



MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT ON

APPENDIX 1

Credentials

NextEra Energy Transmission Southwest, LLC (“NEET”)

FILE NO. EA-2022-0234

*Jefferson City, Missouri
September 22, 202*

TABLE OF CONTENTS

APPENDIX 1

STAFF CREDENTIALS

NextEra Energy Transmission Southwest, LLC (“NEET”),

File No. EA-2022-0234

Bax, Alan J.1

Eubanks, Claire M. (PE)6

Hull, Jordan T.11

Lange, Sarah L.K. (PE)13

Poudel, Krishna L. (PhD)26

Roling, Joseph P.28

Won, Seoung Joun (PhD)33

ALAN J. BAX

I graduated from the University of Missouri - Columbia with a Bachelor of Science degree in Electrical Engineering in December 1995. Concurrent with my studies, I was employed as an Engineering Assistant in the Energy Management Department of the University of Missouri – Columbia from the Fall of 1992 through the Fall of 1995. Prior to this, I completed a tour of duty in the United States Navy, completing a course of study at the Navy Nuclear Power School and a Navy Nuclear Propulsion Plant. Following my graduation from the University of Missouri - Columbia, I was employed by The Empire District Electric Company as a Staff Engineer until August 1999, at which time I began my employment with the Staff of the Missouri Public Service Commission. My current position is an Engineer in the Engineering Analysis Department, within the Industry Analysis Division. I presented in a Peer Review of Power Quality Regulations in the National Association of Regulatory Utility Commissioners (NARUC) outreach program with the Public Utilities Commission of Sri Lanka (PUCSL), supported by the Bureau of Energy Resources (ENR) at the United States Department of State. I am a member of the Institute of Electrical/Electronic Engineers (IEEE).

TESTIMONY AND REPORTS
BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

BY ALAN J. BAX

| <u>COMPANY</u> | <u>CASE NUMBER</u> |
|------------------------------------------|--------------------|
| Aquila Networks – MPS | ER-2004-0034 |
| Union Electric Company d/b/a AmerenUE | EO-2004-0108 |
| Empire District Electric Company | ER-2002-0424 |
| Kansas City Power and Light Company | EA-2003-0135 |
| Union Electric Company d/b/a AmerenUE | EO-2003-0271 |
| Aquila Networks – MPS | EO-2004-0603 |
| Union Electric Company d/b/a AmerenUE | EC-2002-0117 |
| Three Rivers and Gascoage Electric Coops | EO-2005-0122 |
| Union Electric Company d/b/a AmerenUE | EC-2002-1 |
| Aquila Networks – MPS | EO-2001-0384 |
| Empire District Electric Company | ER-2001-299 |
| Aquila Networks – MPS | EA-2003-0370 |
| Union Electric Company d/b/a AmerenUE | EW-2004-0583 |
| Union Electric Company d/b/a AmerenUE | EO-2005-0369 |
| Trigen Kansas City | HA-2006-0294 |
| Union Electric Company d/b/a AmerenUE | EC-2005-0352 |
| Missouri Public Service | ER-2001-672 |
| Aquila Networks – MPS | EO-2003-0543 |
| Kansas City Power and Light Company | ER-2006-0314 |
| Macon Electric Coop | EO-2005-0076 |
| Aquila Networks – MPS | EO-2006-0244 |
| Union Electric Company d/b/a AmerenUE | EC-2004-0556 |
| Union Electric Company d/b/a AmerenUE | EC-2004-0598 |
| Empire District Electric Company | ER-2004-0570 |
| Union Electric Company d/b/a AmerenUE | EC-2005-0110 |
| Union Electric Company d/b/a AmerenUE | EC-2005-0177 |
| Union Electric Company d/b/a AmerenUE | EC-2005-0313 |
| Empire District Electric Company | EO-2005-0275 |
| Aquila Networks – MPS | EO-2005-0270 |
| Union Electric Company d/b/a AmerenUE | EO-2006-0145 |
| Empire District Electric Company | ER-2006-0315 |
| Aquila Networks – MPS | ER-2005-0436 |

