

**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, control, Manage, Operate and )  
Maintain a High Voltage, Direct Current )  
Transmission Line and an Associated Converter )  
Station Providing an Interconnection on the )  
Maywood 345 kV Transmission Line )

Case No. EA-2014-0207

**Reply Brief of Wind On The Wires and The Wind Coalition**

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DATED: December 22, 2014

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Wind on the Wires and The Wind Coalition (jointly referred to as “Clean Energy Intervenors” or “CEI”), by and through its attorney, pursuant to Section 240-2.140 of the Commission’s Rule of Practice (4 CSR 240-2.140) and upon the schedule agreed upon by the parties, respectfully submits its’ Reply Brief in the above captioned matter.

Clean Energy Intervenors’ brief responds to arguments from Missouri Landowner’s Association (“MLA”) and Show-Me Concerned Landowners (“SMCL”).

## I. REPLY

### 1. Grain Belt Clean Line and CEI have Demonstrated the Need for the Grain Belt Express Transmission Line

Both MLA and SMCL assert that Grain Belt Express Clean Line LLC (“GBE”) has not met its’ burden to show there is sufficient need for the Grain Belt Express transmission line (“GBE Project” or “Project”) in Missouri.<sup>1</sup> They are incorrect. GBE has met the *Tartan*<sup>2</sup> test.

First, MLA’s brief misstates the burden of proof that applies in this case. On page 27 of its Initial Brief, MLA claims that the evidence supplied by Grain Belt “fails to meet [its] burden of providing by clear and convincing evidence that the citizens of Missouri

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<sup>1</sup> Initial Post-Hearing Brief of the Show-Me Concerned Landowners (“SMCL IB”) at 5-38 (Dec. 8, 2014); Initial Post-Hearing Brief of the Missouri Landowners Alliance (“MLA IB”) at 4-28 (Dec. 8, 2014).

<sup>2</sup> The Commission reviews five factors in determining whether to grant a certificate of convenience and necessity application, and generally must find that there is evidence to support the following: (1) whether there is a need for the service the applicant proposes to provide; (2) whether the proposed service is in the public interest; (3) whether the applicant’s proposal is economically feasible; (4) whether the applicant has the financial ability to provide the service; and (5) whether the applicant is qualified to provide the proposed service. *In re Entergy Arkansas, Inc.*, Order Granting Certificate of Convenience and Necessity, No. EA-2012-0321 (Mo. P.S.C. 2012); *In re Tartan Energy Co.*, 3 Mo. P.S.C. 173, 177 (1994).

need the proposed...project.” This is a confusion of the standard of review by the appellate courts with the standard of proof required to support a Commission decision. Under section 386.430, an appellant in the court of appeals must show by clear and satisfactory evidence that the Commission decision is unlawful or unreasonable before it will be overturned. Contrary to MLA’s assertion, and as in other civil cases, the applicant, Grain Belt, must prove its case by a preponderance of evidence. And the Commission decision must be based upon substantial and competent evidence upon the whole record. Art. V, Section 18, MO Constitution, and *State ex rel GTE North and MCI Telecom v. Missouri PSC*, 835 S.W.2d 356, 364 (Mo. App. 1992).

“The burden of proof governs the standard that the Courts apply in looking at the evidence as a whole to determine whether a case has been made.” *In the Interest of BH*, 348 S.W.2d 770, 774 (Mo. Banc 2011). Under the preponderance of the evidence standard, the Commission must weigh the evidence for and against a particular proposition. See *Jamison v. DSS and DFS*, 218 S.W.3d 299, 311 (Mo. Banc 2007). Here, Grain Belt’s evidence clearly showed that there is, and will be, a need for renewable energy in Missouri. MLA and other opponents offered no evidence to the contrary; their effort was to attempt to minimize the evidence Grain Belt presented.

