BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing it to Construct, Own, Operate, Control, Manage, and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood-Montgomery 345 kV Transmission Line	)	Case No. EA-2023-0017

INITIAL BRIEF OF GRAIN BELT EXPRESS

Pursuant to the April 3, 2023 Order Amending Procedural Order and the June 28, 2023 Order Granting Staff's Motion for an Extension of Time to File Initial Briefs, Grain Belt Express, LLC ("Grain Belt Express" or "Company"), hereby files its Initial Brief.

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I. Introduction and Legal Standards

A. Background

1. This case concerns the Missouri Public Service Commission's ("Commission's") review of Grain Belt Express' Application to Amend Existing Certificate of Public Convenience and Necessity ("Application")[1] to allow Grain Belt Express to make certain changes to the certificate of public convenience and necessity ("CCN") that was awarded to Grain Belt Express in the Commission's March 20, 2019 Report & Order on Remand ("Prior CCN Order") in File No. EA-2016-0358 ("Prior CCN Docket").

2. In the Prior CCN Docket, Grain Belt Express was granted authority to construct, install, own, operate, maintain, and otherwise control and manage an approximately 800-mile, overhead, multi-terminal ±600 kilovolt ("kV") high-voltage, direct current ("HVDC") transmission line and associated facilities including converter stations and alternating current ("AC") connector lines (the "Certificated Project", and, as modified by the proposed amendments in the Application, the "Amended Project"). The CCN was granted to Grain Belt Express with the understanding that any material changes to the engineering or project design would require an updated application for Commission approval.[2]

3. The Application seeks Commission approval of the following changes to the design and engineering of the Certificated Project:

a. Relocating the Missouri converter station from Ralls County to Monroe County and increasing the capacity of the Missouri converter station from 500 MW to 2500 MW;

[1] Filed on Aug. 24, 2022.

[2] Prior CCN Order, p. 36.

b. Relocating the AC connector line from Ralls County to Monroe, Audrain, and Callaway Counties, allowing for greater access of renewable power and enhanced grid reliability to Missouri and increasing benefits to Missouri; and

c. Constructing the Project in two phases, allowing Missouri to realize the benefits of the Project earlier than it otherwise would.

B. Burden of Proof and Legal Standards for Determination of "Necessary or Convenient for the Public Service"

4. As the Applicant, Grain Belt Express has the burden to show that its proposed amendments to the Project are necessary and convenient for the public service. In order to carry this burden, Grain Belt Express must meet the preponderance of the evidence standard.[3] Grain Belt Express sustains its burden of proof if it demonstrates that it is "more likely than not" that the grant of the CCN is necessary or convenient for the public service.[4] Having established what the burden

[3] "The general standard of proof for civil cases is preponderance of the evidence." *Bonney v. Environmental Engineering, Inc*., 224 S.W.3d 109, 120 (Mo. App. 2007). *See State ex rel. Amrine v. Roper*, 102 S.W.3d 541, 548 (Mo. banc 2003) (stating that the burden of proof in "ordinary civil cases" is "preponderance of the evidence"). *See also Rodriguez v. Suzuki Motor Corp*., 936 S.W.2d 104, 110 (Mo. banc 1996), citing to, *Addington v. Texas*, 441 U.S. 418, 423, 99 S.Ct. 1804, 1808, 60 L.Ed.2d 323, 329 (1979). The function of the standard of proof is to "allocate the risk of error between the litigants and to indicate the relative importance attached to the ultimate decision." *Id*. *See also* Prior CCN Order, p. 40 ("Since Grain Belt brought the application, it bears the burden of proof. The burden of proof is the preponderance of the evidence standard. In order to meet this standard, Grain Belt must convince the Commission it is 'more likely than not' that its allegations are true" (internal citations omitted)).

[4] *Holt v. Director of Revenue, State of Mo*., 3 S.W.3d 427, 430 (Mo. App. 1999); *McNear v. Rhoades*, 992 S.W.2d 877, 885 (Mo. App. 1999*); Rodriguez v. Suzuki Motor Corp*., 936 S.W.2d 104, 109 -111 (Mo. banc 1996); *Wollen v. DePaul Health Center*, 828 S.W.2d 681, 685 (Mo. banc 1992). Preponderance is the minimum standard in civil disputes. *Rodriguez*, 936 S.W.2d at 109-111, citing to *Santosky v. Kramer*, 455 U.S. 745, 755, 102 S.Ct. 1388, 1395, 71 L.Ed.2d 599 (1982). The burden of proof has two parts: the burden of production and the burden of persuasion. The burden of production requires Grain Belt Express to introduce enough evidence on the material issue or issues to have that issue or those issues decided by the Commission, rather than the Commission deciding against Grain Belt Express in a peremptory ruling such as a summary determination or a determination on the pleadings. *Byous v. Missouri Local Government Employees Retirement System Bd. of Trustees*, 157 S.W.3d 740, 745 (Mo. App. 2005); *Kinzenbaw v. Dir. of Revenue*, 62 S.W.3d 49, 53 (Mo. *banc* 2001); *State v. Ramires*, 152 S.W.3d 385, 395 (Mo. App. 2004). The burden of persuasion requires Grain Belt Express to convince the Commission to favor its position. *Id*. And this burden always remains with Grain Belt Express. *Middlemas v. Director of Revenue, State of Missouri*, 159 S.W.3d 515, 517 (Mo. App.

of proof is and the standard for sustaining it, it is critical to note what it is not: absolute certainty or an unequivocal guarantee. Other parties to this proceeding may advocate for such heightened standards, but that is not the law in Missouri. Grain Belt Express has proven, through its Application, pre-filed testimony and schedules, and credible live testimony that it is "more likely than not" that approving Grain Belt Express' requested amendments to its CCN is necessary and convenient for the public service.