| <u>COMPANY</u> | <u>CASE NUMBER</u> |
|-----------------------------------------------|--------------------|
| Union Electric Company d/b/a AmerenUE | EO-2006-0096 |
| West Central Electric Cooperative | EO-2006-0339 |
| Kansas City Power and Light Company | ER-2006-0314 |
| Union Electric Company d/b/a AmerenUE | EO-2008-0031 |
| Union Electric Company d/b/a AmerenUE | EC-2009-0193 |
| Empire District Electric Company | ER-2008-0093 |
| Missouri Rural Electric Cooperative | EO-2008-0332 |
| Grundy Electric Cooperative | EO-2008-0414 |
| Osage Valley Electric Cooperative | EO-2009-0315 |
| Union Electric Company d/b/a AmerenUE | EO-2009-0400 |
| Union Electric Company d/b/a AmerenUE | EO-2008-0310 |
| Aquila Networks – MPS | EA-2008-0279 |
| West Central Electric Cooperative | EO-2008-0339 |
| Empire District Electric Company | EO-2009-0233 |
| Union Electric Company d/b/a/ AmerenUE | EO-2009-0272 |
| Empire District Electric Company | EO-2009-0181 |
| Union Electric Company d/b/a AmerenUE | ER-2008-0318 |
| Kansas City Power and Light Company | ER-2009-0089 |
| Kansas City Power and Light – GMO | ER-2009-0090 |
| Union Electric Company d/b/a AmerenUE | ER-2010-0036 |
| Empire District Electric Company | ER-2010-0130 |
| Laclede Electric Cooperative | EO-2010-0125 |
| Union Electric Company d/b/a AmerenUE | EC-2010-0364 |
| Union Electric Company d/b/a AmerenUE | EO-2011-0052 |
| Kansas City Power and Light Company | ER-2010-0355 |
| Union Electric Company d/b/a AmerenUE | EO-2010-0263 |
| Kansas City Power and Light – GMO | EO-2011-0137 |
| Kansas City Power and Light – GMO | ER-2010-0356 |
| Union Electric Company d/b/a AmerenUE | ER-2011-0028 |
| Kansas City Power and Light – GMO | EO-2012-0119 |
| Kansas City Power and Light Company | EO-2011-0137 |
| Union Electric Company d/b/a AmerenUE | ER-2012-0121 |
| Union Electric Company d/b/a/ Ameren Missouri | EX-2012-0332 |
| Empire District Electric Company | EO-2011-0085 |
| Empire District Electric Company | EO-2012-0192 |
| Empire District Electric Company | EO-2013-0313 |
| Union Electric Company d/b/a AmerenUE | ER-2012-0180 |
| Union Electric Company d/b/a AmerenUE | EO-2013-0418 |

| <u>COMPANY</u> | <u>CASE NUMBER</u> |
|-----------------------------------------------|--------------------|
| City Utilities of Springfield | EO-2012-0441 |
| Kansas City Power and Light – GMO | EO-2012-0367 |
| Empire District Electric Company | ER-2011-0004 |
| Union Electric Company d/b/a/ Ameren Missouri | ER-2012-0166 |
| Kansas City Power and Light Company | ER-2012-0174 |
| Union Electric Company d/b/a/ Ameren Missouri | ER-2013-0044 |
| Kansas City Power and Light – GMO | ER-2012-0175 |
| Central Missouri Electric Cooperative | EO-2015-0137 |
| Empire District Electric Company | ER-2012-0345 |
| Kansas City Power and Light Company | EO-2012-0367 |
| Boone Electric Cooperative | EO-2015-0012 |
| Transource Missouri, LLC | EA-2013-0098 |
| Black River Electric Cooperative | EO-2015-0096 |
| Union Electric Company d/b/a/ Ameren Missouri | EW-2012-0369 |
| Empire District Electric Company | ER-2014-0351 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2014-0044 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2013-0418 |
| Union Electric Company d/b/a/ Ameren Missouri | EE-2013-0511 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2015-0017 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2016-0087 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2014-0009 |
| Kansas City Power and Light Company | EO-2014-0128 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2017-0358 |
| Empire District Electric Company | EO-2016-0192 |
| Empire District Electric Company | EO-2017-0217 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2014-0296 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2015-0328 |
| Union Electric Company d/b/a/ Ameren Missouri | ER-2014-0258 |
| Union Electric Company d/b/a/ Ameren Missouri | EX-2017-0153 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2019-0391 |
| Empire District Electric Company | EO-2018-0118 |
| Empire District Electric Company | ER-2016-0023 |
| Ozark Electric Cooperative Inc. | EO-2020-0163 |
| Union Electric Company d/b/a/ Ameren Missouri | EC-2016-0235 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2018-0058 |
| Union Electric Company d/b/a/ Ameren Missouri | EE-2019-0395 |
| Kansas City Power and Light – GMO | ER-2016-0156 |
| Kansas City Power and Light – GMO | EO-2019-0061 |

