\$ 31,318.30	\$ 29,475.78	\$ 27,633.27
Average annual bill increase for each Lighting Service customer	\$ 0.28	\$ 0.27	\$ 0.25	\$ 0.24	\$ 0.23	\$ 0.22	\$ 0.21	\$ 0.20	\$ 0.18	\$ 0.17
Usage assuming perfect ratemaking, with 100 MW New Large Load										
Average annual bill increase for each Residential customer	\$ 16.34	\$ 15.65	\$ 14.97	\$ 14.29	\$ 13.61	\$ 12.93	\$ 12.25	\$ 11.57	\$ 10.89	\$ 10.21
Average annual bill increase for each General Service customer	\$ 20.30	\$ 19.45	\$ 18.61	\$ 17.76	\$ 16.92	\$ 16.07	\$ 15.23	\$ 14.38	\$ 13.53	\$ 12.69
Average annual bill increase for each Large General customer	\$ 383.05	\$ 367.09	\$ 351.12	\$ 335.16	\$ 319.20	\$ 303.24	\$ 287.28	\$ 271.32	\$ 255.35	\$ 239.39
Average annual bill increase to each Small Primary customer	\$ 1,512.08	\$ 1,449.07	\$ 1,386.06	\$ 1,323.05	\$ 1,260.04	\$ 1,197.03	\$ 1,134.02	\$ 1,071.02	\$ 1,008.01	\$ 945.00
Average annual bill increase for each Large Power customer	\$ 12,862.82	\$ 12,326.81	\$ 11,790.81	\$ 11,254.80	\$ 10,718.80	\$ 10,182.79	\$ 9,646.79	\$ 9,110.79	\$ 8,574.78	\$ 8,038.78
Average annual bill increase for each Transmission Service customer	\$ 39,649.40	\$ 37,997.18	\$ 36,344.96	\$ 34,692.73	\$ 33,040.51	\$ 31,388.28	\$ 29,736.05	\$ 28,083.84	\$ 26,431.61	\$ 24,779.39
Average annual bill increase for each Lighting Service customer	\$ 0.25	\$ 0.24	\$ 0.23	\$ 0.22	\$ 0.21	\$ 0.20	\$ 0.19	\$ 0.18	\$ 0.17	\$ 0.16
Annual bill to New Large Load customer	\$ 516,849.67	\$ 495,312.11	\$ 473,774.55	\$ 452,237.00	\$ 430,699.44	\$ 409,161.89	\$ 387,624.33	\$ 366,086.77	\$ 344,549.22	\$ 323,011.66

	2078	2079
Usage assuming perfect ratemaking, with no New Large Load		
Average annual bill increase for each Residential customer	\$ 10.63	\$ 9.87
Average annual bill increase for each General Service customer	\$ 13.21	\$ 12.26
Average annual bill increase for each Large General customer	\$ 249.16	\$ 231.36
Average annual bill increase to each Small Primary customer	\$ 983.57	\$ 913.30
Average annual bill increase for each Large Power customer	\$ 8,366.88	\$ 7,769.14
Average annual bill increase for each Transmission Service customer	\$ 25,790.76	\$ 23,948.25
Average annual bill increase for each Lighting Service customer	\$ 0.16	\$ 0.15
	\$ -	\$ -
Usage assuming perfect ratemaking, with 100 MW New Large Load		
Average annual bill increase for each Residential customer	\$ 9.53	\$ 8.85
Average annual bill increase for each General Service customer	\$ 11.84	\$ 11.00
Average annual bill increase for each Large General customer	\$ 223.43	\$ 207.47
Average annual bill increase to each Small Primary customer	\$ 881.99	\$ 818.98
Average annual bill increase for each Large Power customer	\$ 7,502.77	\$ 6,966.77
Average annual bill increase for each Transmission Service customer	\$ 23,127.17	\$ 21,474.94
Average annual bill increase for each Lighting Service customer	\$ 0.14	\$ 0.13
Annual bill to New Large Load customer	\$ 301,474.11	\$ 279,936.55

