MISSOURI PUBLIC SERVICE COMMISSION

STAFF

REBUTTAL REPORT

APPENDIX 1

Staff Credentials

THE EMPIRE DISTRICT ELECTRIC COMPANY

CASE NO. EA-2019-0010

Jefferson City, Missouri February, 2019

APPENDIX 1

STAFF CREDENTIALS TABLE OF CONTENTS

Buttig, David T. PE	1
Cunigan, Cedric E	2
Dietrich, Natelle	4
Eubanks, Claire M. PE	10
Lange, Shawn E	
Luebbert, J	16
Oligschlaeger, Mark L	
Smith, Jeffrey	25

DAVID T. BUTTIG, PE

PRESENT POSITION:

I am a Utility Regulatory Engineer I in the Engineering Analysis Department, Commission Staff Division, of the Missouri Public Service Commission.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

I received my Bachelor of Science Degree in Environmental Engineering from the Missouri University of Science & Technology in May of 2012. In February of 2013 I began employment with the Missouri Department of Natural Resources in the Air Pollution Control Program as an Environmental Engineer I. In February of 2014, I was promoted to an Environmental Engineer II within the Air Pollution Control Program. I began employment with the commission in July of 2018. I am a licensed professional engineer in the State of Missouri.

Cedric E. Cunigan

PRESENT POSITION:

I am a Utility Engineering Specialist III in the Engineering Analysis Section, Operational Analysis Department, Commission Staff Division, of the Missouri Public Service Commission.

EDUCATIONAL BACKGROUND AND WORK EXPERIENCE:

In May 2011, I earned a Bachelor of Science in Biological Engineering from the University of Missouri, in Columbia. In May 2013, I earned a Master of Business Administration, also from the University of Missouri. I began work with the Missouri Department of Natural Resources Solid Waste Management Program in August 2013. I started as a Technician and was promoted to an Environmental Engineer I in January 2014. I transferred to the Hazardous Waste Program in September 2014. In January 2015, I was promoted to an Environmental Engineer II. I ended employment with the Department of Natural Resources in January of 2017 and began work with the Missouri Public Service Commission as a Utility Engineering Specialist III.

Summary of Case Involvement:

Case Number	Utility	Туре	Issue
EO-2017-0267	Empire District Electric Company	Memorandum	RES Compliance Report and Plan
EO-2017-0270	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Report
EO-2017-0272	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Plan
EO-2018-0111	Macon Electric Cooperative & City of Marceline	Memorandum	Change of Supplier
EC-2018-0089	Union Electric Company d/b/a Ameren Missouri	Staff Report	Complaint Investigation
EO-2018-0285	Empire District Electric Company	Memorandum	RES Compliance Report and Plan

cont'd Cedric E. Cunigan

Case Number	Utility	Туре	Issue
EO-2018-0289	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Report
EO-2018-0291	KCP&L Greater Missouri Operations Company	Memorandum	RES Compliance Plan
ER-2018-0145 & ER-2018-0146	KCPL & KCP&L Greater Missouri Operations Company	Cost of Service Report, Rebuttal, & Surrebuttal	Renewable Energy
WR-2018-0328	Middlefork Water Company	Depreciation Workpapers	Depreciation
EA-2018-0202	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity
EC-2018-0376	Union Electric Company d/b/a Ameren Missouri	Staff Report	Complaint Investigation
EA-2019-0021	Union Electric Company d/b/a Ameren Missouri	Staff Report	Certificate of Convenience and Necessity

Education and Work Experience for Natelle Dietrich

Commission Staff Director

I received a Bachelor's of Arts Degree in English from the University of Missouri, St. Louis and a Master's of Business Administration from William Woods University. During my tenure with the Commission, I have worked in many areas of telecommunications regulation. In October, 2007, I became the Director of Utility Operations. The division was renamed the Tariff, Safety, Economic and Engineering Analysis Department in August 2011. In October 2015, I was named Commission Staff Director. In this position, I oversee all aspects of the Commission technical staff, and am responsible for determining Staff's position and policy on issues before the Commission.

My responsibilities have included involvement in several activities related to implementing sound utility regulatory policy in Missouri and I have been the lead director for most of the Commission's rulemakings.

