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Issues:	Economic impact analysis
Witness:	Alan E. Spell
Sponsoring Party:	Missouri Department of Economic Development
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Case Nos.:	EA-2016-0358

**MISSOURI PUBLIC SERVICE COMMISSION**

**GRAIN BELT EXPRESS CLEAN LINE LLC**

**CASE NO. EA-2016-0358**

**REBUTTAL TESTIMONY**

**OF**

**ALAN E. SPELL**

**ON**

**BEHALF OF**

**MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT**

Jefferson City, Missouri

January 24, 2017

**BEFORE THE PUBLIC SERVICE COMMISSION  
OF THE STATE OF MISSOURI**

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, ) Case No. EA-2016-0358  
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 )

**AFFIDAVIT OF ALAN E. SPELL**

**STATE OF MISSOURI** )  
 ) **ss**  
**COUNTY OF COLE** )

Alan E. Spell, of lawful age, being duly sworn on his oath, deposes and states:

1. My name is Alan E. Spell. I work in the City of Jefferson, Missouri, and I am employed by the Missouri Department of Economic Development as an Economic and Workforce Research Manager at the Missouri Economic Research and Information Center.
2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of the Missouri Department of Economic Development.
3. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded are true and correct to the best of my knowledge.



DAWN ELLEN OVERBEY  
My Commission Expires  
December 13, 2019  
Moniteau County  
Commission #15456865

Alan E. Spell

Subscribed and sworn to before me this 24<sup>th</sup> day of January, 2017

Notary Public

My commission expires:

December 13, 2019

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1 **I. INTRODUCTION**

2 **Q. Please state your name and business address.**

3 A. My name is Alan E. Spell. My business address is 301 West High Street, Suite 580, PO  
4 Box 3150, Jefferson City, Missouri 65102.

5 **Q. By whom and in what capacity are you employed?**

6 A. I am employed as the Economic and Workforce Research Manager at the Missouri  
7 Economic Research and Information Center (MERIC), the research arm of the Missouri  
8 Department of Economic Development (DED).

9 **Q. Please describe your educational background and employment experience.**

10 A. I received a Bachelor of Science degree in economics from the University of South  
11 Carolina and a Masters degree in landscape architecture from the University of Georgia. I  
12 am a Certified Community Researcher, a designation received from the national Council  
13 for Community and Economic Research, for my work in economic analysis.

14 I currently manage a research team focused on providing economic and workforce  
15 analysis to policymakers, educators, planners, and the public. I have worked in economic  
16 development for over 20 years, in various roles to include site selection, land planning,  
17 spatial analysis, economic impact modeling, and industry/labor research.

18 Since 2005 I have managed the economic impact modeling activities for the DED and  
19 our team has conducted hundreds of impact studies since that time. The DED uses  
20 impact modeling to better understand the economic consequences of planned business  
21 activities, primarily in relation to state tax incentives anticipated in a project proposal. I  
22 have received formal training in two commonly used economic impact modeling systems,  
23 IMPLAN and Regional Economic Models, Inc. Policy Insight (REMI).

1 **II. PURPOSE AND SUMMARY OF TESTIMONY**

2 **Q. What is the purpose of your Rebuttal Testimony in this proceeding?**

3 A. The purpose of my testimony is to provide additional details on the economic impact  
4 analysis conducted by the Missouri Department of Economic Development regarding the  
5 Grain Belt Express Clean Line transmission project (“Grain Belt Express Project” or  
6 “Project”), which is discussed in the direct testimony of Mark Lawlor. The construction  
7 and operation of the Project is expected to have positive economic impacts to the state of  
8 Missouri with regard to jobs, income, gross domestic product, and tax revenues. Those  
9 impacts are summarized in Mr. Lawlor’s **Schedule MOL-7** and further detailed in this  
10 testimony.