| <u>COMPANY</u> | <u>CASE NUMBER</u> |
|------------------------------------------------------|--------------------|
| Kansas City Power and Light Company | ER-2014-0370 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2017-0044 |
| Kansas City Power and Light Company | ER-2016-0285 |
| Empire District Electric Company | EO-2019-0381 |
| Union Electric Company d/b/a/ Ameren Missouri | EE-2019-0395 |
| Union Electric Company d/b/a/ Ameren Missouri | ER-2016-0179 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2018-0278 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2020-0315 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2017-0127 |
| Kansas City Power and Light Company | ER-2018-0145 |
| Kansas City Power and Light Company – GMO | ER-2018-0146 |
| Evergy Missouri West LLC | EO-2021-0388 |
| Gridliance High Plains, LLC | EM-2022-0156 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2021-0305 |
| Union Electric Company d/b/a/ Ameren Missouri | EM-2021-0309 |
| Union Electric Company d/b/a/ Ameren Missouri | ER-2019-0335 |
| Union Electric Company d/b/a/ Ameren Missouri | EE-2019-0383 |
| Osage Valley Electric Cooperative, LLC | EO-2022-0073 |
| Ozark Border Electric Cooperative, LLC | EO-2022-0264 |
| Evergy Missouri West LLC | EO-2021-0339 |
| Union Electric Company d/b/a/ Ameren Missouri | EE-2021-0086 |
| Union Electric Company d/b/a/ Ameren Missouri | EM-2022-0292 |
| Liberty Utilities-Empire | EO-2021-0389 |
| Laclede Electric Cooperative | EO-2022-0143 |
| Empire District Electric Company | ER-2019-0374 |
| Union Electric Company d/b/a/ Ameren Missouri | ET-2021-0082 |
| Union Electric Company d/b/a/ Ameren Missouri | ER-2021-0240 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2022-0226 |
| Evergy Missouri Metro | ER-2022-0129 |
| Evergy Missouri West LLC | ER-2022-0130 |
| Missouri Joint Municipal Utility Electric Commission | EM-2022-0156 |
| Liberty Utilities-Empire | EO-2022-0226 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2021-0401 |
| Union Electric Company d/b/a/ Ameren Missouri | EM-2022-0094 |
| Union Electric Company d/b/a/ Ameren Missouri | EO-2022-0102 |
| Liberty Utilities-Empire | EO-2022-0132 |
| Liberty Utilities-Empire | ER-2021-0312 |

CLAIRE M. EUBANKS, PE

PRESENT POSITION:

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

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

I received my Bachelor of Science degree in Environmental Engineering from the University of Missouri – Rolla, now Missouri University of Science and Technology, in May 2006. I am a licensed professional engineer in the states of Missouri and Arkansas. Immediately after graduating from UMR, I began my career with Aquaterra Environmental Solutions, Inc., now SCS Aquaterra, an engineering consulting firm based in Overland Park, Kansas. During my time with Aquaterra, I worked on various engineering projects related to the design, construction oversight, and environmental compliance of solid waste landfills. I began my employment with the Commission in November 2012 and was promoted to my current position in April 2020.

CASE HISTORY:

| Case Number | Utility | Type | Issue |
|------------------------------|-----------------------|----------------------------------------|------------------------------------------|
| EA-2012-0281 | Ameren | Rebuttal | Certificate of Convenience and Necessity |
| EC-2013-0379 EC-2013-0380 | KCP&L KCP&L GMO | Rebuttal | RES Compliance |
| EO-2013-0458 | Empire | Memorandum | RES Compliance Plan & Report |
| EO-2013-0462 | Ameren | Memorandum | RES Compliance Report |
| EO-2013-0503 | Ameren | Memorandum | RES Compliance Plan |
| EO-2013-0504 | KCPL | Memorandum | RES Compliance Plan & Report |
| EO-2013-0505 | GMO | Memorandum | RES Compliance Plan & Report |
| ET-2014-0059 | KCP&L GMO | Rebuttal | RES Retail Rate Impact |
| ET-2014-0071 | KCP&L | Rebuttal | RES Retail Rate Impact |
| ET-2014-0085 | Ameren | Rebuttal | RES Retail Rate Impact |
| ER-2014-0258 | Ameren | Cost of Service Report, Surrebuttal | RES, In-Service |