Further, opponents attempt to isolate the Commission’s decision regarding Grain Belt’s application to a single factor, “need”, when Missouri law requires the Commission to take a broader view. As Courts have noted:

need for the service is not a strict need or strict necessity, and on the other hand the authorization of the service may not be based upon the mere convenience of its prospective users. If the granting of the authorization subserves a genuine and reasonable public interest in promptness and economy of service, then the public "convenience and necessity" or "public need" is served.

*State ex rel. Beaufort Transport Co. v. Clark*, 504 S.W.2d 216, 219 (Mo.App.1973);  
*State ex rel. National Trailer Con., Inc. v. Public Serv. Comm.*, 488 S.W.2d 942, 945  
(Mo.App.1972).

The genuine and reasonable public interest served by the Grain Belt line is the need for inexpensive, renewable electricity for Missouri utilities, coops, and municipals.

GBE has met its burden. It has shown that Kansas wind energy delivered via the GBE Project to Missouri and to Indiana is cost effective compared to other wind resources that Ameren Missouri and utilities in Missouri and other MISO and PJM states could access.<sup>3</sup> GBE's testimony demonstrates that Kansas wind could be sold into PJM or MISO at a price of 3.6 to 4.6¢ per kilowatt hour ("kWh").<sup>4</sup> Assuming that Ameren Missouri, and utilities in Illinois, Wisconsin, Pennsylvania, Delaware, Maryland, New Jersey, and the District of Columbia competitively bid for their procurement of renewable energy used to comply with their renewable portfolio standards that price would be cost competitive for those states.

In addition to Ameren Missouri, there is demand for renewables from Missouri cooperative and municipal utilities. GBE witness testified that AECI has stated, in its 2013 Annual Report, an intent to purchase more renewables.<sup>5</sup> Municipalities like the City Utilities of Springfield, Columbia Light and Water, and the Missouri Joint Municipal Electric Utility Commission have all purchased renewable energy from wind farms<sup>6</sup> and the

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<sup>3</sup> Initial Post-Hearing Brief of Applicant Grain Belt Express Clean Line LLC ("GBE IB"), at 12-20 and 27-35 (Dec. 8, 2014); Initial Brief of Wind on the Wires and The Wind Coalition ("CEI IB"), at 3-19 (Dec. 8, 2014).

<sup>4</sup> Exh. 120, Surrebuttal Testimony of David Berry on behalf of Grain Belt Clean Line Energy Partners ("Berry Surrebuttal"), at 19-20 (Dec. 4, 2014).

<sup>5</sup> See Exh. 148, Excerpts from AECI 2013 Annual Report.

<sup>6</sup> See Exh. 118, Direct Testimony of David Berry on Behalf of Grain Belt Express Clean Line LLC ("Berry Direct"), at 26 (March 26, 2014).

Columbia City Council adopted a resolution expressing its support for the Grain Belt Express Project as an economically feasible renewable energy option to serve the City's customers and to help the City fulfill its mandate of 15% renewable energy usage by 2017, 25% by 2022, and 30% by 2028.<sup>7</sup> Finally, CEI witness Goggin estimated that Missouri would need between 2.8 million and 12.1 million megawatt hours of renewable/wind energy to comply with the U.S. Environmental Protection Agency's Clean Power Plan rule<sup>8,9</sup>

Thus, GBE has met its' burden to demonstrate that there is need within Missouri for renewable/wind energy delivered via the GBE Project.

## **2. In Determining Need and Public Interest the Commission Should Not Ignore the Benefits the GBE Project Provides Outside of Missouri**

Both MLA and SMCL assert that the only relevant interests are those of Missouri.<sup>10</sup> The need for this line, however, is not Missouri-centric. It is a line that crosses through four regional transmission grid operators -- SPP, Associated Electric Cooperative, Inc., MISO and PJM. It is designed to provide renewable energy to off-takers in PJM and MISO, which includes Ameren Missouri. While the Commission's obligation is to ensure just and reasonable rates to Missouri ratepayers, it cannot turn a blind eye to the entire picture -- that the GBE Project provides benefits to, and outside of, Missouri. Those benefits need to be given appropriate weight in determining the reasonableness and likelihood of this line being necessary and in the public interest.

