MISSOURI PUBLIC SERVICE COMMISSION

STAFF

REBUTTAL REPORT

APPENDIX 1

Staff Credentials

GRAIN BELT EXPRESS CLEAN LINE, LLC INVENERGY TRANSMISSION LLC INVENERGY INVESTMENT COMPANY, LLC

CASE NO. EM-2019-0150

Jefferson City, Missouri March 27, 2019

STAFF REBUTTAL REPORT

GRAIN BELT EXPRESS CLEAN LANE, LLC INVENERGY TRANSMISSION LLC INVENERGY INVESTMENT COMPANY, LLC

CASE NO. EM-2019-0150

APPENDIX 1

STAFF CREDENTIALS

Dietrich, Natelle	1
Murray, David	7
Stahlman, Michael L	

Natelle Dietrich

Education and Work Experience

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 assumed my current position as Commission Staff Director. In this position, I oversee all aspects of the Commission Staff.

My responsibilities include involvement in several activities related to implementing sound energy policy in Missouri. I was the lead Director for the Commission's rulemakings on such things as the implementation of the Missouri Energy Efficiency Investment Act, the Chapter 22 rewrite, and the Commission's renewable energy standard regulations. Relevant activities relate to energy efficiency, demand side management, demand response and smart grid. 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' 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.

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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.

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cont'd Natelle Dietrich

- 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).

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- 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.
- 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

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- 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.
- Case No. EA-2019-0010, In the Matter of the Application of The Empire District Electric Company for Certificates of Convenience and Necessity Related to Wind Generation Facilities.
- 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.

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- 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.

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DAVID MURRAY, CFA

Educational and Employment Background and Credentials

I am currently the Utility Regulatory Manager of the Financial Analysis Unit for the Missouri Public Service Commission (Commission). I accepted the position of a Public Utility Financial Analyst in June 2000 and my position was reclassified in August 2003 to an Auditor III. I was promoted to the position of Auditor IV, effective July 1, 2006. I was employed by the Missouri Department of Insurance in a regulatory position before I began my employment at the Missouri Public Service Commission.

I was authorized in October 2010 to use the Chartered Financial Analyst (CFA) designation. The use of the CFA designation requires the passage of three rigorous examinations addressing many investment related areas such as valuation analysis, portfolio management, statistical analysis, economic analysis, financial statement analysis and ethical standards. In addition to the passage of the examinations a CFA charterholder must have four years of relevant professional work experience.

In May 1995, I earned a Bachelor of Science degree in Business Administration with an emphasis in Finance and Banking, and Real Estate from the University of Missouri-Columbia. I earned a Masters in Business Administration from Lincoln University in December 2003.

In April 2007 I passed the test required to be awarded the professional designation Certified Rate of Return Analyst (CRRA) by the Society of Utility and Regulatory Financial Analysts (SURFA). I served as a board member on the SURFA Board of Directors from 2008 through 2016. I am not currently an active member of SURFA.

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DAVID MURRAY, CFA

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Date Filed	Case Number	Company Name	Testimony Type	Issue(s)
3/6/2019	AO-2018-0179	The Empire District Electric Company, The Empire District Gas Company, Liberty Utilities (Midstates Natural Gas) Corp., and Liberty Utilities (Missouri Water) LLC	Surrebuttal Testimony	Money Pool
1/24/2019	AO-2018-0179	The Empire District Electric Company, The Empire District Gas Company, Liberty Utilities (Midstates Natural Gas) Corp., and Liberty Utilities (Missouri Water) LLC	Direct Testimony in Support of Stipulation and Agreement	Money Pool
12/21/2018	EA-2019-0021	Union Electric Company d/b/a Ameren Missouri	Rebuttal Report	Financial Ability
12/11/2018	EA-2016-0358	Grain Belt Express Clean Line, LLC	Rebuttal Report	Financial Ability
9/28/2018	EA-2018-0202	Union Electric Company d/b/a Ameren Missouri	Surrebuttal	Financial Ability
8/7/2018	WR-2018-0170	Liberty Utilities (Missouri Water), LLC d/b/a Liberty Utilities	Surrebuttal	Rate of Return Capital Structure
8/3/2018	WR-2018-0170	Liberty Utilities (Missouri Water), LLC d/b/a Liberty Utilities	Rebuttal	Rate of Return Capital Structure
5/9/2018	GR-2018-0013	Liberty Utilities (Midstates Natural Gas) Corp., d/b/a Liberty Utilities		Rate of Return Capital Structure
4/13/2018	GR-2018-0013	Liberty Utilities (Midstates Natural Gas) Corp., d/b/a Liberty Utilities	Rebuttal	Rate of Return Capital Structure
3/2/2018	GR-2018-0013	Liberty Utilities (Midstates Natural Gas) Corp., d/b/a Liberty Utilities		Rate of Return Capital Structure
11/21/2017	GR-2017-0215 & GR-2017-0216	Spire Missouri Inc. (LAC and MGE Divisions)		Rate of Return Capital Structure
10/17/2017		Spire Missouri Inc. (LAC and MGE Divisions)	Rebuttal	Rate of Return Capital Structure

