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MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EA-2014-0207

Rebuttal Testimony of

Jeffrey M. Gray, Ph.D.

On behalf of

Missouri Landowners Alliance

September 15, 2014

Exhibit No. <u>301</u> Date 11/13/19 Reporter MG File No. GA - 2019-0707

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I. INTRODUCTION

2 Q. Please state your name and business address.

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A. My name is Jeffrey M. Gray. My business address is P.O. Box 620323,
Middleton, WI 53562-0323.

5 Q. Please describe your educational background and experience.

А, I earned a Bachelor of Science degree in Industrial Engineering from Texas A&M 6 7 University, and Master of Business Administration, Juris Doctor, and Doctor of Philosophy degrees from University at Buffalo, The State University of New 8 York. 9 My 2004 doctoral dissertation examined regulatory reform and 10 restructuring of the U.S. electricity industry, with an emphasis on regional transmission organizations ("RTO"), and my post-doctoral experience includes 11 positions at the Manatt, Phelps & Phillips, LLP law firm in Washington, D.C. and 12 Alliant Energy Corporation in Madison, WI. Since 2010 I have maintained a 13 legal and consulting practice with a focus on regulatory law and economics within 14 15 the energy and utilities industries.

16 Q. In what capacity are you offering your testimony?

17 A. I am testifying in my capacity as a non-legal expert.

18 Q. On whose behalf are you testifying?

A. I am testifying on behalf of Missouri Landowners Alliance ("MLA"). MLA is a
Missouri not-for-profit corporation composed primarily of members who own
land in the area of the proposed Missouri route for the Grain Belt Express Clean
Line LLC ("GBE") transmission project (the "Project").

23 Q. What position has MLA taken towards the Project?

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- 1 A. MLA has stated its opposition to the Project.
- 2 Q. Have you previously testified before any federal or state regulatory
 3 commission?
- 4 A. Yes, I testified before the Illinois Commerce Commission regarding the Rock
 5 Island Clean Line LLC transmission project.
- 6 Q. What is the subject matter of your rebuttal testimony?

A. Generally, I address GBE's assertions that GBE and the Project qualify for a
certificate of convenience and necessity ("CCN") in Missouri. Specifically, I
address aspects of the direct testimony of GBE witnesses David Berry, Michael P.
Skelly, Anthony Wayne Galli, Gary Moland, David G. Loomis, and Robert M.
Zavadil.

- 12 Q. What materials did you review and rely upon in preparing your testimony?
- 13 Α. Those materials include the GBE application and other materials filed with the Commission on March 26, 2014, including the direct testimony and schedules of 14 GBE witnesses Berry, Skelly, Galli, Moland, Loomis, and Zavadil. Other 15 materials include the additional direct testimony of GBE witnesses Berry and 16 Galli filed with the Commission on June 27, 2014, various data requests and 17 responses produced thus far in this proceeding, and outside resources as 18 referenced herein. 19
- 20 Q. How is your testimony organized?

A. Following this introductory section, my testimony is organized into five
 additional sections that address the five criteria that Mr. Berry identified as
 relevant to the question of whether the Project qualifies for a Missouri CCN.
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Those five criteria are (1) there must be a need for the proposed service; (2) the proposed service must promote the public interest; (3) the applicant's proposal must be economically feasible; (4) the applicant must have the financial ability to provide the proposed service; and (5) the applicant must be qualified to provide the proposed service (Berry Direct Testimony, p. 2, lines 21-23 and p. 3, lines 1-2).

- П. <u>NEED</u>
- 8 Q. Is the Project needed?