I was a member of the Missouri Delegation to the Missouri/Moldova Partnership through NARUC and the US Agency for International Development. I am a member of the National Association of Regulatory Utility Commissioners Staff Subcommittee on Rate Design and the Staff Subcommittee on Telecommunications. I serve on the Staff of the Federal/State Joint Board on Universal Service, serve as Lead Staff for the Missouri Universal Service Board and was a member of the Governor's MoBroadbandNow taskforce.

Natelle Dietrich Case Summary

Presented testimony or analysis through affidavits on the following cases and proceedings:

- Case No. TA-99-405, an analysis of the appropriateness of a "payday loan" company providing prepaid telecommunications service.
- Case No. TX-2001-73, In the Matter of Proposed New Rules on Prepaid Calling Cards.
- Case No. TO-2001-455, the AT&T/Southwestern Bell Telephone Company arbitration, which included issues associated with unbundled network elements.
- Case No. TX-2001-512, In the Matter of Proposed Amendments to Commission Rule 4 CSR 240-33.010, 33.020, 33.030, 33.040, 33.060, 33.070, 33.080, 33.110, and 33.150 (telecommunications billing practices).
- Case No. TO-2002-222, the MCI/SWBT arbitration.
- Case No. TR-2002-251, In the Matter of the Tariffs Filed by Sprint Missouri, Inc. d/b/a Sprint to Reduce the Basic Rates by the Change in the CPI-TS as Required by 392.245(4), Updating its Maximum Allowable Prices for Non-Basic Services and Adjusting Certain Rates as Allowed by 392.245(11) and Reducing Certain Switched Access Rates and Rebalancing to Local Rates as Allowed by 392.245(9).
- Case No. TX-2002-1026, In the Matter of a Proposed Rulemaking to Implement the Missouri Universal Service Fund End-User Surcharge.
- Case No. TX-2003-0379, In the Matter of Proposed Amendments to Commission Rule 4 CSR 240-3.545, formerly 4 CSR 240-30.010 (tariff filing requirements).
- Case No. TX-2003-0380, In the Matter of Proposed Amendments to Commission Rules 4 CSR 240-2.060, 4 CSR 240-3.020, 4 CSR 240-3.510, 4 CSR 240-3.520, and 4 CSR 240-3.525 (competitive local exchange carrier filing requirements and merger-type transactions).
- Case No. TX-2003-0389, In the Matter of Proposed Amendment to Commission Rules 4 CSR 240-3.530 and 4 CSR 240-3.535, and New Rules 4 CSR 240-3.560 and 4 CSR 240-3.565 (telecommunications bankruptcies and cessation of operation).
- Case No. TX-2003-0445, In the Matter of a Proposed New Rule 4 CSR 240-33.160 Regarding Customer Proprietary Network Information.
- Case No. TX-2003-0487, In the Matter of Proposed Commission Rules 4 CSR 240-36.010, 36.020, 36.030, 36.040, 36.050, 36.060, 36.070, and 36.080 (arbitration and mediation rules).
- Case No. TX-2003-0565, In the Matter of a Proposed Rulemaking to Codify Procedures for Telecommunications Carriers to Seek Approval, Amendment and Adoption of Interconnection and Resale Agreements.
- Case Nos. TX-2004-0153 and 0154, in the Matter of Proposed Rule for 211 Service (emergency and permanent rules).