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<sup>7</sup> *Id.*, Sched. DAB-8.

<sup>8</sup> 70 Fed. Reg. 117 at 34830 et. seq. (June 18, 2014).

<sup>9</sup> See *CEI IB*, at 6-8; see also, Exh. 700, Rebuttal Testimony of Michael Goggin Submitted on Behalf of Wind on the Wires and The Wind Coalition, at 10-11 (September 15, 2014).

<sup>10</sup> *MLA IB*, at 4; *SMCL IB*, at 7.

If Ameren Missouri's competitive procurement for renewables finds that Kansas wind delivered via the GBE Project is the most cost effective way in which it can comply with the Missouri renewable energy standard then Ameren Missouri should be obligated to enter into such a contract. If Ameren Missouri does not enter into a contract there will still be confirmation of whether the project is in the public interest through the financing condition that GBE has agreed to. As a condition of the approval of the CCN, GBE has agreed that it will not begin to install transmission facilities on easement property until it has demonstrate to the Commission: (1) that it has obtained the commitments for funding in an amount equal to or greater than the cost of the project, and (2) that the contracted transmission service revenue is sufficient to service the debt financing of the Project, taking into account any planned refinancing of debt.<sup>11</sup>

The contracted transmission service revenue will come from wind developers or other generators who will use the line.<sup>12</sup> Thus, the GBE Project will confirm public interest through its' financing condition filing with the Commission, because that filing will show that GBE has secured wind developer customers who have off-takers of power from their Kansas wind farms.<sup>13</sup>

### **3. Capacity Factor for Kansas Wind is likely to be Higher than the NREL Data Due to Improvements in Wind Turbine Efficiencies by the Time the GBE Project is in Operation**

MLA argues that GBE's capacity factor for Kansas wind should not be used, but that a lower value should be used, such as the capacity factors developed by SMCL

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<sup>11</sup> GBE IB, at 42, *citing* Exh. 120, Berry Surrebuttal, at 54-55 and Sched. DAB-14 at 4-6 and 13.

<sup>12</sup> Exh. 118, Berry Direct, at 5.

<sup>13</sup> See GBE IB, at 42, *citing* Exh. 120, Berry Surrebuttal, at 54-55 and Sched. DAB-14 at 4-6 and

witness Dr. Procter.<sup>14</sup> In support of its' position, MLA cites NREL wind data for Kansas that predicts a capacity factor of 45%.<sup>15</sup> CEI witness Goggin also referenced the NREL data in his rebuttal testimony. He explains that the NREL data was for wind turbines with turbine hub heights of 80 meters, instead of the 100 meter commonly used today<sup>16</sup>, and that the NREL derived capacity factors are likely to be conservative “because they do not account for recent technological advances and increases in wind turbine height and size.”<sup>17</sup> CEI witness Goggin further explains that since the GBE Project is forecasted to be in service after 2018 that “future wind projects built for the GBE [Project] would likely make use of higher capacity factor turbine designs, including low-wind speed turbines.”<sup>18</sup> He also explains that new wind generation that uses the GBE Project would likely have a higher capacity factor than 45% because the GBE project would eliminate or greatly reduce transmission congestion.<sup>19</sup> Thus, when presented in the correct context, the NREL data is consistent with GBE witness Berry’s forecasted wind capacity factors.

#### **4. Ameren’s 2014 Integrated Resource Plan is a Non-Binding Forecast of Future Wind Procurement by the Utility**

MLA cites Ameren Missouri’s 2014 integrated resource plan (“IRP”), currently under review by the Commission in open file no. EO-2015-0084, for the propositions, including: Ameren will only purchase from regional wind sites in MISO; and that Ameren will be purchasing wind several years after the GBE Project will be placed into operation<sup>20</sup>;

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<sup>14</sup> MLA IB, at 8.