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Date Filed	Case Number	Company Name	Testimony Type	Issue(s)
9/8/2017		Spire Missouri Inc. (LAC and MGE Divisions)	Cost of Service Report	Rate of Return Capital Structure
1/27/2017	ER-2016-0285	Kansas City Power & Light Company	Surrebuttal	Capital Structure
1/20/2017	ER-2016-0179	Union Electric Company d/b/a Ameren Missouri	Rebuttal	Capital Structure
12/30/2016	ER-2016-0285	Kansas City Power & Light Company	Rebuttal	Capital Structure/Cost of Debt
12/09/2016	ER-2016-0179	Union Electric Company d/b/a Ameren Missouri	Cost of Service Report	Capital Structure
3/04/2016	WR-2015-0301	Missouri-American Water Company	Surrebuttal	Rate of Return Capital Structure
2/11/2016	WR-2015-0301	Missouri-American Water Company	Rebuttal	Rate of Return Capital Structure
12/23/2015	WR-2015-0301	Missouri-American Water Company	Cost of Service Report	Rate of Return Capital Structure
10/21/2015	EA-2015-0146	Ameren Transmission Company of Illinois	Rebuttal	Financial Ability
8/24/2015	GF-2015-0181	Laclede Gas Company	Rebuttal	Financing
3/20/15	EO-2015-0055	Union Electric Company d/b/a Ameren Missouri	Rebuttal	Demand-Side Programs
2/6/2015	ER-2014-0258	Union Electric Company d/b/a Ameren Missouri	Surrebuttal	Rate of Return Capital Structure
1/16/2015	ER-2014-0258	Union Electric Company d/b/a Ameren Missouri	Rebuttal	Rate of Return Capițal Structure
12/5/2014	ER-2014-0258	Union Electric Company d/b/a Ameren Missouri	Cost of Service Report	Rate of Return Capital Structure
9/15/2014	EA-2014-0207	Grain Belt Express Clean Line, LLC	Rebuttal	Financing
8/8/2014	GR-2014-0086	Summit Natural Gas of Missouri	Surrebuttal	Rate of Return Capital Structure
7/11/2014	GR-2014-0086	Summit Natural Gas of Missouri	Rebuttal	Rate of Return Capital Structure