- Case Nos. TO-2004-0370, IO-2004-0467, TO-2004-0505 et al, In the Matter of the Petition of various small LECs for Suspension of the Federal Communications Commission Requirement to Implement Number Portability.
- Case No. TX-2005-0258, In the Matter of a New Proposed Rule 4 CSR 240-33.045 (placement and identification of charges on customer bills).
- Case No. TX-2005-0460, In the Matter of the Proposed Amendments to the Missouri Universal Service Fund Rules.
- Case No. TO-2006-0093, In the Matter of the Request of Southwestern Bell Telephone, L.P. d/b/a SBC Missouri, for Competitive Classification Pursuant to Section 392.245.6, RSMo (2205) – 30-day Petition.
- Case Nos. TC-2005-0357, IR-2006-0374, TM-2006-0306, the complaint case, earnings investigation and transfer of assets case to resolve issues related to Cass County Telephone Company, LP, LEC Long Distance, FairPoint Communications, Inc., FairPoint Communications Missouri Inc. d/b/a FairPoint Communications and ST Long Distance Inc. db/a FairPoint Communications Long Distance.
- Case No. TC-2006-0068, FullTel, Inc., v. CenturyTel of Missouri, LLC.
- Case No. TX-2006-0169, In the Matter of Proposed New Rule 4 CSR 240-3.570 Regarding Eligible Telecommunications Carrier Designations for Receipt of Federal Universal Service Fund Support.
- Case No. TX-2006-0429, In the Matter of a Proposed Amendment to 4 CSR 240-3.545 (one day tariff filings).
- Case No. TX-2007-0086, In the Matter of a Proposed Rulemaking to Create Chapter 37 Number Pooling and Number Conservation Efforts
- Case No. TA-2009-0327, In the Matter of the Petition of TracFone Wireless, Inc. for Designation as an Eligible Telecommunications Carrier in the State of Missouri for the Limited Purpose of Offering Lifeline and Link Up Service to Qualified Households.
- Case No. RA-2009-0375, In the Matter of the application of Nexus Communications, Inc. dba TSI for Designation as an Eligible Telecommunications Carrier in the State of Missouri for the Limited Purpose of Offering Wireless Lifeline and Link Up Service to Qualifying Households.
- Case No. AX-2010-0061, Office of Public Counsel's Petition for Promulgation of Rules Relating to Billing and Payment Standards for Residential Customers.
- Case No. GT-2009-0056, In the Matter of Laclede Gas Company's Tariff Revision Designed to Clarify its Liability for Damages Occurring on Customer Piping and Equipment Beyond the Company's Meter.
- Case No. ER-2012-0166, In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Increase Its Revenues for Electric Service. Energy Independence and Security Act of 2007 (EISA).
- Case No. ER-2012-0174, In the Matter of Kansas City Power & Light Company's Request for Authority to Implement A General Rate Increase for Electric Service. Energy Independence and Security Act of 2007 (EISA).

- Case No. ER-2012-0175, In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement A General Rate Increase for Electric Service. Energy Independence and Security Act of 2007 (EISA).
- Case No. ER-2012-0345, In the Matter of Empire District Electric Company of Joplin, Missouri Tariff's Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area of the Company. Energy Independence and Security Act of 2007 (EISA).
- File Nos. EO-2013-0396 and EO-2013-0431, In the Matter of the Joint Application of Entergy Arkansas, Inc., Mid South TransCo, LLC, Transmission Company Arkansas, LLC and ITC Midsouth LLC for Approval of Transfer of Assets and Certificate of Convenience and Necessity, and Merger and, in connection therewith, Certain Other Related Transactions; and In the Matter of Entergy Arkansas, Inc.'s Notification of Intent to Change Functional Control of Its Missouri Electric Transmission Facilities to the Midwest Independent Transmission System Operator Inc. Regional Transmission System Organization or Alternative Request to Change Functional Control and Motions for Waiver and Expedited Treatment, respectively.
- Case No. MX-2013-0432, In the Matter of a Proposed Rulemaking to Revise Manufactured Housing Rules Regarding Installation and Monthly Reporting Requirements.
- Case No. TX-2013-0324, In the Matter of a Proposed Rulemaking to the Missouri Universal Service Fund.
- Case No. EO-2014-0095, In the Matter of Kansas City Power & Light Company's Filing for Approval of Demand-Side Programs and for Authority to Establish Demand-Side Programs Investment Mechanism.
- Case No. EA-2014-0207, 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.
- Case No. ER-2014-0370, In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service.
- Case No. WR-2015-0301, In the Matter of Missouri-American Water Company's Request for Authority to Implement a General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas.
- Case No. ER-2016-0156, In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service.
- Case No. ET-2016-0246, In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for Approval of a Tariff Setting a Rate for Electric Vehicle Charging Stations.
- Case No. ER-2016-0285, In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service.
- Case No. ER-2016-0179, In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariffs to Increase its Revenues for Electric Service.

