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)	Case No. EA-2016-0358
Current Transmission Line and an Associated Converter)	
Station Providing an Interconnection on the Maywood-)	
Montgomery 345 kV Transmission Line)	

REPLY BRIEF OF APPLICANT GRAIN BELT EXPRESS CLEAN LINE LLC

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TABLE OF CONTENTS

I.	Intro	duction		1			
II.	Grain Belt Express May Be Granted a CCN in Missouri						
	A.	. Grain Belt Express is a Public Utility and May be Granted a CCN					
	B.	B. The Commission May Lawfully Issue a CCN to Grain Belt Express					
III.	The I	The Missouri Facilities Are Necessary or Convenient for the Public Service					
	A.	There	e is a Need for the Service	11			
		1.	Legal Standard	11			
		2.	The Evidence Clearly Shows the Need for the Service	12			
	B.	The I	Project is Economically Feasible	18			
		1.	Legal Standard	18			
		2.	Staff's RTO Interconnection and Related Concerns are Addressed by Grain Belt Express	20			
		3.	Show Me's Criticism of Low-Cost Kansas Wind Generation and Transmission Congestion Costs has No Merit	23			
		4.	MLA's Attacks on Mr. Berry's Use of a 55% Capacity Factor for Kansas Wind Generation, the MJMEUC TSA, and the MJMEUC-Infinity Wind PPA are Flawed	25			
	C.	The I	Project is in the Public Interest	30			
		1.	Legal Standard	30			
		2.	The Economic Benefits of the Project Are Substantial	31			
		3.	The Project Will Lower Production Costs, Reduce Emissions and Improve Reliability	34			
		4.	Landowner Interests are Respected and are Compatible with the Broader Public Interest	35			
		5.	Eminent Domain	40			
IV.	Conditions						
	Α.	Land	owner Interactions and Right-of-Way Acquisition	44			

	B.	Rockies Express Pipeline Conditions	45
	C.	Staff and Related Conditions	46
	D.	Decommissioning Fund	47
	E.	Commission Question regarding Conditioning the CCN on the Operational Readiness of the Missouri Converter Station	47
V.		er of Reporting Requirements of Commission Rules 4 CSR 240-3.145, 4 CSR .175, and 3.190(1), (2) and (3)(A)-(D)	48
VI.	Concl	usion	49

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Grain Belt Express Clean Line LLC ("Grain Belt Express" or "Company"), pursuant to the Missouri Public Service Commission's ("PSC" or "Commission") October 19, 2016 Order Setting Procedural Schedule and Other Procedural Requirements, files this post-hearing Reply Brief.

I. <u>Introduction</u>

Strong support for the Company's Application for a line Certificate of Convenience and Necessity ("CCN") was expressed in briefs submitted by the Missouri Joint Municipal Electric Utility Commission ("MJMEUC"), Infinity Wind Power, Wind on the Wires, The Wind Coalition, Sierra Club, the Natural Resources Defense Council, Renew Missouri, the Missouri Department of Economic Development ("DED"), IBEW Local Unions 2 and 53 ("IBEW Unions"), Missouri Industrial Energy Consumers ("MIEC"), the Missouri Retailers Association, Consumers Council of Missouri, and Walmart Stores, Inc. Amicus curiae briefs in support of Grain Belt Express were also submitted by Energy for Generations, LLC and by SSM Health Care Corporation.

These supporters of the Grain Belt Express Clean Line Project ("Project") reflect all elements of society, from residential, commercial, and industrial electric users to labor unions

and public policy organizations, as well as the energy industry. The supporters of the Company represent the interests of millions of Missourians who benefit from lower electric bills, new construction and manufacturing jobs, and cleaner air and water – all benefits of the Project. They stressed the need for the transmission service that the Company will provide, the economic feasibility of the Project, and the variety of public interests that the Project will serve.

The opposition briefs of the Missouri Landowners Alliance ("MLA")¹ and the Eastern Missouri Landowners Alliance, d/b/a Show Me Concerned Landowners ("Show Me") focused attention on three of the five CCN factors considered by the Commission, but do not challenge the qualifications of Grain Belt Express to own and operate the proposed Missouri Facilities, or the financial resources to support those operations. Staff has acknowledged that the Company does possess the necessary operational and financial qualifications to receive a CCN. See Staff Brief at 9. While the Missouri Farm Bureau ("Farm Bureau") opposed the Company's Application, it did so primarily for reasons relating to the use of eminent domain.

Consequently, Grain Belt Express will devote this Reply Brief to countering the legal arguments asserted by the opponents, and to showing that the overwhelming weight of the factual evidence supports the granting of a line CCN to the Company because the Project provides a needed service, is economically feasible, and is in the public interest.

¹ MLA's Initial Brief was submitted on behalf of MLA, Charles and Robyn Henke, R. Kenneth Hutchinson, Randall and Roseanne Meyer, and Matthew and Christina Reichert, all of whom MLA refers to collectively as "MLA." Grain Belt Express likewise will refer to this group collectively as "MLA" herein.

II. Grain Belt Express May Be Granted a CCN in Missouri

A. Grain Belt Express is a Public Utility and May be Granted a CCN

While certain intervenors make much of the fact that Grain Belt Express will have no Missouri retail customers, it is, indeed, a public utility.² Staff agrees. <u>See</u> Staff Brief at 3-4.

The term "public utility," defined in Section 386.020(43),³ includes electrical corporations under Section 386.020(15). An "electrical corporation" is defined broadly and includes every corporation owning, operating, controlling, or managing any "electric plant." Electric plant is defined in Section 386.020(14) as "all real estate, fixtures and personal property operated, controlled, owned, used or to be used for or in connection with or to facilitate the generation, <u>transmission</u>, distribution, sale or furnishing of electricity for light, heat or power ... [emphasis added]."

Under Section 393.170.1, an electrical corporation must obtain a CCN from the Commission before it can begin construction of an electric plant, which includes both transmission and distribution systems, as well as generating facilities. See § 386.020(14). Grain Belt Express clearly is a public utility properly seeking this Commission's permission to construct electric plant in Missouri.

Nevertheless, Show Me and Farm Bureau argue that Grain Belt Express is not a public utility because it is a participant-funded transmission company. They rely on a century-old case concerning a brewery's sale of excess power generated at its facility to private citizens within three blocks of that facility. See Show Me Brief at 4-5, 14-16; Farm Bureau Brief at 5. In State ex rel. M.O. Danciger & Co. v. PSC, 205 S.W. 36 (Mo. 1918), the issue was whether a brewery's

² The Company is already a public utility at FERC and in Kansas, Illinois, and Indiana. <u>See</u> Application, ¶¶ 16, 70-71. The Commission found that the Company is a "public utility" in the 2014 Case. <u>See</u> Report and Order at 18-19, <u>In re Grain Belt Express Clean Line LLC</u>, No. EA-2014-0207 (July 1, 2015).

³ All statutory references are to the Missouri Revised Statues (2016), unless otherwise noted.

selective sale of excess power generated at the brewery made it a "public utility" such that it owed a duty to provide electric service to all who requested it. <u>Id.</u> at 39. The Court found that the statutory provisions defining "electric plant" and "electrical corporation" necessarily connote the concept of public service, "[s]ince the sole right of regulation depends upon the public interest." <u>Id.</u> at 40. It further stated that "[w]e are not to be understood as saying that an electric plant constructed solely for private use could not, by professing public service, become by such profession, and by the furnishing of general public service, a public utility." <u>Id.</u> However, finding that there was "no explicit professing of public service," the Court concluded that the brewery had not devoted itself to a public use and therefore could not be regulated by the PSC. Id.

The Grain Belt Express Project, in no uncertain terms, serves a public need. Staff agrees that the Project "would be an indiscriminate offering of utility service to the public requiring a certificate of convenience and necessity from this Commission." See Staff Brief at 2. Citing Danciger, Staff correctly asserts that "[t]he hallmark of a public utility is the offering of utility service to the public without discrimination." Id. at 3. Unlike the brewery in Danciger, the Company is a public utility because it will offer indiscriminate transmission service through an open access transmission tariff that will be filed with and subject to the jurisdiction of FERC. See Ex. 104 at 4-5; (Berry Direct); Ex. 100 at 23-24 (Skelly Direct).

In an attempt to complicate the clear fact that Grain Belt Express is a public utility, Show Me incorrectly asserts that "Grain Belt Express wants to be a regulated electric utility, but it does not want to take on the obligations of a regulated electric utility." See Show Me Brief at 7. Nothing could be further from the truth. The Company recognizes that "the rights and powers of a regulated electric utility run in tandem with the obligations." Id. That is precisely why the

Company is now before the Commission, and why it has agreed to a series of conditions with Staff (Exhibit 206) that reflect the Commission's authority. Nevertheless, Show Me confuses the Commission's supervision of a participant-funded transmission-only utility seeking to construct electric plant in Missouri with the Commission's rate regulation powers over retail providers. <u>Id.</u> at 6-8. Show Me believes that because Grain Belt Express is proposing a Project paid for by shippers across its transmission line, and not captive Missouri ratepayers, somehow the "Commission is not needed and its regulation would go beyond the limits of what the Missouri Legislature intended for this Commission." <u>Id.</u> at 5-7.

Standard PSC practice belies Show Me's position. The Commission regularly grants CCNs to public utilities that have no Missouri retail customers, for projects that provide only wholesale transmission service, and for projects whose rates are regulated by FERC. In its Initial Brief, Staff lists a number of instances in which this Commission has repeatedly and consistently asserted jurisdiction over such interstate transmission lines. See Staff Brief at 4, n.14.

For example, in 2001 IES Utilities, Inc. ("IES") requested that the Commission issue it a CCN to construct and operate a transmission line in Clark County or waive the requirement in Section 393.170 that it receive such a certificate. IES subsequently changed its name to Interstate Power and Light Co. ("IPL"). Although this transmission line would not be used to serve any customers in Missouri, and would rather provide an alternative transmission source to serve load growth in southeastern Iowa, the Commission found that it did have authority to require that IPL obtain a CCN. In re IES Utilities, Inc., Order Granting Certificate of Public Convenience and Necessity, Case No. EA-2002-296 (2002). The Commission determined that it was necessary and convenient for the public interest for IPL to construct and operate the proposed transmission line, and granted the CCN because IPL's proposed transmission line was

necessary to provide reliable electric service to IPL customers residing exclusively outside Missouri. <u>Id.</u> While the Commission found that the requirements for a CCN were met even where the service was for Iowa customers only, the Grain Belt Express Project provides benefits to customers in Missouri *and* elsewhere.

In 2007 the Commission granted a CCN to ITC Midwest LLC ("ITC") as part of its order authorizing IPL to transfer those transmission line assets in Clark County to ITC. In re Interstate Power & Light Co. ("IPL"), Order Granting Certificate of Convenience and Necessity, Case No. EO-2007-0485 (2007). No Missouri retail customers are served from this transmission line. Nevertheless, the Commission "conclude[d] that ITC's ownership of the proposed transmission line is both necessary and convenient for the public service because by owning that line ITC will continue to serve customers in the Keokuk, Iowa area that IPL currently serves." Id. at 4. The Commission further waived certain reporting requirements imposed on utilities serving retail customers because ITC would have no retail electric customers in Missouri and rates for the transmission line would be set by FERC. Id. at 5-6. See Staff Recommendation at 1, IPL (Aug. 17, 2007).

ITC Midwest, a Michigan LLC and wholly owned subsidiary of ITC Holdings Corp. that was organized to acquire the high-voltage electric transmission assets of IPL, is an electrical corporation under Missouri law because it owns and operates "electric plant," which includes property used for the transmission of electricity, and is therefore a "public utility." <u>Id.</u> at 3-4. <u>See</u> §§ 386.020(14), (15), (43).

