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Public Interest
Witness: Michael L. Stahlman
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MISSOURI PUBLIC SERVICE COMMISSION

COMMISSION STAFF DIVISION

REBUTTAL TESTIMONY

OF

MICHAEL L. STAHLMAN

AMEREN TRANSMISSION COMPANY OF ILLINOIS

CASE NO. EA-2015-0146

*Jefferson City, Missouri
October 2015*

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1 benefit ratio to be less than one, Staff would still find the project economically feasible as
2 long as ATXI would receive payments for the construction and operation of the proposed line
3 through MISO tariffs. Staff witness Sarah L. Kliethermes further discusses the public interest
4 of the project.

5 Q. Does the MTEP14 MVP Triennial Review isolate the cost-benefit ratio of this
6 Project?

7 A. No. Staff's review of the MTEP14 MVP Triennial Review was unable to
8 locate the cost-benefit ratio of specific projects; it appears that the study was performed on the
9 entire portfolio.

10 Q. Does the MTEP14 MVP Triennial Review's cost-benefit ratio include public
11 policy and other social benefits?

12 A. No. The cost-benefit ratio appears to be based on economic analysis alone,
13 although the MTEP14 MVP Triennial Review did review the MTEP11 assumptions regarding
14 public policy other qualitative and social benefits. Some of these assumptions are further
15 discussed by Staff witness Shawn E. Lange.

16 Q. Does the economic analysis include any offsets due to restrictions in land use
17 (e.g., loss of agricultural land)?

18 A. No. The model, PROMOD IV, focuses on electric markets. Figure E-1 of the
19 MTEP14 MVP Triennial Review identifies the categories of economic benefit as increased
20 market efficiency, deferred generation investment, and wind turbine and future transmission
21 investment capital benefits.

1 Q. Do your answers to the last three questions change your opinion that the
2 MTEP14 MVP Triennial Review provides supporting evidence of the project being in the
3 public interest?

4 A. No. Although the cost-benefit ratio is limited in its scope, Staff has not seen
5 any evidence to suggest the overall portfolio of projects is not in the public interest.

6 Q. Does Staff anticipate that upgrades will be necessary due to the connection at
7 the Maywood-Montgomery 345 kV transmission line?

8 A. Yes. In response to Staff Data Requests Nos. 0021 and 0022, ATXI has
9 identified substation modifications that Ameren Missouri will need to make as part of the
10 project. ATXI has indicated that it must compensate Ameren Missouri 100% of the cost of
11 the upgrades. ATXI is not aware of any upgrades that rural electric co-operatives will need to
12 make as part of this project.

13 **Economic Development Benefits to Missouri**

14 Q. Did ATXI provide an analysis of economic development benefits for
15 Missouri?

16 A. Yes. ATXI provided an analysis as Schedule GH-02 in the Direct Testimony
17 of Geoffrey J. D. Hewings, Ph.D.

18 Q. Does that study estimate the number of jobs expected to be created in
19 Missouri?

20 A. Yes. Tables 3 and 4 of Schedule GH-02 provide a summary of impacts by
21 year for Missouri and for the Missouri counties where the transmission line is proposed to be
22 physically located.

23 Q. Is the estimate of construction jobs in Dr. Hewings' study reasonable?

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1 A. Yes. In addition, his study also reasonably estimates that there will be no
2 additional jobs created by the project in Missouri after the proposed project is completed.

3 Q. Are there limitations to the estimates provided in this type of study?

4 A. Yes. Dr. Hewings' testimony does not discuss the limitations of input-output
5 models. Input-output models, like IMPLAN (IMPact analysis for PLANning), assume linear,
6 fixed proportion production and consumption functions, i.e., constant returns to scale, with
7 constant technology, market shares, and consumer behavior, and no capacity or labor
8 constraints.⁵ In other words, if it currently takes one person with one grill to make 100
9 hamburgers a day, an input-output model assumes that it would take two persons with two
10 grills to make 200 hamburgers a day. These and other limitations are why the results should
11 be treated as rough estimates rather than precise forecasts.

12 Q. Does Staff recommend reliance on this information as a basis to recommend
13 approval or rejection of ATXI's application?