Mr. Berry states there is a "demonstrated need" for the Project (Berry Direct 9 Α. 10 Testimony, p. 3, line 6), but I disagree, for three main reasons. First, the Project 11 has not been demonstrated as needed through a comprehensive RTO regional planning process, or the type of integrated resource plan required of Missouri 12 13 investor-owned utilities. Second, the Project is not needed for electric-system reliability in Missouri. Third, there is little reason to believe that Missouri's 14 15 future renewable energy requirements will be unmet without the Project. GBE attempts to demonstrate need through speculation and aspiration, which I believe 16 17 is insufficient, especially when the property rights of Missourians may be impacted. 18

Q. Please explain how transmission projects are vetted and need is determined
 in RTO regional planning processes.

A. The relevant RTOs in this instance are Southwest Power Pool, Inc. ("SPP"),
 Midcontinent Independent System Operator, Inc. ("MISO"), and PJM
 Interconnection, L.L.C. ("PJM"). The need for transmission expansion within the
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multi-state footprint of SPP, which includes a portion of Missouri, is established 1 through the SPP Transmission Expansion Plan ("STEP") process and related 2 processes. The need for transmission expansion within the multi-state footprint of 3 MISO, which also includes a portion of Missouri, is established through the 4 MISO Transmission Expansion Plan ("MTEP") process. 5 The need for 6 transmission expansion within the multi-state footprint of PJM, which does not include any portion of Missouri, is established through the PJM Regional 7 Transmission Expansion Plan ("RTEP") process. 8

- 9 Q. What is SPP, and what is the STEP process?
- 10 A. SPP is an RTO subject to the jurisdiction of the Federal Energy Regulatory 11 Commission ("FERC"). It is a not-for-profit, member-based organization that 12 administers wholesale electricity markets and coordinates transmission planning 13 within a multi-state region that includes a portion of Missouri. The STEP process 14 uses SPP's Integrated Transmission Plan ("ITP") to identify system needs. The 15 ITP is a three-year iterative study process that includes 20-year, 10-year, and 16 near-term assessments.

Q. Can you provide examples of recent high-voltage transmission projects that
the SPP regional planning process identified as needed, at least in part, to
facilitate the development of wind energy?

A. Yes, in 2010 the SPP Board of Directors approved a portfolio of five high-voltage
 transmission projects, designated as Priority Projects, identified as needed to
 facilitate the development of wind energy.

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- Q. Has GBE's Project been identified as needed through SPP's regional planning process?
- 3 A. No.

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- 4 Q. If constructed, how would the Project integrate with the SPP transmission 5 system?
- Α. The Project would have a single interconnection with the SPP system, in western 6 7 Kansas, for the limited purpose of facilitating the alternating current ("AC") to direct current ("DC") conversion process at the western converter station (Galli 8 9 Direct Testimony, p. 4, lines 5-8). The Project would have minimal power 10 exchange with the SPP system, and GBE would have no SPP injection rights (see GBE response to Staff data request no. 5). In substance, the Project would 11 function as an unusually long generator lead line connecting Kansas wind 12 generators with the MISO and PJM systems. A generator lead line is a non-13 network radial line that moves power in one direction, from a generator to the AC 14 transmission grid, and is only as useful as the generator(s) connected to it. 15

16 Q. What is MISO, and what is the MTEP process?

MISO is an RTO subject to the jurisdiction of the FERC. It is a not-for-profit, 17 A. member-based organization that administers wholesale electricity markets and 18 coordinates transmission planning within a multi-state region that includes a 19 portion of Missouri, including Ralls County where GBE proposes to construct a 20 converter station. MISO engages with a broad collection of stakeholders through 21 22 a comprehensive annual MTEP process to identify needed transmission projects for approval by the MISO Board of Directors and subsequent construction. The 23 5 MLA Ex. Case No. EA-2014-0207

1 purpose of the MTEP is to (1) ensure the reliability of the transmission system over the planning horizon, (2) provide economic benefits such as increased 2 market efficiency, (3) facilitate public policy objectives, such as meeting state 3 Renewable Portfolio Standards ("RPS"), and (4) address other issues or goals 4 identified through the stakeholder process. MTEP Appendices A, B, and C 5 indicate the status of a given project in the MTEP process. A project starts in 6 7 Appendix C when submitted into the process, transfers to Appendix B when MISO has documented the project's need and effectiveness, and moves to 8 9 Appendix A after approval by the MISO Board of Directors.