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DAVID MURRAY, CFA

Date Filed	Case Number	Company Name	Testimony Type	Issue(s)
5/30/2014	GR-2014-0086	Summit Natural Gas of Missouri	Cost of Service Report	Rate of Return Capital Structure
4/29/2013	SR-2013-0016	Emerald Pointe Utility Company	Surrebuttal	Rate of Return
1/30/2013	EA-2013-0098	KCP&L KCP&L Greater Missouri Operations; Transource Missouri, LLC	Rebuttal	Financing
11/13/2012	ER-2012-0175	KCP&L Greater Missouri Operations Company	True-up Rebuttal	Rate of Return Capital Structure
11/13/2012	ER-2012-0174	Kansas City Power & Light Company	True-up Rebuttal	Rate of Return Capital Structure
10/10/2012	ER-2012-0175	KCP&L Greater Missouri Operations Company	Surrebuttal	Rate of Return Capital Structure
10/8/2012	ER-2012-0174	Kansas City Power & Light Company	Surrebuttal	Rate of Return Capital Structure
9/12/2012	ER-2012-0175	KCP&L Greater Missouri Operations Company	Rebuttal	Rate of Return Capital Structure
9/7/2012	ER-2012-0166	Union Electric Company d/b/a Ameren Missouri	Surrebuttal	Rate of Return Capital Structure
9/5/2012	ER-2012-0174	Kansas City Power & Light Company	Rebuttal	Rate of Return Capital Structure
8/14/2012	ER-2012-0166	Union Electric Company d/b/a Ameren Missouri	Rebuttal	Rate of Return Capital Structure
8/9/2012	ER-2012-0175	KCP&L Greater Missouri Operations Company	Cost of Service Report	Rate of Return Capital Structure
8/2/2012	ER-2012-0174	Kansas City Power & Light Company	Cost of Service Report	Rate of Return Capital Structure
7/6/2012	ER-2012-0166	Union Electric Company d/b/a Ameren Missouri	Cost of Service Report	Rate of Return Capital Structure
04/15/2011	ER-2011-0028	Union Electric Company d/b/a Ameren Missouri	Surrebuttal	Rate of Return Capital Structure
03/25/2011	ER-2011-0028	Union Electric Company d/b/a Ameren Missouri	Rebuttal	Rate of Return Capital Structure

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DAVID MURRAY, CFA

Date Filed	Case Number	Company Name	Testimony Type	Lssue(s)
02/28/2011	ER-2010-0356	KCP&L Greater Missouri Operations Company	True-up Rebuttal	Rate of Return Capital Structure
02/28/2011	ER-2010-0355	Kansas City Power & Light Company	True-up Rebuttal	Rate of Return Capital Structure
02/22/2011	ER-2010-0356	KCP&L Greater Missouri Operations Company	True-up Direct	Rate of Return Capital Structure
02/22/2011	ER-2010-0355	Kansas City Power & Light Company	True-up Direct	Rate of Return Capital Structure
02/08/2011	ER-2011-0028	Union Electric Company d/b/a Ameren Missouri	Cost of Service Report	Rate of Return Capital Structure
1/12/2011	ER-2010-0356	KCP&L Greater Missouri Operations Company	Surrebuttal	Rate of Return Capital Structure
1/05/2011	ER-2010-0355	Kansas City Power & Light Company	Surrebuttal	Rate of Return Capital Structure
12/15/2010	ER-2010-0356	KCP&L Greater Missouri Operations Company	Rebuttal	Rate of Return Capital Structure
12/08/2010	ER-2010-0355	Kansas City Power & Light Company	Rebuttal	Rate of Return Capital Structure
11/17/2010	ER-2010-0356	KCP&L Greater Missouri Operations Company	Cost of Service Report	Rate of Return Capital Structure
11/10/2010	ER-2010-0355	Kansas City Power & Light Company	Cost of Service Report	Rate of Return Capital Structure
05/06/2010	WR-2010-0131	Missouri-American Water Company	Surrebuttal	Rate of Return Capital Structure
04/15/2010	WR-2010-0131	Missouri-American Water Company	Rebuttal	Rate of Return Capital Structure
03/09/2010	WR-2010-0131	Missouri-American Water Company	Cost of Service Report	Rate of Return Capital Structure
03/05/2010	ER-2010-0036	Union Electric Company d/b/a AmerenUE	Surrebuttal	Rate of Return Capital Structure
02/11/2010	ER-2010-0036	Union Electric Company d/b/a AmerenUE	Rebuttal .	Rate of Return Capital Structure