Customer Count Per Lyons Rebuttal Workpaper 0261	Annual Total kWh Usage	Avg. Annual kWh Usage per Customer	Rate Class	Unadjusted Total Cost with No New Load Added	Unadjusted Total Cost if 100 MW New Large Load is Added	Unadjusted Total Benefit with No New Load Added	Unadjusted Total Benefit with 100 MW New Large Load is Added	Unadjusted Total Net Cost of Service if No New Load is Added	Unadjusted Total Net Cost of Service if 100 MW New Large Load is Added	Change in Net Cost if 100 MW New Large Load is Added
140,994	1,902,623,347	13,494	Residential	\$ 1,495,010,812	\$ 1,332,945,428	\$ (758,232,064)	\$ (651,974,320)	\$ 736,778,748	\$ 680,971,108	\$ (55,807,641)
22,238	455,828,911	20,498	General Service	\$ 315,986,986	\$ 280,936,431	\$ (181,656,604)	\$ (156,199,462)	\$ 134,330,382	\$ 124,736,968	\$ (9,593,414)
2,722	1,140,973,977	419,168	Large General	\$ 776,940,205	\$ 690,541,035	\$ (454,700,114)	\$ (390,978,979)	\$ 322,240,091	\$ 299,562,056	\$ (22,678,035)
56	113,678,443	2,029,972	Small Primary	\$ 69,617,522	\$ 61,707,894	\$ (45,303,050)	\$ (38,954,334)	\$ 24,314,472	\$ 22,753,560	\$ (1,560,912)
44	853,325,947	19,393,772	Large Power	\$ 471,194,541	\$ 416,342,392	\$ (340,066,832)	\$ (292,410,269)	\$ 131,127,709	\$ 123,932,123	\$ (7,195,585)
1	70,610,218	70,610,218	Transmission Service	\$ 35,532,364	\$ 31,301,494	\$ (28,139,533)	\$ (24,196,092)	\$ 7,392,831	\$ 7,105,402	\$ (287,429)
350	31,662,214	90,463	Lighting	\$ 21,919,342	\$ 19,534,472	\$ (12,618,002)	\$ (10,849,730)	\$ 9,301,340	\$ 8,684,742	\$ (616,598)
1	744,600,000	744,600,000	New Large Load	\$ -	\$ 352,892,626	\$ -	\$ (255,153,013)	\$ -	\$ 97,739,614	\$ 97,739,614
166,406	5,313,303,057		All Class Total	\$ 3,186,201,772	\$ 3,186,201,772	\$ (1,820,716,199)	\$ (1,820,716,199)	\$ 1,365,485,573	\$ 1,365,485,573	\$ 0

Rate Class	% Change in Net Cost	% Net Cost of Service if No New Load	% of Cost of Service if 100 MW New Large Load
Residential	-7.57%	54.0%	49.9%
General Service	-7.14%	9.8%	9.1%
Large General	-7.04%	23.6%	21.9%
Small Primary	-6.42%	1.8%	1.7%
Large Power	-5.49%	9.6%	9.1%
Transmission Service	-3.89%	0.5%	0.5%
Lighting	-6.63%	0.7%	0.6%
New Large Load		0.0%	7.2%
All Class Total		100.0%	100.0%

Case No. EA-2025-0299

SCHEDULE 10.1

HAS BEEN DEEMED

CONFIDENTIAL

IN ITS ENTIRETY

Data Response Display - EA-2025-0299 - 0027.0

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0027.0

Requested Date

11/24/2025

Due Date

12/14/2025

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Jared Giacone (jared.giacone@psc.mo.gov)

Brief Description

Timeline

Description

Please provide a general timeline graphic by month of the major milestones from Engineering, Procurement and Construction (“EPC”) Request For Proposals (“RFP”), review and award of RFP, finalized budget, major component procurement, construction, sitework, gas extension, transmission extension and unit completion/in-service. Requested by: Jared Giacone (jared.giacone@psc.mo.gov)