10 Q. How does the MISO regional planning process identify high-voltage
 11 transmission needs?

A. MISO's regional planning process evaluates and identifies high-voltage
 transmission projects that will provide value in excess of cost under a variety of
 future policy and economic conditions. Those projects are designated as Multi
 Value Projects ("MVP"). MVP portfolios provide public policy, economic, and
 reliability benefits spread broadly across the regional MISO footprint.

Q. Can you provide examples of recent high-voltage transmission projects that
the MISO regional planning process identified as needed, at least in part, to
facilitate the development of wind energy?

A. Yes, the MISO Board of Directors approved a portfolio of 17 MVPs in the 2011
MTEP, identified as needed to facilitate the development of wind energy.

Q. Has GBE's Project been identified as needed through MISO's regional
 planning process?

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1 A. No.

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2	Q.	Can a merchant transmission developer submit a proposed merchant project
3		into the MTEP process for evaluation?
4	A.	My understanding is that a merchant transmission developer is not precluded from
5		submitting a proposed merchant project into the MTEP process for evaluation
6		alongside other proposed transmission projects. As with those other proposed
7		transmission projects, MISO would evaluate the proposed merchant project's
8		need and effectiveness. The proposed merchant project would not be subject to
9		cost allocation analysis or review by the MISO Board of Directors.
10	Q.	Did GBE submit the Project into the MTEP process for evaluation of need
11		and effectiveness?
12	А.	No.
13	Q.	If constructed, how would the Project integrate with the MISO transmission
14		system?
15	А.	As mentioned above, the Project would function as a generator lead line for
16		Kansas wind generators. As a non-network radial line, the Project would not be
17		an integrated component of the SPP or MISO transmission networks, and would
18		not provide the range of benefits provided by SPP and MISO network expansion,
19		integration, and interregional coordination. Effectively, MISO would treat the
20		Project as if it were a generating facility located in Ralls County. However,
21		unlike a generating facility located in Ralls County, the Project would require a
22		206-mile transmission corridor across the state of Missouri, of 150 to 200 feet in

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- width, containing between 824 and 1442 tower structures (see Galli responses to MLA data requests nos. 3 and 16).
- 3 Q. What is PJM, and what is the RTEP process?

4 Α. PJM is an RTO subject to the jurisdiction of the FERC. It administers wholesale 5 electricity markets and coordinates transmission planning in all or parts of 6 Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and the 7 8 District of Columbia. The RTEP process identifies transmission expansion needs based on the aggregate effects of system trends including long-term growth in 9 10 electricity use, generating plant retirements, broader generation development patterns (including the evolution of renewable resources), demand side response, 11 12 and energy efficiency programs.

Q. Has GBE's Project been identified as needed through PJM's regional planning process?

15 A. No.

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- Q. If constructed, how would the Project integrate with the PJM transmission
 system?
- A. Effectively, PJM would treat the Project as if it were a generating facility located
 in Indiana. However, unlike a generating facility located in Indiana, the Project
 would require a 206-mile transmission corridor across the state of Missouri, of
 150 to 200 feet in width, containing between 824 and 1442 tower structures (*see*Galli responses to MLA data requests nos. 3 and 16).

