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Sponsoring Party: Grain Belt Express Clean Line LLC

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MISSOURI PUBLIC SERVICE COMMISSION CASE NO. EA-2014-0207

SURREBUTTAL TESTIMONY OF DR. DAVID G. LOOMIS ON BEHALF OF GRAIN BELT EXPRESS CLEAN LINE LLC

October 14, 2014

C-BE Exhibit No. 115

Date V- 21-M Reporter XF File No. EA - 2014 - 0207

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I. INTRODUCTION

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- 2 O. Please state your name, present position and business address.
- 3 A. My name is David G. Loomis. I am Principal of Strategic Economic Research, LLC,
- 4 Professor of Economics at Illinois State University, Director of the Center for Renewable
- 5 Energy, and Executive Director of the Institute for Regulatory Policy Studies. My
- 6 business address is 2705 Kolby Court, Bloomington, IL 61704.
- 7 Q. Have you previously submitted testimony in this proceeding?
- 8 A. Yes, I previously submitted direct testimony.
- 9 Q. What is the purpose of your surrebuttal testimony?
- 10 A. The purpose of my surrebuttal testimony is to respond to the rebuttal testimony of Jeffrey
- M. Gray, Ph.D. in two areas: 1) the relevance of my study to the present case; and 2) the
- limitations of the study methodology. In addition, I respond to a question raised by
- 13 Commission Staff witness Michael Stahlman regarding the employment impacts of the
- operations of the Grain Belt Express Project (the "Project").
- 15 II. RELEVANCE OF THE ECONOMIC IMPACT STUDY TO THIS CASE
- 16 Q. At page 12 of his rebuttal, MLA Witness Dr. Gray states that "Dr. Loomis'
- economic input-output analysis lacks relevance in this public service proceeding."
- 18 What is your response?
- 19 A. As I described in more detail in my direct testimony, my study examines the gross
- benefits that accrue to the State of Missouri from the Project through direct, indirect and
- induced economic effects. In this context, my study is relevant to this case because it
- demonstrates that the service provided by the Project will provide an important benefit to
- 23 the State of Missouri that will promote the public interest, which I understand is a factor

to be considered by the Commission in this proceeding. Although not necessarily conducted to the level of detail of my study in this case, this type of analysis is often performed to inform policymakers of the economic development benefits that will come to an area as a result of a new public or private infrastructure project. This type of analysis is also often considered by governmental entities in assessing large infrastructure projects or in analyzing whether incentives should be offered to persuade companies to locate facilities within a state or other governmental units. Studies of this type are considered for a wide variety of other public policy decisions or initiatives concerning the construction of new public or private facilities, including Enterprise Zones and Tax Increment Financing districts.

- Q. Do you believe that this type of analysis should be considered by the Missouri Public

 Service Commission in evaluating the overall benefits of the Project?
- 13 A. Yes. My analysis shows the incremental economic activity that the Project expects to
 14 generate. I believe that this evidence complements the analyses provided by other Grain
 15 Belt Express witnesses.
- 16 Q. Has this type of study been used to show the economic benefits of the construction of 17 other transmission projects and wind farms?
- A. Yes. Academicians, economic consultants and state agencies have conducted these types of analyses to determine the economic impacts of transmission line projects in the Midwest and other parts of the country. Specifically, the Brattle Group conducted a study using the same economic impact methodology as my analysis for the transmission

and wind generation investments in the SPP region.¹ The economic benefits estimated by Brattle's economic impact study were ultimately incorporated by SPP into its cost-benefit analysis for the Priority Projects.²

Additionally, there is a long list of studies of the economic impact of wind farms available at the National Renewable Energy Laboratory website: http://www.nrel.gov/analysis/jedi/publications.html. The methodology used in my study was recently validated in a published study by J.P. Brown, J. Pender, R. Wiser, R., E. Lantz, and B. Hoen entitled "Ex Post Analysis of Economic Impacts from Wind Power Development in U.S. Counties," which was published in the scholarly journal Energy Economics in 2012. In light of their widespread use and academic validation, the techniques used in my study are appropriate for the Commission to consider in this proceeding.

13 III. <u>LIMITATIONS OF THE STUDY METHODOLOGY</u>

Q. At page 12 of his rebuttal, MLA Witness Dr. Gray states: "The Jobs and Economic Development Impact ("JEDI") model of the U.S. Department of Energy's National Renewable Energy Laboratory ("NREL"), as used by Dr. Loomis, is a screening tool for wind projects, not a forecasting tool, and has limitations." Do you agree that the analysis is limited in this way?