More recently, the Commission granted a line CCN to Transource Missouri, LLC, a company established to build wholesale regional transmission projects within SPP, as well as other regional transmission organizations ("RTOs"). <u>In re Transource Missouri LLC</u>, No. EA-

2013-0098, Report and Order at 11, 2013 WL 4478909 (2013). The two Missouri projects for which the Commission granted Transource Missouri a CCN are regional, high-voltage, wholesale transmission projects. <u>Id.</u> Like the ITC Midwest case, the Commission waived certain reporting requirements as Transource Missouri would have no Missouri retail customers. <u>Id.</u> at 17, 26. Just last year, the Commission granted the transmission-only company Ameren Transmission Company of Illinois a line CCN to construct an interstate transmission line that crosses five counties in Missouri. <u>In re Ameren Transmission Co. of Ill.</u>, No. EA-2015-0146, Report and Order (2016). In its conclusions of law, the Commission determined that "ATXI is an electric utility and a public utility subject to Commission jurisdiction." <u>Id.</u> at 33, ¶10.

While the Commission has found projects to be necessary or convenient for the public service that serve members of the public outside of Missouri, Grain Belt Express exceeds this threshold because the Project will provide transmission service for public use in Missouri *and* will provide substantial public benefits in Missouri. It, therefore, meets an even higher standard than that set by the Commission in prior CCN cases.

B. The Commission May Lawfully Issue a CCN to Grain Belt Express

Staff, MLA, Show Me, and Farm Bureau each alert the Commission to the recent decision by the Missouri Court of Appeals on an appeal from the Commission's Report and Order granting Ameren Transmission Company of Illinois ("ATXI") a conditional CCN. Neighbors United Against Ameren's Power Line v. PSC, No. WD79883 (Mar. 28, 2017) ("Neighbors United"). See Staff Brief at 6; MLA Brief at 70-73; Show Me Brief at 13-14; Farm Bureau Brief at 4. In Neighbors United, the Court found that the Commission exceeded its authority under Section 393.170.2 by granting ATXI a conditional CCN prior to ATXI obtaining all necessary county road-crossing assents under Section 229.100. Neighbors United, slip opin. at 7-8. However, as Staff, MLA, and Show Me acknowledge, this decision is not yet final. See

Staff Brief at 8; MLA Brief at 71; Show Me Brief at 13. So too did this Commission acknowledge that this decision is not final when it denied MLA's request that the instant case be dismissed in light of <u>Neighbors United</u>. <u>See</u> Order Denying Motion to Dismiss or Hold Case in Abeyance at 1 ("the opinion is not yet final") (Apr. 3, 2017). Accordingly, the <u>Neighbors United</u> decision is not binding here.

Furthermore, nothing in the <u>Neighbors United</u> decision precludes this Commission from considering precisely what it is mandated to consider – whether construction of the Project "is necessary or convenient for the public service." <u>See</u> §393.170.3. As the Commission recognized in its Application for Transfer to the Missouri Supreme Court in the <u>Neighbors United</u> case, "[t]he Commission was considering the only question properly before it: Whether the construction of the Mark Twain Transmission Line was 'necessary or convenient for the public service." <u>See Neighbors United</u>, Commission Application For Transfer at 6, 11 (Apr. 12, 2017). That question is reserved to the Commission, and not to county commissions. <u>Id</u>.

As MLA admits, Section 229.100 requires that Grain Belt Express "at some point" receive the assent of the county commissions in the counties its Project will cross to erect poles for the suspension of power wires through, on, under, or across the public roads or highways of that county. See MLA Brief at 70. The question is, however, at what point must it do so? Requiring county assents as a prerequisite to line certificate permission by this Commission would usurp the role of this Commission and deprive it of its mandate to determine after due hearing whether the Project is necessary or convenient for the public service. As the Commission explained in its Application for Transfer, "County Commissions are not authorized to deprive a utility of a hearing before the Commission under § 393.170.3, nor are they authorized to preclude or delay the Commission's exclusive authority to decide whether

construction of a transmission line is necessary or convenient for the public service under § 393.170.1." See Neighbors United, Commission Application For Transfer at 1 (Apr. 12, 2017). It is the Commission's duty to "decide exclusively and in the first instance" whether the Project meets this standard. Id. at 4. Requiring Section 229.100 county assents "prior to the Commission's decision interferes with the legislative purpose of § 393.170." Id.

Nevertheless, Staff, MLA, Show Me, and Farm Bureau cling to the notion that Section 229.100 county assents are a prerequisite to the line certificate sought here. Grain Belt Express does not need to re-hash the arguments made in its Initial Brief, nor those made in numerous supporting briefs, setting forth the robust case law demonstrating the clear distinction between "line" certificates governed by Section 393.170.1 and "area" certificated governed by Section 393.170.2. See Company Brief at 13-23; MJMEUC Brief at 2-5; Sierra Club, NRDC, and Renew Missouri Brief at 1-4; IBEW Unions Brief at 1. As explained in those briefs, the question of whether a utility may exercise service rights under a municipal franchise is not even relevant to a Commission consideration of an application pursuant to Section 393.170.1. It is for this reason that "[t]he elements of proving the public necessity of a line are different from the test applied to proving the public necessity of area certificate authority." State ex rel. Union Elec. Co. v. PSC, 770 S.W.2d 283, 285 (Mo. App. W.D. 1989). County assents plainly are not an element of proving public convenience and necessity for a line certificate.

Yet Staff asks that this Commission muddy the distinction between line and area authority, citing to Section 393.170 legislative history from nearly a century ago, in which that statute was originally enacted as one continuous paragraph. See Staff Brief at 4, fn. 16. Show Me also attempts to fuse the subsections of 393.170, arguing that the "permission and approval" of subsection 1 is analogous to the "certificate" of subsection 2. See Show Me Brief at 11-13.

Farm Bureau merely cites Section 393.170 without discussing the distinct subsections at all. See Farm Bureau Brief at 4.

These arguments ignore Missouri appellate court decisions, as well as Commission orders, that have long recognized the distinction between "line" certificates governed by Section 393.170.1 and "area" certificated governed by Section 393.170.2. See State ex rel. Cass Cnty. v. PSC, 259 S.W.3d 544, 548-49 (Mo. App. W.D. 2008); StopAquila.org v. Aquila, Inc., 180 S.W.3d 24, 32-34 (Mo. App. W.D. 2005); State ex rel. Union Elec. Co. v. PSC, 770 S.W.2d 283, 285 (Mo. App. W.D. 1989); State ex rel. Harline v. PSC, 343 S.W.2d 177, 182-85 (Mo. App. W.D. 1960). They also ignore that this clear distinction is made in subsection 3 as well. Under that subsection, the Commission may grant the permission sought under subsections 1 or 2 after determining that "such construction [sought under subsection 1] or such exercise of the right, privilege, or franchise [sought under subsection 2] is necessary or convenient for the public service." §393.170.3 (emphasis added). This Commission must continue to recognize the long-held and logical distinction between "line" and "area" certificates.

III. The Missouri Facilities Are Necessary or Convenient for the Public Service

The Commission articulated the specific criteria to be used when evaluating applications for CCNs in the <u>Tartan</u> case, where Tartan Energy Company, doing business as Southern Missouri Gas Co., filed an application for a CCN to construct gas facilities and to provide natural gas services to retail customers in Missouri. <u>See</u> Report and Order, <u>In re Tartan Energy Co.</u>, Case No. GA-94-127, 1994 WL 762882 at *1 (1994) ("<u>Tartan</u>"); <u>In re Intercon Gas, Inc.</u>, 30 Mo P.S.C. (N.S.) 554, 561 (1991).

No party challenged the financial resources of Grain Belt Express to provide the services proposed by the Project. See Ex. 100 at 19-20 (Skelly Direct); Ex. 110 at 6 (Hartshorne Direct);

Company Brief at 46-48. Staff concluded that the Company "is financially capable to be granted a CCN." See Ex. 200 at 21 (Staff Report). Accordingly, the Company has the proper financial resources to provide the service.

Nor did any party challenge the ability of Grain Belt Express and Clean Line to construct, own, operate, control, manage, and maintain the Missouri Facilities. Staff agreed, stating that it "is not questioning the qualifications of the staff that Grain Belt has in place to date." <u>Id.</u> at 18 (Staff Report). As described in its Brief, the evidence shows that Grain Belt Express is qualified to provide the service it is offering. <u>See</u> Company Brief at 48-52.

A review of <u>Tartan</u> and its progeny makes clear that those intervenors who challenge the need, economic feasibility, and public interest of the Project misapply the <u>Tartan</u> criteria and misconstrue the facts of this case.

A. There is a Need for the Service

1. Legal Standard

The Missouri Court of Appeals has held that necessity does not require that the improvement be "essential" or "absolutely indispensable." State ex rel. Intercon Gas, Inc. v. PSC, 848 S.W.2d 593, 597 (Mo. App. W.D. 1993). It simply means that the "additional service would be an improvement justifying its cost." Id. Citing the Court of Appeals on this criterion, the Commission in Tartan found a need for the proposed service because natural gas was becoming one of the preferred alternative forms of energy in the central United States. Tartan, 1994 WL 762882 at *5. In determining need, the Commission declared:

The availability of natural gas provides a new energy alternative which may lower energy costs and promote economic development. Natural gas may also provide an inviting alternative for industrial and commercial customers. In addition, the project itself will represent a major capital investment in south central Missouri, which will require the employment of workers during the construction phase of the project, and for the operation of the pipeline. <u>Id.</u>

In addition to supporting its finding of need almost entirely on the availability of natural gas as an alternative and potentially cheaper source of fuel, the Commission also described its public policy rationale behind promoting natural gas in its finding of need. It stated:

The Commission also notes that as a general policy in recent years, it has looked favorably upon applications designed to spread the availability of natural gas throughout the State of Missouri wherever feasible. Id.

Accordingly, in determining the need for the Project, the Commission must look to the need for alternative sources of fuel, as well as public policy concerns.

Nevertheless, and without any demonstration that other service is available, Show Me contends that the Project is not needed because it is duplicative. See Show Me Brief at 16-18. In support of its allegation of duplication, Show Me cites a 1945 case that not only predates Tartan by a half century, but it is factually distinct from this case. In People's Tel. Exchange v. PSC, 186 S.W.2d 531 (Mo. App. K.C. 1945), the Court of Appeals upheld the Commission's denial of a CCN to a telephone company that proposed to provide duplicate telephone service in Nodaway County. Id. at 536. However, Grain Belt Express is proposing to provide a much needed service that is necessary precisely because there is no high-voltage, direct current ("HVDC") transmission line that can bring low cost Kansas wind generation to Missouri without congestion. Clearly, there is no duplication of service and the Project meets the need prong of the Tartan factors.

2. The Evidence Clearly Shows the Need for the Service

Only Show Me, Staff, and MLA argue that the Company's evidence failed to establish that there was a need for the service. Show Me's discussion consisted of one paragraph that failed to discuss the Grain Belt Express Transmission Services Agreement ("TSA") with MJMEUC, or the MJMEUC Power Purchase Agreement ("PPA") with Infinity Wind's Iron Star Wind Project, LLC. See Show Me Brief at 19. Show Me seems to argue that service from the

Project is not needed because "service is available from regulated entities." Apparently, Show Me believes that MJMEUC and other municipal utilities should only use transmission owned by incumbent transmission utilities and operated by RTOs. <u>Id.</u> However, Show Me's witness Mr. Justis performed no engineering or economic study of RTO service to determine the cost or availability of an alternative service to that offered by Grain Belt Express. Tr. 1586-87; Ex. 136 (Response to Data Request 5). Show Me's allegation of other available service exists only in theory, and is not a real alternative to the Project. It also ignores evidence showing that even if such service were available on the existing grid, the service offered by Grain Belt Express is less expensive. <u>See</u> Ex. 476 at 4-8 (Grotzinger Rebuttal); Ex. 477 at 4-5 (HC) (Grotzinger Surrebuttal) (Grain Belt Express TSA provides service that is cheaper than SPP and MISO transmission service). <u>See also</u> Tr. 1105-08 (Grotzinger) (full Grain Belt Express tariff rate cheaper than using SPP and MISO transmission service).

Although Show Me does indirectly refer to the TSA, quoting MJMEUC's view that it is a "rare cost saving opportunity" that provides significant economic benefits "for their customers over long periods," Show Me provides no analysis that would cause the Commission to reject the overwhelming evidence provided by Grain Belt Express, MJMEUC, Infinity Wind, and other intervenors who testified about the demand from municipal utilities, as well as commercial and industrial customers that confirms there is a need for the Project. See Show Me Brief at 19.