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1	Q.	A common theme in the three regional planning processes discussed above is
2		ensuring the reliability of the electric grid. Is the Project needed to resolve
3		reliability issues in Missouri or elsewhere?
4	А.	No. As Dr. Galli states (Galli Direct Testimony, p. 8, lines 20-21): "the [Project]
5		is not intended to prevent the bulk power system from falling below some
6		predetermined, minimum level of reliability" See also Galli responses to
7		MLA data requests nos. 4 and 5.
. 8	Q.	If the Project is not needed for reliability reasons, what is the significance of
9		the study performed by GBE witness Zavadil?
10	Α.	Mr. Zavadil's study has little practical significance. He performs a loss of load
11		expectation ("LOLE") analysis based on power injection into the transmission
12		system at an unidentified point in Missouri, presumably in Ralls County. The
13		study is equivalent to examining the LOLE impact of a new MISO-interconnected
14		generating facility located in Ralls County. Additional generating capacity, all
15		else equal, will always increase reserve margin and decrease LOLE. However, an
16		increase in reserve margin and decrease in LOLE are only meaningful when
17		resource adequacy is potentially unmet and reliability is at risk, which is not the
18		case here.
19	Q.	Please comment on Mr. Zavadil's study methodology.
20	А.	Mr. Zavadil's study methodology of "tak[ing] a view of Missouri as an electric
21		island and gaug[ing] the impact of the [Project's] wind injection on the adequacy

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Schedule RMZ-2, p. 2, paragraph 3) ignores the fact that the transmission grid in

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of the supply portfolio for Missouri electric loads" (Zavadil Direct Testimony,

MLA Ex. ____

Ralls County is an integral part of MISO's regional bulk power grid. Viewing Missouri as an electric island, rather than as part of the regional power grid, is inaccurate.

4 5 Q.

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How does Mr. Zavadil's analysis compare with the annual reliability analyses performed by MISO as part of the MTEP process?

A. Mr. Zavadil's analysis has little to do with the fact that the Project would be a DC
transmission line as opposed to a generating facility located in Ralls County. His
analysis merely acknowledges the axiom that an increase in generating capacity
margin will reduce LOLE. In contrast, when MISO evaluates the reliability costs
and benefits of AC transmission expansion, they analyze not just long-term
resource adequacy, but also steady state, voltage stability, dynamic stability,
generator deliverability, and long-term transmission rights feasibility.

Q. Is the Project needed to integrate the SPP, MISO, and PJM transmission
 networks?

15 A, No. Mr. Berry suggests the Project would promote interregional integration (see 16 Berry Direct Testimony, p. 4, lines 23-27 and p. 36, lines 3-10), but his suggestion lacks foundation. SPP and MISO are actively engaged in interregional 17 coordination and planning, without regard to the Project. Similarly, MISO and 18 PJM are actively engaged in interregional coordination and planning, without 19 20 regard to the Project. Moreover, a non-network DC transmission line would not help to further integrate the three regional AC networks in any meaningful sense. 21 Further integration will be accomplished at AC interconnection and transfer 22 23 points, where the regional AC networks intersect.

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Q.

Does Missouri need the Project to meet its renewable energy objectives?

A. No. Mr. Berry states the Project "is necessary to meet the requirements of the
Missouri Renewable Energy Standard ("RES")" (Berry Direct Testimony, page 3,
lines 17-18), but my understanding is that the Missouri investor-owned utilities
have already addressed their plans to meet the RES requirements, as indicated by
annual compliance reports and plans filed with the Commission.

7 Q. Do Kansas wind generators need the Project?

Α. Mr. Berry argues that future, unidentified wind generators in western Kansas 8 9 "have a clear and substantial need" for the Project, ostensibly because of expected deficiencies in RTO regional expansion planning and interregional coordination 10 causing "constraints of the existing grid" (Berry Direct Testimony, page 3, lines 11 12 21-23 and page 4, lines 1-3). If true, such need will become evident only if and 13 when Kansas wind developers enter into contracts that involve using the Project. Until then, future need for the Project by Kansas wind generators is speculative. 14 In any event, "need" in this public service proceeding, as I understand it, is the 15 need of the Missouri public for the utility service that the Project would provide, 16 not the need of Kansas wind generators. 17

III. Public Interest

19 Q. Do you believe the Project would promote the Missouri public interest?

A. On balance, no. Mr. Berry provides a list of purported public interest benefits
 (Berry Direct Testimony, page 4, lines 6-34). Depending on how the Commission
 views the public interest, some of those purported benefits may be valid.

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However, as a whole, GBE's public interest claims are unpersuasive, especially when the property rights of Missourians are at risk.