cont'd Natelle Dietrich

- Case No. EE-2017-0113, In the Matter of the Joint Application of Great Plains Energy Incorporated, Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company for a Variance from the Commission's Affiliate Transactions Rule, 4 CSR 240-20.015
- Case No. EA-2016-0358, 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 345kV Transmission Line
- Case No. EM-2017-0226, In the Matter of the Application of Great Plains Energy Incorporated for Approval of its Acquisition of Westar Energy, Inc.
- Case No. GR-2017-0215, In the Matter of Laclede Gas Company's Request to Increase its Revenues for Gas Service.
- Case No. GR-2017-0216, In the Matter of Laclede Gas Company d/b/a Missouri Gas Energy's Request to increase its Revenues for Gas Service.
- Case No. WR-2017-0259, In the Matter of the Rate Increase Request of Indian Hills Utility Operating Company, Inc.
- Case No. WR-2017-0285, In the Matter of Missouri-American Water Company's Request for Authority to Implement General Rate Increase for Water and Sewer Service Provided in Missouri Service Areas.
- Case No. EM-2018-0012, In the Matter of the Application of Great Plains Energy Incorporated for Approval of its Merger with Westar Energy, Inc.
- Case No. EO-2018-0092, In the Matter of the Application of The Empire District Electric Company for Approval of Its Customer Savings Plan.
- Case No. GR-2018-0013, In the Matter of Liberty Utilities (Midstates Natural Gas) Corp. d/b/a Liberty Utilities' Tariff Revisions Designed to Implement a General Rate Increase for Natural Gas Service in the Missouri Service Areas of the Company.
- Case No. ER-2018-0145, In the Matter of Kansas City Power & Light Company's Request for Authority to Implement a General Rate Increase for Electric Service.
- Case No. ER-2018-0146, In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement a General Rate Increase for Electric Service.
- Case No. EO-2018-0211, In the Matter of Union Electric Company d/b/a Ameren Missouri's 3rd Filing to Implement Regulatory Changes in Furtherance of Energy Efficiency as Allowed by MEEIA.
- Case Nos. WM-2018-0116 and SM-2018-0117, In the Matter of the Application of Confluence Rivers Utility Operating Company, Inc. to Acquire Certain Water and Sewer Assets, For a Certificate of Convenience and Necessity, and, in Connection Therewith, To Issue Indebtedness and Encumber Assets.
- Actively participated in or prepared comments on numerous issues on behalf of the Commission to be filed at the Federal Communications Commission.

- Prepared congressional testimony on behalf of the Commission on number conservation efforts in Missouri.
- A principal author on Missouri Public Service Commission Comments on the Reduction of Carbon Emissions in Missouri under Section 111(d) of the Clean Air Act.
- A principal author on Missouri Public Service Commission Comments on the Environmental Protection Agency's "Emission Guidelines for Existing Stationary Sources: Electric Generating Unity".

Commission Arbitration Advisory Lead Staff for the following cases:

- Case No. TO-2005-0336, Southwestern Bell Telephone, L.P., d/b/a SBC Missouri's Petition for Compulsory Arbitration of Unresolved Issues For a Successor Interconnection Agreement to the Missouri 271 Agreement ("M2A").
- Case No. IO-2005-0468, In the Matter of the Petition of Alma Telephone Company for Arbitration of Unresolved Issues Pertaining to a Section 251(b)(5) Agreement with T-Mobile USA, Inc.
- Case No. TO-2006-0147 et al, In the Matter of the Petition for Arbitration of Unresolved Issues in a Section 251(b)(5) Agreement with T-Mobile USA, Inc and Cingular Wireless.
- Case No. TO-2006-0299, Petition of Socket Telecom, LLC for Compulsory Arbitration of Interconnection Agreements with CenturyTel of Missouri, LLC and Spectra Communications, LLC, pursuant to Section 251(b)(1) of the Telecommunications Act of 1996.
- Case No. TO-2006-0463, In the Matter of the Petition for Arbitration of Unresolved Issues in a Section 251(b)(5) Agreement with ALLTEL Wireless and Western Wireless.
- Case No. TO-2009-0037, In the Matter of the Petition of Charter Fiberlink-Missouri, LLC for Arbitration of an Interconnection Agreement Between CenturyTel of Missouri, LLC and Charter Fiberlink-Missouri, LLC.

CLAIRE M. EUBANKS, PE

PRESENT POSITION:

I am a Utility Regulatory Engineer II in the Engineering Analysis Unit, Operational Analysis Department, of the Commission Staff 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 referred to as 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 January 2017. My primary responsibilities are related to the Renewable Energy Standard. I have also served on work groups related to the Clean Power Plan and Ameren Missouri's Standby Service Rider.

Case Number	Utility	Туре	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 HISTORY:

Case Number	Utility	Туре	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	Туре	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-2019-0072	Ameren	Staff Report	Certificate of Convenience and Necessity

CREDENTIALS AND CASE PARTICIPATION OF SHAWN E. LANGE

PRESENT POSITION:

I am a Utility Regulatory Engineer I in the Engineering Analysis Department, Commission Staff 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. I have spoke at NCDC's workshop on alternative climate normals.