The Staff Brief discusses the <u>Tartan</u> need factor in slightly over four pages, the first two pages of which summarize seventeen points presented by the Company's Mr. Skelly and Mr. Berry that show there is a need for the Project. <u>See</u> Staff Brief at 13-14. The balance of Staff's discussion of need expresses skepticism about Grain Belt Express's study of reliability benefits and the Project's contribution to meeting Missouri's Renewable Energy Standard ("RES").

Staff does not dispute that the Project could increase electric reliability. Instead, Staff points to Grain Belt Express witness Edward Pfeiffer's statement that the existing reliability of the Missouri generation fleet was already adequate without the Project. See Staff Brief at 15. The Company has never claimed that the need for the Project rests on the need to remedy an existing reliability deficiency. Grain Belt Express has claimed simply that the Project can increase reliability, which is one of the many benefits the Project provides. See Ex. 117 at 5 (Pfeiffer Direct); Ex. 118 at 11-12 (Pfeiffer Surrebuttal). Staff fails to explain why even higher electric levels of reliability are anything but a benefit to the State.

Staff also disputes the need for the Project to meet Missouri's RES for investor-owned utilities. The Staff Rebuttal Report acknowledges that Ameren Missouri has a need for additional renewable energy or renewable energy credits to meet its RES requirement in 2021. See Ex. 200, Staff Rebuttal Report at 17. Staff's only argument against the need for the Project to meet the Missouri RES is that "Ameren is exploring its options" for other sources of renewable energy. See Staff Brief at 16. But, Staff fails to appreciate that the Project offers not just an opportunity to supply renewable energy to Missouri, but a lower-cost opportunity. In both its brief and Rebuttal Report, Staff does not dispute the fact that the Project provides Missouri utilities such as Ameren a lower cost of renewable energy than is available from any other source. The lower cost of the Project's delivered energy compared to other renewable options is well-documented in the record, and even confirmed by the analysis of Show Me witness Justis. See Ex. 104 at 28-35 (Berry Direct); Ex. 105 at 6-8 (Berry Surrebuttal); Tr. 1562-63, 1574-76 (HC).

The glaring omission in Staff's Brief is that it fails to mention, let alone discuss, <u>any</u> aspect of the Company's TSA with MJMEUC and the MJMEUC-Infinity Wind PPA. Nor did

any of Staff's written or oral testimony in this case address the benefits to MJMEUC from the TSA. MJMEUC Chief Operating Officer John Grotzinger attached the PPA to his rebuttal testimony, and explained how that agreement, when combined with MJMEUC's TSA with the Company, confirmed MJMEUC's need to take service on the Grain Belt Express Project and demonstrated the savings that it would provide to its members. See Ex. 476 at 6-11 & Sched. JG-4 (Grotzinger Rebuttal). The response of Staff to this critical development was silence. It filed no surrebuttal testimony and presented no supplement to its Staff Rebuttal Report. Now, Staff continues to overlook in its Brief both the Grain Belt Express/MJMEUC TSA and the MJMEUC/Infinity Wind PPA, which are clear and tangible evidence of the need for the Project.

At the hearing, counsel for MJMEUC directly asked Staff's witness on economic benefits Sarah Kliethermes "if it would be a public benefit if" 300,000 Missouri citizens who are MJMEUC customers obtain access to low-cost, \$20/MWh renewable energy delivered by the Project. She responded: "I don't see that that fits in with how this Commission has in the past looked at public interest and I don't have an answer beyond that." Tr. 1319-20. Throughout this case, Staff has offered no opinion or answer to the fact that the Project meets a clear need for MJMEUC and saves MJMEUC's customers money.⁴

In addition to ignoring the MJMEUC PPA and TSA, Staff's Brief ignores numerous other indications that the Project meets a need and provides benefits to the State. Staff does not dispute the results of Mr. Berry's leveled cost of energy ("LCOE") model, nor the results of Mr. Copeland's PROMOD analysis of generation cost savings for Missouri utilities. As a result of Staff's limited and arbitrary selection of which evidence to discuss in its Brief and the Rebuttal Report, its position on the need for the Project is without merit.

⁴ Ms. Kliethermes further responding to MJMEUC's questions: "I can't really say that that [low-cost renewable energy] contributes to a public interest determination one way or the other. ... If the hypothetical is [whether] energy at a given price [is] good, I don't have an opinion on that question in the abstract." Tr. 1321.

Like Staff, MLA fails to mention the MJMEUC PPA with Infinity Wind in its ten-page discussion of the MJMEUC agreement with the Company, as if the TSA were the only evidence of need. See MLA Brief at 5-15. Because it appears that this portion of MLA's brief was written months before MJMEUC and Infinity Wind signed their PPA, it has no relevance to the evidence presented in this case. MLA repeatedly calls on MJMEUC to file a binding contract with the Commission to show its commitment to the Project. With its submission of the Infinity PPA in Mr. Grotzinger's rebuttal testimony (Ex. 476, Sched. JG-4), MJMEUC has done so.

If the Project is built, MJMEUC's obligation to buy power from the Iron Star Wind Project is clear. See Ex. 477 at 4 (Grotzinger Surrebuttal). The PPA between Infinity Wind and MJMEUC requires that MJMEUC provide written notice to Iron Star and designate its Buyer's Share which shall "not be less than 100 MW." See Sched. JG-4 at § 3.1, Ex. 476 (Grotzinger Rebuttal) (HC). At least 100 MW of the PPA is already spoken for, given MJMEUC's 60 MW commitment from the Missouri Public Energy Pool ("MoPEP"), plus its contracts with the City of Kirkwood (25 MW) and the City of Hannibal (15 MW). With the additional interest expressed by other Missouri municipalities, including the City of Columbia (35 MW), more than three dozen Missouri municipal utilities and their customers have committed to the Project and have expressed their need for the services that Grain Belt Express will provide. Tr. 995-96 (Kincheloe).

As Mr. Grotzinger testified, MJMEUC cannot meet the existing demand for retail renewable power. The offers of energy from MJMEUC's Kansas wind project that are now available to MoPEP cities with high-load commercial and industrial customers "are oversubscribed." Tr. 1112 (Grotzinger). When MJMEUC's offer of Kansas wind was extended, "it was filled [on] the closing date ... with more than we had available to be able to provide." Tr.

1113. Agreeing that the outstanding demand for renewable energy from those cities is not currently being met, Mr. Grotzinger added that this "was just the initial offering there with the relatively short time window for them to even entertain the offering." Tr. 1113. This demand that cannot be met today is clear evidence of the need for the Grain Belt Express Project.

MLA appears to argue that the uncertainties of the future show there is no need to plan for any project. This view has no merit when the TSA with MJMEUC is coupled with the favorable pricing terms of the Infinity Wind contract. MLA's view that "no one knows" or no one can "possibly know" what the future will hold as far as capacity needs, energy prices, and related issues seems to call for MJMEUC and other utilities to halt their resource planning efforts and embrace a "do nothing" option. MLA's argument is contrary to the Commission's Chapter 22 regulations on Electric Utility Resource Planning. See MLA Brief at 7-11. The fact that the future is uncertain increases the value of wind energy for Grain Belt Express customers like MJMEUC. Wind energy offers customers a low, fixed price for utilities that removes the uncertainty from volatile fuel prices and new environmental regulations. See Ex. 104 at 23-24, 41 (Berry Direct).

Finally, no one rebutted the testimony provided by a variety of intervenors that there is a clear demand for the services provided by the Project. See Ex. 900 at 5-6 (Steve Chriss Rebuttal for Wal-Mart); Ex. 800 at 2 (James Dauphinais Rebuttal on behalf of MIEC, Missouri Retailers Association, and Consumers Council); Ex. 675 at 11-24 (Michael Goggin Rebuttal on behalf of Wind on the Wires and The Wind Coalition); Ex. 725 at 2-3 (Ashok Gupta for the Natural Resources Defense Council).

As Mr. Chriss testified, there is demand for the renewable power that the Project will deliver "both from Walmart's perspective as a retail utility customer in Missouri as well as from

Walmart's perspective as a customer in competitive retail markets east of Missouri in the MISO and PJM footprints." See Ex. 900 at 6 (Chriss Rebuttal). Mr. Dauphinais, representing the interests of industrial customers, stated that the Project will allow "consumers in Missouri to take advantage of low-cost and clean wind energy resources" that "should put downward pressure on wholesale market prices." See Ex. 800 at 3-6 (Dauphinais Rebuttal).

MLA, Show Me, and Staff have raised no worthwhile objections to the overwhelming evidence that there is a need for the Grain Belt Express Project based upon the Company's TSA with MJMEUC, MJMEUC's PPA with Infinity Wind, and other studies and testimony demonstrating need.

B. The Project is Economically Feasible

1. Legal Standard

The Commission in the <u>Tartan</u> case found the proposed service to be economically feasible simply because the Tartan investors bore the economic risk of that project. <u>Tartan</u>, 1994 WL 762882 at *8, 10. Admonishing the applicant's opponents for "seek[ing] to require Tartan to prove that its application is virtually risk-free," the Commission acknowledged that a risk-free project is "an impossibility." <u>Tartan</u>, 1994 WL 762882 at *10. It acknowledged that "estimates will always remain just that -- estimates" and that one cannot calculate actual costs for a new entrant "since the actual costs are not and cannot be known with any certainty until the company is up and running." <u>Id.</u> Although Tartan's cost estimates of its service were a contested issue, the Commission stated that "in this case Tartan bears most of the risk if it has underestimated the economic feasibility of its project, and the public benefit outweighs the potential for underestimating these costs." <u>Id., citing In re UtiliCorp United Inc.</u>, Report and Order at 6, No. GA-94-325 (1994). <u>See also In re UtiliCorp United Inc.</u>, Report and Order, No. GA-95-216 (1995) (rejecting a challenge to the economic feasibility of a proposed project because "[t]here is

little question that UtiliCorp can suffer a complete loss on this project without appreciable damage to its Missouri operation or harm to its ratepayers").

The Commission similarly rejected a challenge to the economic feasibility of a proposed project where ratepayers did not bear any additional risk when it recently granted a CCN to Ameren to site a coal ash landfill next to a generating plant. In re Union Elec. Co., Report and Order at 16, Case No. EA-2012-0281, 2014 WL 3812102 at *1 (2014). In determining that Ameren's project was economically feasible, the Commission found that contamination concerns and remediation costs raised by intervenors who challenged the economic feasibility of the project on those grounds were not a concern, as "Ameren Missouri is self-insured and has supplementary insurance against specific risks associated with its different types of plants, including those with a coal ash landfill." Id. The only costs of the project that the Commission considered were those that would be borne by Ameren's ratepayers, who would benefit from the reduced transportation costs of storing the ash in a landfill located close to the power plant where it is produced. Id. at 20.

In the instant case, it is clear that Grain Belt Express and its investors will bear all of the risk associated with recovering the costs of the Project, which is the specific test the Commission applied in the <u>Tartan</u> case to determine that the project under review was economically feasible. See <u>Tartan</u>, 1994 WL 762882 at *10 (1994) (finding that Tartan's proposal "represents a viable project" as "Tartan bears most of the risk if it has underestimated the economic feasibility of its project"). Because the Company will employ a participant-funded or "shipper pays" model under which the cost to construct the Project will *not* be borne by load-serving entities or their ratepayers through the cost allocation processes, Missouri ratepayers will bear no risks related to

the construction of the Project. <u>See</u> Ex. 100 at 15, 17, 31-32 (Skelly Direct); Ex. 104 at 3, 8 (Berry Direct); Ex. 112 at 4-5 (Kelly Direct).

2. <u>Staff's RTO Interconnection and Related Concerns are Addressed by</u> <u>Grain Belt Express</u>

In the five pages that Staff dedicated to this <u>Tartan</u> factor, it never suggested that the Grain Belt Express Project was not economically feasible. Indeed, Staff admitted that the Project may be economically feasible if the Company's claims regarding the efficiency of HVDC technology, low-cost wind generation from western Kansas, and the participant-funded nature of the Project are true. <u>See</u> Staff Brief at 18-19. Neither Staff nor any other party cast serious doubt on these propositions. The only substantive concerns that Staff raised were the status of the necessary RTO interconnection studies and uncertainty regarding Ameren's Mark Twain Project. <u>Id.</u> Each of these concerns was addressed in detail by the Company.