| Case Number | Utility | Type | Issue |
|--------------------|----------------|------------------------|---------------------------------------------------------|
| EO-2014-0151 | KCP&L GMO | Memorandum | RESRAM |
| EO-2014-0357 | Electric | Memorandum | Solar Rebates Payments |
| EO-2014-0287 | KCPL | Memorandum | RES Compliance Plan |
| EO-2014-0288 | GMO | Memorandum | RES Compliance Plan |
| EO-2014-0289 | KCPL | Memorandum | RES Compliance Report |
| EO-2014-0290 | GMO | Memorandum | RES Compliance Plan |
| ER-2014-0370 | KCP&L | Cost of Service Report | RES |
| EX-2014-0352 | N/A | Live Comments | RES rulemaking |
| EC-2015-0155 | GMO | Memorandum | Solar Rebate Complaint |
| EO-2015-0260 | Empire | Memorandum | RES Compliance Plan & Report |
| EO-2015-0263 | KCPL | Memorandum | RES Compliance Report |
| EO-2015-0264 | GMO | Memorandum | RES Compliance Report |
| EO-2015-0265 | KCPL | Memorandum | RES Compliance Plan |
| EO-2015-0266 | GMO | Memorandum | RES Compliance Plan |
| EO-2015-0267 | Ameren | Memorandum | RES Compliance Plan & Report |
| EO-2015-0252 | GMO | Staff Report | Integrated Resource Plan – Renewable Energy Standard |
| EO-2015-0254 | KCPL | Staff Report | Integrated Resource Plan – Renewable Energy Standard |
| EA-2015-0256 | KCP&L GMO | Live Testimony | Greenwood Solar CCN |
| EO-2015-0279 | Empire | Memorandum | RES Compliance Plan & Report |
| ET-2016-0185 | KCP&L | Memorandum | Solar Rebate Tariff Suspension |
| EO-2016-0280 | KCPL | Memorandum | RES Compliance Report |
| EO-2016-0281 | GMO | Memorandum | RES Compliance Report |
| EO-2016-0282 | KCPL | Memorandum | RES Compliance Plan |
| EO-2016-0283 | GMO | Memorandum | RES Compliance Plan |
| EO-2016-0284 | Ameren | Memorandum | RES Compliance Plan & Report |
| ER-2016-0023 | Empire | Report | RES |
| ER-2016-0156 | KCP&L GMO | Rebuttal | RESRAM Prudence Review |

| Case Number | Utility | Type | Issue |
|-----------------------------------|----------------------------------------------|----------------------------------------|----------------------------------------------------------------|
| EA-2016-0208 | Ameren | Rebuttal | Certificate of Convenience and Necessity |
| ER-2016-0285 | KCPL | Cost of Service Report | In-Service, Greenwood Solar |
| ER-2016-0179 | Ameren | Rebuttal | In-Service, Labadie Landfill |
| EW-2017-0245 | Electric | Report | Working Case on Emerging Issues in Utility Regulation |
| EO-2017-0268 | Ameren | Memorandum | RES Compliance Plan & Report |
| EO-2017-0269 | KCPL | Memorandum | RES Compliance Report |
| EO-2017-0271 | KCPL | Memorandum | RES Compliance Plan |
| GR-2017-0215 & GR-2017-0216 | Spire | Rebuttal & Surrebuttal | CHP for Critical Infrastructure |
| GR-2018-0013 | Liberty Utilities (Midstates Natural Gas) | Rebuttal | CHP Outreach Initiative for Critical Infrastructure Resiliency |
| EO-2018-0287 | Ameren | Memorandum | RES Compliance Plan & Report |
| EO-2018-0288 | KCPL | Memorandum | RES Compliance Report |
| EO-2018-0290 | KCPL | Memorandum | RES Compliance Plan |
| EA-2016-0207 | Ameren | Memorandum | Certificate of Convenience and Necessity |
| ER-2018-0146 | GMO | Cost of Service Report | RESRAM Prudence Review |
| ER-2018-0145 ER-2018-0146 | KCPL GMO | Class Cost of Service Report, Rebuttal | Solar Subscription Pilot Rider, Standby Service Rider |
| EA-2018-0202 | Ameren | Staff Report | Certificate of Convenience and Necessity |
| EE-2019-0076 | Ameren | Memorandum | Variance Request – Reliability Reporting |
| EA-2019-0021 | Ameren | Staff Report | Certificate of Convenience and Necessity |
| EA-2019-0010 | Empire | Staff Report | Certificate of Convenience and Necessity |
| EX-2019-0050 | N/A | Live Comments | Renewable Energy Standard |