3 Q. Please comment on Dr. Loomis's economic input-output analysis.

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4 A. I believe Dr. Loomis's economic input-output analysis lacks relevance in this 5 public service proceeding. In this proceeding, the public interest inquiry, as I 6 understand it, is whether the utility service to be provided by the proposed Project 7 would promote the Missouri public interest, not whether procurement and construction activities potentially associated with the Project would have regional 8 9 economic impacts. I recognize the applicability of an economic input-output 10 analysis in certain circumstances, including when seeking local tax exemptions or 11 other government incentives, but not in this context.

12 Q. Please comment on Dr. Loomis's methodology.

The Jobs and Economic Development Impact ("JEDI") model of the U.S. A. 13 Department of Energy's National Renewable Energy Laboratory ("NREL"), as 14 used by Dr. Loomis, is a screening tool for wind projects, not a forecasting tool, 15 and has limitations.¹ Those limitations include (1) JEDI is a static model and 16 cannot account for future changes in wind power plant costs, industry 17 18 characteristics and sectors, or the regulatory and policy environments; (2) analyses are specific to wind power plants and therefore represent a gross 19 analysis that does not reflect net impacts associated with alternative uses of the 20 expenditures, displacement of other energy sources, or displacement of other 21

¹ NREL describes the limitations of its JEDI model at the following link: <u>http://www.nrel.gov/analysis/jedi/limitations.html</u> (last visited September 12, 2014).

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types of economic activity; (3) analyses assume that plant output produces sufficient revenues to accommodate equity and debt repayment and annual operating expenditures; (4) JEDI does not calculate "net jobs" or otherwise reflect the opportunity cost of alternative uses of investment; and (5) like any inputoutput model, the quality of the outputs is only as good as the quality of the inputs, including assumptions. A basic limitation of Dr. Loomis's analysis is the unsupported assumption that, without the Project, approximately 4,000 fewer megawatts ("MW") of wind generation will be developed (Loomis Direct Testimony, p. 2, lines 18-19).

10 Q. Please comment on Mr. Moland's analysis.

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A. Because wind has near-zero marginal cost, the injection of wind energy at a 11 MISO bus, assuming the wind energy is bid into the market as a price taker, 12 would be expected to place downward pressure on locational marginal prices 13 ("LMP") at relevant commercial pricing nodes. Mr. Moland uses PROMOD 14 simulations to try to quantify those potential LMP reductions under several future 15 scenarios. I have no major criticisms of his analysis, although there is always 16 17 room to quibble over assumptions and inputs. Mr. Moland's assumptions and inputs include (1) the use of a hypothetical hourly energy profile for potential 18 Kansas wind generators, as provided by Mr. Berry (Moland Direct Testimony, p. 19 4, lines 20-24); (2) the unsupported assumption that, without the Project, 20 approximately 4,000 fewer MWs of wind generation will be developed (Moland 21 Direct Testimony, p. 5, lines 1-8); and (3) the questionable assumption that the 22 cancelled Potomac Appalachian Transmission Highline ("PATH") transmission 23 13 MLA Ex. Case No. EA-2014-0207