Clean Line Executive Vice President for Transmission Wayne Galli explained in over 30 pages of testimony how interconnection studies are progressing at SPP, MISO and PJM, the three independent RTO's responsible for seeing that the Project is safely and reliably integrated into the electric grid. See Ex. 109 at 2-32 (Galli Surrebuttal). See 18 C.F.R. § 35.34 (Reg'l Transmission Organizations). In response to Commissioner questions regarding Staff's concerns, Dr. Galli advised "that the level of study that we've done has indicated there won't be significant additional transmission upgrades." Tr. 502-03. Schedule AWG-7 to Dr. Galli's surrebuttal testimony provides a summary of the studies that have been completed to date, and shows that of the 12 studies that need to be completed, all but two are either completed or in their final stages. See Ex. 109 at 14, 24-27 (Galli Surrebuttal). Engineering firms retained by Grain

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⁵ The "required characteristics" of a FERC-approved RTO include "operational authority for all transmission facilities under its control" and "exclusive authority for maintaining the short-term reliability of the grid that it operates." 18 C.F.R. § 35.34(j)(3)-(4).

Belt Express have performed technical analyses that have confirmed the required upgrades to construct the Project. Id. at 3, 10-11, 23-26.

Dr. Galli testified at the evidentiary hearing that regulatory approvals and RTO studies "need to be tackled in parallel as opposed to sequentially from a development timeframe." Tr. 501. No transmission project can interconnect and operate without the approval of the relevant RTOs that are charged with ensuring the reliability of the transmission system. See Ex. 109 at 15 (Galli Surrebuttal); Ex. 112 at 1-2 (Kelly Surrebuttal). Dr. Galli confirmed that RTO interconnection agreements were not a pre-condition required by the Illinois, Indiana, and Kansas Commissions when they granted CCNs to Grain Belt Express. Tr. 501.

The Company's current estimate of costs for transmission upgrades is \$550 million. See Ex. 105 at 28 (Berry Surrebuttal). Mr. Berry, the Company's Chief Financial Officer, testified that potential transmission upgrade costs are "far from the largest cost component" of the entire undertaking. Id. at 29. "When looking at the combined cost of the Project and the connected wind generation, the transmission upgrade costs comprise about 5.5% of the total cost. Therefore, even if such costs increased by 50%, it would only increase the overall cost of the Project to deliver wind energy by 2.75%." Id. Mr. Berry concluded that even if transmission upgrade costs increased by over 500%, the Project's delivered wind energy would still be less expensive than the alternatives he studied, including advanced combined-cycle gas generation, Iowa wind, and Missouri wind. Id. at 29-30.

Suedeen Kelly, a former state and FERC commissioner, confirmed that MISO will study the proposed interconnection of the Grain Belt Express Project and determine what upgrades need to occur, all of which will be paid for by Grain Belt Express as the interconnecting party.

Tr. 532-34. Regarding the participant-funded nature of the Project she stated that the

Commission "can rely on the decision by well-informed individual customers voluntarily entering into contracts to purchase transmission capacity, as well as informed investors willing to invest" in the Project. Tr. 536. Such investors, as well as contracts like the MJMEUC TSA and its PPA with Infinity Wind, are evidence of both economic feasibility and need. Tr. 534-36.

Staff's other concern related to the status of the Mark Twain Project, arguing that uncertainty concerning its status made "unclear" whether the Grain Belt Express Project was economically feasible. See Staff Brief at 19. The Mark Twain Project has been modeled in every transmission expansion plan and generation interconnection study performed by MISO, Associated Electric Cooperative, SPP, and Southwestern Power Administration since it was approved by the MISO Board of Directors in 2012. See Ex. 109 at 16 (Galli Surrebuttal). Therefore, all transmission and generation projects under development in MISO are premised on the Mark Twain Project being built. Id. at 16-17. Public utilities and the Commission cannot simply put on hold all transmission and generation projects until the legal uncertainties affecting that project are resolved. Should Mark Twain not proceed, MISO must identify and implement alternative projects to address any future reliability issues, and continue to operate the grid in a reliable manner. Id. at 17. See 16 U.S.C. § 8240 ("Electric reliability") (obligation of RTOs to comply with FERC-approved reliability standards and applicable rules, orders and tariffs).

The potential for delays related to Mark Twain does not affect the <u>Tartan</u> economic feasibility analysis where the cost of the Project is borne by the Company's investors, not ratepayers. Moreover, given that "[t]he Commission can rely on FERC to oversee the RTOs' interconnection process and ensure that the Grain Belt Express Project ... is safely interconnected with SPP, MISO, and PJM," there is no basis for the Commission to reject or delay the Company's CCN Application. <u>See</u> Ex. 112 at 1-2 (Kelly Surrebuttal). This is

especially true considering the agreements of Grain Belt Express with Staff that completed RTO interconnection agreements and associated safety and reliability studies are a condition of the Company receiving a CCN. See Ex. 109 at 15 (Galli Surrebuttal); Tr. 500-02; Ex. 206, § II ("Interconnection Studies and Safety").

3. Show Me's Criticism of Low-Cost Kansas Wind Generation and Transmission Congestion Costs has No Merit

Show Me briefly addresses the economic feasibility factor, citing the conclusions of Dr. Michael Proctor in the 2014 Case and its witness Mr. Justis regarding the comparative cost of Kansas wind generation with other generation resources. See Show Me Brief at 20-21. However, neither of their opinions impeaches Mr. Berry's LCOE conclusions that taking low-cost Kansas wind energy via the Project is the most economically feasible alternative available to supply electricity to Missouri utilities.

Dr. Proctor did not testify in the pending case, which is not surprising. Mr. Berry explained that when Dr. Proctor appeared recently in the Company's proceeding before the Illinois Commerce Commission, he "ended up coming to a different conclusion than he did in [the 2014 Case in] Missouri." Tr. 918. Mr. Berry explained that Dr. Proctor compared the Grain Belt Express Project delivering wind energy to Illinois and PJM with a combined-cycle gas plant and concluded that "the Kansas Wind was actually a little bit cheaper." Tr. 965. Ultimately, Mr. Berry stated that Illinois Commission Staff and the Company (although Mr. Berry noted the Company concluded that Kansas wind "was a lot cheaper") "came to a single view on it" which "was part of the approval in Illinois" issued in November 2015. Id. See Application, ¶ 71-72.

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⁶ Staff witness Shawn Lange acknowledged Staff's position that the agreements in Exhibit 206 on safety and related issues alleviate Staff concerns. Tr. 1329-32. Mr. Beck agreed that if MISO studies found that the Project would have an impact on the transmission system in Missouri and Grain Belt Express mitigated that impact, the Project would be interconnected and that, as a result, reliability would be enhanced. Tr. 1370-71.

Show Me also relies on the analysis of Mr. Justis, although it is unclear whether the brief refers to his original analysis or his heavily corrected version. Show Me states that Mr. Justis only found that the MJMEUC first-mover rate was competitive with MISO wind, arguing that the non-discounted rate is highly uncompetitive. See Show Me Brief at 20. However, Mr. Justis' own LCOE analysis indicates that the Project's delivered energy is, in fact, cheaper than wind from Missouri or Iowa. See Ex. 105 at 6-8 (Berry Surrebuttal); Ex. 420 at 1 (Summary of Corrections to Justis Rebuttal). These conclusions are based on the full rate for the Project's transmission service, which Mr. Justis used, not the discounted MJMEUC rate. See Ex. 105 at 21-23 (Berry Surrebuttal); Ex. 400 at 13 & Sched. PGJ-01 (Justis Rebuttal). See also Company Brief at 42-46.

Notwithstanding the conclusions of the Justis LCOE analysis, Show Me attempts to use his analysis of the Crystal Lake wind project in Iowa to undermine the economics of the Project and MJMEUC's PPA and TSA. However, Mr. Justis failed to account for congestion costs when comparing northern Iowa wind generation to western Kansas wind from the Project. Tr. 1562-63. When the full cost to bring wind power from the Crystal Lake project on the Iowa-Minnesota border to Columbia was included, the total cost of delivered energy was far more expensive than the MJMEUC arrangement with Grain Belt Express and Infinity Wind, and was "competitive" with the non-discounted MJMEUC rate. Tr. 1574-76 (HC).

Finally, Show Me attacks Grain Belt Express and MJMEUC for considering congestion charges in comparing the price of energy on the AC grid with the Project's delivering energy through an HVDC line. See Show Me Brief at 21. Characterizing their analysis of congestion charges "as smoke and mirrors to achieve a desired result," Show Me apparently believes utilities should disregard such costs. Id.

However, the evidence was clear that on an HVDC line there is virtually no congestion, making the Project attractive to customers. See Ex. 476 at 5-6 (Grotzinger Rebuttal); Ex. 477 at 4-5 (Grotzinger Surrebuttal). No witness contested the assertions of Grain Belt Express that the Project's HVDC design will provide a congestion-free delivery source, in contrast to the AC interconnected grid, which is frequently characterized by congestion that raises transmission costs. See Ex. 108 at 9-10 (Galli Direct); Ex. 109 at 17-18 (Galli surrebuttal); Ex. 104 at 34 (Berry Direct).

Indeed, one of the most appealing features about taking service on the Project is that it offers MJMEUC congestion-free access to energy, unlike the Crystal Lake wind farm in northern Iowa and other MISO wind projects that are expected to experience far higher congestion prices compared with the Grain Belt Express Project. See Ex. 477 at 4-5 (HC). FERC Order 890 recognized that transmission congestion affects the value of generation and, if not remedied, restricts competition in the electricity market. See Ex. 675 at 20 (Goggin Rebuttal). Mr. Goggin testified that severe transmission congestion inhibits the delivery of low-cost wind generation from western Kansas and other parts of western SPP to Missouri "by imposing congestion costs that in many cases exceed the price of wind energy." Id. at 29, citing SPP's 2015 State of the Market Report. Congestion costs are a major consideration for utilities in procuring energy at the lowest-possible cost, and Show Me's suggestion that such costs should be ignored is nonsense.

4. MLA's Attacks on Mr. Berry's Use of a 55% Capacity Factor for Kansas Wind Generation, the MJMEUC TSA, and the MJMEUC-Infinity Wind PPA are Flawed

MLA criticized Mr. Berry's LCOE analysis for using a 55% capacity factor for Kansas wind generation and a \$14.00/MWh cost to produce energy from Kansas wind generation. Neither of these attacks is supported by the evidence.

No witness in this proceeding provided evidence to dispute Mr. Berry's use of a 55% capacity factor. If MLA had been concerned that the 55% capacity factor was such a fiction, it would have questioned Mr. Berry about it during the hearing. MLA now states belatedly that "there is no support in the record" for that number. <u>See MLA Brief at 18</u>. The truth is there is no support for MLA's allegation.

During discovery Mr. Berry was asked about the basis of the capacity factor. He responded fully to MLA's Data Requests 87 and 91, which are appended as Attachment A. He explained that the primary source of the 55% capacity factor was a meteorological analysis of wind speed data from anemometers or towers within 40 miles of the Project's Kansas converter station. The towers were located near Dodge City and Mullinville, and the data was reviewed by V-Bar, LLC, a third-party company that performs wind resource assessments for the energy industry. Mr. Berry stated that he calculated the 55% capacity factor using the power curves for wind turbines that are available today. See Response to Data Request DB.87 (Attachment A).

Responding to a further MLA data request, Mr. Berry stated that the 55% capacity factor for Kansas Wind used in his LCOE analysis was consistent with the range of capacity factors compiled by the investment bank Lazard. See Response to Data Request DB.91 (Attachment A). Contrary to MLA's assertions, a 55% capacity factor is supported by actual wind data in western Kansas, third-party verification of the wind data, and currently existing turbine technology.