| Case Number | Utility | Type | Issue |
|-----------------------|-----------------------|------------------------------------------------|------------------------------------------------|
| EO-2019-0315 | KCPL | Memorandum in Response to Commission Questions | Renewable Energy Standard |
| EO-2019-0316 | GMO | Memorandum | Renewable Energy Standard |
| EO-2019-0317 | KCPL | Memorandum in Response to Commission Questions | Renewable Energy Standard |
| EO-2019-0318 | GMO | Memorandum | Renewable Energy Standard |
| ER-2019-0335 | Ameren | Cost of Service Report | Renewable Energy Standard, In-Service Criteria |
| EA-2019-0371 | Ameren | Staff Report | Certificate of Convenience and Necessity |
| EO-2020-0329 | Evergy Missouri Metro | Memorandum | Renewable Energy Standard |
| EO-2020-0330 | Evergy Missouri West | Memorandum | Renewable Energy Standard |
| EE-2021-0237 | Evergy Missouri Metro | Memorandum | Cogeneration Tariff |
| EE-2021-0238 | Evergy Missouri West | Memorandum | Cogeneration Tariff |
| EE-2021-0180 | Ameren Missouri | Memorandum | Electric Meter Variance |
| ET-2021-0151 and 0269 | Evergy | Memorandum, Rebuttal Report | Transportation Electrification |
| AO-2021-0264 | Various | Staff Report | February 2021 Cold Weather Event |
| EW-2021-0104 | n/a | Staff Report | RTO Membership |
| EW-2021-0077 | n/a | Staff Report | FERC Order 2222 |
| EO-2021-0339 | Evergy Missouri West | Memorandum | Territorial Agreement |
| GR-2021-0108 | Spire | Rebuttal | Automated Meter Reading Opt-out Tariff |
| EA-2021-0087 | ATXI | Rebuttal Report | Certificate of Convenience and Necessity |
| ER-2021-0240 | Ameren Missouri | Cost of Service Report Rebuttal | In-Service Bat Mitigation |

| Case Number | Utility | Type | Issue |
|--------------------|-----------------------------|-------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| ER-2021-0312 | Empire | Cost of Service Report | Construction Audit – Engineering Review, In-service |
| EO-2022-0061 | Evergy Missouri West | Surrebuttal | Special Rate/ Renewable Energy Standard |
| EA-2022-0099 | ATXI | Rebuttal | Certificate of Convenience and Necessity |
| ER-2022-0129 | Evergy Missouri West | Direct Rebuttal | Advanced Metering Infrastructure, Reliability, Transmission & Distribution Investment, PISA reporting, Misc. Tariff issues |
| ER-2022-0130 | Evergy Missouri Metro | Direct Rebuttal Surrebuttal/True-Up | Advanced Metering Infrastructure, Reliability, Transmission & Distribution Investment, PISA reporting, Misc. Tariff issues |
| EE-2022-0329 | Ameren Missouri | Memorandum | Variance Request |
| GR-2022-0179 | Spire Missouri | Direct | Metering Infrastructure |

Jordan T. Hull

CURRENT POSITION:

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

EDUCATIONAL BACKGROUND & WORK EXPERIENCE:

I received my Bachelor of Science Degree in Biological Engineering from the University of Missouri-Columbia in May of 2016. In June of 2016 I began employment with the Missouri Department of Natural Resources in the Air Pollution Control Program as an Environmental Engineer I. In June of 2017, I was promoted to an Environmental Engineer II within the Air Pollution Control Program. I began employment with the commission in November of 2018.

Summary of Case Involvement:

| Case Number | Utility | Type | Issues |
|-----------------------------|---------------------------------|--------------------------|---------------------------------------------------------------------|
| EO-2019-0067 | KCP&L GMO | FAC Prudency Review | Heat Rates, Plant Outages, Generation Utilization |
| EO-2019-0068 | KCP&L | FAC Prudency Review | Heat Rates, Plant Outages, Generation Utilization |
| EO-2019-0049 | Liberty-Empire Electric Company | Integrated Resource Plan | Misc. |
| EO-2019-0132 & EO-2019-0133 | KCP&L | MEEIA | Misc. |
| EO-2019-0257 | Ameren- Missouri | FAC Prudency Review | Heat Rates, Plant Outages, Generation Utilization |
| ER-2019-0335 | Ameren- Missouri | Rate Case | Heat Rates |
| ER-2019-0374 | Liberty-Empire Electric Company | Rate Case | Heat Rates |
| EO-2020-0059 | Liberty-Empire Electric Company | FAC Prudency Review | Heat Rates, Plant Outages, Generation Utilization |
| EO-2020-0262 | EvergyWest | FAC Prudency Review | Heat Rates, Plant Outages, Generation Utilization, Self-Commitment. |