1		project would be renewed in the "robust economy" and "green economy"
2		scenarios (Moland Direct Testimony, p. 7, lines 15-18 and p. 8, lines 7-10).
3	Q.	What other comments do you have regarding Mr. Moland's analysis?
4	A.	Despite reservations about assumptions and inputs, I agree with the basic premise
5		of Mr. Moland's analysis regarding the injection of wind energy at a MISO bus in
6		Missouri, which is that adding near-zero marginal cost wind energy (whatever the
7		source) to the supply stack would be expected to place downward pressure on
8		LMPs. I also acknowledge that a permanent displacement of fossil-fueled
9		generation would be expected to reduce emissions, whether achieved through
10		terrestrial wind energy, off-shore wind energy (e.g., in the Great Lakes or along
11		the Atlantic Seaboard), distributed solar energy, energy efficiency, demand
12		response, or other means.
12		response, or other means.
13	Q.	Please comment on GBE's hypothetical hourly energy profile for potential
	Q.	
13	Q. A.	Please comment on GBE's hypothetical hourly energy profile for potential
13 14		Please comment on GBE's hypothetical hourly energy profile for potential Kansas wind generators.
13 14 15		Please comment on GBE's hypothetical hourly energy profile for potential Kansas wind generators. Mr. Moland provided a copy of GBE's hourly energy profile in the form of a
13 14 15 16		Please comment on GBE's hypothetical hourly energy profile for potential Kansas wind generators. Mr. Moland provided a copy of GBE's hourly energy profile in the form of a spreadsheet with columns for month, day, hour, and "Grain Belt Wind Energy
13 14 15 16 17		Please comment on GBE's hypothetical hourly energy profile for potential Kansas wind generators. Mr. Moland provided a copy of GBE's hourly energy profile in the form of a spreadsheet with columns for month, day, hour, and "Grain Belt Wind Energy (MW)" (see Moland response to MLA data request no. 1). GBE derived the
13 14 15 16 17 18		Please comment on GBE's hypothetical hourly energy profile for potential Kansas wind generators. Mr. Moland provided a copy of GBE's hourly energy profile in the form of a spreadsheet with columns for month, day, hour, and "Grain Belt Wind Energy (MW)" (see Moland response to MLA data request no. 1). GBE derived the hypothetical energy profile using, I believe, data from NREL's Eastern Wind
13 14 15 16 17 18 19		Please comment on GBE's hypothetical hourly energy profile for potential Kansas wind generators. Mr. Moland provided a copy of GBE's hourly energy profile in the form of a spreadsheet with columns for month, day, hour, and "Grain Belt Wind Energy (MW)" (see Moland response to MLA data request no. 1). GBE derived the hypothetical energy profile using, I believe, data from NREL's Eastern Wind Integration and Transmission Study ("EWITS"), which is based on numerical
13 14 15 16 17 18 19 20		Please comment on GBE's hypothetical hourly energy profile for potential Kansas wind generators. Mr. Moland provided a copy of GBE's hourly energy profile in the form of a spreadsheet with columns for month, day, hour, and "Grain Belt Wind Energy (MW)" (see Moland response to MLA data request no. 1). GBE derived the hypothetical energy profile using, I believe, data from NREL's Eastern Wind Integration and Transmission Study ("EWITS"), which is based on numerical weather simulations from AWS Truepower, LLC and the National Weather
13 14 15 16 17 18 19 20 21		Please comment on GBE's hypothetical hourly energy profile for potential Kansas wind generators. Mr. Moland provided a copy of GBE's hourly energy profile in the form of a spreadsheet with columns for month, day, hour, and "Grain Belt Wind Energy (MW)" (see Moland response to MLA data request no. 1). GBE derived the hypothetical energy profile using, I believe, data from NREL's Eastern Wind Integration and Transmission Study ("EWITS"), which is based on numerical weather simulations from AWS Truepower, LLC and the National Weather Service (see Zavadil Direct Testimony, p. 7, lines 9-13 and Schedule RMZ-2, p.

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Q. How do GBE's assumptions about potential Kansas wind generators factor into the public interest inquiry?

3 А. We have no way of knowing if those potential Kansas wind generators, and the 4 hypothetical hourly energy profile given to Messrs. Zavadil and Moland, are 5 sufficiently representative of actual Project subscribers, if and when subscribers 6 materialize. Moreover, under a FERC-jurisdictional Open Access Transmission Tariff ("OATT"), GBE cannot restrict Project access to wind generators. If 7 8 natural-gas generation or other fossil-fueled generation were to connect to the Project, GBE's public interest claims about the Project's green characteristics 9 would be overstated. 10