Although Mr. Berry was not cross-examined by MLA regarding the 55% capacity factor, Mr. Goggin was. He testified that the data compiled by the Department of Energy's National Renewable Energy Laboratory ("NREL") showed "that the best wind resources in Kansas do have a capacity factor around 55%." Tr. 1150-51. He stated that "a 55% estimate is reliable for ... the type of wind resource that would be accessed for Grain Belt." Tr. 1141. Mr. Goggin

further noted that "the deployment of larger turbines, particularly longer rotor turbines, but also to some extent taller tower turbines that result in higher energy capture and a much higher capacity factor by capturing more wind at low wind speed periods" are responsible for increases in capacity factors from 2012 to 2014 at a rate of 4% per year. Tr. 1172-73. He concluded:

And that trend is continuing. We're seeing even larger rotors being installed on turbines going into the field today and ... that's expected to continue into the future.

So I believe that trend makes a 55% capacity factor assumption reasonable for Kansas. [Tr. 1173].

Finally, it should be recognized that Show Me's expert Mr. Justis presented no "correction" to the 55% capacity factor used by Mr. Berry. See Ex. 400, Sched. PGJ-1. In his surrebuttal Mr. Justis expressed no criticism of Mr. Berry for using a 55% capacity factor, although he acknowledged MJMEUC's Mr. Grotzinger did use a 50% factor. See 405 at 9. Notably, MJMEUC determined that it was in the best interest of its Missouri members and their customers to enter into a TSA with Grain Belt Express, as well as a PPA with Infinity Wind, even based on this more conservative capacity factor assumption. Although MLA relies upon the analysis of Dr. Proctor from the 2014 Case (MLA Brief at 18), it fails to acknowledge that when Dr. Proctor was asked whether he disagreed with the 55% capacity factor, he replied: "There's no way I can dispute that." See Tr. 1390 (2014 Case).

MLA also complains that the price for wind energy that Mr. Berry calculated in his LCOE analysis is inconsistent with other contract prices, including the Infinity Wind PPA with MJMEUC. See MLA Brief at 23-24. As Mr. Berry pointed out during cross-examination in closed session, the comparisons must take into account whether a year-one price is accompanied by a percentage escalator or is a flat price. Tr. 863-66 (HC). When asked to compare the \$14.00 figure in his LCOE analysis with the Infinity Wind contract, he responded that because his

number had a higher escalator of 2.5%, "you can't perform that comparison without taking into account the escalators." Tr. 866 (HC). The MJMEUC PPA price of \$16.50 has a different escalator, which is confidential. See Sched. JG-4 (HC) at 3 ("Contract Price"), Ex. 476 (Grotzinger Rebuttal). MLA's brief also references a PPA discussed by Mr. Berry in a data request, which he stated at the hearing had a flat price of \$15.80 per MWh without any escalator. Tr. 864-66 (HC). Once the annual escalators are taken into account, the prices for wind energy in Mr. Berry's LCOE analysis, the Iron Star PPA, and the PPA discussed in his data request response are very similar.

Mr. Berry's LCOE analysis withstands MLA's attacks because his assumptions are accurate and consistently presented. In addition, the analysis performed by MJMEUC, a load-serving entity with municipal utility members who have real customers, shows why the Grain Belt Express Project creates substantial savings for Missouri ratepayers. Mr. Grotzinger has worked for 40 years in the electricity industry, not only for MJMEUC, but also for City Utilities in Springfield, as well as Kansas City Power & Light Co. See Ex. 476 at 1-4. During those many years of utility experience, he has planned for and met the generation needs of his customers by relying on a variety of resources, including coal, diesel, natural gas, and wind. Id. at 1.

MLA, obviously frustrated with Mr. Grotzinger's conclusions, now attacks his assessment of the economics of the Project as "so arbitrary and speculative as to be meaningless." See MLA Brief at 31-33. Perhaps the source of MLA's frustration is that it has Mr. Grotzinger's numbers completely wrong. MLA asserts that the Company's estimate of congestion costs, which dates from over fourteen months ago and represents a "best case" scenario in terms of the availability of congestion hedges, was only \$1.9 million. MLA then

compares that \$1.9 million estimate of congestion costs with Mr. Grotzinger's <u>total</u> transmission cost of \$12.7 million on Schedule JG-3. Comparing only part of the transmission cost (the congestion component) with the total cost of transmission (including congestion, electric losses, and transmission service) is meaningless. <u>Id.</u> at 31.

MJMEUC's congestion cost calculation was actually between \$1.8 million and \$8.8 million because Mr. Grotzinger examined a range of congestion costs between \$2/MWh and \$10/MWh. See Sched. JG-3, Ex. 476 at 5 (Grotzinger Rebuttal). His analysis showed total transmission cost savings between \$5.8 million and \$12.8 million. Id. Although MLA attacks the MJMEUC analysis throughout its brief, it is telling that its own expert Mr. Jaskulski conceded in his testimony that "MJMEUC will save \$3 million per year buying Kansas wind" from Infinity Wind and delivering it over the Grain Belt Express Project. See Ex. 307 at 2, 5-6 (Jaskulski Surrebuttal).

MLA's final attack is on the pricing offered to MJMEUC as a first-mover rate, apparently believing that a "good deal" (Tr. 1554 [Justis]) for MJMEUC is a problem. In quoting Mr. Berry's response to Commissioner Rupp about a "sweetheart deal," MLA failed to tell the rest of the story. Mr. Berry's full response showed that a lower price for Missouri customers was consistent with the overall economics of the entire Project. He explained that the converter station in Missouri had been part of the Project for a long time, in part to create benefits for the state, but also to "have more drop-offs" that permitted the Company to "sell more capacity," leading to "an economy of scale." Tr. 944. This results in the Project being "a good deal for Missouri" because of "a huge market in PJM that can pay higher prices." Id.

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⁷ Schedule JG-3 estimates the total transmission cost savings to MJMEUC from \$5,789,600 to \$12,797,600 if MJMEUC were to use the entire 200 MW under the TSA. <u>See</u> Ex. 476 at 5 (Grotzinger Rebuttal).

The fact that eastern states will pay higher prices that will help pay for the line and will, in effect, subsidize Missouri operations simply demonstrates why the Project is both economically feasible and a benefit for Missouri. <u>Id.</u> Mr. Berry stated that a lower price for MJMEUC makes sense because it has committed to the Grain Belt Express Project at this early stage, even without regulatory certainty having been achieved in Missouri. Given the benefits that will be enjoyed by MJMEUC's load-serving member utilities and their ratepayers as a result of the TSA's first-mover rate, Mr. Berry agreed that the arrangement is "a very good deal for them." Tr. 945.

None of the concerns raised by Staff, nor the arguments of Show Me and MLA, detract from the evidence provided by the Company, MJMEUC, and Infinity Wind which shows that the Grain Belt Express Project is an economically sound proposition.

C. The Project is in the Public Interest

1. Legal Standard

In the <u>Tartan</u> case the Commission held that the public interest factor "is in essence a conclusory finding as there is no specific definition of what constitutes the public interest." <u>Tartan</u>, 1994 WL 762882 at *10. The Commission concluded that "positive findings with respect to the other four standards will in most instances support a finding that an application for a certificate of convenience and necessity will promote the public interest." <u>Tartan</u>, 1994 WL 762882 at *10. Indeed, in Tartan's predecessor case, <u>Intercon Gas</u>, the Commission did not consider public interest as a distinct criterion for its CCN determinations. <u>In re Intercon Gas</u>, <u>Inc.</u>, 30 Mo P.S.C. (N.S.) 554, 561 (1991) (in which the Commission applied the following criteria: "(a) a need for the proposed service; (b) the applicant's qualifications, (c) the applicant's financial ability to provide the service, and (d) the economic feasibility of Applicant's proposal"). Because the cost of a service offered by a new entrant is not entirely knowable, the

Commission concluded that the public interest "question, therefore, becomes whether the estimates given are reasonable." Tartan, 1994 WL 762882 at *10.

A broad interpretation of a project's public interest is supported by Missouri courts, which have held that "the rights of an individual with respect to issuance of a certificate are subservient to the rights of the public," and "some of the public may suffer adverse consequences for the total public interest." Citing controlling case law, the Commission has found that "the ultimate interest is that interest of the public as a whole ... and not the potential hardship to individuals" In re Union Electric Co., Report and Order, Case No. EO-2002-351, 2003 WL 22017276 at *15 (2003). "The Commission must, therefore, balance all the relevant factors, both the benefits and detriments, and determine whether the public benefits of the project outweigh the individual detriments." Id. Such an analysis must also include the consideration of future needs and benefits, such as the Project will provide in the form of low-cost renewable wind generation. United for Missouri v. PSC, 2016 WL 7650625 at *4 (Mo. App. W.D. 2016) (approving CCN for utility-scale solar plant).

2. The Economic Benefits of the Project Are Substantial

Confronted with the overwhelming evidence that the Project will result in substantial economic growth and development in Missouri, both as measured by jobs and increased tax revenues, MLA and Show Me have urged the Commission to ignore this evidence (MLA Brief at 64) or to reject the Missouri DED's economic benefits forecast study as "an academic exercise."

⁸ State ex rel. Mo. Pac. Freight Transp. Co. v. PSC, 288 S.W.2d 679, 682 (Mo. App. K.C.) aff'd sub nom. State ex rel. Mo. Pac. Freight Transp. Co. v. PSC, 295 S.W.2d 128 (Mo. 1956). See In re KCP&L Greater Missouri Operations Co., Report and Order at 33-34, Case No. EA-2009-0118, 2009 WL 762539 (2009); In re Union Electric Co., Report and Order, Case No. EO-2002-351, 2003 WL 22017276 at *15 (2003); MLA Brief at 4.

⁹ In re Sho-Me Power Corp., Report and Order, Case No. EO-93-259, 1993 WL 719871 (1993). See In re KCP&L Greater Missouri Operations Co., Report and Order at 33, Case No. EA-2009-0118, 2009 WL 762539 (2009) (holding that "[d]etermining what is in the interest of the public is a balancing process. In making such a determination, the total interests of the public served must be assessed. This means that some of the public may suffer adverse consequences for the total public interest"). See In re Union Electric Co., Report and Order, Case No. EO-2002-351, 2003 WL 22017276 at *15 (2003).

<u>See</u> Show Me Brief at 26-27. Plainly, any evaluation of the public interest must assess "the total interests of the public." <u>See</u> Report and Order at 33, <u>In re KCP&L Greater Mo. Operations Co.</u>, No. EA-2009-0118 (2009). Therefore, it is entirely appropriate for the Commission to consider the economic impacts of the Project.

DED witness Alan Spell explained that his economic forecast was the product of the Regional Economic Models, Inc. Policy Insight ("REMI") model, a tool that is universally used "by government agencies on the national, state, and local level, as well as by private consulting firms, utilities, and universities." See Ex. 526 at 4 (Spell Rebuttal). The estimated benefits of the Project include over 1,500 new jobs over its construction period, 91 jobs in the Project's first year of operation, and 28 jobs in subsequent years. Personal income during the construction period was estimated at \$246 million and \$249 million in Missouri-specific manufacturing and professional service contracting spending" Id. at 3.

Grain Belt Express has made commitments that Missouri companies will supply a large percentage of the equipment and labor for the entire Project, not just the Missouri portion of the Project. These companies include PAR Electric (Kansas City), which will construct the Project; ABB Inc. (St. Louis), which will manufacture transformers; Hubbell Power Systems (Centralia) which will manufacture the insulator cores and conductor hardware; and General Cable Industries (Sedalia) which will manufacture the steel core for the line's conductor. See Ex. 115 at 15-17 (Lawlor Direct); Ex. 121 at 5-6 (Shiflett Direct).

On cross-examination, Mr. Spell explained that he has been doing economic impact modeling for over 12 years (Tr. 1326), is continuously trained on the REMI model (Tr. 1238), and has a "pretty high" confidence level that the Project "will have a positive benefit based on the impact from the construction and the operation" of the transmission line and converter

station. Tr. 1256. Advising that he was not aware of a better predictive tool to assess economic activity than the REMI model, Mr. Spell stated that it is "the one model that has features ... which no other model has, [and] helps produce more conservative figures." Tr. 1285. He noted that the Pew Center recommended that states use models like REMI "to understand the cost benefit of their business incentives," and that "Missouri was one of the top ten states in doing those cost benefit analysis." Tr. 1285. Finally, in reply to MLA's questions about the effect of the Project on the coal industry, Mr. Spell stated that in the "hundreds of applications for new businesses" that he has received in recent years, he had "never seen one" proposing a new coal plant for Missouri. Tr. 1288-89.