¹ Pfeifenberger, J.; Chang, J.; Hou, D.; Madjarov, K., "Jobs and Economic Benefits of Transmission and Wind Generation Investments in the SPP Region," The Brattle Group (2010).

² Priority Projects Phase II Reports. Available at http://www.spp.org/publications/Priority%20Projects%20Phase%20II%20Final%20Report%20-%204-27-10.pdf (last checked October 10, 2014).

No, I disagree with Dr. Gray's assessment for several reasons. First, it is unclear what Dr. Gray means by calling JEDI a "screening tool." JEDI is a widely used input-output modeling tool that measures the spending patterns and location-specific economic structures that reflect expenditures supporting varying levels of employment, income, and output. Second, Dr. Gray ignores the economic impacts of transmission lines that were modeled using IMPLAN and included as a part of this study. Third, Dr. Gray fails to note that the JEDI model is built upon the foundation of the IMPLAN methodology and that both analyses are completely compatible.

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Q. At page 12 and 13 of his rebuttal, MLA Witness Gray states five specific limitations of the JEDI analyses that you performed. What is your response?

Several of the limitations of the study that Dr. Gray mentioned are acknowledged on pages 8-9 of the study. These are all standard limitations of economic impact studies of this type. It appears that Dr. Gray has pulled these standard limitations from the JEDI model website. However, none of these limitations undermine the study and many are addressed by other witnesses in this proceeding.

The first alleged limitation is that the model cannot account for future wind power technology, cost and regulatory changes. This is an immaterial limitation because it is a generic limitation of any analysis that pertains to the future. The second limitation that Dr. Gray mentions is that the study does not address the net impact of a wind project, including displacement of other energy sources or alternative uses of the capital. Company witnesses David Berry and Robert Cleveland address this limitation in their surrebuttal testimony and estimate the resulting effects on electric rates.

The third limitation mentioned is that the model assumes that wind farms generate enough revenue to accommodate equity and debt repayment and to cover operating costs. This goes to the economic feasibility of the Project, which is addressed by David Berry in his direct and surrebuttal testimony. The fourth limitation that Dr. Gray mentions is that my study does not calculate net jobs compared to alternative uses of the capital. However, if the same capital is deployed in another project rather than the Grain Belt Express Project and its associated wind farms, there is no guarantee that the alternative project will be in Missouri and that any of the project's benefits will accrue to Missouri residents.

The fifth limitation that Dr. Gray notes is that the study is only as good as its inputs. Again, this is a generic objection that is true of any study. Dr. Gray offers no specific critiques of the input values in my study. Therefore, I find that Dr. Gray's testimony fails to identify any facts that would change the results of my study or the value of the study to this proceeding.

IV. OPERATIONAL JOB IMPACTS OF THE PROJECT

- Q. At page 15 of his rebuttal, Staff witness Michael Stahlman notes a seeming inconsistency between the Company's own estimates of jobs during the Project's operations and your study. What is your response?
- A. The Company's estimates are for the number of full-time workers needed to operate and maintain the Project. They do not include indirect or induced effects, as my study does.

 Nor does the Company's estimates include the labor benefits of part-time contractors, as my study does. Therefore, there is no inconsistency between the Company's estimate

- and my study because my study includes all labor impacts from operating the Project, not
- 2 just a portion.
- 3 Q. Does this conclude your prepared surrebuttal testimony?
- 4 A. Yes, it does.

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, Control, Manage and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood 345 kV transmission line.			
AFFIDAVIT OF DAVID G. LOOMIS			
STATE OF ILLINOIS)			
COUNTY OF MCLEAN) ss			
David G. Loomis, being first duly sworn on his oath, states:			
1. My name is David G. Loomis. I am Principal of Strategic Economic Research, LLC,			
Professor of Economics at Illinois State University, Director of the Center for Renewabl			
Energy, and Executive Director of the Institute for Regulatory Policy Studies.			
2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony of			
behalf of Grain Belt Express Clean Line, LLC consisting of 5 pages, having been prepared in			
written form for introduction into evidence in the above-captioned docket.			
3. I have knowledge of the matters set forth therein. I hereby swear and affirm that m			
answers contained in the attached testimony to the questions therein propounded, including any			
attachments thereto, are true and accurate to the best of my knowledge, information and belief. David G. Loomis			
Subscribed and sworn to before me this, day of October, 2014. Notary Public			
My Commission Expires: 4-12-2017 CAROL A. PRIOR Notary Public, State of Illinois My Commission Expires 04-12-2017			

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