5. Section 393.170.3 RSMo. requires that the Commission determine whether the construction of electric plant is "necessary or convenient for the public service." In interpreting the meaning of that legal standard in a 1993 decision, the Missouri Court of Appeals held:

> The term 'necessity' does not mean 'essential' or absolutely indispensable', but that an additional service would be an improvement justifying its cost. . . . Furthermore, it is within the discretion of the Public Service Commission to determine when the evidence indicates the public interest would be served in the award of the certificate.[5]

The Missouri Court of Appeals has also explained:

> Any improvement which is highly important to the public convenience and desirable for the public welfare may be regarded as necessary. If it is of sufficient importance to warrant the expense of making it, it is a public necessity.[6]

6. In recent CCN cases, the Commission recognized the above standard and further explained:

> In evaluating applications for certificates of convenience and necessity, the Commission has frequently considered five factors first described in a Commission decision regarding an application for certificate of convenience and necessity filed

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2005); *R.T. French Co. v. Springfield Mayor's Comm'n on Human Rights and Community Relations*, 650 S.W.2d 717, 722 (Mo. App. 1983).

[5] *State ex rel. Intercon Gas, Inc. v Pub. Serv. Comm'n,* 848 S.W.2d 593, 597-598 (Mo. App. W.D. 1993) (*citing State ex rel. Beaufort Transfer Co. v. Clark*, 504 S.W.2d 216, 219; *State ex rel. Ozark Elec. Coop. v. Public Serv. Comm'n*, 527 S.W.2d 390, 392 (Mo. App. 1975)).

[6] *In The Matter of The Application of KCP&L Greater Missouri Operations Company for Permission and Approval of a Certificate Of Public Convenience and Necessity Authorizing It To Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage Solar Generation Facilities in Western Missouri*, 515 S.W.3d 754, 759 (Mo. App. W.D. 2016) (internal quotations and citations omitted).

> by Tartan Energy Company, LC, d/b/a Southern Missouri Gas Company. The *Tartan* factors, as they have become known, are: '(1) there must be a need for the service; (2) the applicant must be qualified to provide the proposed service; (3) the applicant must have the financial ability to provide the service; (4) the applicant's proposal must be economically feasible; and (5) the service must promote the public interest.'
>
> While the *Tartan* factors are frequently cited in Commission decisions regarding applications for certificates of convenience and necessity, they are merely guidelines for the Commission's decision, and are not part of the legal standard set forth by the controlling statute. Moreover, the *Tartan* decision concerned an application for a certificate to provide natural gas service to a particular service area. As a result, the described factors are not precisely applicable [to applications to construct renewable facilities]. Nevertheless, they provide some guidance ….[7]

Accordingly, while the parties referenced the *Tartan* factors throughout their testimonies, various position statements, and during the evidentiary hearing, the *Tartan* factors are not a mandatory checklist. Rather, the Commission must view the totality of the evidence to determine if the Grain Belt Express Project is "an improvement justifying its cost,"[8] and therefore "necessary or convenient for the public interest."[9] Because the Commission has recognized the usefulness of the *Tartan* factors as a guide, the following sections of this Initial Brief will use those factors to organize the discussion of the evidence presented in this case.

7. Much of the opposition to Grain Belt Express' requested amendments focus on the "economic feasibility" factor. That criticism, however, relies on an artificially strict and myopic

[7] *In the Matter of the Application of Union Electric Company d/b/a Ameren Missouri for a Certificate of Convenience and Necessity for a Solar Facility, Approval of a Subscription-Based Renewable Energy Program, and Authorization to Establish Tracking Mechanism*, Case No. EA-2022-0245, Report & Order, pp. 24-25 ("Boomtown Solar Order"); *In the Matter of the Application of Evergy Missouri West, Inc. d/b/a Evergy Missouri West for Permission and Approval of a Certificate of Public Convenience and Necessity Authorizing It to Purchase, Own, Operate, Maintain and Otherwise Control and Manage an Existing Wind Generation Facility in Oklahoma*, Case No. EA-2022-0328, Report & Order, p. 24 ("Persimmon Creek Order"). Each of the foregoing Orders cite to *In the Matter of the Application of Tartan Energy Company, L.C., d/b/a Southern Missouri Gas Company*, 3 Mo. P.S.C. 3d, 173, 177 (1994).

[8] *Intercon Gas, Inc.*, 848 S.W.2d at 597–598.

[9] Section 393.170.3.

view of the factor. As discussed further under Section II.C ("Economic Feasibility"), the general standard of whether "the improvement justifies its cost" guides the Commission's interpretation of the "economic feasibility" factor. The standard for "economic feasibility" is not present tense economic certainty or perfect knowledge of future costs and revenues. The Commission recently addressed and rejected an overly myopic view of the "economic feasibility" factor, finding:

> OPC's position is that the fourth factor of economic feasibility has not been satisfied because the Project has not been shown to generate more revenues and avoid more costs than the costs Ameren Missouri's retail customers will incur if the Company builds the Project. However, the test is whether the improvement justifies its cost.[10]

In this case, the economic feasibility of the Amended Project is demonstrated by credible evidence regarding the commercial interest in the services offered by the Amended Project at prices that will allow for full recovery of the anticipated costs.[11] Further, before any transmission facilities are installed on easement property in Missouri, the Commission will receive further assurances of the economic feasibility of the Amended Project pursuant to the Financing Condition that requires each Phase of the Amended Project to be fully financed before transmission facilities are installed on easement property in Missouri.

8. The following sections of this Brief address how Grain Belt Express has sustained its burden of proof to demonstrate—by a preponderance of the evidence—that the Amended Project satisfies each of the *Tartan* factors. This leads directly to the conclusion that the Amended Project is an improvement justifying its cost, therefore satisfying the statutory standard of "necessary or convenient for the public service."

[10] Boomtown Solar Order, pp. 28–29.

[11] Tr. Vol. 8 at 256:12-14 (Sane: ***[redacted]***)

C. Legal Standards for Conditions Imposed by the Commission

9. Commission orders, and their included conditions, must be lawful, reasonable, and necessary.[12] The lawfulness of a proposed condition is determined "by whether statutory authority for its issuance exists."[13] The reasonableness of a proposed condition is determined based on whether it is supported by substantial, competent evidence on the whole record and whether the decision is arbitrary or capricious or where the Commission has not abused its discretion.[14]

10. For evidence to be considered "substantial," it must be "competent and support the Commission's discretionary determination."[15] Substantial evidence is competent evidence that would have probative force upon the issues if believed.[16]

11. An agency action is considered "arbitrary and capricious" where the agency treats two applicants differently absent differing circumstances or changed conditions.[17]

12. An agency action can also be considered "arbitrary and capricious" where the decision is not "based on guidelines and criteria in a promulgated rule" and instead, is based on irrational review or a decision based on guesswork.[18]

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[12] *State ex rel. Praxair, Inc. v. Missouri Pub. Serv. Comm'n*, 344 S.W.3d 178, 184 (Mo. 2011); Section 393.170.3 RSMo.