MLA also disputes the testimony of Randolph County Assessor Richard Tregnago on the tax benefits that would be received by Missouri counties (MLA Brief at 69-70), but offered no evidence to contradict Mr. Tregnago's estimate that in its first year of operation the Project will generate more than \$720,000 in tax revenues to Randolph County. See Ex. 123 at 4 (Tregnago Direct). Notably, MLA did not sponsor testimony by another Missouri county assessor to contradict Mr. Tregnago's estimates. The undisputed evidence is that Grain Belt Express will pay approximately \$7.2 million in the first year of operation in tax payments to the eight Missouri counties where the Project will be located. See Ex. 115 at Sched. MOL-7 at 4 (Lawlor Direct).

Similarly, Show Me failed to provide any sound basis to reject the results of the REMI model. Instead it relied upon Staff witness Stahlman whose research on the economic benefits of the Project consisted of one paragraph lacking any citation to economic study results or models (Ex. 200, Staff Report at 41-42). Mr. Stahlman testified that he did not dispute the findings set forth in DED's REMI study, and that he did not conduct a similar study. Tr. 1336-37.

3. The Project Will Lower Production Costs, Reduce Emissions and Improve Reliability

No party's brief disputed the Company's evidence that the Project will lower both adjusted production costs and demand costs for Missouri, and that the savings under a "business as usual" scenario would be approximately \$40 million in the first year of operation alone. See Ex. 206 at 4-5, 10-12 & Sched. JNC-2 (Copeland Direct). This is not surprising since no other party conducted a production cost analysis. Tr. 1305-06 (Kliethermes); Tr. 1486 (Jaskulski); Ex. 400 & Tr. 1586 (Justis). For Missouri utilities with cost-based rates, a lower wholesale cost of electric generation should translate into lower rates charged to end users. See Ex. 104 at 44 (Berry Direct); Ex. 112 at 8 (Kelly Surrebuttal). The Project will also lower emissions in the Eastern Interconnection by displacing thermal generation that emits sulfur dioxide, nitrogen oxides, and carbon dioxide. See Ex. 106 at 4 (Copeland Direct).

Although Staff commented upon the Company's evidence that the Project will improve reliability, based on Edward Pfeiffer's loss of load expectation study, it simply noted that it provided a "small" improvement. See Staff Brief at 15. However, no one disputed Mr. Pfeiffer's testimony at the hearing that, regardless of the size of the number, "the issue is it's moving as an improvement." Tr. 727. Although MLA sought to belittle Mr. Pfeiffer's analysis, noting that Missouri is not facing a reliability crisis (MLA Brief at 60-63), it could not dispute Mr. Pfeiffer's conclusion in both his direct and surrebuttal testimony that reliability is improved by the Project which acts as a tie line that links eastern Missouri to capacity in both the SPP and PJM systems. See Tr. 747-49; Ex. 117 at 5 (Pfeiffer Direct); Ex. 118 at 11-12 (Pfeiffer Surrebuttal).

4. <u>Landowner Interests are Respected and are Compatible with the Broader Public Interest</u>

Grain Belt Express has made efforts far beyond the routine practices of incumbent electric utilities to engage the landowners who will be affected by the Project, to adopt specific protocols and policies to address their concerns, and to assure fair compensation for them. The Company has also agreed that the terms of key protocols may be incorporated into the Easement Agreement, as well as be a condition to the CCN. See Ex. 113 at 3-16 & Sched. 1-4 (Lanz Direct); Ex. 115 at 4-14 (Lawlor Direct); Ex. 101 at 10-13, 31-32 & Sched. JLA-2 (Arndt Direct); Tr. 158 (Skelly); Tr. 411-13 (Lanz). None of these efforts, which far exceed standard industry practices, is given any weight by MLA, Show Me, or Farm Bureau.

MLA spends over ten pages of its brief simply repeating statements from landowners that, while undoubtedly sincerely made, in many cases lack a factual basis to support them. For example, the scientific evidence stands unchallenged that there are no known risks to human health from the electric and magnetic fields that may be generated by the Project or that of any other transmission project. <u>See</u> Ex. 103 at 24 (Bailey Direct).

Both MLA and Show Me argue that the Project will create problems for farming operations, but the only witness who underwent cross-examination during the evidentiary hearing who operates an active farm disputed those allegations. Robert Wayne Wilcox, a Randolph County farmer and member of the Randolph County Commission, testified that the Project's transmission line would not create problems during harvesting, planting or fertilizing. See Tr. 673; Ex. 126 at 3-5 (Wilcox Surrebuttal). "If you're running a spreader truck, you just go right on by it. You don't have to worry about it." Tr. 673. With regard to spraying crops near a transmission line pole, he advised: "You need to make a diversion around the pole, but

those booms are set up well. If you slow down appropriately, they'll spring back, and they're not a real hazard." Tr. 673-74.

This directly contradicted the testimony of MLA witness Jim Edwards (MLA Brief at 42), to which Mr. Wilcox responded:

Mr. Edwards uses a lot of detail to describe the [planting] process, but it really is not that big of a deal. Most farming equipment is automated, so you just push a button and the hydraulics just lift up the planter. If you are using older equipment, you are activating a lever. Overall, this probably takes 2 to 3 minutes per pole with your planter or harvester.

So, in the case of Mr. Edwards, who according to his testimony, has 8 sets of pole on his property, even it were to take him up to 4 minutes per structure, that adds about 16-32 minutes to his farming, twice a year (planting and harvesting).

So he is taking about an extra 32-64 minutes of his time each year so that his follow citizens can have access to reliable electricity. That seems like a short amount of time for the benefit that our society is gaining in return. [Ex. 126 at 4-5 (Wilcox Surrebuttal)]

MLA also relies on the testimony of Christina Reichert (MLA Brief at 39-40), including her complaints about "the economic viability" of her family's bed and breakfast business. However, neither Mrs. Reichert nor MLA mention that in response to their concerns, Grain Belt Express re-routed the transmission line away from the Reichert bed and breakfast. See Sched. JGP-2 at 29 (June 2016 Missouri Route Selection Study Addendum), Ex. 119 (Puckett Direct). "The new alignment is approximately 1,600 feet from Sycamore Valley Farms Bed and Breakfast, whereas the Original Proposed Route is approximately 450 feet away." Id. This modification, known as Reroute Chariton-1, made other changes to the route to avoid several other residences, a private air strip (Shiloh Airpark), and two small potentially historic cemeteries. Id. at 28-29.

In total, the re-routing process led to 16 modifications which reduced the number of residences within 500 feet of the Project, affected fewer churches and cemeteries within 1,000

feet, crossed fewer parcels, and reduced the number of archeological sites within 1,000 feet of the project from 49 to 41. Id. at 37-39. The opponents' failure to recognize the efforts that Grain Belt Express has taken to revise the proposed route is unfortunate and fails to recognize the Company's commitment to working with landowners and accommodating their concerns. For example, MLA refers to a watercolor painting that purports to show a transmission tower on property proximate to the Reichert's bed and breakfast. See Ex. 551 at 5 & Sched. SN-3 (Nordstrom Rebuttal). The drawing was not created by the sponsoring witness, is not to scale, and was prepared over two years ago for the 2014 Case. See Ex. 551 at 4-5. More importantly, the drawing and the testimony do not reflect that the Company's 2016 Addendum to the 2014 Route Selection Study re-routed the line away from the Reichert property. See Sched. JGP-2 at 29, Ex. 119 (Puckett Direct).

Finally, MLA relies upon the opinions of Kurt Kielisch with regard to property values. See MLA Brief at 45-47. Mr. Kielisch is not licensed as an appraiser in Missouri, but is in North Dakota, where he is currently the subject of a disciplinary and ethics investigation. See Ex. 133; Tr. 1486-89. The North Dakota Real Estate Appraiser Qualifications and Ethics Board on June 23, 2016 vote unanimously to proceed with disciplinary action based on allegations of "bias and general lack of competency." See Ex. 133 at 1. Given the lack of a scientific basis to his analysis in this case, including his reliance upon YouTube searches to determine public perception, his analysis of the real estate that he surveyed as well as his methods contain significant errors and should be disregarded. See Ex. 3-1 at 7 (Kielisch Rebuttal).

As discussed at length in the report by Company witness Richard J. Roddewig, the Kielisch study is flawed in significant respects. <u>See</u> Sched. RJR-1 at 44-45, Ex. 120 (Roddewig Surrebuttal). Mr. Roddewig is a licensed appraiser in 27 states, including Missouri, with over 35

years of experience as a professional real estate appraiser. Based on years of study and analysis, Mr. Roddewig concluded that the effect of transmission line corridors on the prices of farmland is no more than about a minus 2.0% impact. <u>Id.</u> at 44.

Completely absent from the opponents' briefs is any discussion of the Company's Missouri Landowner Protocol, Agricultural Impact Mitigation Protocol, Code of Conduct, and its industry-leading compensation package. The standard Grain Belt Express offer includes (a) payments amounting to 110% of the average fee value of the right-of-way to ensure market value is reached, (b) the option of a 2% annual escalating structure payment for each structure on a landowner's property, and (c) agriculture impact payments designed to compensate for economic loss caused by the Project. See Ex. 113 at 6-9 & Sched. DLK-1 to DLK-4 (Lanz Direct); Ex. 101 at 10-13 & Sched. JLA-2. Testifying that the Company's agricultural protocols "are consistent with the best industry standards" for constructing projects like the Grain Belt Express, Dr. James Arndt concluded that the Project "will not have any substantive impact to the operations, soil quality, or crop yields of individual agricultural operations of landowners and tenants." See Ex. 101 at 31-32 (Arndt Direct).

Considering the broad spectrum of public benefits that the Project will create and the Company's commitments to recognize and protect landowner interests, the evidence supports a finding that the Grain Belt Express Project serves the public interest. Bringing low-cost renewable wind generation to a converter station in Missouri that will provide for the direct delivery of wind power to MJMEUC members and their customers is a significant benefit that will save them between \$9 million and \$24 million annually. See Ex. 476 at 8 (Grotzinger Rebuttal); Ex. 107 at 3 (Copeland Surrebuttal). The Project will lower production and demand costs for Missouri, and reduce sulfur dioxide and other emissions across the Eastern

Interconnection. <u>See</u> Ex. 106 at 4 (Copeland Rebuttal). The construction of the Grain Belt Express line and converter station will have a significant positive effect on the Missouri economy through the direct and indirect creation of jobs, as well as an increase in local and state tax revenues. <u>See</u> Ex. 526 at 3 (Spell Rebuttal); Ex. 234 at 4-8 (Tregnago Rebuttal); Sched. MOL-7 at 4, Ex. 115 (Lawlor Direct).

In contrast, any decrease in value incurred by landowners whose property is crossed by the right-of-way ("ROW") is likely to be modest. <u>See Sched. RJR-1 at 9, 15, Ex. 120</u> (Roddewig Surrebuttal). Any economic loss will be compensated under the Landowner Protocol which contains more generous features than those offered by incumbent utilities. <u>See Tr. 440</u> (Lanz); Ex. 113 at 6-9 & Sched. DLK-1 to DLK-4 (Lanz Direct); Tr. 1180-83 (Shaw). Other elements of the Landowner Protocol, from the Agricultural impact Mitigation Protocol to the availability of arbitration proceedings to avoid more costly court cases, reflect the Company's commitment to work fairly and cooperatively with property owners.

The Commission must also recognize that a majority of the public comments registered on its Electronic Filing and Information System ("EFIS") expressed support for the Project. Out of approximately 11,800 comments, over 6,200 favored the Project, amounting to a 53% positive rating. See Staff Ex. 207. The Project creates clear benefits for over 300,000 Missouri electricity customers who will use the low-cost renewable power purchased through the MJMEUC's TSA with the Company, and MJMEUC's PPA with Infinity Wind. See Ex. 475 at 3-5 (Kincheloe Rebuttal); Ex. 476 at 4-8 (Grotzinger Rebuttal). All Missourians will benefit from lower wholesale prices, cleaner air and water, and a more robust transmission grid. See Ex. 106 at 4 (Copeland Direct); Ex. 117 at 5 (Pfeiffer Direct); Ex. 118 at 11-12 (Pfeiffer

Surrebuttal). Finally, the Project will create jobs and increase tax revenues. <u>See</u> Ex. 526 at 3-4 (Spell Rebuttal).