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 &	Direct	Weather Normalization
	Light Company	Rebuttal	Weather Normalization
ER-2006-0315	Empire District Electric	Direct	Weather Normalization
	Company	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 &	Staff Report	Weather Normalization
	Light Company	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
ER-2009-0089	Kansas City Power & Light Company	Staff Report	Net System Input

TESTIMONY FILED:

cont'd \ *Case Participation of Shawn E. Lange* Page 2 of 3

Case Number	Utility	Testimony	Issue
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
	Electric Company	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	Staff Report	Weather Normalization
	Company d/b/a Ameren Missouri	Surrebuttal	Weather Normalization Maryland Heights In-
ER-2012-0174	Kansas City Power & Light Company	Staff Report	Service Weather Normalization Net System Input Variable Fuel Costs
		Surrebuttal	Weather Normalization
ER-2012-0175	KCP&L Greater Missouri Operations	Staff Report	Weather Normalization Net System Input
	Company	Surrebuttal	Weather Normalization
ER-2012-0345	Empire District Electric	Rebuttal	Interim Rates
	Company	Staff Report	Weather Normalization
EA-2014-0223	Complaint of Noranda Aluminum	Rebuttal	Weather Normalization
EA-2014-0207	Grain Belt Express CCN	Rebuttal	Safety Interconnection Studies
		Surrebuttal	Environmental Impacts

cont'd \ Case Participation of Shawn E. Lange Page 3 of 3

Case Number	Utility	Testimony	Issue
ER-2014-0258	Union Electric Company d/b/a Ameren Missouri	Staff Report	Variable Fuel Costs Net System Input
ER-2014-0351	Empire District Electric Company	Staff Report	Variable Fuel Costs Net System Input
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
		Surrebuttal	Analysis
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	Safety Interconnection Studies
		Surrebuttal	Environmental Impacts
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	Ameren CCN	Staff 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 a Case Manager of the Commission Staff Division of the Missouri Public Service Commission. Prior to holding my current position, I was employed as a Utility Engineering Specialist III in the Engineering 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 Number	Company	Issues
EO-2015-0055	Ameren Missouri	Evaluation, Measurement, and Verification
EO-2016-0223	Empire District Electric	Supply-Side Resource Analysis, Transmission and Distribution Analysis, Demand-Side Resource Analysis, Integrated Resource Analysis
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
EO-2017-0065	Empire District Electric	Utilization of Generation Capacity and Station Outages
EO-2017-0231	Kansas City Power & Light Company	Utilization of Generation Capacity, Heat Rates, and Plant Outages

Case Number	Company	Issues
EO-2017-0232	KCP&L Greater Missouri Operations Company	Utilization of Generation Capacity, Heat Rates, and Plant Outages
ER-2018-0145	Kansas City Power & Light Company	Case Manager
ER-2018-0146	KCP&L Greater Missouri Operations Company	Case Manager
EO-2018-0211	Ameren Missouri	Avoided Cost and Demand Response Programs

MARK L. OLIGSCHLAEGER

Educational and Employment Background and Credentials

I graduated from Rockhurst College in Kansas City, Missouri in 1981, with a Bachelor of Science degree in Business Administration, with a major in Accounting.

In November 1981, I passed the Uniform Certified Public Accountant examination and, since February 1989, have been licensed in the state of Missouri as a CPA.

I have been employed by the Missouri Public Service Commission ("Commission") since September 1981 within the Auditing Department. In April 2011, I assumed the position of Manager of the Auditing Department, Commission Staff Division, of the Commission.

I have been employed by this Commission as a Regulatory Auditor for approximately 37 years and have submitted testimony on ratemaking matters numerous times before the Commission. I have also been responsible for the supervision of other Commission employees in rate cases and other regulatory proceedings many times. As Manager of the Auditing Department, I am responsible for managing and coordinating the work of all auditors on cases assigned to the Auditing Department.

