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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

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1 I. INTRODUCTION

2 Q. Please state your name, present position and business address.

A. 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 Renewable
Energy, and Executive Director of the Institute for Regulatory Policy Studies. My
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?

- 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
 Commission Staff witness Michael Stahlman regarding the employment impacts of the
 operations of the Grain Belt Express Project (the "Project").
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5 II. <u>RELEVANCE OF THE ECONOMIC IMPACT STUDY TO THIS CASE</u>

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."
What is your response?

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
the State of Missouri that will promote the public interest, which I understand is a factor

1 to be considered by the Commission in this proceeding. Although not necessarily 2 conducted to the level of detail of my study in this case, this type of analysis is often 3 performed to inform policymakers of the economic development benefits that will come 4 to an area as a result of a new public or private infrastructure project. This type of 5 analysis is also often considered by governmental entities in assessing large infrastructure 6 projects or in analyzing whether incentives should be offered to persuade companies to 7 locate facilities within a state or other governmental units. Studies of this type are 8 considered for a wide variety of other public policy decisions or initiatives concerning the 9 construction of new public or private facilities, including Enterprise Zones and Tax 10 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?

A. Yes. My analysis shows the incremental economic activity that the Project expects to
generate. I believe that this evidence complements the analyses provided by other Grain
Belt Express witnesses.

Q. Has this type of study been used to show the economic benefits of the construction of 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

4 Additionally, there is a long list of studies of the economic impact of wind farms 5 available Renewable the National Energy Laboratory website: at http://www.nrel.gov/analysis/jedi/publications.html. The methodology used in my study 6 7 was recently validated in a published study by J.P. Brown, J. Pender, R. Wiser, R., E. 8 Lantz, and B. Hoen entitled "Ex Post Analysis of Economic Impacts from Wind Power 9 Development in U.S. Counties," which was published in the scholarly journal Energy 10 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 11 12 proceeding.

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

14Q.At page 12 of his rebuttal, MLA Witness Dr. Gray states: "The Jobs and Economic15Development Impact ("JEDI") model of the U.S. Department of Energy's National16Renewable Energy Laboratory ("NREL"), as used by Dr. Loomis, is a screening tool17for wind projects, not a forecasting tool, and has limitations." Do you agree that the18analysis 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).

1 A. No, I disagree with Dr. Gray's assessment for several reasons. First, it is unclear what 2 Dr. Gray means by calling JEDI a "screening tool." JEDI is a widely used input-output 3 modeling tool that measures the spending patterns and location-specific economic 4 structures that reflect expenditures supporting varying levels of employment, income, and 5 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 6 7 note that the JEDI model is built upon the foundation of the IMPLAN methodology and 8 that both analyses are completely compatible.

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

A. 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.

16 The first alleged limitation is that the model cannot account for future wind power 17 technology, cost and regulatory changes. This is an immaterial limitation because it is a 18 generic limitation of any analysis that pertains to the future. The second limitation that 19 Dr. Gray mentions is that the study does not address the net impact of a wind project, 20 including displacement of other energy sources or alternative uses of the capital. 21 Company witnesses David Berry and Robert Cleveland address this limitation in their 22 surrebuttal testimony and estimate the resulting effects on electric rates.

1 The third limitation mentioned is that the model assumes that wind farms generate 2 enough revenue to accommodate equity and debt repayment and to cover operating costs. 3 This goes to the economic feasibility of the Project, which is addressed by David Berry in 4 his direct and surrebuttal testimony. The fourth limitation that Dr. Gray mentions is that 5 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 6 7 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 8 9 residents.

10 The fifth limitation that Dr. Gray notes is that the study is only as good as its 11 inputs. Again, this is a generic objection that is true of any study. Dr. Gray offers no 12 specific critiques of the input values in my study. Therefore, I find that Dr. Gray's 13 testimony fails to identify any facts that would change the results of my study or the 14 value of the study to this proceeding.

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IV. <u>OPERATIONAL JOB IMPACTS OF THE PROJECT</u>

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

- 1 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.