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|--------------|------------------|--------------------------|--------------------------------------------------------------------|
| EO-2020-0263 | Evergy Metro | FAC Prudency Review | Heat Rates, Plant Outages, Generation Utilization, Self-Commitment |
| EO-2021-0060 | Ameren- Missouri | FAC Prudency Review | Heat Rates, Plant Outages, Generation Utilization, Self-Commitment |
| EO-2021-0281 | Liberty- Empire | FAC Prudency Review | Heat Rate, Plant Outages, Generation Utilization, Self-Commitment |
| EO-2021-0035 | Evergy- Metro | Integrated Resource Plan | Misc. |
| EO-2021-0036 | Evergy- West | Integrated Resource Plan | Misc. |
| EO-2021-0060 | Ameren- Missouri | FAC Prudency Review | Heat Rate, Plant Outages, Generation Utilization, Self-Commitment |
| ER-2021-0240 | Ameren- Missouri | Rate Case | Heat Rate |
| ER-2021-0312 | Liberty- Empire | Rate Case | Heat Rate |
| EO-2021-0331 | Liberty- Empire | Integrated Resource Plan | Misc. |
| EO-2022-0064 | Evergy- Metro | FAC Prudency Review | Heat Rate, Plant Outages, Generation Utilization, Self-Commitment |
| EO-2022-0065 | Evergy-West | FAC Prudency Review | Heat Rate, Plant Outages, Generation Utilization, Self-Commitment |
| EA-2022-0099 | Ameren- Missouri | Transmission | Qualified to construct |
| EO-2022-0236 | Ameren- Missouri | FAAC Prudency Review | Heat Rate, Plant Outages, Generation Utilization, Self-Commitment |
| | | | |

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

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

| <u>Company</u> | <u>Case No.</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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 |
| 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 |

| <u>Company</u> | <u>Case No.</u> |
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| 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 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 |

| <u>Company</u> | <u>Case No.</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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 |
| 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 |

| <u>Company</u> | <u>Case No.</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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 |
| 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 |
| 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 |

| <u>Company</u> | <u>Case No.</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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 |
| 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 |

| <u>Company</u> | <u>Case No.</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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 |
| 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 |

| <u>Company</u> | <u>Case No.</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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 |
| 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 |

| <u>Company</u> | <u>Case No.</u> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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 |
| 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 |

| <u>Company</u> | <u>Case No.</u> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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 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 |
| 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 |

| <u>Company</u> | <u>Case No.</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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 |
| 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 |

| <u>Company</u> | <u>Case No.</u> |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| 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 |
| 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 |

Krishna L. Poudel, PhD

Education and Employment Background

I am an Economist of the Energy Resources Department, Industry Analysis Division of the Missouri Public Service Commission. Prior to my current position, I was employed at the Missouri Department of Natural Resources as an Economist from September 2016 through May 2019.

I received Bachelor of Science degree in Agriculture in June 1998, Master of Science in Agricultural in May 2003 from Tribhuvan University, Nepal and Doctoral degree in Applied Economics from University of Missouri, Columbia in 2017.

Prior to joining the Missouri Department of Natural Resources and Public Service Commission, I worked in various research positions in different countries including Nepal, SriLanka, Japan and USA. I worked for University of Missouri-Columbia as a Research Associate in Community Policy Analysis Center from August 2011 through December 2016.

I joined Commission on May, 2019.

Krishna L. Poudel

Case Participation History

| Case Number | Company | Issue | Exhibit |
|--------------|---------------------------------------|--------------------------------------------------|-----------------------|
| EO-2021-0021 | Union Electric Company | IRP Update | Staff Report |
| ER-2019-0374 | The Empire District Electric Company | LED street lighting | Rebuttal Testimony |
| EO-2020-0280 | Evergy Metro | IRP Update | Staff Report |
| EO-2020-0281 | Evergy Missouri West | IRP Update | Staff Report |
| ER-2020-0311 | The Empire District Electric Company | Fuel Adjustment Clause | Staff report |
| EO-2020-0227 | Evergy Metro and Evergy Missouri West | MEEIA Prudence Review | Staff Report |
| EO-2021-0021 | Union Electric Company | Triennial compliance filing | Staff Report |
| EO-2021-0035 | Evergy Metro | Triennial compliance filing | Staff report |
| EO-2021-0036 | Evergy Missouri West | Triennial compliance filing | Staff Report |
| EO-2021-0416 | Evergy Missouri West | MEEIA prudence review | Staff Report |
| EO-2021-0417 | Evergy Metro | MEEIA prudence review | Staff Report |
| YH-2022-0218 | Vicinity Energy | Hedging | Staff Report |
| HT-2022-0212 | Vicinity Energy | Hedging and Production Adjustment Cost Clause | Staff Report |
| ER-2022-0129 | Evergy MO Metro | Hedging | Rebuttal Testimony |
| ER-2022-0130 | Evergy MO West | Hedging | Rebuttal Testimony |
| EO-2021-0331 | The Empire District Electric Company | Triennial compliance filing | Staff Report |

Joe Roling

Present Position:

I am a Regulatory Economist in the Tariff and Rate Design Unit, Operational Analysis Department, Commission Staff Division, of the Missouri Public Service Commission. I have been employed by the Missouri Public Service Commission since March of 2016.