[13] *Id.*

[14] "The Commission's decision must be upheld if authorized by law and supported by competent and substantial evidence upon the record, unless the result is clearly erroneous to the reasonable expectations of the General Assembly." *Burlington N. R.R. v. Dir. of Revenue*, 785 S.W.2d 272, 273 (Mo. 1990) ("Commission" refers to the "Administrative Hearing Commission")

[15] *Brown v. City of St. Louis*, 561 S.W.3d 839, 844 (Mo. Ct. App. 2018).

[16] *Id.*

[17] *Wolfner v. Bd. of Adjustment of City of Frontenac*, 672 S.W.2d 147, 151 (Mo. Ct. App. 1984); *Ford Leasing Dev. Co. v. Ellisville*, 718 S.W.2d 228, 233 (Mo. App. 1986) ("The City is not authorized to pick and choose between similarly situated applicants.").

[18] *Board of Educ. of City of St. Louis v. Missouri State Bd. of Educ.*, 271 S.W.3d 1, 14 (Mo. 2008).

13. Grain Belt Express has already agreed to several conditions, as set forth in Section III.A below, and encourages the Commission to include those conditions in the amended CCN. There are two conditions, however, that should be rejected by the Commission:

a. Staff's proposed definitions of "material change in the design and engineering of the Project."

b. Easement compensation terms beyond the above-market compensation already proposed by Grain Belt Express.

14. As explained below, Staff's proposed definitions of "material change in the design and engineering of the Project" are not supported by substantial competent evidence and are therefore not reasonable or necessary.

15. As also explained below, the proposed condition requiring easement compensation beyond the terms already offered by Grain Belt Express would be unlawful because the Commission lacks statutory authority to impose such a condition and unreasonable because such a condition would be arbitrary, capricious, and an abuse of discretion.

II. The Amended Project Is an Improvement Justifying Its Cost and Is Therefore Necessary or Convenient for the Public Service

16. Several of the Commission's findings in the Prior CCN Order regarding the Certificated Project remain applicable here and can be integrated into how the Commission views whether the proposed amendments should be approved. The Commission appropriately took administrative notice of the Prior CCN Order during the evidentiary hearing.[19]

17. The general purpose of and types of benefits provided by the Amended Project are the same as the Certificated Project. The Amended Project only increases the magnitude and

[19] Tr. Vol. 7 at 89:18–21.

number of the benefits. Accordingly, the Amended Project will continue to promote the public interest, but at a greater level.

A. Need for the Amended Project

18. Through the Rebuttal Testimony of Shawn Lange, Staff has already concluded that the Amended Project "fulfills the need requirement of the Tartan criteria."[20] Nevertheless, Grain Belt Express will demonstrate that the Amended Project is needed for a variety of reasons. The Amended Project is needed as demonstrated by the operative agreements with the Missouri Joint Municipal Electric Utility Commission's ("MJMEUC", now "MEC"), expressed demand from municipalities, executed Memorandums of Understanding ("MOUs"), demand from commercial and industrial customers, the carbon emission reduction goals and/or net-zero equivalent targets of local utilities, and demand outside of Missouri. The Amended Project is also needed because it will result in $17.6 billion in savings to Missouri ratepayers and $7.6 billion in social benefits. Additionally, the Amended Project is needed for the reliability and resilience of the grid and national security. Finally, phasing of the Amended Project is needed to hasten the benefits brought to Missourians and the region.

i. The Amended Project is Needed as Demonstrated by the Operative Agreements with MEC, Demand from Municipalities, MOUs with Various Offtakers, Demand from Commercial and Industrial Customers, Local Utility Carbon Emission and Renewable Energy Goals.

19. In the Prior CCN Order, the Commission found that the Certificated Project was needed to serve potential and expected customers—primarily evidenced by Grain Belt Express' contract with MEC.[21] In addition to considering just the MEC contract, the Commission also noted that:

[20] Rebuttal Testimony of Shawn Lange, p. 16.

[21] App. ¶ 37; Prior CCN Order, pp. 41-42.

> Of course, [MEC] and Missouri industrial customers are not the only energy customers we must consider in this analysis. In a state whose regulated utilities participate in two regional transmission organizations, it is appropriate to consider the Project's effect on other market participants. There was substantial evidence of demand for this project, both on the production and delivery side, within the relevant regional markets.[22]

20. The MEC contract remains in place and that demand for electricity supplied by the transmission line continues to grow.[23] The need for MEC and its customers to obtain energy from the Project has been re-affirmed by MEC's Chief Markets Officer Rebecca Atkins, Chief Executive Officer John Twitty, and Chief Electric Operations Officer John Grotzinger.

21. Mr. Grotzinger presented evidence that MEC's contracts with Grain Belt Express and Santa Fe have 136 MW of the 200 MW under firm contract.[24] And the remainder will be contracted for by MoPEP cities, of which he "fully expect[s] the demand of the other MEC members will exceed the 64 MW that remains for subscription under the Grain Belt TSA and the Santa Fe PPA."[25]

22. Equally clear are the benefits to MEC's customers. Mr. Grotzinger and Ms. Atkins presented estimates of $1.1 billion in savings to MISO.[26]

23. The need for the Amended Project is also demonstrated by executed MOUs with potential customers of the Amended Project and ***[redacted]***.[27]

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[22] Prior CCN Order, pp. 1–42.

[23] *See* App. ¶¶ 60-66.

[24] Direct Testimony of John Grotzinger, p. 5.

[25] Rebuttal Testimony of John Grotzinger, p. 6.

[26] *Id.* at 13 *and see* Slide 15 of Schedule JG-14; Rebuttal Testimony of Rebecca Atkins, p. 3.

[27] Direct Testimony of Shashank Sane, pp. 13, 31; Surrebuttal Testimony of Shashank Sane pp. 14–15. In addition to the MOUs, ***[redacted]*** Rebuttal Testimony of John Twitty, p. 6 *and see* Highly Confidential-Competitive Schedule JT-12.