14 A. No. Staff understands that job creation can make it easier to "sell" a project
15 from a public policy perspective, but fundamentally, job creation is a function of the costs of
16 the project rather than its benefits. For example, ATXI could increase its expenditures by
17 hiring additional workers to dig holes and fill them in again. This increase in expenditures
18 increases the direct effect, increasing direct jobs; increases the indirect effect as ATXI
19 procures capital materials for the additional workers to dig and fill in the holes; and induces
20 effects as the workers spend money in the local economy. In this instance, the hiring of
21 additional workers would appear as a benefit from the input-output model, but would either be

⁵ "Limitations of JEDI Models" <http://www.nrel.gov/analysis/jedi/limitations.html> (01SEP15) and "IMPLAN Methodology" <http://reic.uwcc.wisc.edu/implan/> (01SEP15).

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1 a cost in the MISO MVP studies or a cost overrun and would have an impact of reducing the
2 cost-benefit ratio identified in the MTEP14 MVP Triennial Review.

3 Q. Is this analysis related to the analysis of economic feasibility?

4 A. No. Input-output models assume that the project is economically feasible.

5 **Conclusion**

6 Q. Please summarize your testimony.

7 A. Staff concludes that this project is economically feasible since it will receive
8 RTO cost allocation through MISO tariff schedules. While Staff disagrees with ATXI that the
9 MTEP14 MVP Triennial Review should be viewed as evidence of the project's economic
10 feasibility, Staff does find that the MTEP14 MVP Triennial Review is consistent with the
11 Project as promoting the public interest. Finally, my testimony also recommends that the
12 Commission not use the information contained in the Direct Testimony of Geoffrey J. D.
13 Hewings, Ph.D. as a basis for approval or rejection of ATXI's application.

14 Q. Does this conclude your testimony?

15 A. Yes.

Michael Stahlman

Education

- 2009 M. S., Agricultural Economics, University 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

- Union Electric Company d/b/a AmerenUE GR-2010-0363
In the Matter of Union Electric Company d/b/a AmerenUE for Authority to File Tariffs Increasing Rates for Natural Gas Service Provided to Customers in the Company's Missouri Service Area
- Union Electric Company d/b/a Ameren Missouri GT-2011-0410
In the Matter of the Union Electric Company's (d/b/a Ameren Missouri) Gas Service Tariffs Removing Certain Provisions for Rebates from Its Missouri Energy Efficient Natural Gas Equipment and Building Shell Measure Rebate Program
- KCP&L Great Missouri Operations Company EO-2012-0009
In the Matter of KCP&L Greater Missouri Operations Company's Notice of Intent to File an Application for Authority to Establish a Demand-Side Programs Investment Mechanism
- Union Electric Company d/b/a Ameren Missouri EO-2012-0142
In the Matter of Union Electric Company d/b/a Ameren Missouri's Filing to Implement Regulatory Changes Furtherance of Energy Efficiency as Allowed by MEEIA
- Kansas City Power & Light Company EO-2012-0323
In the Matter of the Resource Plan of Kansas City Power & Light Company
- KCP&L Great Missouri Operations Company EO-2012-0324
In the Matter of the Resource Plan of KCP&L Greater Missouri Operations Company
- Kansas City Power & Light Company, KCP&L Great Missouri Operations Company, and Transource Missouri EA-2013-0098
EO-2012-0367
In the Matter of the Application of Transource Missouri, LLC for a Certificate of Convenience and Necessity Authorizing it to Construct, Finance, Own, Operate,

and Maintain the Iatan-Nashua and Sibley-Nebraska City Electric Transmission Projects

Kansas City Power & Light Company EO-2012-0135

KCP&L Great Missouri Operations Company EO-2012-0136

In the Matter of the Application of Kansas City Power & Light Company [KCP&L Great Missouri Operations Company] for Authority to Extend the Transfer of Functional Control of Certain Transmission Assets to the Southwest Power Pool, Inc.

Kansas City Power & Light Company EU-2014-0077

KCP&L Great Missouri Operations Company

In the Matter of the Application of Kansas City Power & Light Company and KCP&L Greater Missouri Operations Company for the Issuance of an Accounting Authority Order relating to their Electrical Operations and for a Contingent Waiver of the Notice Requirement of 4 CSR 240-4.020(2)

Kansas City Power & Light Company EO-2014-0095

In the Matter of Kansas City Power & Light Company's Notice of Intent to File an Application for Authority To Establish a Demand-Side Programs Investment Mechanism

Veolia Energy Kansas City, Inc HR-2014-0066

In the Matter of Veolia Energy Kansas City, Inc for Authority to File Tariffs to Increase Rates

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 ER-2014-0258

In the Matter of Union Electric Company d/b/a Ameren Missouri's Tariff to Increase Its Revenues for Electric Service

Empire District Electric Company ER-2014-0351

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

Kansas City Power & Light Company 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

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, 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.