11 Q. What are the risks to the Missouri public of Project failure or abandonment?

The Project is proposed as a high-voltage DC transmission line that would 12 Α. traverse Missouri from west to east. Energy would flow over the line from the 13 western terminus in Kansas to the eastern terminus in Indiana, with an off ramp in 14 15 Ralls County. A converter station in Ralls County would convert the energy from DC to AC for injection into the MISO system. No other interconnection points 16 would exist along the line. In effect, the Project would function as a generator 17 18 lead line, which is only as useful as the generator connected to it. In the event of Project failure or abandonment, due to loss of wind generator subscribers or 19 otherwise, the Project would serve no useful purpose, but the land-use impacts 20 would remain. 21

Q. How does GBE plan to protect Missouri landowners in the event of Project failure or abandonment?

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MLA Ex. ____

A. 1 GBE did not discuss a decommissioning plan in its application or direct 2 testimony, but I believe GBE has suggested that the future scrap value of towers 3 and lines would be sufficient to cover the costs of removal and land restoration. 4 Compared to how developers of merchant energy projects commonly protect 5 landowners, the suggestion lacks substance. For example, merchant wind 6 developers frequently have decommissioning plans that include an escrow fund or other form of financial security to cover the costs of wind turbine removal and 7 8 land restoration. Because the Project is proposed as a dedicated merchant transmission line for merchant wind generators, it would be reasonable for GBE 9 10 to have a similar decommissioning plan that includes an escrow fund or other form of financial security to cover the costs of tower and line removal and land 11 restoration. 12

13 Q. Do you believe an escrow fund or other form of financial security is 14 unnecessary in this instance, because landowners can rely on scrap values? 15 Α. No. With GBE or the then-owner in bankruptcy, and creditors picking over the assets, it is unclear how landowners would be able to secure the scrap values of 16 the towers and lines for purposes of land restoration. Further, landowners cannot 17 18 be assured that future scrap values will be sufficient to cover costs. The purpose of an escrow fund or other form of financial security is to give landowners 19 reasonable assurances that their land will be returned to its original condition 20 when a project is no longer used and useful. Speculations about future scrap 21 values provide no assurances. Moreover, because this would be a merchant 22 project, landowners cannot rely on the traditional regulatory compact between a 23 MLA Ex. Case No. EA-2014-0207 16

1		Missouri investor-owned utility and the Commission, under which the investor-			
2		owned utility removes facilities when they are no longer used and useful.			
3		IV. <u>Economic Feasibility</u>			
4	Q.	Is GBE's Project economically feasible?			
5	Α,	Presently, no. Economic feasibility is dependent on GBE entering into profitable			
6		contracts with transmission customers, and those contracts and customers do not			
7		exist (see GBE response to Staff data request no. 82).			
8	Q.	Do GBE's aspirations about attracting customers demonstrate economic			
9		feasibility?			
10	Α.	In my opinion, no. Mr. Berry states "the Project can attract the necessary			
11		transmission customers" (Berry Direct Testimony, p. 5, line 8). However, the			
12		task of attracting customers and negotiating profitable contracts in sufficient			
13		numbers to achieve economic feasibility is subject to substantial uncertainty. This			
14		uncertainty is demonstrated by the fact that GBE must sell a majority of the			
15		Project's capacity before GBE can secure construction financing (Berry Direct			
16		Testimony, p. 48, lines 3-5).			
17		V. <u>Financial Ability</u>			
18	Q.	Does GBE have the financial ability to construct and operate the Project?			
19	А.	No. GBE claims it eventually will have access to the necessary equity and debt			
20		capital (Berry Direct Testimony, p. 42, lines 3-13), but those claims are			
21		aspirational.			
22	Q.	Is GBE's project finance model appropriate for the Project?			