The MOUs and ***[redacted]*** establish the substantial interest in contracting with Grain Belt Express for use of the expanded capacity of the Amended Project including the 2500 MW of delivery in Missouri. ***[redacted]***[28] Further, the Commission has received competent evidence that ***[redacted]***[29]

24. In addition to the MOUs and ***[redacted]***, large corporate energy customers are contributing to the growing demand for clean energy and represent an increasing amount of renewable energy procurement. Large corporate energy customers account for 37% of all carbon free energy added to the grid since 2014.[30] Of the energy deals completed by corporate customers to date, 22% are within PJM markets and 13% are within MISO markets.[31] The trend of high demand for carbon free energy continued in 2021 with corporate buyers procuring 11 GW of power.[32] A broad array of commercial and industrial customers have expressed interest in buying renewable power.[33] A non-exhaustive list of potential customers with footprints in Missouri include: 3M, Anheuser-Busch Companies, LLC, Burns & McDonnell, The Boeing Company, Cargill, Emerson, Dow, General Mills, Google LLC, GM, Ikea, Meta Platforms, Inc., Nestle USA,

[28] Tr. Vol. 8 at 248:2-6 (Highly Confidential-Competitive).

[29] Tr. Vol. 8 at 249:5-23 (Highly Confidential-Competitive).

[30] Direct Testimony of Shashank Sane, p. 13.

[31] *Id.*

[32] *Id.*

[33] *Id.* at 15; App. ¶ 49; Tr. Vol. 8 at 253:3-22 (Highly Confidential-Competitive).

Proctor & Gamble, T-Mobile, Occidental Petroleum Corporation, Unilever and Walmart, among others.[34]

25. Further, 28 MISO utilities have Carbon Reduction goals and 26 have Renewable Energy goals.[35] For example, Ameren Missouri filed its 2022 Annual Update to its Integrated Resource Plan ("IRP"), noting that the Preferred Resource Plan presented in its 2020 Triennial Integrated Resource Plan should be revised.[36] Ameren states that the new Preferred Resource Plan represents an acceleration in the retirement of approximately 3,000 MW of coal-fired generation by the end of 2030, acceleration in the retirement of approximately 1,000 MW of gas-fired generation, and total renewable generation of 3,500 MW by 2030, among other items.[37] These accelerated transitions and retirements will permit Ameren to achieve greater reductions in carbon emissions by 2030, in furtherance of its stated goal of net zero carbon emissions.[38]

26. In addition, Evergy's IRP, filed with the Commission on April 30, 2021, announced the acceleration of the company's carbon reduction timeline.[39] As part of the plan, Evergy will retire nearly 1,200 megawatts of coal-based fossil generation and add 3,200 MW of renewable generation in the next 10 years.[40] These changes will include the retirement of the Lawrence Energy Center and the addition of over 700 MW of solar energy.[41] The plan prioritizes sustainability, reliability and cost competitiveness, while advancing Evergy's goal to reduce

[34] Direct Testimony of Shashank Sane, p. 15.

[35] *Id.* at 16.

[36] *Id.* at 13.

[37] *Id.*; Direct Testimony of Michael Goggin, pp. 23–24.

[38] Direct Testimony of Shashank Sane, p. 13.

[39] *Id.* at 14.

[40] Direct Testimony of Shashank Sane, p. 14.

[41] *Id.* at 14; *and see* Evergy Integrated Resource Plan 2023 Annual Update, EO-2023-0212, p. 6, Table 4 (June 15, 2023).

carbon emissions 70 percent by 2030 (relative to 2005 levels) and achieve net-zero carbon emissions by 2045.[42]

27. Staff has suggested that the IRPs failure to reference the Amended Project as an already contracted supply side resource eliminates the value of the IRPs when assessing whether the Amended Project is needed.[43] This argument is non-sensical and should be rejected. IRPs are, by their nature, forward looking and typically identify the *general* supply side resources that the utility believes it will need to procure in the future (such as wind or solar), rather than identifying a specific, already contracted for generating resource. Further, Grain Belt was, in fact, included explicitly in Ameren Missouri's 2020 IRP as part of a potential alternative resource plan.[44]

28. Finally, and most importantly, there are no similar projects on the market or in development that will offer Missouri utilities and other load interests direct access to a geographically diverse supply of high-capacity renewable energy via a permanently uncongested path (at scale), the ability to address sustainability, reliability and capacity needs cost effectively, that will be available on the timeline set forth in each utility IRP and during the critical hours when this capacity is most needed.[45] There should be no question that the Ameren and Evergy IRPs specifically outline a need for the type of supply side resource that Grain Belt will be capable of providing.

29. Of note, "the resources that are made accessible by the Project [] provide a better fit to local capacity needs than local solar resources,"[46] which was a great concern of Commission

[42] Direct Testimony of Shashank Sane, pp. 14–15.

[43] Rebuttal Testimony of Krishna Poudel, pp. 2–3.

[44] Rebuttal Testimony of Michael Goggin, p. 24.

[45] *Id.* at 19, 24–25.

[46] Surrebuttal Testimony of Shashank Sane, p. 7.

Staff in recently filed CCN proceedings.[47] The most pressing need for capacity is during the winter peak—from 7 to 8 A.M.[48] Early morning is typically the strongest time period for Kansas wind resources, with an average 52% capacity factor.[49] Conversely, solar resources in the Midwest will necessarily be lower in the early morning, meaning that Missouri would benefit from additional, reliable supply from wind resources in Kansas in periods before Missouri solar resources are at greater resource production.[50] Further, during the summer peak hours of 4 to 6 P.M., the wind/solar portfolio provided by the Amended Project provides superior load carrying capacity than local solar because it better aligns with system peak.[51] "In fact, 160 MW of solar in Kansas provides the same capacity value as 450 MW of local solar, saving Missouri ratepayers approximately $600 million just in avoided capital costs."[52] The primary driver of this benefit is time shift associated with solar resources in Kansas continuing to produce nearly two hours later into the evening than local Missouri resources. This time shift effectively serves as a built-in battery associated with Kansas solar resources that would otherwise need to be replicated with actual/physical batteries built along with local Missouri solar projects.