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Date Filed	Case Number	Company Name	Testimony Type	Issue(s)
12/18/2009	ER-2010-0036	Union Electric Company d/b/a AmerenUE	Cost of Service Report	Rate of Return Capital Structure
10/14/2009	GR-2009-0355	Missouri Gas Energy	Surrebuttal	Rate of Return Capital Structure
09/28/2009	GR-2009-0355	Missouri Gas Energy	Rebuttal	Rate of Return Capital Structure
08/21/2009	GR-2009-0355	Missouri Gas Energy	Cost of Service Report	Rate of Return Capital Structure
04/09/2009	HR-2009-0092	KCP&L Greater Missouri Operations Company	Surrebuttal	Rate of Return Capital Structure
04/09/2009	ER-2009-0090	KCP&L Greater Missouri Operations Company	Surrebuttal	Rate of Return Capital Structure
04/07/2009	ER-2009-0089	Kansas City Power & Light Company	Surrebuttal	Rate of Return Capital Structure
03/13/2009	HR-2009-0092	KCP&L Greater Missouri Operations Company	Rebuttal	Rate of Return Capital Structure
03/13/2009	ER-2009-0090	KCP&L Greater Missouri Operations Company	Rebuttal	Rate of Return Capital Structure
03/11/2009	ER-2009-0089	Kansas City Power & Light Company	Rebuttal	Rate of Return Capital Structure
02/13/2009	HR-2009-0092	KCP&L Greater Missouri Operations Company	Cost of Service Report	Rate of Return Capital Structure
02/13/2009	ER-2009-0090	KCP&L Greater Missouri Operations Company	Cost of Service Report	Rate of Return Capital Structure
02/11/2009	ER-2009-0089	Kansas City Power & Light Company	Cost of Service Report	Rate of Return Capital Structure
08/01/2008	HR-2008-0300	Trigen-Kansas City Energy Corporation	Cost of Service Report	Rate of Return Capital Structure
01/18/2008	GR-2008-0060	Missouri Gas Utility, Inc.	Cost of Service Report	Rate of Return Capital Structure

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Date Filed	Case Number	Company Name	Testimony Type	Issue(s)
07/31/2007	WR-2007-0216	Missouri-American Water Company	Surrebuttal	Rate of Return Capital Structure
07/13/2007	WR-2007-0216	Missouri-American Water Company	Rebuttal	Rate of Return Capital Structure
06/05/2007	WR-2007-0216	Missouri-American Water Company	Direct	Rate of Return Capital Structure
12/27/2006	GR-2006-0422	Missouri Gas Energy	True-up Direct	Rate of Return Capital Structure
.12/11/2006	GR-2006-0422	Missouri Gas Energy	Surrebuttal	Rate of Return Capital Structure
11/21/2006	GR-2006-0422	Missouri Gas Energy	Rebuttal	Rate of Return Capital Structure
10/13/2006	GR-2006-0422	Missouri Gas Energy	Direct	Rate of Return Capital Structure
08/18/2006	ER-2006-0315	Empire District Electric Co.	Surrebuttal	Rate of Return Capital Structure
07/28/2006	ER-2006-0315	Empire District Electric Co.	Rebuttal	Rate of Return Capital Structure
06/23/2006	ER-2006-0315	Empire District Electric Co.	Direct	Rate of Return Capital Structure
12/13/2005	ER-2005-0436	Aquila, Inc. dba Aquila Networks-MPS and Aquila Networks-L&P	Surrebuttal	Rate of Return Capital Structure
11/18/2005	ER-2005-0436	Aquila, Inc. dba Aquila Networks-MPS and Aquila Networks-L&P	Rebuttal	Rate of Return Capital Structure
10/14/2005	ER-2005-0436	Aquila, Inc. dba Aquila Networks-MPS and Aquila Networks-L&P	Direct	Rate of Return Capital Structure
11/24/2004	ER-2004-0570	Empire District Electric Co.	Surrebuttal	Rate of Return Capital Structure
11/04/2004	ER-2004-0570	Empire District Electric Co.	Rebuttal	Rate of Return Capital Structure
09/20/2004	ER-2004-0570	Empire District Electric Co.	Direct	Rate of Return
07/19/2004	GR-2004-0209	Missouri Gas Energy	True-Up Direct	Rate of Return Capital Structure