The cases in which I have submitted written testimony for the Commission Staff are shown in the following table:

Company Name	Case Number	Issues
Spire Missouri, Inc., d/b/a Spire	GU-2019-0011	Rebuttal: Commission Assessment AAO
Missouri-American Water Company	WO-2018-0373	Direct: Net Operating Loss
The Empire District Electric Company	ER-2018-0366	Rebuttal: Tax Reform
Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company	ER-2018-0145 and ER-2018-0146	Surrebuttal: Tax Cuts and Jobs Act
Union Electric Company, d/b/a Ameren Missouri	ET-2018-0132	Rebuttal: Accounting and Ratemaking
Empire District, a Liberty Utilities Company	EO-2018-0092	Rebuttal: Ashbury Regulatory Asset; Affiliate Transaction Variance
Liberty Utilities (Midstates Natural Gas) Corp., d/b/a Liberty Utilities	GR-2018-0013	Rebuttal: Tracker Proposals Surrebuttal: Tracker Proposals; Pensions/OPEBs
Missouri-American Water Company	WR-2017-0285	Direct: Future Test Year Rebuttal: Future Test Year New Tax Legislation
Spire Missouri, Inc., d/b/a Spire (Laclede Gas Company / Missouri Gas Energy)	GR-2017-0215 and GR-2017-0216	Rebuttal: Tracker Proposals; Other Policy Proposals; Software Costs
Missouri-American Water Company	WU-2017-0351	Rebuttal: Property Tax AAO Surrebuttal: Property Tax AAO
Missouri Gas Energy and Laclede Gas Company	GO-2016-0332 and GO-2016-0333	Rebuttal: ISRS Updates; Capitalized Incentive Compensation; Hydrostatic Testing
Kansas City Power & Light Company	ER-2016-0285	Rebuttal: Tracker Proposals; Use of Projected Expenses; Expense Trackers in Rate Base
Laclede Gas Company and Missouri Gas Energy	GO-2016-0196 and GO-2016-0197	Rebuttal: ISRS True-ups
Union Electric Company, d/b/a Ameren Missouri	ER-2016-0179	Rebuttal : Transmission Tracker; Noranda Deferral; Regulatory Reform

Company Name	Case Number	Issues
KCP&L Greater Missouri Operations Company	ER-2016-0156	Rebuttal: Tracker Proposals; Use of Projected Expenses; Tracker Balances in Rate Base; Deferral Policy
Missouri-American Water Company	WR-2015-0301	Rebuttal: Environmental Coast Adjustment Mechanism; Energy Efficiency and Water Loss Reduction Deferral Mechanism Tracker
Laclede Gas Company	GO-2015-0178	Direct: ISRS True-ups
Kansas City Power & Light Company	EU-2015-0094	Direct: Accounting Order – Department of Energy Nuclear Waste Fund Fees
Union Electric Company, d/b/a Ameren Missouri (2018)	EO-2015-0055	Rebuttal: MEEIA Accounting Conditions
Union Electric Company, d/b/a Ameren Missouri (2015)	EO-2015-0055	Rebuttal: Demand-Side Investment Mechanism
Kansas City Power & Light Company	ER-2014-0370	Rebuttal: Trackers Surrebuttal: Trackers; Rate Case Expense
Kansas City Power & Light Company	EO-2014-0255	Rebuttal: Continuation of Construction Accounting
Union Electric Company, d/b/a Ameren Missouri	EC-2014-0223	Rebuttal: Complaint Case – Rate Levels
Kansas City Power & Light Company	EO-2014-0095	Rebuttal: DSIM
Union Electric Company, d/b/a Ameren Missouri	ET-2014-0085	Surrebuttal: RES Retail Rate Impact
Kansas City Power & Light Company & KCP&L Greater Missouri Operations Co.	EU-2014-0077	Rebuttal: Accounting Authority Order
Kansas City Power & Light Company	ET-2014-0071	Rebuttal: RES Retail Rate Impact Surrebuttal: RES Retail Rate Impact
KCP&L Greater Missouri Operations Company	ET-2014-0059	Rebuttal: RES Retail Rate Impact Surrebuttal: RES Retail Rate Impact
Missouri Gas Energy, A Division of Laclede Gas Company	GR-2014-0007	Surrebuttal: Pension Amortizations