30. Further, renewable energy provided through the Project will provide an ideal complement to increasing solar penetration in MISO. There are currently 146,793 MW of solar projects in the queue in MISO, with 4,759 MW specifically within Zone 5. As these resources are

[47] Boomtown Solar Order, p. 17 (discussing the benefits of geographic diversity of solar resources); Rebuttal Testimony of Michael Stahlman, Case No. EA-2022-0245, pp. 4-6 (Mr. Stahlman discusses local solar resources not being readily available during the winter peak of 7-8 A.M.).

[48] Surrebuttal Testimony of Shashank Sane, p. 7.

[49] *Id.*

[50] *Id.*

[51] *Id.*

[52] *Id*.

built out, MISO will experience challenges similar to those experienced in other markets with high solar penetration, including high ramping needs in the evening and correlated supply risk with solar conditions.[53] As Kansas wind is uncorrelated with solar generation within MISO, wind energy reduces supply shortfalls that could occur in the MISO area through overreliance on solar resources, especially during early morning and evening peaking events.[54] This relationship will reduce the risk of supply shortfall and therefore reduce the need for backup generation. The Project can also deliver solar from Kansas, which will, as noted, continue producing at a higher capacity factor for nearly 2 hours later than solar within Missouri, reducing the rate of ramping required in the evening.[55] No generation resources within MISO, and certainly no local solar resources that will increasingly be used to supply energy to regional utilities like Ameren, Evergy and utilities in adjacent states, can provide the resilience to extreme weather that can be provided by the Amended Project.[56] Through interregional transmission capabilities with SPP and PJM, the Amended Project provides Missouri ratepayers with an insurance policy against extremely high energy prices in MISO and catastrophic loss of load situations that have plagued multiple utilities in recent years.[57]

31. The demand for the Amended Project outside of Missouri also demonstrates the Amended Project's need. The Amended Project will have the ability to deliver energy into MISO South and the Tennessee Valley Authority ("TVA") via its AECI interconnection.[58] In fact, TVA

[53] *Id.* at 8

[54] Surrebuttal Testimony of Shashank Sane, p. 7–8.

[55] *Id.* at 8.

[56] *Id.* at 8–9.

[57] *Id.*

[58] Direct Testimony of Shashank Sane, p.16.

requested up to 5,000 MW of carbon-free energy that must be operational before 2029, which is one of the largest clean energy procurement requests in the nation.[59]

32. Staff has also suggested that the existence of the Tranche 1 Projects identified in MISO's Long Range Transmission Plan ("LRTP") somehow reduces the benefits of the Amended Project.[60] However, none of the Tranche 1 Projects are interregional projects designed to connect multiple adjacent balancing authorities, thereby providing geographically diverse energy supply and related reliability benefits. In fact, the Tranche 1 Projects are within Zones 1-7 in MISO's northern region and do not even interconnect those higher-cost zones to the lower-cost Zones 8-10 in MISO's southern region.[61] Accordingly, there is no meaningful overlap between the Tranche 1 Projects and the Amended Grain Belt Express Project. In fact, the Amended Grain Belt Express Project "provides complementary benefit" when paired with the LRTP Tranche 1 Projects.[62] In addition, it should be noted that while the LRTP projects will quickly become congested as additional local renewable resources interconnect to the MISO system, Grain Belt will remain a congestion free path to the high-capacity renewable resources interconnected to the line for the long term.

ii. The Amended Project is Needed as Demonstrated by Inducing $17.6 Billion in Ratepayer Savings and $7.6 Billion Dollars in Social Benefits for the 2027-2066 Period.

33. The Amended Project produces a number of economic benefits in the form of ratepayer savings and social benefits. First, increasing the flow of low-cost, high capacity factor energy will reduce power prices in the MISO and SPP markets, particularly in periods when local

[59] *Id.*

[60] Rebuttal Testimony of Shawn Lange, p. 2.

[61] Surrebuttal Testimony of Robert Baker, p. 9–10.

[62] Tr. Vol. 9 at 509:20–510:16.

renewable resources in Missouri are operating at below-average levels.[63] Incremental reliability-weighted capacity provided via the Amended Project will also increase available supply in the MISO power market, putting downward pressure on capacity prices.[64] Together, these impacts reduce costs to ratepayers across the State of Missouri.

34. In that regard, the Amended Project is projected to lower energy and capacity costs in Missouri by approximately 6.1% over the 2027-2066 period, resulting in over $17.6 billion of savings for Missouri residents, on an undiscounted basis.[65] In addition, the Amended Project is projected to result in $7.6 billion in social benefits from avoided emissions in the 2027-66 period.[66]

35. Staff criticized the PA Consulting Report for assuming a blend of generation that does not exist. Mark Repsher acknowledges that the PA Consulting Report assumed a blend of generation that does not exist. However, Mr. Repsher explains that this is not surprising, given that development cycles for wind and solar facilities are typically 3-5 years in length.[67] As a result, the generation mix today will not be the generation mix tomorrow. SPP's current Generator Interconnection queue for Kansas reflects that fact: over 20 GW of new solar and wind resources in the region have submitted initial requests to come online.[68] The future generation mix will be driven by a combination of factors, such as expected thermal retirements, load-serving entity and corporate demand for renewables, improving economics in light of favorable federal policies (*e.g.*, tax credits from the Inflation Reduction Act), easing supply chain constraints, anticipated regional

[63] Direct Testimony of Mark Repsher, Schedule MR-2, p. 12; Tr. Vol. 12 at 980:5-23; Prior CCN Order, pp. 26, 43–44.

[64] *See* Direct Testimony of Mark Repsher, Schedule MR-2, p. 12–13.

[65] *Id.* at 14.

[66] *Id.* at 1 *and see generally* Schedule MR-2 (report on how the Amended Project will affect power costs and emissions reductions in Missouri and other states).

[67] Surrebuttal Testimony of Mark Repsher, p. 4.

[68] *Id*. at 4–5.

transmission expansion, and advantageous renewable resource quality.[69] That is why PA Consulting's analysis conservatively assumes that only a fraction of generators in the queue will ultimately come online (as evidenced by history) and other generators not currently in the queue will enter over the next few years.[70] For example, PA Consulting's analysis projects that from 2022-29, the entire SPP RTO (not just Kansas) is expected to see the entry of approximately 17 GW of new nameplate wind and solar resources, which is less than the 20 GW of new solar and wind resources currently in the Generator Interconnection queue for Kansas alone.[71]

36. Regardless, assumptions about the future generation mix are necessary. Assumptions about the future are frequently made by energy regulators when approving public utility projects, particularly in light of the fact that regulatory approval must be obtained prior to beginning construction, and oftentimes, multiple years in advance of construction.[72] It would be discriminatory, arbitrary and capricious not to permit Grain Belt Express to present reasonable assumptions about the future in making its case for the Amended Project.

