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Grain Belt Express LLC – Exhibit 21
David Loomis
Direct Testimony
File No. EA-2023-0017

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Employment and Fiscal Impacts
Witness: Dr. David Loomis
Type of Exhibit: Direct Testimony
Sponsoring Party: Grain Belt Express LLC
File No.: EA-2023-0017
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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO.

EA-2023-0017

DIRECT TESTIMONY

OF

DR. DAVID G. LOOMIS

ON

BEHALF OF

GRAIN BELT EXPRESS LLC

AUGUST 24, 2021

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1 **I. INTRODUCTION**

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

3 A. My name is David G. Loomis. I am President of Strategic Economic Research,
4 LLC, Professor of Economics at Illinois State University, Co-Founder of the Center for Renewable
5 Energy and Executive Director of the Institute for Regulatory Policy Studies. My business address
6 is 2705 Kolby Court, Bloomington, IL 61704.

7 **Q. Please describe your education and professional background.**

8 A. I received a Bachelor of Arts degree in Honors Economics and Mathematics and a
9 Doctor of Philosophy degree in Economics from Temple University. I achieved the rank of Full
10 Professor at Illinois State University in 2010.

11 As part of my duties as Professor of Economics at Illinois State University, I teach and
12 oversee the course sequence in Electricity, Natural Gas and Telecommunications Economics. I
13 have been teaching classes that cover transmission markets, cost allocation, and pricing for over
14 25 years, including Economics of Regulation and Antitrust; Economics of Energy; and Industry
15 Studies in Electricity, Natural Gas and Telecommunications Economics. I was part of the Illinois
16 State University faculty team that created a unique undergraduate degree in renewable energy at
17 Illinois State University. I have authored or co-authored 38 articles or chapters in peer-reviewed
18 publications such as *Energy Policy*, *Energy Economics*, *Electricity Journal* and *Applied Energy*.

19 I have received numerous professional awards, including the 2011 Midwestern Regional
20 Wind Advocacy Award from the U.S. Department of Energy's Wind Powering America, the 2009
21 Economics Department Scott M. Elliott Faculty Excellence Award, the Illinois State University
22 Million Dollar Club in 2009 (awarded to faculty who received over \$1 million in grants) and the
23 2006 Outstanding State Wind Working Group Award. My full curriculum vita is provided in
24 Schedule DL-1.

1 **Q. What is the purpose of your direct testimony?**

2 A. I am testifying on behalf of Grain Belt Express LLC (“Grain Belt Express”).
3 Specifically, I will address the economic impact of the proposed Grain Belt Express transmission
4 line project (“Project”) on the Missouri economy in terms of increased jobs, labor earnings and
5 fiscal impacts. My firm, Strategic Economic Research, LLC performed a study to estimate the
6 economic impact of the Project. The full report of the study that we performed, titled, *Economic*
7 *Impact Analysis of the Grain Belt Express Transmission Project on the State of Missouri*, is
8 attached as Schedule DL-2. Schedule DL-2 was prepared either by me or under my direct
9 supervision and I am personally familiar with the contents.

10 **Q. Have you previously provided testimony before the Missouri Public Service**
11 **Commission?**

12 A. Yes. I previously provided testimony to the Commission on behalf of Grain Belt
13 Express Clean Line LLC in Case No. EA-2014-0207. I testified to the economic impacts that
14 would come to the State of Missouri as a result of the construction and operation of the original
15 Project. I have also provided testimony to the Commission on behalf of NextEra Energy
16 Transmission Southwest, LLC in the pending Case No. EA-2022-0234.

17 **Q. Are you sponsoring any schedules or exhibits as part of your direct testimony?**

18 A. Yes, I am sponsoring the following exhibits/schedules:

- 19 • Schedule DL-1 – My curriculum vitae
- 20 • Schedule DL-2 – *Economic Impact Analysis of the Grain Belt Express*
21 *Transmission Project on the State of Missouri*

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II. SUMMARY OF RESULTS OF STUDY

Q. What are the economic impacts of the Project that your study estimated?

A. The study estimates the economic impacts and benefits of the Project on the State of Missouri. Specifically, the report estimates the direct, indirect and induced impacts on job creation, wages and total economic output of the Project in Missouri. In addition, it estimates anticipated revenue to governmental entities from Project activities.

Q. What type of methodology does the study utilize?

A. The economic impact of the construction and operation of the Project was estimated in the study using the IMPLAN model. The study area inputs used for the report were the ten counties in Missouri that will be traversed by the Project. The IMPLAN data for Missouri and for each county is the 2020 data (the latest data available). The IMPLAN model is designed to estimate the total impacts of an increase in spending on a particular industry. IMPLAN is an on-line program that allows for customized construction of regional impact-output models for areas ranging in size from a single zip code to the entire United States. The model can account for direct, indirect and induced effects of increased economic activity. Direct effects are those production changes associated with immediate effects of final demand changes, such as spending on structures used to support a transmission line. Indirect effects are production changes in backward-linked industries caused by the changing input needs of the directly affected industry, such as steel purchasing to be used for supporting structures. Finally, induced effects are changes in regional spending patterns caused by changes in income generated from direct and indirect effects, such as household spending on housing, groceries and entertainment that results from the increased income.