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Date Filed	Case Number	Company Name	-Testimony Type	Issue(s)
06/14/2004	GR-2004-0209	Missouri Gas Energy	Surrebuttal	Rate of Return Capital Structure
05/24/2004	GR-2004-0209	Missouri Gas Energy	Rebuttal	Rate of Return Capital Structure
04/15/2004	GR-2004-0209	Missouri Gas Energy	Direct	Rate of Return Capital Structure
03/11/2004	IR-2004-0272	Fidelity Telephone Company	Direct	Rate of Return Capital Structure
02/13/2004	GR-2004-0072	Aquila, Inc. dba Aquila Networks-MPS and Aquila Networks-L&P	Rebuttal	Rate of Return Capital Structure
02/13/2004	ER-2004-0034	Aquila, Inc. dba Aquila Networks-MPS and Aquila Networks-L&P	Surrebuttal	Rate of Return Capital Structure
02/13/2004	HR-2004-0024	Aquila, Inc. dba Aquila Networks-MPS and Aquila Networks-L&P	Surrebuttal	Rate of Return Capital Structure
01/26/2004	HR-2004-0024	Aquila, Inc. dba Aquila Networks-MPS and Aquila Networks L&P	Rebuttal	Rate of Return Capital Structure
01/26/2004	ER-2004-0034	Aquila, Inc. dba Aquila Networks-MPS and Aquila Networks L&P	Rebuttal	Rate of Return Capital Structure
01/09/2004	WT-2003-0563	Osage Water Company	Rebuttal	Rate of Return Capital Structure
01/09/2004	ST-2003-0562	Osage Water Company	Rebuttal	Rate of Return Capital Structure
01/06/2004	GR-2004-0072	Aquila, Inc.	Direct	Rate of Return Capital Structure
12/19/2003	ST-2003-0562	Osage Water Company	Direct	Rate of Return Capital Structure
12/19/2003	WT-2003-0563	Osage Water Company	Direct	Rate of Return Capital Structure
12/09/2003	ER-2004-0034	Aquila, Inc.	Direct	Rate of Return Capital Structure
12/09/2003	HR-2004-0024	Aquila, Inc.	Direct	Rate of Return Capital Structure

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-Date Filed	Case Number	Company Name	Testimony Type	Issue(s)
12/05/2003	WC-2004-0168	Missouri-American Water Co	Surrebuttal	Rate of Return Capital Structure
12/05/2003	WR-2003-0500	Missouri-American Water Co	Surrebuttal	Rate of Return Capital Structure
11/10/2003	WR-2003-0500	Missouri-American Water Company	Rebuttal	Rate of Return Capital Structure
11/10/2003	WC-2004-0168	Missouri-American Water Company	Rebuttal	Rate of Return Capital Structure
10/03/2003	WC-2004-0168	Missouri-American Water Company	Direct	Rate of Return Capital Structure
10/03/2003	WR-2003-0500	Missouri-American Water Company	Direct	Rate of Return Capital Structure
03/17/2003	GM-2003-0238	Southern Union Co. dba Missouri Gas Energy	Rebuttal	Insulation
10/16/2002	ER-2002-424	The Empire District Electric Company	Surrebuttal	Rate of Return Capital Structure
09/24/2002	ER-2002-424	The Empire District Electric Company	Rebuttal	Rate of Return Capital Structure
08/16/2002	ER-2002-424	The Empire District Electric Company	Direct	Rate of Return Capital Structure
08/06/2002	TC-2002-1076	BPS Telephone Company	Direct	Rate of Return Capital Structure
01/22/2002	ER-2001-672	UtiliCorp United Inc. dba Missouri Public Service	Surrebuttal	Rate of Return Capital Structure
01/22/2002	EC-2002-265	UtiliCorp United Inc. dba Missouri Public Service	Surrebuttal	Rate of Return Capital Structure
01/08/2002	ER-2001-672	UtiliCorp United Inc. dba Missouri Public Service	Rebuttal	Rate of Return Capital Structure
01/08/2002	EC-2002-265	UtiliCorp United Inc. dba Missouri Public Service	Rebuttal	Rate of Return Capital Structure
12/06/2001	ER-2001-672	UtiliCorp United Inc. dba Missouri Public Service	Direct	Rate of Return Capital Structure
12/06/2001	EC-2002-265	UtiliCorp United Inc. dba Missouri Public Service	Direct	Rate of Return Capital Structure