11 **III. SUMMARY OF ECONOMIC IMPACT RESULTS**

12 **Q. What economic impacts of the Grain Belt Express Project did your study assess?**

13 A. The study analyzed the potential economic impact the Project would have to the state of  
14 Missouri for the construction of the electrical transmission line and on-going operations.  
15 The impacts include the anticipated number of jobs, personal income, gross domestic  
16 product (GDP), state tax revenue, and county property taxes the Project will support. The  
17 analysis included the total statewide effect of construction which is anticipated to occur  
18 in years 2018 through 2020, the first year of impact (2021) when the transmission line is  
19 in operation and up-front landowner payments are made, and the annual impact  
20 anticipated in operational years that begin in 2022.

21 **Q. What does the study estimate will be the economic impact of construction of the**  
22 **Grain Belt Express Project?**

1 A. The construction phase of the Project is expected to support 1,527 total jobs over the  
2 three years, create \$246 million in personal income, \$476 million in GDP, and \$9.6  
3 million in state general revenue for the state of Missouri. These figures are presented in  
4 2016 constant dollars using REMI's personal consumer expenditure deflator.  
5 Inputs for the construction phase includes \$354 million in spending to build the  
6 transmission line in Missouri and \$249 million in Missouri-specific manufacturing and  
7 professional service contract spending for the completion of the total project which spans  
8 four states (Kansas, Missouri, Illinois, and Indiana). Since impact models estimate  
9 supply-chain purchases based on construction spending, this analysis removed the portion  
10 of related manufacturing and services from the impact of the transmission line  
11 construction in Missouri to avoid double counting those inputs.

12 **Q. What does the study estimate will be the economic impact of operations of the Grain**  
13 **Belt Express Project?**

14 A. The operations phase analysis is divided into two time periods due to up-front landowner  
15 payments that would only impact the first year of operations, or year 2021. The  
16 economic impact in year 2021 of Project operations is expected to support 91 total jobs,  
17 create \$17.9 million in personal income, \$9.1 million in GDP, and \$720,000 in state  
18 general revenue for the state of Missouri. Total county property taxes of \$7.2 million are  
19 expected to be paid to the eight Missouri counties the transmission line crosses in 2021.  
20 Beginning in year 2022, when landowner payments are smaller, the impact is expected to  
21 support 28 total jobs, create \$2.6 million in personal income, \$4.2 million in GDP, and  
22 \$111,000 in state general revenue on an annual basis. Annual county property taxes of  
23 \$7.2 million are expected to continue.

1           Inputs for the operations phase of the Project include a one-time, up-front payment of  
2           \$14.97 million to landowners in year 2021. The new transmission line is also expected to  
3           increase annual operations and maintenance spending by \$5 million beginning in 2021.  
4           In year 2022 the annual payments to landowners are reduced to \$1.23 million, based on  
5           the assumption that landowners choose annual payments over a one-time payment option.

6   **IV. DESCRIPTION OF STUDY METHODOLOGY**

7   **Q. Please describe how the economic impact study was conducted.**

8   A. The economic impacts of the construction and operations phases of the Project were  
9       estimated using the REMI economic model. The model takes direct spending inputs and  
10       predicts the jobs, income, GDP, and state fiscal revenue that will occur in Missouri based  
11       on new supply-chain purchases and worker spending. The county property tax estimates  
12       were provided by the Missouri State Tax Commission.

13   **Q. What is the REMI model and how does it work?**

14   A. The REMI models the flow of income that moves around an economy through the  
15       primary relationships between businesses and consumers. Those relationships are  
16       informed by input-output, commuter flows, and income data from the U.S. Bureau of  
17       Economic Analysis; employment, wage, and occupational data from the U.S. Bureau of  
18       Labor Statistics; and county business patterns, population, and migration data from the  
19       U.S. Census Bureau, among other sources. The model follows spending patterns to  
20       estimate the larger impacts to a region that include jobs, income, GDP, and government  
21       revenue. The REMI model also takes into account state expenditures when new workers  
22       move to Missouri in response to job opportunities simulated in the model. New workers

1 bring families and the need for additional governmental services so those costs are  
2 deducted from state tax revenues.