1 **Q. Utilizing the IMPLAN model, what type of analysis was generated regarding**
2 **the economic impact of the Project?**

3 A. The study analysis focuses on the impacts of direct spending on labor, materials
4 and services, increased supply chain manufacturing of Project components, and household
5 spending from increased income. All jobs in the analysis are reported on a full-time equivalent or
6 FTE basis. Full-time equivalents are assumed to work 2,080 hours per year. Earnings include
7 wages, salary and benefits. In addition, the study analyzes economic output produced by the
8 Project. Economic output is the value of goods and services produced in a given area. Gross
9 Domestic Product is the economic output for the total United States. All of these impacts are
10 measured on a state-wide basis for Missouri and for the individual counties along the path of the
11 Project.

12 **Q. How did the study measure the economic impact to Missouri of Project**
13 **construction?**

14 A. First, cost estimates were provided by Grain Belt Express for construction costs by
15 budget category and the geographic location where costs would be incurred. Next, budget
16 categories were translated into IMPLAN sectors. Construction spending was assumed to be spread
17 evenly over the anticipated three-year construction period. The total Project (including both
18 Phases I and II) construction costs over all the states is \$5.7 billion as shown in Table 4.1 of the
19 study. Of this amount, \$272,343,897 is anticipated to be spent in Missouri annually for three years
20 across the sectors listed in Table 4.2 of the study. These construction costs represent a very
21 conservative estimate of the Project's true spending in Missouri and therefore the computed
22 economic impact is a conservative estimate of its true value.

1 **Q. Did the study calculate any results outside of IMPLAN?**

2 A. Yes. The study used a method known as Analysis By Parts or ABP. Under this
3 method, direct jobs, earnings and output are calculated outside of IMPLAN. However, to complete
4 the analysis, the direct labor income and household spending (by income level within the state)
5 figures are then entered into IMPLAN to show the induced impacts that would result from these
6 expenditures. Inputs at the county level were allocated according to the line-mileage in that
7 county. Most importantly for purposes of this hybrid analysis, the converter stations located at
8 various points along the transmission line are assumed to be sourced internationally but the labor
9 to install them would be sourced locally.

10 **Q. Did you also study the ongoing annual expenditures of Grain Belt Express in**
11 **Missouri?**

12 A. Yes, Grain Belt Express also provided annual operations costs to be spent in
13 Missouri. These costs are show in Table 4.3 in the study and the estimated applicable annual
14 spending in Missouri is \$13,026,804.

15 **Q. What does the study estimate will be the employment impacts of the**
16 **construction and operation of the Project in Missouri?**

17 A. Using these cost estimates supplied by Grain Belt Express and the assumptions in
18 Tables 4.2 and 4.3 of the study, the modeled economic impact of the Project is represented in
19 Tables 5.1 to 5.6 of the study. These tables report the employment, earning and output results at
20 the county level during both construction and operations. Note, these results only account for the
21 effect of Project spending within the county and do not add-up to the entire statewide total
22 economic impact. As previously noted, the job figures are reported using FTEs. The construction
23 job figures are significant, totaling 247 for Audrain County, 318 for Buchanan County, 243 for

1 Caldwell County, 66 for Callaway County, 303 for Carroll County, 362 for Chariton County, 226
2 for Clinton County, 804 for Monroe County, 356 for Ralls County, and 284 for Randolph County.
3 The statewide construction job figure for Missouri is estimated at 5,747. In addition to the jobs
4 during construction, the Project will also support permanent positions. The long-term jobs
5 supported are estimated to be 10.6 for Audrain County, 3.8 for Buchanan County, 1.9 for Caldwell
6 County, .3 for Callaway County, 3.2 for Carroll County, 4.1 for Chariton County, 1.4 for Clinton
7 County, 16.2 for Monroe County, 2.0 for Ralls County, and 2.6 for Randolph County. The total
8 long-term Project related job figure for Missouri is 104.4.

9 **Q. What are the earnings associated with these jobs?**

10 A. The earnings impacts are shown in Tables 5.3 and 5.4 of the study. The total
11 earning impact from the Project for Missouri is \$586,118,331 for construction and \$8,113,077 for
12 operations. The State will also benefit from increased income tax generation from wages paid
13 during construction in Missouri and during the operation phase of the Project.

14 **Q. How does the study measure the economic output resulting from the Project?**

15 A. Tables 5.5 and 5.6 to the study show the output impacts of the Project during both
16 construction and operation. These figures are broken-down on both a county and statewide basis.

17 III. CONCLUSION

18 **Q. Does this conclude your testimony?**

19 A. Yes, it does.
20

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

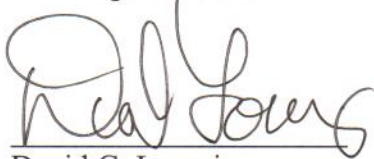
In the Matter of the Application of Grain Belt)	
Express LLC for an Amendment to its Certificate)	
of Convenience and Necessity Authorizing it to)	
Construct, Own, Operate, Control, Manage, and)	File No. EA-2023-0017
Maintain a High Voltage, Direct Current)	
Transmission Line and Associated Converter)	
Station)	

AFFIDAVIT OF DAVID G. LOOMIS

1. My name is David G. Loomis. I am President of Strategic Economic Research, LLC, Professor of Economics at Illinois State University, Co-Founder 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.

2. I have read the above and foregoing Direct Testimony and the statements contained therein are true and correct to the best of my information, knowledge, and belief.

3. Under penalty of perjury, I declare that the foregoing is true and correct to the best of my knowledge and belief.



David G. Loomis
President
Strategic Economic Research, LLC

Date: 8/22/22