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Date Filed	Case Number	Company Name	Testimony Type	Issue(s)
05/22/2001	GR-2001-292	Missouri Gas Energy, A Division of Southern Union Company	Rebuttal	Rate of Return Capital Structure
04/19/2001	GR-2001-292	Missouri Gas Energy, A Division of Southern Union Company	Direct	Rate of Return Capital Structure
03/01/2001	TT-2001-328	Oregon Farmers Mutual Telephone Company	Rebuttal	Rate of Return Capital Structure
02/28/2001	TR-2001-344	Northeast Missouri Rural Telephone Company	Direct	Rate of Return Capital Structure
01/31/2001	TC-2001-402	Ozark Telephone Company	Direct	Rate of Return Capital Structure

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Education

2009	M. S., Agricultural Economics, University	sity of Missouri, Columbia.
2007	B.A., Economics, Summa Cum Laude,	Westminster College, Fulton, MO.

Professional Experience

2010 -	Regulatory Economist, Missouri Public Service Commission
2007 - 2009	Graduate Research Assistant, University of Missouri
2008	Graduate Teaching Assistant, University of Missouri
2007	American Institute for Economic Research (AIER) Summer
	Fellowship Program
2006	Price Analysis Intern, Food and Agricultural Policy Research Institute
	(FAPRI), Columbia, MO
2006	Legislative Intern for State Representative Munzlinger
2005 - 2006	Certified Tutor in Macroeconomics, Westminster College, Fulton, MO
1998 - 2004	Engineering Watch Supervisor, United States Navy

Expert Witness Testimony

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Union Electric Company d/b/a AmerenUE In the Matter of Union Electric Company d/b/a AmerenUE for A Tariffs Increasing Rates for Natural Gas Service Provided to Cus Company's Missouri Service Area	
Union Electric Company d/b/a Ameren Missouri In the Matter of the Union Electric Company's (d/b/a Ameren M Service Tariffs Removing Certain Provisions for Rebates from It Efficient Natural Gas Equipment and Building Shell Measure Re	s Missouri Energy
KCP&L Great Missouri Operations Company In the Matter of KCP&L Greater Missouri Operations Company' to File an Application for Authority to Establish a Demand-Side Investment Mechanism	
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missour Implement Regulatory Changes Furtherance of Energy Efficienc MEEIA	~
Kansas City Power & Light Company In the Matter of the Resource Plan of Kansas City Power & Ligh	EO-2012-0323 t Company
KCP&L Great Missouri Operations Company In the Matter of the Resource Plan of KCP&L Greater Missouri (Company	EO-2012-0324 Operations

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Kansas City Power & Light Company KCP&L Great Missouri Operations Company In the Matter of the Application of Kansas City Power & Light (Great Missouri Operations Company] for Authority to Extend th Functional Control of Certain Transmission Assets to the Southy Inc.	ne Transfer of	
Kansas City Power & Light Company, KCP&L Great Missouri Operations Company, and Transource Missouri In the Matter of the Application of Transource Missouri, LLC for Convenience and Necessity Authorizing it to Construct, Finance and Maintain the Iatan-Nashua and Sibley-Nebraska City Electric Projects	, Own, Operate,	
Kansas City Power & Light Company KCP&L Great Missouri Operations Company In the Matter of the Application of Kansas City Power & Light C KCP&L Greater Missouri Operations Company for the Issuance Authority Order relating to their Electrical Operations and for a of the Notice Requirement of 4 CSR 240-4.020(2)	of an Accounting	
Kansas City Power & Light Company In the Matter of Kansas City Power & Light Company's Notice Application for Authority To Establish a Demand-Side Programs Mechanism		
Veolia Energy Kansas City, Inc In the Matter of Veolia Energy Kansas City, Inc for Authority to Increase Rates	HR-2014-0066 File Tariffs to	
Grain Belt Express Clean Line, LLC 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		
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Missour Increase Its Revenues for Electric Service	ER-2014-0258 i's Tariff to	
Empire District Electric Company In the Matter of The Empire District Electric Company for Author Increasing Rates for Electric Service Provided to Customers in the Missouri Service Area	•	
Kansas City Power & Light Company In the Matter of Kansas City Power & Light Company's Request Implement a General Rate Increase for Electric Service	ER-2014-0370 for Authority to	