3 REMI provides annual updates of the model to DED to continually incorporate newer  
4 information from the Bureau of Economic Analysis, Bureau of Labor Statistics, Census  
5 Bureau, and other agencies. The DED staff also take the extra step to annually calibrate  
6 the fiscal component with Missouri Office of Administration budget figures to produce  
7 better state tax estimates.

8 The REMI model has been used by DED for over fifteen years to estimate the impacts of  
9 business activities. REMI is a popular model with over 250 organizations, universities,  
10 and consulting firms using the system, including governmental agencies in 40 states.

11 Many organizations use models like REMI as a tool in analyzing the potential economic  
12 benefits and costs associated with a business activity while recognizing that it is one part  
13 of a decision-making process. Future changes in the project inputs or general economy,  
14 for example, will impact the conclusions of any analysis and therefore these studies  
15 should be viewed as reasonable estimates given currently available information.

16 Articles about the REMI model have been published in professional and peer-reviewed  
17 journals, such as the *American Economic Review*, *Economic Systems Research*, *Journal*  
18 *of Regional Science*, *Applied Economics*, and the *International Regional Science Review*.

19 A more complete description, to include model concepts, sources, and equations, can be  
20 found on REMI's website <sup>1</sup>in PDF format, which I have attached to my testimony as  
21 Schedule-AES 1.

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<sup>1</sup> REMI documentation can be found at: <http://www.remi.com/resources/documentation>



1 **Q. Does the REMI model take into account costs borne by property owners along the**  
2 **right-of-way such as lost property value or use of agricultural land?**

3 A. The analysis does not include estimates of lost property value or use of agricultural land.  
4 At the time of conducting this analysis I did not have information on these potential  
5 effects. It is always the case that some consequences of a business activity, both positive  
6 and negative, will be either unknown, difficult to quantify, or both during an analysis. If  
7 reasonable estimates of the costs borne to property owners are available then those  
8 factors could be incorporated into a revised analysis.

9 **Q. Where did you obtain your data inputs?**

10 A. The estimates of construction and operations spending on the Project were provided by  
11 Clean Line, the company building the roughly 700-mile high voltage line across four  
12 states. Clean Line provided information on the timing of activities, the construction  
13 spending specific to Missouri, contracts with Missouri companies for project  
14 management and transmission line components, operation and maintenance spending,  
15 and details of landowner payments. Clean Line also provided Dr. Loomis's analysis,  
16 shown in **Schedule AES-2**, which was used to determine direct construction spending by  
17 detailed categories and by state. Construction spending by states was used with  
18 information on specific Missouri contract agreements to discount those sales if already  
19 accounted for in the construction impact estimate. This was done to avoid double-  
20 counting the impact to Missouri.

21 The county property tax estimates were provided by the State Tax Commission after they  
22 determined which taxing jurisdictions the transmission line would cross.

1 **Q. Based off your experience are the inputs that Clean Line provided you reasonable**  
2 **estimates?**

3 A. I believe the construction and operation spending inputs provided by Clean Line were  
4 reasonable.

5 **V. CONCLUSIONS**

6 **Q. Please summarize the main conclusions of your testimony.**

7 A. The construction and operation of the Project is expected to have positive economic  
8 impacts to Missouri with regard to jobs, income, gross domestic product, and state tax  
9 revenues beginning in year 2018. The construction phase (2018-2020) is expected to  
10 support 1,527 total jobs over the three years, create \$246 million in personal income,  
11 \$476 million in GDP, and \$9.6 million in state general revenue for the state of Missouri.  
12 The first year of operations (2021), which includes spending to maintain the transmission  
13 line and nearly \$15 million in initial landowner payments, is expected to support 91 total  
14 jobs, create \$17.9 million in personal income, \$9.1 million in GDP, \$720,000 in state  
15 general revenue, and \$7.2 million in county property taxes. Beginning in year 2022 the  
16 annual operations and landowner payments of the Project are expected to support 28 total  
17 jobs, create \$2.6 million in personal income, \$4.2 million in GDP, \$111,000 in state  
18 general revenue, and \$7.2 million in county property taxes.

19 **Q. Does this conclude your prepared rebuttal testimony?**

20 A. Yes.