Educational Background and Work Experience:

I have a Bachelor of Science degree in Business Administration, Finance & Banking with a minor in Economics from the University of Missouri – Columbia in 1991, and a Master of Business Administration from Lincoln University in 1995. Prior to joining the Commission, I was employed in the Financial Service Industry.

Additionally, I completed Financial Planning Certificate Program from Bryant University in October, 2015.

Regulatory Training while at PSC:

- 5/19/16 – Carbon Markets 101 – Keys to Effective Design & Management
- 6/27/16 – Evaluation, Measurement & Verification (EM&V) for Energy Efficiency
- 6/29/16 – Long Term Gas Hedging Why and How
- 7/2/16 – Setting Baselines for Planning & Evaluation of Efficiency Programs EMV
- 8/25/16 - Leveraging Power Markets to Achieve a Reliable, Least-Cost Transition to a Low-Carbon Power System Regulatory Assistance Project
- 9/21/16 – FRI Symposium Attendance - “Managing the Triple Threat to Public Utility Profitability: Safety, Reliability & Affordability.”
- 10/13/16 - Gas Efficiency Programs – What does it take to pass cost-effectiveness tests?
- 11/3/16 - More is Less - Environmentally Beneficial Electrification

cont'd Regulatory Training while at PSC:

01-17-17 Harness the Momentum of Power Sector Transformation - Regulatory Assistance Project (RAP) Webinar

01-25-17 New Study on Demand Charge Savings from Residential Solar – Electric Markets & Policy Group, Lawrence Berkeley National Laboratory.

01-31-17 Energy Efficiency - Consistency and Coordination of Energy Efficiency EM&V and Reporting

02-21-17 Assessment of Benefits Derived from Improved Reliability & Resiliency in Utility-owned Microgrid

03-01-17 Flexible & Customizable – Designing Decoupling for your State Regulatory Assistance Project

03-23-17 Part 1 Lessons Learned from Energy Efficiency Programs

03-30-17 Part 2 Lessons Learned from Energy Efficiency Programs

11-17-17 MISO 101 Overview for MPSC

02-06-18 One Size Does Not Fit All – Complexities, Use Case, Trends in Energy Storage

02-13-18 Clean Energy States Alliance-State of the US Energy Storage Industry 2017 Year on Review

05-02-18 Income Trends of Residential Solar Adopters

Previous filed Testimony of Joseph P. Roling

| Case No. | Company | Type of Filing | Issue |
|-------------------------------------|---------------------------------------------------------------------------------------------|------------------------------|--------------------|
| ER-2019-0375 | Kansas City Power & Light Company | Staff Recommendation | MEEIA |
| ER-2019-0397 | KCPL Greater Missouri Operations Company | Staff Recommendation | MEEIA |
| GR-2019-0077 | Ameren Missouri | Cost of Service Report | Revenues |
| EC-2018-0066 | Ameren Missouri | Tariff Investigation Report | Customer Complaint |
| EC-2018-0097 | Ameren Missouri | Tariff Investigation Report | Customer Complaint |
| GR-2018-0013 | Liberty Utilities | Cost of Service Report | Revenues |
| GR-2021-0108 | Spire Missouri, Inc., d/b/a Spire | Cost of Service Report | Revenues |
| GC-2017-0348 | Spire Missouri, Inc., d/b/a Spire (Laclede Gas Company and Missouri Gas Energy) | Tariff Investigation Report | Customer Complaint |
| GR-2017-0215 and GR-2017-0216 | Spire Missouri, Inc., d/b/a Spire (Laclede Gas Company and Missouri Gas Energy) | Cost of Service Report | Revenues |
| ER-2016-0179 | Ameren Missouri | Cost of Service / Revenue | Revenues |