Any reasonable assessment of magnitude of these benefits compared with the potential detriments compels the conclusion that the Grain Belt Express Project is in the public interest.

5. Eminent Domain

Without regard for Missouri's careful stewardship of the law of eminent domain, Show Me and Farm Bureau argue that the Commission should consider matters over which it has no jurisdiction to issue a decision. See Show Me Brief at 30; Farm Bureau Brief at 8. Because issues regarding eminent domain are not pertinent to its duties under Section 393.170, the Commission lacks the power to address the issues raised by these parties, which are appropriate issues for the General Assembly.

The Commission's duty in this case is to focus on the evidence relevant to whether the Project "is necessary or convenient for the public service" by applying the five <u>Tartan</u> factors. Public policy issues regarding eminent domain are not relevant to those factors.

Nevertheless, Show Me and Farm Bureau attempt to bootstrap the eminent domain issue to the public interest factor in this case. See Show Me Brief at 30; Farm Bureau Brief at 3, 8. They incorrectly claim that because Grain Belt Express is a "merchant" and "private" company, the Project will not be devoted to public service and the historical justifications for eminent domain are not present. Id. Neither party cites any Missouri appellate decision to support this proposition.

The power of eminent domain is the inherent power of a state to take private property so long as the purpose for which land to be taken is a public purpose and the state pays just compensation. State ex rel. Jackson v. Dolan, 398 S.W.3d 472, 476 (Mo. 2013); City of Kansas City v. Powell, 2014 WL 4976980 at *5 (Mo. App. W.D., Oct. 7, 2014), as modified (Nov. 25,

2014). The power of eminent domain clearly permits the taking of private property. <u>State ex rel.</u> <u>St. Louis Union Trust Co. v. Ferriss</u>, 304 S.W.2d 896, 898-98 (Mo. 1957).

While the power of eminent domain is an inherent state power, the legislature may delegate this authority to public <u>and</u> private entities, subject to constitutional limitations. <u>City of Kansas City v. Hon</u>, 972 S.W.2d 407, 409 (Mo. App. W.D. 1998); <u>Osage Water Co. v. Miller County Water Auth.</u>, <u>Inc.</u>, 950 S.W.2d 569, 572 (Mo. App. S.D. 1997). Eminent domain "may be exercised by private corporations to the extent and for the purposes authorized by law." <u>State ex rel. N.W. Elec. Power Co-op.</u>, <u>Inc. v. Waggoner</u>, 319 S.W.2d 930, 934 (Mo. App. K.C. 1959).

The Missouri Supreme Court has noted: "We cannot say that public bodies are the only entities that may be invested with the power of eminent domain – the authority to designate those entities with whom it may invest that power is solely that of the legislative branch." <u>Annbar Associates v. West Side Redev. Corp.</u>, 397 S.W.2d 635, 647 (Mo. en banc 1965). "We cannot, and should not, second guess the legislative branch of government as to what bodies may be invested with the power of eminent domain." <u>Id.</u> Accordingly, "[t]he granting of that power to private enterprise is not an inherent prohibition of the constitution." Id.

Yet Show Me and Farm Bureau feel at liberty to second guess what the Missouri Supreme Court would not. Their general opposition to eminent domain is precisely what Missouri law has authorized and regulated for well over a century, including amendments enacted most recently in 2006 which offer additional protections for landowners. See § 523.010, et seq. Any opposition to the ability of the state to delegate the power of eminent domain to a private entity should be raised with the General Assembly, not at the Public Service Commission which has no power to alter state statutes.

Show Me's condition requiring that this Commission somehow override the eminent domain statute is equally irrelevant and contrary to the law. See Show Me Brief at 30. "In Missouri, the right of eminent domain rests with the state and does not naturally inhere in counties, municipalities or public service corporations." State ex rel. Missouri Cities Water Co. v. Hodge, 878 S.W.2d 819, 820 (Mo. en banc 1994). Because the right to condemn can be exercised only upon delegation from the state, it follows that the right to withhold such delegation equally lies with the legislature. Id. Such right has long been the province of public utilities such as Grain Belt Express. "There is no question that, whatever it may have been in its historical origin, Section 523.010 now not only provides a procedure for but confers upon the public utilities therein named the substantive right of eminent domain." Southwestern Bell Tel. Co. v. Newingham, 386 S.W.2d 663, 667 (Mo. App. Spfld. 1965).

Finally, it must be recognized that the Company has made clear that it "views the use of eminent domain as a last resort that is appropriate only after exhausting all reasonable attempts at voluntary easement and title curative work." See Ex. 113 at 16 (Lanz Direct). The Company believes that its Missouri Landowner Protocol, the Agricultural Impact Mitigation Protocol, and the Easement Agreement will lead to those voluntary negotiations with landowners, and will include the resolution of final siting issues. See Company Brief at 59-62.

IV. Conditions

A number of conditions recommended by other parties have already been incorporated into the Company's agreements with Staff as reflected in Exhibit 206 (copies of which are attached to both the Staff Brief and the Company's Brief), or have been agreed to by the Company elsewhere, as discussed below.

Certain legal requirements advocated by MLA or Show Me are simply beyond the authority of this Commission to impose. MLA recommends requiring Commission approval of the Company's issuance of debt under Section 393.200. See Condition 7, MLA Brief at 84. This provision only applies to electrical corporations "organized or existing or hereafter incorporated under or by virtues of the laws of this state." See § 393.200.1. Grain Belt Express is a limited liability company organized under Indiana law. See Application ¶ 6 & Ex. 1. Therefore, this proposal is not acceptable to the Company and should be rejected by the Commission.

There is also no basis for this Commission to exercise "general supervision" over Grain Belt Express under Section 393.140 as if it were a rate-regulated utility providing retail service to customers. See Show Me Brief at 31. Similarly, there is also no basis for this Commission to approve the sale of assets under Section 393.190 for a company like Grain Belt Express which will provide wholesale transmission service by means of an interstate transmission line pursuant to market-based rates overseen by FERC. See Condition 6, MLA Brief at 82. These two proposed conditions are not acceptable to the Company and should be rejected by the Commission.

As discussed above, because this Commission has no authority regarding the condemnation authority of public utilities and other corporations under Section 523.001, et seq., conditions proposed by Show Me and Farm Bureau should be rejected. <u>See</u> Show Me Brief at 30; Farm Bureau Brief at 7-8.

With regard to remaining conditions that were either recommended or commented upon by the other parties, the Company states as follows:

A. Landowner Interactions and Right-of-Way Acquisition

MLA has requested that Grain Belt Express agree that there will be no reduction to its highest and best offer in the event of an arbitration or a court proceeding. See Condition 5, MLA Brief at 81. During the evidentiary hearing, the Company's Vice President of Land Deann Lanz agreed that the methodology for determining payments to landowners would not be changed during an arbitration proceeding or a court case. Tr. 417-18. If that methodology resulted in the same amount previously offered to a landowner, "then we would not reduce it." Tr. 418. Therefore, Grain Belt Express agrees to a condition that the Company will not change its structure for determining compensation in an arbitration proceeding or in a Circuit Court case. See Condition 5, MLA Brief at 81.

MLA and Show Me requested that the Landowner Protocol, the Agricultural Impact Mitigation Protocol, and the Code of Conduct be incorporated into the Company's Easement Agreement and made a condition of the CCN. See Condition 3, MLA Brief at 79; Condition 2, Show Me Brief at 30. Those agreements and commitments have already been made. See Tr. 411-13 (Lanz); Ex. 114 at 5 (Lanz Surrebuttal); Tr. 158 (Skelly).

In MLA Condition 8, it proposed two modifications to the Easement Agreement. The first related to language which is already contained in the Landowner Protocol, and will be incorporated into the Easement Agreement. This concerns the Company's agreement to pay landowners for agricultural-related impacts resulting from the Project, regardless of when they occur and without any cap on the amount of damages. <u>See</u> Sched. DKL-1, Missouri Landowner Protocol, §3.3, Ex. 113 (Lanz Direct).

MLA's second request in Condition 8 was to remove the words "gross negligence" from Section 11(c) of the Easement Agreement. See Sched. DKL-4, §11 (c), Ex. 113 (Lanz Direct). Grain Belt Express does not agree to this modification which would otherwise allow landowners

to commit grossly negligent acts that damage the Company's facilities within the easement ROW without bearing any responsibility for their conduct.

As a general proposition, negotiations regarding the contents of the Easement Agreement should be left to the Company and the individual landowners. Ms. Lanz testified that in the Plains & Eastern Project "well over a thousand" easements have been negotiated with landowners that reflect "specific terms dealing with the uniqueness of their land." Tr. 442-43. She noted that once the Company meets "one-on-one with landowners at a table and they view our compensation package and our desire and ability to negotiate specific terms," they are "willing to voluntar[ily] negotiate easements." Tr. 443 (Lanz).

To the extent that any party has proposed a condition that would modify Section VII(1) regarding landowner interactions and ROW acquisition in the Company's Agreement with Staff (Exhibit 206), it should be rejected. Although the CCN will be limited to the locations specified in the Application, as described in the 2014 Routing Study and its June 2016 Addendum (Schedules 1 and 2 to Direct Testimony of James G. Puckett, Exhibit 119), minor deviations to the location of the line not exceeding 500 feet must be permitted. Small changes to the route as a result of surveying, final engineering and design, and landowner consultation regarding specific property issues are reasonable and necessary. Such minor deviations may be required to move the line a short distance in order to address safety issues, cultural sites, land conditions or other environmental issues that may be encountered in the final siting of the Project. Tr. 923-24 (Berry).

B. Rockies Express Pipeline Conditions

Grain Belt Express has no objection to the Commission incorporating the language proposed by Rockies Express Pipeline in the form of a Commission finding, which is consistent

with Exhibit 205 (appended to the Company's Brief as Attachment B). See Rockies Express Brief at 7.

C. <u>Staff and Related Conditions</u>

Grain Belt Express has no objection to presenting an updated application to the Commission if the design and engineering of the Project is materially different than described in its Application. See Staff Condition 3.

The Company has already agreed that if studies related to RTO interconnection agreements and related matters raise new issues, Grain Belt Express will provide its plan to address those issues under Section II(1) of Exhibit 206, the Company's Agreement with Staff. Therefore, Staff Condition 4 is not needed.

Staff Condition 5 proposes that if any of the conditions that Staff and the Company have agreed to can be satisfied either before the Company acquires involuntary easements or starts construction of the Project, Grain Belt Express will satisfy the condition before the earlier of these two events. The Company does not agree to this condition which is not necessary and is confusing, given the specific commitments contained in Exhibit 206, the Company's Agreement with Staff.

The Grain Belt Express-Staff Agreement contains specific and different timing requirements, depending on the subject of the condition. For example, the Company has agreed to fulfill the financial commitments set forth in Section I(1) when it "is prepared to begin to construct" the facilities. Under Section III(2) Grain Belt Express must demonstrate that the line has been built with dedicated metallic return conductors "before it begins commercial operation of" the Project. However, Section III(3) states that engineering studies regarding any adverse impacts on nearby facilities must be available to Staff and affected facility owners "at least 45".

days prior to commercial operation." Given the detail of the conditions that the Company has agreed to with Staff in Exhibit 206, Staff Condition 5 is not needed.

D. <u>Decommissioning Fund</u>

Several parties have proposed that Grain Belt Express commence financial contributions to a decommissioning fund or secure a letter of credit or bond to cover the cost of decommissioning sooner than the Project's 20th anniversary of completion. The proposals are each phrased differently, both in terms of how the funding should occur and the timing of contributions to the fund. See Farm Bureau Brief at 8 ("from the inception of the project"); Staff Brief at 28 (at commercial operation); MLA Brief at 78 (before construction begins); DED Brief at 7 (at commercial operation); Show Me Brief at 31 (prior to construction).