Request Security

Public (DR)

Response Date

12/12/2025

Response

Response provided by Shaen Rooney

Objections

Response Security

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
EA-2025-0299 - DR 0027 - Milestone Timeline.pdf	251.33 KB	Public (DR)
Missouri EA-2025-0299 Missouri Public Service Commission 0027.pdf	104.71 KB	Public (DR)
Total: 2 file(s), 356.04 KB		

Data Response Display - EA-2025-0299 - 0009.0

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0009.0

Requested Date

11/12/2025

Due Date

12/2/2025

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Jared Giacone (jared.giacone@psc.mo.gov)

Brief Description

Jurisdictional allocation

Description

Please explain whether the proposed facility is 100% Missouri jurisdictional and if not, please provide the jurisdictional allocators proposed or contemplated by FERC account for this generating asset, transformer and transmission line. Please include, but do not limit the response to identification and cost allocation percent for all jurisdictions and how the transmission line extension costs will be recovered (e.g., through FERC rates, Missouri base rates, as an offset to base rates from FERC revenue, etc.). Requested by: Jared Giacone (jared.giacone@psc.mo.gov)

Request Security

Public (DR)

Response Date

12/4/2025

Response

Response provided by Shaen Rooney - see attached

Objections**Response Security**

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0009.pdf	111.12 KB	Public (DR)

Total: 1 file(s), 111.12 KB



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0009

Data Request Received: 2025-11-12
Request No. 0009
Submitted by: Jared Giacone, Jared.Giacone@psc.mo.gov

Response Date: 2025-12-04
Witness/Respondent: Shaen Rooney

REQUEST:

Please explain whether the proposed facility is 100% Missouri jurisdictional and if not, please provide the jurisdictional allocators proposed or contemplated by FERC account for this generating asset, transformer and transmission line. Please include, but do not limit the response to identification and cost allocation percent for all jurisdictions and how the transmission line extension costs will be recovered (e.g., through FERC rates, Missouri base rates, as an offset to base rates from FERC revenue, etc.).

RESPONSE:

The costs of the proposed facility will be allocated among Empire’s customers in the same manner as other generating units, using a twelve-month average coincidental peak methodology. While these allocation factors vary monthly, the September 2025 allocators are provided below. Please note that, as of May 2025, the Company no longer has customers taking service under its FERC Generation Formula Rate (GFR-Resale). Therefore, we anticipate the allocation to this jurisdiction will eventually decline to zero unless additional customers are added.

FERC Account Groups	MO	KS	OK	AR	GFR-Resale
Generation Plant	87.54%	4.71%	4.35%	3.27%	0.12%

Data Response Display - EA-2025-0299 - 0085.0

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0085.0

Requested Date

2/23/2026

Due Date

3/15/2026

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Jared Giacone (jared.giacone@psc.mo.gov)

Brief Description

Sales and Use tax exemption

Description

1) Please describe what items or services used to construct the facility that will not be exempt from sales and use tax and quantify the estimated amount of sales and use tax budgeted for the construction of the facility. 2) Please quantify the estimated savings from any sales and use tax exemptions that construction materials and services the facility qualifies for. Requested by: Jared Giacone (jared.giacone@psc.mo.gov)

Request Security

Public (DR)

Response Date

3/12/2026

Response

Response provided by Shaen Rooney - see attached

Objections**Response Security**

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0085.pdf	152.68 KB	Public (DR)

Total: 1 file(s), 152.68 KB



The Empire District Electric Company d/b/a Liberty
Case No. EA-2025-0299
Missouri Public Service Commission Data Request - 0085

Data Request Received: 2026-02-23

Response Date: 2026-03-12

Request No. 0085

Witness/Respondent: Shaen Rooney

Submitted by: Jared Giacone, Jared.Giacone@psc.mo.gov

REQUEST:

1. Please describe what items or services used to construct the facility that will not be exempt from sales and use tax and quantify the estimated amount of sales and use tax budgeted for the construction of the facility.
2. Please quantify the estimated savings from any sales and use tax exemptions that construction materials and services the facility qualifies for.