<sup>15</sup> MLA IB, at 11-12.

<sup>16</sup> Exh. 700, Goggin Rebuttal, at 6.

<sup>17</sup> Exh. 700, Goggin Rebuttal, at 8-9.

<sup>18</sup> Id. at 8.

<sup>19</sup> Id.

<sup>20</sup> MLA IB, at 19.



and that the Commission cannot justify doing something other than what Ameren Missouri has put into its' 2014 IRP<sup>21</sup>. While Ameren Missouri's 2014 IRP is informative, it must be significantly discounted since IRPs are non-binding. As the Commission stated in its' Decision regarding Ameren Missouri's 2011 IRP

The most important thing to understand about this case is what the Commission is not doing. The Commission's IRP rule clearly and emphatically provides that in reviewing Ameren Missouri's IRP filing, the Commission is not preapproving Ameren Missouri's "resource plans, resource acquisition strategies or investment decisions."

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The IRP rule states that the fundamental objective of the electric utility's planning process must be to "provide the public with energy services that are safe, reliable and efficient, at just and reasonable rates, in a manner that serves the public interest." In other words, the rule requires Missouri's investor-owned electric utilities to adequately plan for the future. However, the rule does not attempt to give the Commission authority to take over management of the electric utility to dictate the manner in which the company meets that fundamental objective.

That means Ameren Missouri may satisfy the planning requirements of the rule even if it reaches a decision at the conclusion of the planning process that is not to the liking of outside parties, or even to the liking of the Commission. (Report and Order (File No. EO-2011-0271), at 28-29 (March 28, 2012)).

Thus, Ameren Missouri is not obligated to the resource procurements set forth in its' 2014 IRP but can do something completely different. While the 2014 IRP identifies that Ameren Missouri's preferred resource plan includes 400MW of new wind capacity, Ameren Missouri can submit an application for a certificate of convenience and necessity to purchase well over 400 MW of wind capacity or none at all.<sup>22</sup> Thus, what is of greatest weight to the Commission in this case is that Ameren Missouri needs renewable energy

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<sup>21</sup> Id. at 20.

<sup>22</sup> MLA IB, at 19, *citing* Exh. 120 Berry Surrebuttal, at 15; see *also* Exh. 137, Ameren Missouri 2014 Integrated Resource Plan, Ch. 1 at 3.

to comply with the Missouri RES and the 2,000,000+ MWhs of annual wind energy that can be delivered via the GBE Project<sup>23</sup> is cost competitive with other sources and can be delivered within the compliance period of the RES<sup>24</sup>.

#### **5. The GBE Project Will Offer Wind Energy Prices Lower than Most New Wind Generation that would be Built in MISO**

In its' discussion on the use of MISO wind as an energy only resource, SMCL states that MISO wind, including transmission congestion costs, would be able to offer a price in Missouri that is competitive with the wind transported via the GBE Project if MISO wind has a capacity factor above 35%.<sup>25</sup> CEI witness Goggin responded to this in his surrebuttal testimony, pointing out that northwestern MISO has the high capacity factors needed to compete with wind from the GBE Project, however, that region has a large degree of transmission congestion and curtailment that greatly limits wind deliverability.<sup>26</sup> Curtailment for the Xcel Energy footprint (Northern States Power in Minnesota and Wisconsin) is greater than the average in MISO. Wind curtailment in the Xcel Energy footprint in 2013 was 5.9%, whereas the remainder of MISO had average curtailment of 4.6% and all other regions of the country that were examined by the Department of Energy had an average curtailment below 2%.<sup>27</sup> CEI witness Goggin concludes that due to the congestion and curtailment that new wind energy from northwestern MISO is not a viable alternative to wind delivered via the GBE Project.<sup>28</sup>

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<sup>23</sup> Exh. 118, Berry Direct, at 12:17.