Company Name	Case Number	Issues
The Empire District Electric Company	ER-2012-0345	Direct (Interim): Interim Rate Request Rebuttal: Transmission Tracker, Cost of Removal Deferred Tax Amortization; State Income Tax Flow-Through Amortization Surrebuttal: State Income Tax Flow-Through Amortization
KCP&L Greater Missouri Operations Company	ER-2012-0175	Surrebuttal: Transmission Tracker Conditions
Kansas City Power & Light Company	ER-2012-0174	Rebuttal: Flood Deferral of off-system sales Surrebuttal: Flood Deferral of off-system sales, Transmission Tracker conditions
Union Electric Company, d/b/a Ameren Missouri	ER-2012-0166	Responsive: Transmission Tracker
Union Electric Company, d/b/a Ameren Missouri	EO-2012-0142	Rebuttal: DSIM
Union Electric Company, d/b/a Ameren Missouri	EU-2012-0027	Rebuttal: Accounting Authority Order Cross-Surrebuttal: Accounting Authority Order
KCP&L Greater Missouri Operations Company	EO-2012-0009	Rebuttal: DSIM
Missouri Gas Energy, a Division of Southern Union	GU-2011-0392	Rebuttal: Lost Revenues Cross-Surrebuttal: Lost Revenues
Missouri-American Water Company	WR-2011-0337	Surrebuttal: Pension Tracker
The Empire District Electric Company	ER-2011-0004	Staff Report on Cost of Service: Direct: Report on Cost of Service; Overview of the Staff's Filing Surrebuttal: SWPA Payment, Ice Storm Amortization Rebasing, S02 Allowances, Fuel/Purchased Power and True-up
The Empire District Electric Company	ER-2010-0130	Staff Report Cost of Service: Direct Report on Cost of Service; Overview of the Staff's Filing; Regulatory Plan Amortizations; Surrebuttal: Regulatory Plan Amortizations
Missouri Gas Energy, a Division of Southern Union	GR-2009-0355	Staff Report Cost of Service: Direct Report on Cost of Service; Overview of the Staff's Filing; Rebuttal: Kansas Property Taxes/AAO; Bad Debts/Tracker; FAS 106/OPEBs; Policy; Surrebuttal: Environmental Expense, FAS 106/OPEBs
KCP&L Greater Missouri Operations Company	EO-2008-0216	Rebuttal: Accounting Authority Order Request

Company Name	Case Number	Issues
The Empire District Electric Company	ER-2008-0093	Case Overview; Regulatory Plan Amortizations; Asbury SCR; Commission Rules Tracker; Fuel Adjustment Clause; ROE and Risk; Depreciation; True-up; Gas Contract Unwinding
Missouri Gas Utility	GR-2008-0060	Report on Cost of Service; Overview of Staff's Filing
Laclede Gas Company	GR-2007-0208	Case Overview; Depreciation Expense/Depreciation Reserve; Affiliated Transactions; Regulatory Compact
Missouri Gas Energy	GR-2006-0422	Unrecovered Cost of Service Adjustment; Policy
The Empire District Electric Company	ER-2006-0315	Fuel/Purchased Power; Regulatory Plan Amortizations; Return on Equity; True-Up
Missouri Gas Energy	GR-2004-0209	Revenue Requirement Differences; Corporate Cost Allocation Study; Policy; Load Attrition; Capital Structure
Aquila, Inc., d/b/a Aquila Networks-MPS-Electric and Aquila Networks-L&P- Electric and Steam	ER-2004-0034 and HR-2004-0024 (Consolidated)	Aries Purchased Power Agreement; Merger Savings
Laclede Gas Company	GA-2002-429	Accounting Authority Order Request
Union Electric Company	EC-2002-1	Merger Savings; Criticisms of Staff's Case; Injuries and Damages; Uncollectibles
Missouri Public Service	ER-2001-672	Purchased Power Agreement; Merger Savings/Acquisition Adjustment
Gateway Pipeline Company	GM-2001-585	Financial Statements
Ozark Telephone Company	TC-2001-402	Interim Rate Refund
The Empire District Electric Company	ER-2001-299	Prudence/State Line Construction/Capital Costs
Missouri Gas Energy	GR-2001-292	SLRP Deferrals; Y2K Deferrals; Deferred Taxes; SLRP and Y2K CSE/GSIP
KLM Telephone Company	TT-2001-120	Policy
Holway Telephone Company	TT-2001-119	Policy
Peace Valley Telephone	TT-2001-118	Policy
Ozark Telephone Company	TT-2001-117	Policy
IAMO Telephone Company	TT-2001-116	Policy