RESPONSE:

1. Sales and use taxes are expected to apply to certain items and services used to construct the facility that do not qualify for available exemptions (or are not being purchased under an exempt structure like Missouri's Chapter 100). In general, non-exempt categories include:
 - a. Construction and professional services such as labor, installation, engineering, project management, consulting.
 - b. Temporary facilities, consumables, and jobsite operating supplies.
 - c. Contractor-purchased materials incorporated into real property improvements where no flow-through exemption is applied.
 - d. Equipment rentals/leases and other taxable lease transactions not covered by an approved exemption structure.
 - e. Out-of-State purchases where Missouri use tax applies.

Based on forecasted construction costs of \$518,302,433 and a blended sales and use tax rate of 5.6%, the project's estimated sales and use tax budget will depend on the final allocation of taxable purchases and the application of available exemptions (including the procurement

structure for EPC and major equipment). The forecasted cost categories and the framework for estimating taxable amounts are summarized in the table below. These estimates are provided for informational purposes only and do not reflect a final tax determination.

Category (Purchases During Construction)	Forecasted Taxable Base (\$M)		
EPC Contract (Materials/Equipment)	\$ 393.00	*	
Switchyard/Transmission/Gas Interconnect	\$ 13.31	*	
Operating Spare Parts	\$ 7.20		
Startup/Testing Fuel & Consumables	\$ 0.90		
Initial Fuel Inventory	\$ 3.20		
Temporary Utilities/Rentals/Supplies	\$ 0.50		
Total Estimated Cost Subject to Sales Tax	\$ 418.11		
MO Sales Tax Rate - Jasper County	5.60%		
Estimated Sales Tax	\$ 23.41		
*Forecast may include labor and other costs that are not subject to sales tax			
Estimates are based on forecasted construction costs and a sales tax rate of 5.6%			
The taxable base will depend on final procurement structure, exemption applicability, and the taxability of components and services. These estimates are for informational purposes only and do not reflect a final tax determination.			

2. Estimated Sales and Use Tax Exemption Savings

Estimated sales and use tax exemption savings are calculated as the portion of project spend that qualifies for a sales/use tax exemption (based on the procurement structure and applicable exemption rules) multiplied by the applicable combined state and local sales/use tax rate at the project location.

To the extent the project qualifies for exemptions (including, as applicable, Chapter 100 purchase/ownership structure for construction materials and/or qualifying exemptions for machinery and equipment used directly in producing electricity), the estimated savings are quantified as follows:

- Assumed combined sales/use tax rate (Jasper County countywide minimum): 5.6%
- Estimated exempt spend categories:
 - Exempt construction materials: \$[A]
 - Exempt qualifying equipment: \$[B]
 - Other exempt purchases/transactions: \$[C]
- Estimated exemption savings:

$$= (\$[A] + \$[B] + \$[C]) \times 5.6\%$$

$$= \$[Savings]$$

This estimate will be updated as the procurement plan is finalized and exemption eligibility/documentation is confirmed (including whether purchases are made under an exempt structure).

Data Response Display - EA-2025-0299 - 0084.0

Request Summary ▼

Submission No.

EA-2025-0299

Request No.

0084.0

Requested Date

2/23/2026

Due Date

3/15/2026

Issue

General Information & Miscellaneous

Other

Requested From

Liberty (Empire) (Electric) (Investor)

Regulatory Information (regulatory.information@libertyutilities.com)

Requested By

MO PSC Staff (Other)

Paul Graham (paul.graham@psc.mo.gov)

Jared Giacone (jared.giacone@psc.mo.gov)

Brief Description

Property tax

Description

1) What is the estimated annual increase to property tax expense for the completed facility? 2) Will construction of the facility cause an increase to property tax expense? If so, please explain and quantify the annual expected increase for each year of construction. 3) Is the project eligible for Missouri Chapter 100 development incentives? If so, please explain whether Empire contemplated the incentive and why the option was not elected. Requested by: Jared Giacone (jared.giacone@psc.mo.gov)