37. With regard to assumptions concerning net capacity factor, the ability of the Amended Project to deliver above 70% net capacity factor is supported by the record. The PA Consulting Report relied on 8,760 hourly production profiles for the wind and solar facilities associated with Grain Belt Express, which equated to net AC capacity factors (pre-curtailment) of 47% and 30% respectively.[73] For clarity, the 8,760 production profiles are projected actual wind and solar energy production for each hour of the year based on measured wind speed from Met

[69] *Id*. at 5.

[70] *Id*.

[71] *Id*.

[72] Section 393.170.1 RSMo.

[73] Surrebuttal Testimony of Mark Repsher, p. 8.

masts in southwest Kansas, and solar irradiance data from SolarAnywhere for a site in southwestern Kansas based upon data from 2018.[74]

38. As a result, the 74% capacity factor represents the "blended" capacity factor for the Amended Project.[75] The blended capacity factor sums the hourly generation from the renewable resources (with the generation 'clipped' as appropriate when total generation feeding the Amended Project exceeds the Amended Project's rated capacity) and dividing by the Amended Project's rated capacity and multiplied by 8,760 hours.[76] The combined capacity of generators feeding the line (approximately 9,300 MW) far exceeds the instantaneous takeaway capacity of the line (5,000 MW). This allows for a higher optimized utilization of the line and lowers the overall cost (on a $/MWh basis) for the renewable generators to access the Amended Project. In addition, this serves to offer a "firmer" product (i.e., more reliable and less intermittent), which can afford the Amended Project a higher capacity accreditation value that can be recycled back to interconnecting generators.[77]

39. The willingness of renewable generation developers to connect their projects to the Amended Grain Belt Express Project at levels that exceed the 5,000 MW capacity of the line was confirmed by Mr. Goggin, who has worked closely with renewable generation developers for over 15 years, including as an employee of the American Wind Energy Association, now known as American Clean Power.[78] Mr. Goggin explained that interconnecting renewable resources with nameplate capacities that exceed the capacity of the transmission line is common.[79] Renewable

[74] Surrebuttal Testimony of Shashank Sane, p. 20.

[75] Surrebuttal Testimony of Mark Repsher, p. 8.

[76] *Id*.

[77] *Id*.

[78] Rebuttal Testimony of Michael Goggin, pp. 1–2.

[79] Tr. Vol. 12 at 983:12–15.

developers are willing to do so because of the variation in output profiles due to different energy sources (wind vs. sun) and geographic diversity.[80] Due to the variation in output profiles, it is economically palatable for the renewable developers to experience curtailment during the few hours per year in which total output exceeds the capacity of the transmission line.[81]

40. Mr. Stahlman incorrectly surmised that Invenergy's estimation of a 74% capacity factor unreasonably assumed normalized wind and solar generation curves where the peak solar was equal to the peak wind capacity for a single day and assumes that generation would operate on this normalized basis every day.[82] This is simply a misunderstanding of the data and methodology employed. While the 74% value represents an annual average (that is also the typical basis of reporting capacity factors), in reality, PA Consulting's models relied on actual hour-to-hour flows over Grain Belt Express (which vary by day and are frequently lower than 74%), rather than assuming a constant value as Mr. Stahlman suggests.[83] Additionally, Mr. Stahlman misunderstood Grain Belt Express' conservative methodology of "clipping" the generation during the hours that total generation exceed the capacity of the transmission line—claiming that it was done "without explanation."[84] However, the "clipping" was simply the result of the anticipated overgeneration curtailment, which as explained by Mr. Goggin, is commonplace and "economically palatable" to renewable energy developers. In any given hour, the power produced in excess of the instantaneous takeaway capacity of the line is simply grounded (*i.e.*, clipped).

[80] Tr. Vol. 12 at 983:15–984:21.

[81] Tr. Vol. 12 at 984:21–985:3.

[82] Rebuttal Testimony of Michael Stahlman, pp. 7-8.

[83] Surrebuttal Testimony of Mark Repsher, p. 8 (cross-referencing Surrebuttal Testimony of Shashank Sane, Schedule SS-4).

[84] Tr. Vol. 12 at 911:21-912:3.

41. Finally, at the Evidentiary Hearing, Mr. Stahlman noted that "in the calculations [for capacity factors] they increased generation, but they did not change the denominator," suggesting that PA Consulting built more generation to artificially raise the utilization rate of the line.[85] This is simply not accurate; PA Consulting's assumption was grounded in prior discussions with renewable developers in Kansas, and the oversizing of generators is a proactive strategy to provide beneficiaries—including Missourians—with firmer, less variable power. The incentive for the renewables being occasionally clipped is that any loss of production tax credit revenues in the first ten years of their operations would be more than offset by a meaningfully higher capacity accreditation, and more accretive energy revenues from selling power eastward (in regions where prices are higher and instances of economic curtailment are lower, relative to Kansas).[86]

42. In suggesting that Grain Belt Express' use of a 74% net capacity factor is inappropriate, Mr. Stahlman also conflates net capacity factor with capacity accreditation. The 74% figure represents a reasonable expectation for the *net capacity factor* of the generation delivered through Grain Belt Express, which is different than the *capacity accreditation* determined by MISO. Grain Belt Express agrees that wind and solar accreditation in MISO is lower than 74%, but, as Mr. Sane explains, it is reasonable to assume that wind resources from southwest Kansas delivered via Grain Belt will have a higher capacity accreditation than MISO wind resources. This is due to the superior wind resources in southwestern Kansas versus within the MISO footprint. Further, it is also reasonable to assume that capacity credit for Kansas solar will be higher than for MISO solar because southwest Kansas solar is not only uncorrelated to local MISO resources but also delayed by over an hour. With additional solar expected in MISO,

[85] Tr. Vol. 12 at 913:9-13.