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cont'd Michael L. Stahlman

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Kansas City Power & Light Company In the Matter of Kansas City Power & Light Company's Filin Demand-Side Programs and for Authority to Establish a Dem Investment Mechanism	
KCP&L Great Missouri Operations Company In the Matter of KCP&L Greater Missouri Operations Comp Approval of Demand-Side Programs and for Authority to Es- Programs Investment Mechanism	
Ameren Transmission Company of Illinois In the Matter of the Application of Ameren Transmission Co Other Relief or, in the Alternative, a Certificate of Public Co Necessity Authorizing it to Construct, Install, Own, Operate, Otherwise Control and Manage a 345,000-volt Electric Trans Palmyra, Missouri to the Iowa Border and an Associated Sub Kirksville, Missouri	nvenience and Maintain and smission Line from
Empire District Electric Company In the Matter of The Empire District Electric Company's Req Implement a General Rate Increase for Electric Service	ER-2016-0023 Juest for Authority to
KCP&L Great Missouri Operations Company In the Matter of KCP&L Greater Missouri Operations Compa Authority to Implement a General Rate Increase for Electric	
Kansas City Power & Light Company In the Matter of Kansas City Power & Light Company's Requ Implement A General Rate Increase for Electric Service	ER-2016-0285 uest for Authority to
Union Electric Company d/b/a Ameren Missouri In the Matter of Union Electric Company d/b/a Ameren Miss Increase Its Revenues for Electric Service	ER-2016-0179 souri's Tariff to
Grain Belt Express Clean Line, LLC In the Matter of the Application of Grain Belt Express Clean Certificate of Convenience and Necessity Authorizing it to C Operate, Control, Manage and Maintain a High Voltage, Dire Transmission Line and an Associated Converter Station Prov Interconnection on the Maywood-Montgomery 345kV transm	onstruct, Own, ect Current riding an
Spire Missouri, Inc. GR-2017-02 In the Matter of Spire Missouri, Inc.'s Request to Increase I Service	15 and GR-2017-0216 ts Revenues for Gas
Liberty Utilities In the Matter of Liberty Utilities (Midstates Natural Gas) C Utilities' Tariff Revisions Designed to Implement a Genera Natural Gas Service in the Missouri Service Areas of the C	Rate Increase for

Appendix 1 EM-2019-0150 Page 19 of 20 Spire Missouri, Inc.

GO-2019-0058 and GO-2019-0059 In the Matter of Spire Missouri, Inc. d/b/a Spire's Request to Decrease [Increase] WNAR

Selected Manuscripts and Posters

- Stahlman, Michael and Laura M.J. McCann. "Technology Characteristics, Choice Architecture and Farmer Knowledge: The Case of Phytase." Agriculture and Human Values (2012) 29: 371-379.
- Stahlman, Michael. "The Amorality of Signals." Awarded in top 50 authors for SEVEN Fund essay competition, "The Morality of Profit."
- Stahlman, Michael, Laura M.J. McCann, and Haluk Gedikoglou. "Adoption of Phytase by Livestock Farmers." Selected poster at the American Agricultural Economics Association Annual Meeting, Orlando, FL, July 27-29, 2008. Also presented at the USDA/CSREES Annual Meeting in St. Louis, MO in February 2009.
- McCann, Laura, Haluk Gedikoglu, Bob Broz, John Lory, Ray Massey, and Michael Stahlman. "Farm Size and Adoption of BMPs by AFOs." Selected poster at the 5th National Small Farm Conference in Springfield, IL in September 2009.