Request Security

Public (DR)

Response Date

3/12/2026

Response

Response provided by Shaen Rooney - See attached

Objections**Response Security**

Public (DR)

Rationale

Attachments ▼

Name	Size	Security
Missouri EA-2025-0299 Missouri Public Service Commission 0084.pdf	158.8 KB	Public (DR)
Total: 1 file(s), 158.8 KB		



The Empire District Electric Company d/b/a Liberty
 Case No. EA-2025-0299
 Missouri Public Service Commission Data Request - 0084

Data Request Received: 2026-02-23
 Request No. 0084
 Submitted by: Jared Giacone, Jared.Giacone@psc.mo.gov

Response Date: 2026-03-12
 Witness/Respondent: Shaen Rooney

REQUEST:

- 1) What is the estimated annual increase to property tax expense for the completed facility?
- 2) Will construction of the facility cause an increase to property tax expense? If so, please explain and quantify the annual expected increase for each year of construction.
- 3) Is the project eligible for Missouri Chapter 100 development incentives? If so, please explain whether Empire contemplated the incentive and why the option was not elected.

RESPONSE:

1. Under Missouri law, utility real and personal property is assessed as of January 1 following placement in service. Electric generation facilities are centrally assessed for utility property. Based on the forecasted capital cost for a Single F-Class Combustion Turbine is approximately \$518M, the estimated annual increase in property taxes would be approximately \$9.7M. Please see table below:

Estimated Annual Property Tax Expense (Post-COD)	
Simple F-Class Combustion Turbine	Total
Forecasted Capital Cost	\$ 518,302,433
Assessed Value (33.33%)	\$ 172,750,201
MO Property Tax Rate	5.60%
Estimated Annual Property Tax	\$ 9,674,011 *

*These estimates are provided for informational purposes and do not reflect a final assessment or tax determination.

2. Yes. Construction of the facility is expected to result in a limited increase in property tax

expense during the construction period due to the assessment of Construction Work in Progress (CWIP). CWIP is taxable utility property in Missouri but is not operating plant and is not assessed at full value until the facility is placed in service.

The first year of construction is expected to consist primarily of site preparation, foundations, and early structural work, with limited equipment installed. Accordingly, only a small portion of total project costs are expected to be physically in place as of January 1. Based on the example above of the forecasted capital cost of \$518,302,433, the increase in property tax expense during the first year of construction is expected to be approximately \$1 million.

As construction progresses and additional assets are installed, property tax expense is expected to increase incrementally in subsequent construction years, with the primary increase occurring once the facility is placed in service. The estimated impacts are summarized in the table below.

Estimated Annual Property Tax Expense (Post-COD)						
Simple F-Class Combustion Turbine	CWIP 2025	CWIP 2026	CWIP 2027	CWIP 2028	CWIP 2029	In Service 2030
Forecasted Capital Cost	\$ 2,813,034	\$ 48,998,559	\$ 120,794,331	\$ 166,434,024	\$ 326,634,796	\$ 518,302,433
Assessed Value (33.33%)	\$ 937,584	\$ 16,331,220	\$ 40,260,751	\$ 55,472,460	\$ 108,867,378	\$ 172,750,201
MO Property Tax Rate	5.60%	5.60%	5.60%	5.60%	5.60%	5.60%
Estimated Annual Property Tax	\$ 52,505	\$ 914,548	\$ 2,254,602	\$ 3,106,458	\$ 6,096,573	\$ 9,674,011 *

*These estimates are provided for informational purposes, are based on forecasted information, and do not reflect a final assessment or tax determination.

- Missouri Chapter 100 development incentives have not been pursued or evaluated in detail for this project to date; however, Empire may consider the potential availability of such incentives in the future, subject to further evaluation and local governmental approval.