[86] *See* Tr. Vol. 12 at 983:6-985:3.

the net-peak summer demand will shift to late evening hours, when local solar production is declining rapidly, leading to high-capacity credit value for southwest Kansas solar.

43. Staff also asserted that lower energy and capacity prices indicated by the PA Consulting Report do not necessarily result in cheaper electricity for Missouri ratepayers.[87] The record confirms the opposite conclusion. With respect to energy prices, the Amended Project is projected to lower wholesale energy pricing for Missouri customers.[88] Lower wholesale energy prices are brought about due to the interconnected nature of the electricity grid, which will permit incremental clean energy injected by the Amended Project to reduce around-the-clock zonal power prices by 2.7% in MISO Zone 5, 1.1% in SPP South, and 4.1% in SERC AECI, thereby saving state residents electricity costs.[89] These benefits are further accentuated on a load-weighted basis.[90]

44. With respect to capacity prices, the Amended Project produces different capacity price outcomes overtime, but because capacity savings represent a *de minimis* share of the total impacts, compared to energy savings that represent the lion's share of the total cost savings to consumers, ratepayers still receive $17.6 billion in savings from 2027-2066.[91] The addition of lower cost (i.e., near zero variable cost) supply will—all else equal—lead to lower price outcomes compared to the counterfactual case.[92] In fact, Mr. Stahlman's testimony acknowledges this reality when he concedes in his rebuttal testimony that "using basic supply curve shifts, it is obviously

[87] Rebuttal Testimony of Michael Stahlman, pp. 6–7; Tr. Vol. 12 at 922:10–22; Tr. Vol. 12 at 942:15–943:3.

[88] Direct Testimony of Mark Repsher, Schedule MR-2, p. 12.

[89] Direct Testimony of Mark Repsher, pp. 11–12.

[90] *Id.* at 12.

[91] Tr. Vol. 9 at 347:14–22.

[92] Surrebuttal Testimony of Mark Repsher, p. 5.

true that energy and capacity prices will go down. Any extra generation, all else remaining the same, will reduce energy and capacity prices."[93]

45. Staff's concern that lower energy and capacity prices are bad for net sellers of energy is unpersuasive and contrary to the Commission's objective to protect the public interest.[94] Load serving entities—and the retail ratepayers that they represent—are first and formost net *users* of energy, as suggested by the "load serving" nomenclature. While they may, in certain periods, have "off-system sales" (*i.e.*, liquidate excess power into the market), that is neither their primary objective as a utility, nor their main lever for managing ratepayer costs. Rather, by procuring power from a low-cost alternative like Grain Belt Express, a utility like Ameren could reduce ratepayer costs because it would not need to dispatch costlier alternatives (typically thermal units that have higher variable costs than renewables) as frequently, thereby saving on fleet operating expenses. Ultimately, Mr. Stahlman's rational is contrary to the entire competitive market model because it would have the Commission block new projects based on their propensity to *lower* prices, which may thereby harm competitors. If that is the standard, no other energy project would be built, and ratepayers would suffer the consequences.

46. Finally, during cross-examination by counsel for MLA, it was suggested that the Commission previously found that a levelized cost of energy ("LCOE") analysis is the best financial technique to compare different energy sources.[95] However, to the contrary, Grain Belt Express has presented evidence that LCOE is a "fairly simplistic metric in so much that it's directly looking at what is the cost of one option versus the other."[96]

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[93] Rebuttal Testimony of Michael Stahlman, p. 5.

[94] Tr. Vol. 12 at 922:10-22; Tr. Vol. 12 at 942:15–943:3.

[95] Tr. Vol. 9 at 340:15–18.

[96] Tr. Vol. 9 at 399:11–19.

47. Quantifying the Amended Projects benefits to ratepayers is more relevant to the Commission's analysis than a comparison of different energy sources, and an LCOE analysis fails to quantify the benefits of the Amended Project to ratepayers.[97] That is why the PA Consulting Report conducted a production cost and rate impact analysis *to electric utility customers*, rather than an LCOE analysis.[98]

48. To complete its analysis, PA Consulting used an industry standard wholesale market model called Aurora,[99] which is widely used by electric utilities, power market regulators, independent system operators and other market consultants to conduct integrated resource planning and evaluate the most beneficial allocation of resources.[100] With Aurora, PA Consulting modeled the benefit of the Amended Project if brought into service by calculating the impacts of the Amended Project on energy prices, capacity prices, and emissions, as discussed above.[101]

49. Nevertheless, Mr. Repsher provided a directional LCOE analysis at the Evidentiary Hearing.[102] As explained at the Evidentiary Hearing, assuming LCOE is determined on a dollar per MW-hour basis, there are two components to an LCOE analysis: 1) all-in costs for constructing and operating a project (the numerator);[103] and 2) MW-hours produced (the denominator).[104] Here, the all-in costs for constructing and operating generation facilities in Missouri and Kansas are not

[97] Tr. Vol. 9 at 399:22–400:1.

[98] Tr. Vol. 9 at 399:11–400:9; Direct Testimony of Mark Repsher, p. 5.

[99] Direct Testimony of Mark Repsher, p. 5.

[100] Tr. Vol. 9 at 346:2–4; 387:3–388:7.

[101] Tr. Vol. 9 at 400:2–9; Tr. Vol. 9 at 345:24–349:17; *see generally* Direct Testimony of Mark Repsher, Schedule MR-2.

[102] Tr. Vol. 9 at 340:24–342:20.

[103] Tr. Vol. 9 at 341:12–24

[104] Tr. Vol. 9 at 341:25–342:8.

significantly different.[105] However, the MW-hours produced by generation facilities in Kansas and Missouri are significantly different (*i.e.*, Kansas generators produce more MW-hours, owing to differences in solar irradiance and wind speeds).[106] Therefore, due to basic mathematic operation, the larger denominator (more MW-hours produced) in the case of Kansas renewable generation facilities results in a lower LCOE for Kansas renewable generation facilities compared to Missouri renewable generation facilities, which produce relatively fewer MW-hours.[107]

50. Regardless, the Amended Project is projected to produce $17.6 billion in direct ratepayer benefits for the 2027-2066 period.[108] That figure is undisputed. And these $17.6 billion in ratepayer benefits more than offsets the associated costs ($5.7 billion) of the Amended Project without even considering the significant reliability and resilience benefits that the Amended Project brings.[109]

iii. The Amended Project is Needed as Demonstrated by the Reliability and Resilience Benefits it Provides to the Grid and National Security

51. Missouri utilities and the regional transmission organizations of which Missouri is a part face a growing need to strengthen the reliability and resiliency of their systems in response to a trio of emerging concerns: increased demand for electricity, extreme grid conditions, and a revolution in the type of energy supply resources powering the economy today. Each of these concerns should encourage planners to diversify and caution planners from over-reliance on one single resource type or from sourcing power supply from one single region. Not only will the Amended Project help Missouri and its utilities diversify its resource mix by providing a direct

[105] Tr. Vol. 9 at 341:23–24.