<sup>24</sup> Exh. 120, Berry Surrebuttal, at 19-20.

<sup>25</sup> SMCL IB, at 28 *citing* Exh. 400, Rebuttal Testimony of Michael S. Procter Submitted on Behalf of Show-Me Concerned Land Owners, at 26-30 (Sept. 15, 2014).

<sup>26</sup> Exh. 701, Surrebuttal of Michael Goggin on behalf of Wind on the Wires and The Wind Coalition, at 7-8 (Oct. 11, 2014).

<sup>27</sup> Id. citing Exh. 325, DOE 2013 Wind Technologies Market Report, at 39-40.

<sup>28</sup> Id. at 8.

## 6. Relevance of Testimony about the Illinois Rivers Transmission Line

SMCL cites testimony Wind on the Wires presented in Illinois Commerce Commission docket number 12-0598 regarding the need for the Illinois Rivers transmission project.<sup>29</sup> The Illinois Rivers project is a 345 kV line that crosses Illinois from the Mississippi River at Quincy, Illinois and terminates at the Indiana border near Terre Haute. From that testimony SMCL pulls the following facts:

(1) MISO has a robust and effective transmission planning process to enable states in the MISO footprint to meet their RPS mandates at the lowest deliverable energy cost; (2) the MISO footprint has some of the best wind energy resources in the United States; and (3) MISO has enough wind resources (2.838 million MW) to meet the current electricity needs of the entire United States at least two times over. (SMCL IB, at 12-13)

SMCL then reaches the totally unsupported conclusion:

Given all this, it is **much more likely** that MISO Wind can satisfy all the needs Missouri utilities for wind energy instead of the small amount of Kansas Wind (500 MW) that Grain Belt Express has to offer into MISO.” (Id., emphasis added)

No witness -- not SMCL’s witness nor Wind on the Wires’ witness Goggin -- reached the conclusion SMCL asserts based on these facts. MLA and SMCL had the opportunity to ask CEI witness Goggin for his opinion of these statements when he was cross examined on this material but failed to do so.

The facts pulled from the Illinois docket are about the Illinois Rivers Project and MISO but there is no connection between these statements and the GBE Project. In the Illinois docket, Wind on the Wires made no comparison of the “likelihood” of the GBE

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<sup>29</sup> SMCL IB, at 12-13.

Project being able to satisfy the needs of Missouri utilities to the “likelihood” of MISO wind to do such. In this case before the Missouri Commission, CEI witness Goggin states that northwestern MISO (Minnesota, North Dakota and South Dakota) has severe transmission congestion that is causing widespread curtailments of wind operation and thus greatly limits the deliverability of wind energy.<sup>30</sup> Moreover, the likelihood of meeting the needs of Ameren Missouri ratepayers will come down to a comparison of bids from Kansas wind farms to other alternatives. Testimony from GBE and CEI, *in this case*, has already shown that Kansas wind delivered via the GBE Project would be comparable to or lower than wind delivered from MISO.<sup>31</sup>

## II. CONCLUSION AND REQUESTED RELIEF

Wherefore, Clean Energy Intervenors respectfully requests that the Commission accept the arguments put forth in our initial and reply briefs and find that the Grain Belt Express Project [1] is needed, [2] is in the public interest, [3] is economically feasible, and therefore will grant Grain Belt Express a certificate of convenience and necessity to construct, own, control, manage, operate and maintain a high voltage, direct current transmission line in Missouri and an associated converter station providing an interconnection on the Maywood 345 kV transmission line.

/s/ Steven C. Reed  
Steven C. Reed

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<sup>30</sup> Exh. 701, Surrebuttal of Michael Goggin on behalf of Wind on the Wires and The Wind Coalition, at 7 (Oct. 11, 2014).

<sup>31</sup> CEI IB, at 17, *citing* Exh. 120, Berry Surrebuttal, at 19-20.

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