| Case No. | Company | Type of Filing | Issue |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|----------------------------------------------------------------------------|
| | | Requirement Report | |
| HO-2017-0211 | Veolia Energy Kansas City, Inc.-(Steam/Heat) | Staff Recommendation | PACC Filing |
| ER-2019-0335 | Ameren Missouri | Lighting Revenue | Revenues |
| ER-2019-0374 | Liberty (Empire)-Investor(Electric) | Low Income Pilot Information | Revenues |
| ER-2021-0240 | Ameren Missouri | Large Primary Service Revenue | Revenues |
| GA-2019-0210 | Spire Missouri, Inc.-Investor(Gas) Spire-Investor(Gas) | Staff Recommendation | CCN Expansion |
| GA-2019-0214 | Spire Missouri, Inc.-Investor(Gas) Spire-Investor(Gas) | Staff Recommendation | CCN Expansion |
| ER-2020-0154 | Evergy Metro, Inc.-Investor(Electric) Evergy Missouri Metro-Investor(Electric) | Staff Recommendation | MEEIA |
| ER-2020-0388 | Evergy Metro, Inc.-Investor(Electric) Evergy Missouri Metro-Investor(Electric) | Staff Recommendation | MEEIA |
| ET-2020-0133 | Evergy Metro, Inc.-Investor(Electric) Evergy Missouri Metro-Investor(Electric) Evergy Missouri West, Inc.-Investor(Electric) Evergy Missouri West-Investor(Electric) | Staff Recommendation | Request for a variance from the Commission's billing and payment standards |

| Case No. | Company | Type of Filing | Issue |
|-----------------|------------------------------------------------------------------------------------------------------------|---------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| GA-2020-0235 | Spire Missouri, Inc.- Investor(Gas) Spire-Investor(Gas) | Staff Recommendation | CCN Expansion |
| GO-2020-0182 | Spire Missouri, Inc.- Investor(Gas) Spire-Investor(Gas) | Staff Investigation | Investigation into the Customer Service and Billing Recordkeeping Practices of Spire Missouri, Inc. d/b/a Spire |
| GA-2021-0010 | Spire Missouri, Inc.- Investor(Gas) Spire-Investor(Gas) | Staff Recommendation | CCN Expansion |
| GO-2021-0126 | Spire Missouri, Inc.- Investor(Gas) | Staff Recommendation | Rejection of Spire Missouri Inc.'s Application to Establish an On-Bill Financing Program and Cost Recovery Mechanism |
| ET-2021-0020 | Ameren Missouri | Staff Recommendation | Efficient Electrification Program |
| ER-2021-0312 | Empire District Electric Company, The- Investor(Electric) Liberty (Empire)- Investor(Electric) | Cost of Service Report | Revenues |
| | | | |

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> |
|--------------------|-------------------------------------------|--------------------------------------|
| ER-2022-0130 | Evergy Missouri West, Inc. | Rate of Return, Capital Structure |
| ER-2022-0129 | Evergy Missouri Metro | Rate of Return, Capital Structure |
| GR-2021-0320 | Empire District Gas Company | 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 |
| EF-2022- 0103 | Evergy Missouri West, Inc. | Financing Authority |
| WF-2021-0427 | Raytown Water Company | Financing Authority |
| ER-2021-0312 | Empire District Electric Company | Rate of Return, Capital Structure |
| WF-2022-0066 | Missouri American Water Company | Financing Authority |
| GR-2021-0241 | Union Electric Co., d/b/a Ameren Missouri | Rate of Return, Capital Structure |
| WF-2021-0131 | Raytown Water Company | Financing Authority |
| GR-2021-0108 | Spire Missouri, Inc. | Rate of Return, Capital Structure |
| EA-2021-0087 | Ameren Transmission Company of Illinois | Financial Feasibility |
| EA-2020-0371 | Union Electric Co., d/b/a Ameren Missouri | Financial Feasibility |
| SR-2020-0345 | Missouri American Water Company | 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> |
|--------------------|---------------------------------------------------------------|----------------------------------------------|
| WR-2020-0344 | Missouri American Water Company | Rate of Return, Capital Structure |
| EF-2020-0301 | Evergy 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, Evergy Metro | Business Process Efficiency |
| EO-2019-0132 | Kansas City Power & Light Company, Evergy Metro | Business Process Efficiency |
| 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 |
| 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 |

cont'd List of Previous Testimony Filed

Seoung Joun Won, PhD

| <u>Case Number</u> | <u>Company</u> | <u>Issue</u> |
|--------------------|------------------------------------------------------------------------------------------|----------------------------------------------|
| 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 |
| 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 |

cont'd List of Previous Testimony Filed

Seoung Joun Won, PhD

| <u>Case Number</u> | <u>Company</u> | <u>Issue</u> |
|--------------------|---------------------------------------|-------------------------------|
| 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).