Company Name	Case Number	Issues
Green Hills Telephone	TT-2001-115	Policy
UtiliCorp United & The Empire District Electric Company	EM-2000-369	Overall Recommendations
UtiliCorp United & St. Joseph Light & Power	EM-2000-292	Staff Overall Recommendations
Missouri-American Water	WM-2000-222	Conditions
Laclede Gas Company	GR-99-315 (remand)	Depreciation and Cost of Removal
United Water Missouri	WA-98-187	FAS 106 Deferrals
Western Resources & Kansas City Power & Light	EM-97-515	Regulatory Plan; Ratemaking Recommendations; Stranded Costs
Missouri Public Service	ER-97-394	Stranded/Transition Costs; Regulatory Asset Amortization; Performance Based Regulation
The Empire District Electric Company	ER-97-82	Policy
Missouri Gas Energy	GR-96-285	Riders; Savings Sharing
St. Louis County Water	WR-96-263	Future Plant
Union Electric Company	EM-96-149	Merger Savings; Transmission Policy
St. Louis County Water	WR-95-145	Policy
Western Resources & Southern Union Company	GM-94-40	Regulatory Asset Transfer
Generic Electric	EO-93-218	Preapproval
Generic Telephone	TO-92-306	Revenue Neutrality; Accounting Classification
Missouri Public Service	EO-91-358 and EO-91-360	Accounting Authority Order
Missouri-American Water Company	WR-91-211	True-up; Known and Measurable
Western Resources	GR-90-40 and GR-91-149	Take-Or-Pay Costs

COMPANY NAME	CASE NUMBER
Kansas City Power and Light Company	ER-82-66
Kansas City Power and Light Company	HR-82-67
Southwestern Bell Telephone Company	TR-82-199
Missouri Public Service Company	ER-83-40
Kansas City Power and Light Company	ER-83-49
Southwestern Bell Telephone Company	TR-83-253
Kansas City Power and Light Company	EO-84-4
Kansas City Power and Light Company	ER-85-128 & EO-85-185
KPL Gas Service Company	GR-86-76
Kansas City Power and Light Company	HO-86-139
Southwestern Bell Telephone Company	TC-89-14

EDUCATION

Bachelors of Science Criminal Justice Central Missouri State University, Warrensburg, MO – July 2007

Master of Science Criminal Justice University of Central Missouri, Warrensburg, MO – December 2010

Post-Bachelors of Science Economics University of Central Missouri, Warrensburg, MO – December 2015

Post-Bachelors of Science and Business Administration Finance University of Central Missouri, Warrensburg, MO – December 2016

Certified Rate of Return Analyst Society of Regulatory and Financial Analysts, Richmond, VA – April 2017

Certificate in Public Policy Truman School of Public Affairs, University of Missouri, Columbia, MO – December 2018

Candidate in the CFA Institute CFA Program CFA Institute, Charlottesville, VA Passed CFA Level 1 Exam – December 2017

PROFESSIONAL EXPERIENCE

Missouri Public Service Commission Utility Regulatory Auditor III August 2018 – Present Utility Regulatory Auditor II August 2017 – August 2018 Utility Regulatory Auditor I August 2016 – August 2017

CASE INVOLVEMENT

MO PSC	Utility	Subject
SR-2017-0099	Seges Partners Mobile Home Park, LLC	Cost of Capital
WF-2017-0110	Terre Du Lac Utilities	Finance Authority
SR-2017-0130	Gladlo Water & Sewer Company	Cost of Capital
WR-2017-0139	Stockton Hills Water Company	Cost of Capital
WR-2017-0143	Terre Du Lac Utilities	Cost of Capital
WF-2017-0143	Terre Du Lac Utilities	Finance Authority
GR-2017-0215	Laclede Gas Company	Assisted in Developing Cost of Capital Schedules
GR-2017-0216	Missouri Gas Energy	Assisted in Developing Cost of Capital Schedules
EF-2017-0242	Kansas City Power & Light Company	Finance Authority
WR-2017-0285	Missouri-American Water Company	Cost of Capital
WF-2017-0349	Missouri-American Water Company	Finance Authority
EO-2018-0062	Kansas City Power & Light Company	Triennial Decommissioning Trust Fund Adequacy
EF-2018-0114	Kansas City Power & Light Company	Finance Authority
ER-2018-0145	Kansas City Power & Light	Cost of Capital
ER-2018-0146	Kansas City Power & Light Greater Missouri Operations	Cost of Capital

Jeffrey Smith cont'd

CASE INVOLVEMENT

MO PSC	Utility	Subject
EF-2018-0314	Kansas City Power & Light	Finance Authority
WR-2018-0356	Branson Cedars Resort Utility Company, LLC	Cost of Capital
EA-2019-0010	Empire District Electric Company	Certificate of Convenience and Necessity