Given the Company's unprecedented offer to establish a decommissioning fund, Grain Belt Express believes that its proposal to have a study conducted by a qualified engineering firm to estimate the cost of such a fund no earlier than the 20th anniversary of the completion of the Project is reasonable. See Ex. 113 at 12-13 (Lanz Direct); Tr. 942-43 (Berry to Commissioner Rupp). The conditions proposed by the other parties should not be adopted by the Commission.

E. <u>Commission Question regarding Conditioning the CCN on the Operational</u> Readiness of the Missouri Converter Station

The Company agrees with Staff's observation that any condition relating to the actual construction of the converter station and the actual delivery of 500 MW of wind power to the converter station must be carefully phrased so as to avoid anti-discrimination and open access issues that are subject to FERC to jurisdiction. See Staff Brief at 27. However, the language that the Company proposed in its response to the Commission question in its Brief is appropriate. Therefore, the Commission may provide that: The CCN is conditioned upon the Company's

constructing the proposed Missouri Converter Station to be capable of the actual delivery of 500 MW of wind power to the converter station. <u>See</u> Company Brief at 70.

However, the Company opposes Staff's suggestion that the CCN be conditioned upon the Company having obtained "firm commitments from the third parties to buy the full 500 MW of transmission capacity from Kansas to Missouri to enter the AC transmission system at the Missouri converter station." See Staff Brief at 27. It is unnecessarily restrictive and impractical to impose such a condition before construction is even started. The evidence has already shown that even without having received a CCN, Grain Belt Express has obtained a 100 MW commitment from MJMEUC and other municipal utilities to purchase service on the Kansas-to-Missouri portion of the Project. See Ex. 476 at 6 (Grotzinger Rebuttal); Tr. 980-81 (Kincheloe). It would be counterproductive to prevent Grain Belt Express from even starting construction if, for example, it has 400 MW under contract and is negotiating for the balance. Such a restriction would delay the construction of the Project, lead to higher and unnecessary costs, and undermine the benefits that the Project will produce.

V. Waiver of Reporting Requirements of Commission Rules 4 CSR 240-3.145, 4 CSR 240-3.175, and 3.190(1), (2) and (3)(A)-(D)

Only Show Me and Farm Bureau opposed the Company's request for the waiver of these reporting requirements. They cite no authority for their opposition, and overlook the Commission's authority to provide waivers from its rules under 4 CSR 240-2.060(4). See Show Me Brief at 31-32; Farm Bureau Brief at 8.

Staff agrees with the Company, stating that the "Commission should find that there is good cause to relieve Grain Belt from the filing and reporting requirements" as requested. See Staff Brief at 28. The Company agrees with Staff that "these requirements are intended for ratemaking, but this Commission will have no jurisdiction over Grain Belt's rates because it will

have no retail customers," and, therefore, waiver of the requirements is appropriate as they "would impose a burden on Grain Belt with little commensurate benefit." Id.

VI. Conclusion

Because the Company meets each of the five <u>Tartan</u> criteria, the Grain Belt Express Project is necessary or convenient for the public interest. Accordingly, the Commission should issue an order granting Grain Belt Express a certificate of convenience and necessity to construct, own, operate, control, manage, and maintain the Missouri Facilities of the Project.

Dated: April 24, 2017

Dentons US LLP

/s/ Karl Zobrist

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ATTORNEYS FOR GRAIN BELT EXPRESS CLEAN LINE LLC

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served upon all parties of record by email or U.S. mail, postage prepaid, this 24th day of April 2017.

/s/ Karl Zobrist

Attorney for Grain Belt Express Clean Line LLC

ATTACHMENT A

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) Case No. EA-2016-0358
Current Transmission Line and an Associated Converter)
Station Providing an interconnection on the Maywood-	
Montgomery 345 kV Transmission Line)

Grain Belt Express Response to Missouri Landowners Alliance First Set of Data Requests Directed To David Berry

<u>Definitions</u>: for purposes of these data requests the following words and phrases are defined as indicated:

"2014 case" is Case No. EA-2014-0207 at the Missouri Public Service Commission.

"Bluescape" means Bluescape Resources Company LLC and its affiliates

"Clean Line" means Clean Line Energy Partners LLC

"Document" shall be construed in accordance with Missouri Supreme Court Rule 58.01 and shall mean the original and every draft or non-identical copy (whether different from the original because of handwritten notes or underlining or checkmarks on the copy or otherwise) of every paper, electronic record, electronic mail or other record, regardless of origin, location or format, whether sent or received or made or used internally, in whatever form, electronic or otherwise, in the possession, custody, or control of Clean Line, Grain Belt or the person to whom the particular data request is directed, or in the possession, custody or control of the attorneys for Clean Line, Grain Belt or the attorneys for the person to whom the particular data requests are directed.

"Entity" means an individual, a company, a governmental unit or any other form of organization or association.

"Grain Belt" means Grain Belt Express Clean Line LLC

"MJMEUC" means the Missouri Joint Municipal Electric Utility Commission

"National Grid" means National Grid plc, and any and all of its subsidiaries.

"the proposed line" means the HVDC line proposed in this case by Grain Belt.

assuming an average annual capacity factor of 50%?

RESPONSE: (1) The year one transmission service rate for 200 MW of service is \$1,417/MW-month, or \$17,004/MW-year. The expected cost for the 200 MW is \$3.4 million. A 200 MW, 50% capacity factor resource will produce 876 thousand MWh a year, resulting in a per kWh cost of 0.39 cents/kWh.

(2) The year five transmission service rate for 200 MW of service is \$1,534/MW-month, or \$18,406/MW-year. The expected cost for the 200 MW is \$3.68 million. A 200 MW, 50% capacity factor resource will produce 876 thousand MWh a year, resulting in a per kWh cost of 0.42 cents/kWh.

DB.84 Please provide a copy of all documents exchanged between Clean Line or Grain Belt on the one hand, and potential lenders on the other, dealing with the possibility or likelihood of using the expected revenue from the MJMEUC contract as security for construction debt issued by Clean Line or Grain Belt.

RESPONSE: There are no such documents.

DB.86 Who was the individual primarily responsible for compiling the data on the three pages from Exhibit 313 referenced in the preceding item.

RESPONSE: Mr. Berry and analysts working under his supervision.

DB.87 In his direct testimony, page 9 lines 14-16, Mr. Copeland states that you provided him with hourly energy profiles for the wind generation in Western Kansas. With respect to that material, please state the following: (1) the person and organization which developed those energy profiles; (2) a description of how they were developed, including the inputs used in that process; (3) whether these wind profiles were the same as were used in the 2014 case by Messrs. Cleveland and Zavadil; and (4) the time frame used in compiling the underlying data used to derive the hourly profiles for this case.

RESPONSE: 1) Mr. Berry

2) The primary source of the capacity factor for Kansas wind is a meteorological analysis of wind speed data from two anemometers or towers ("met towers") within 40 miles of the Project's western converter station. Their locations are near Dodge City, Kansas and near Mullinville, Kansas. Clean Line began collecting data from these sites in late 2011. V-Bar, LLC, a company that provides meteorological and wind resource support to the global wind and solar energy industry, manages and quality controls the climate data obtained from these stations.

For this analysis, the wind data collected from these two stations in 2012 were used to simulate an annual profile because the average wind speeds from these years were closest (within 3%) to the long-term averages of the respective sites.

This wind speed data of the Mullinville and Dodge City sites were applied to the

101827908\V-2

Vestas V110-2.0 and GE2.0-116 power curves, respectively, adjusted for the typical air density in Kansas at 80m hub height. The gross capacity factors for the Mullinville site was 68.8% and 68.0% for the Dodge City site. Wind speeds were further adjusted down to take out energy losses equivalent to 13% performance losses (from wake and environmental losses, for example). 2% additional electrical losses were removed from the final output of the turbine, and a further random ~5% losses were removed from the final output to mimic turbine availability losses that may reflect actual wind farm conditions due to maintenance or other reasons. The total losses to adjust gross-to-net capacity factor was 19%.

In addition to the above adjustment for losses, I applied a smoothing factor to match the variability of output to observed trends, since the variability of two met towers will overestimate the variability of 4000+ MW of wind production. After this adjustment, the variability closely matched those of 3 existing wind farms within 40 miles of the converter station. The smoothing factor was used to create a high variability and low variability wind generation profile for use in Mr. Copeland's analysis.

Please see EA-2016-0358.GBX response to Show Me-1.2.Berry.Attachment 04.HC

- 3) No, they are not.
- 4) The wind data collected from the two met towers were from 2012.

DB.88 Please provide a typical sample page of the data supplied by you to Mr. Copeland, as referenced in the preceding item.

RESPONSE: Please see the "Wind Profiles" tab in EA-2016-0358.GBX response to Show Me-1.2.Copeland.Attachment 14.HC.

DB.89 Has Clean Line allocated any of the capacity yet on its Plains & Eastern line?

RESPONSE: No. Negotiations with participants are underway.

DB.90 If the answer to the preceding item is "yes", please list the following: (a) name of the entity to which any capacity was allocated; (b) MW of capacity allocated to each such entity; (c) the delivery point (Arkansas or TVA) for each such allocation; and (d) the cost of the capacity for each such allocation, including any escalation provisions.

RESPONSE: Not applicable.

DB.91 With reference to page 1 of your Schedule DAB-5, what is the basis for the 55% capacity factor for KS wind?

RESPONSE: The 55% capacity factor for KS wind was derived based on the profile

101827908\V-2 22

created from meteorological data from near the Kansas converter station using turbines commercially available today and conservative gross-to-net loss assumptions (as described in DB.87). It is also our expectation that turbine technology will continue to improve between now and when the wind farms will reach commercial operation. 55% is also consistent with the high end of the range of capacity factors used in the Lazard's Levelized Cost of Energy Analysis 9.0 (https://www.lazard.com/media/2390/lazards-levelized-cost-of-energy-analysis-90.pdf), which is reasonable for one of the best wind resources in the country.

DB.92 At that same page, in calculating the 35% figure for the MO wind capacity factor, what wind speeds did you use, and what was the source of that data?

RESPONSE: The 35% estimate was not the result of a single calculation but multiple data points:

- 1) Average capacity factors from Missouri wind farms from the past three years (2013-2015) have been approximately 27% (Source: EIA Form 923 2013-2015). However, wind farms installed in 2007-2011 have poor performance compared to the newest turbines installed in 2014. According to the most recent Wind Technologies Market Report (http://energy.gov/sites/prod/files/2016/08/f33/2015-Wind-Technologies-Market-Report-08162016.pdf), 2015 capacity factor improvements (Figure 32) between projects that came online in 2014 compared to those that came online in 2007-2011 was approximately 30%. A 30% improvement in turbine performance suggests that new wind farms in Missouri could obtain capacity factors of approximately 35%.
- The best wind sites in Missouri have 80 meter wind speeds of about 7.25 meters per second, though most areas of the state have lower wind speeds. See EA-2016-3582.GBX response to MLA-92-Berry.Attachment 01. The best wind resource in Missouri is about 1.5 meters per second less than in western Kansas. Taking the midpoint (7.25 m/s) and comparing it to Kansas wind speeds (between 8.5-9.0 m/s, or 8.75 m/s), the power available in Missouri wind ($P_{wind} = \frac{1}{2} \rho A v^3$, where P_{wind} is the amount of power available in wind, ρ is the air density, A is the area covered, and v is the velocity of wind) is about 57% of that of Kansas (7.25 3 /8.75 3 =56.9%). This implies that the potential energy production at a Missouri wind farm would be approximately 57% of that of western Kansas. With a 55% capacity factor at Kansas, this implies the Missouri wind farm would have a capacity factor of 31.4%.

DB.93 Please provide a copy of all documents exchanged since July 1, 2015 between Clean Line or Grain Belt on the one hand, and Kansas wind developers on the other, regarding prices that the wind developers might charge to load-serving utilities in Missouri (including MJMEUC) for energy to be delivered at the Missouri converter station.

RESPONSE: No such documents exist.

101827908\V-2 23

VERIFICATION OF RESPONSE

The answers provided to this Set of Data Requests have been collected from v	arious
sources at Clean Line Energy Partners LLC and Grain Belt Express Clean Line LLC,	and are
true and accurate to the best of my knowledge and belief.	

Signed:

Position: President & CEO

Clean Line Energy Partners LLC

Date: 11/1/16