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Α. At present, I believe that is unknowable. Mr. Berry discusses other shipper-pays 1 2 merchant transmission projects (Berry Direct Testimony, p. 43, lines 14-19), but lenders could easily differentiate those projects from GBE's Project. 3 For example, the Neptune underwater project between New Jersey and Long Island 4 5 materially differs from the Project in at least four ways. First, Neptune was designed to link a known AC network source in New Jersey with a known AC 6 7 network sink on Long Island. It was not designed to act as a generator lead line for unknown wind generators. Second, the reliability justifications for the 8 9 Neptune line were strong, not only because of resource adequacy concerns on 10 Long Island, but also because of Long Island's unique geography and the challenges of importing electricity from the New York City metro area. Third, 11 the primary customer was known: Long Island Power Authority. Fourth, the 12 Neptune line could avoid land-use impacts by locating underwater. The Hudson 13 underwater project shares similar traits with Neptune. First, it was designed to 14 link a known AC network source in New Jersey with a known AC network sink in 15 Second, Manhattan's unique geography and density presented Manhattan. 16 obstacles to achieving resource adequacy through new generating capacity or AC 17 transmission expansion. Third, the primary customer was known: New York 18 Power Authority. Fourth, the Hudson line could avoid land-use impacts by 19 locating underwater. 20

21 22 Q.

Please comment on the other projects referenced by Mr. Berry when discussing shipper-pays merchant transmission projects.

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1	А.	The Wyoming Colorado Intertie has not secured project financing, to my
2		knowledge, so I am unsure why Mr. Berry mentions it here (Berry Direct
3		Testimony, p. 43, lines 17-18). I also am unsure why Mr. Berry mentions the
4		Competitive Renewable Energy Zone ("CREZ") projects (Berry Direct
5	·	Testimony, p. 43, lines 18-19), because those projects are not shipper-pays
6		merchant transmission projects. Texas operates an independent transmission grid
7	·	that is not subject to FERC jurisdiction, and the CREZ projects are a product of
8		state legislative action. Those CREZ projects are low-risk propositions for project
9		lenders because of strong government sponsorship, an application and selection
10		process conducted by the Texas Public Utility Commission, and regulated rate
и.		recovery.
12		VI. <u>Qualifications</u>
13	Q.	Is GBE qualified to provide the proposed service?
14	Α.	No. Neither GBE nor GBE's parent, Clean Line Energy Partners LLC ("Clean
15		Line") has ever constructed or operated a transmission line.
16	Q.	Do you believe GBE can become qualified to provide the proposed service?
17	A.	That depends, I believe, on the scope of future day-to-day involvement by Clean
18		Line's equity investor, National Grid USA ("National Grid"). Mr. Berry states
18		Line's equity investor, National Grid USA ("National Grid"). Mr. Berry states "National Grid and its subsidiaries are experienced in constructing and operating
19		"National Grid and its subsidiaries are experienced in constructing and operating
19 20		"National Grid and its subsidiaries are experienced in constructing and operating electric transmission facilities" and "Clean Line can draw on this experience
19 20 21		"National Grid and its subsidiaries are experienced in constructing and operating electric transmission facilities" and "Clean Line can draw on this experience when necessary in connection with the planning, construction, and operation of

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management team of our investor, National Grid" (Skelly Direct Testimony, p. 13, lines 18-23 and p. 14, lines 1-7). However, National Grid is not the applicant, and whether GBE can become qualified to provide the proposed service depends on the extent to which GBE will be able to "draw on" National Grid's qualifications.

6 Q. Does this conclude your rebuttal testimony?

7 A. Yes, it does.

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Case No. EA-2014-0207

MLA Ex. ____

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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-Montgomery 345 kV Transmission Line

Case No. EA-2014-0207

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AFFIDAVIT OF JEFFREY M. GRAY

STATE OF WISCONSIN)) SS
COUNTY OF DANE)

Jeffrey M. Gray, being first duly sworn on his oath states:

1. My name is Jeffrey M. Gray, Ph.D.

2. Attached hereto and made a part hereof for all purposes is my Rebuttal Testimony on behalf of Missouri Landowners Alliance consisting of 22 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 my 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.

Jeffrey M.

Subscribed and sworn before me this day of

NUM R. Mdsen Notary Public exp 11.22-15 State of WI Dane County