[106] Tr. Vol. 9 at 342:12–18.

[107] Tr. Vol. 9 at 342:9–20.

[108] Direct Testimony of Mark Repsher, p. 6.

[109] Tr. Vol. 9 at 346:17–349:17.

line to uncorrelated, high capacity renewable power supply, it will also strengthen the regional and interregional grid by creating a new high-voltage, high capacity link among three of the largest power markets in the U.S. and AECI.

52. As further addressed above, a key consideration in assessing the value of this Amended Project to local utilities is how interregional transmission can support energy use patterns in the State and provide energy and capacity during the summer and winter peaks in Missouri. Generation resources within MISO and other local solar resources will all be equally impacted by the same regional weather patterns, time zone realities, and other regional grid-related challenges.[110] Linking the Missouri and MISO grid systems to Kansas wind to the west and the PJM market to the east will allow Missouri to cast a net for electricity that is larger than a storm, larger than local wind patterns, larger than local solar availability and where solar, wind, or other generation resources may be working better than in the region.[111] There is no doubt, based on recent weather events, that interregional transmission could be invaluable in keeping the lights on and in saving lives.[112]

53. More specifically, the Amended Project will increase the reliability of electricity provided to customers and the resiliency of the electric grid based on current observed market and operating conditions. For example, using projected injections from the Amended Project and cost of new entry for generation capacity, Grain Belt Express estimates that the Amended Project will mitigate additional reliability driven generation capacity investments of approximately $526 million per year and approximately $7.6 billion for the life of the Amended Project (assuming an

[110] *See* discussion *supra* at ¶ 29–30.

[111] *Id.*

[112] Surrebuttal of Shashank Sane, p. 9–10.

asset lifespan of 30 years and a discount rate of 6.057%) for a 5,000 MW line capacity.[113] Of these total Amended Project benefits, the savings generated by reduced procurement obligations are broken down by region in Table 9 of the Guidehouse Report. Nevertheless, using SPP's regional cost of new entry, the Amended Project is capable of saving approximately $85 million per year for AECI customers in Missouri and $145 million per year for customers in MISO Load Resource Zones 4 through 7 (which includes Missouri).[114]

54. As well, the Guidehouse Report estimated the influence of the Amended Project over MISO's Planning Reserve Auction (PRA). MISO's PRA is designed to ensure Local Resource Zones have procured enough generation capacity to meet their respective Local Reserve Requirement and MISO Regions have met the Planning Reserve Margin Requirement for the year.[115] The Guidehouse Report estimated the Amended Project attributes an annual savings of $410.9 million or a savings of $346.0 million based upon a $60/MW-day ACP to MISO.[116] The portion of these annual savings benefitting Missouri is approximately $28 million to $33 million of MISO PRA auction clearing price savings per year.[117]

55. Further, the Guidehouse Report provides evidence that the Amended Project will mitigate high energy prices during extreme weather events.[118] Guidehouse examined the frequency and impact of recent extreme weather events, including their impact on emergency energy prices, and estimated the potential benefit the Amended Project could have provided during

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[113] Direct Testimony of Anthony Petti (adopted by Robert Baker), p. 9.

[114] *Id.* at 9.

[115] *Id.* at 10.

[116] *Id.* at 11.

[117] *Id.*

[118] *See* App. ¶¶ 63–66; Direct Testimony of Anthony Petti, p. 7–8 *and see generally* Schedule AP-2 *and see also* App. ¶¶ 41–57 (discussing economic need and benefits of the Amended Project).

the scenarios.[119] The Guidehouse Report estimated that, had the Amended Project been in operation during Winter Storm Uri and transmitted 2,500 MW of electricity east to west, the Amended Project could have saved SPP participants over $300 million in costs.[120] As well, the Guidehouse Report estimated the total savings generated by the Amended Project with a capacity of 5,000 MW for Winter Storm Uri, the Northeast "Bomb Cycle" cold weather snap of 2017/2018, the Northeast "Polar Vortex" of 2014 and the Midwest "Polar Vortex" of 2019 at $407 million.[121]

56. Finally, reliability and resilience of the transmission grid are also a matter of national security. Grain Belt Express provided substantial competent evidence of how the Amended Project improves certain goals of the Department of Defense by supplying military installations with more domestic, renewable energy, and with diversifying sources of electricity.[122] The Amended Project can do this because of its unique technical capabilities: 1) voltage source converter technology, which can quickly reverse the direction of current, and 2) its converter stations capable of bidirectional flow.[123]

57. These technical capabilities benefit national security because across four balancing authorities they provide outage protection, energy diversity, power flow control, interregional transfers, black start support, and increased energy independence.[124] Serving as the backbone of the grid, HVDC can perform as both the extension cord bringing electricity to customers impacted by disruptive events and jumper cables needed to restart grids suffering from outages.

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[119] Direct Testimony of Anthony Petti, p. 7.

[120] *Id.* at 7.

[121] *Id.* at 7–8.

[122] *See* Direct Testimony of Jonathon Monken, p. 4–12 and Schedule JM-2.

[123] Direct Testimony of Aaron White, p. 4–5.

[124] Direct Testimony of Jonathon Monken, p. 8.

58. Staff criticizes Grain Belt Express' representations regarding bidirectional capability because Grain Belt Express does not yet have authority from MISO to operate bidirectionally and has not requested or undertaken the incremental investment needed to allow for bidirectional operations.[125] This is an extremely short-sighted criticism, and one that unfairly and cursorily denies the benefits of bidirectionality over the length of the Amended Project. Bidirectional power flow is inherent to the selected technology type and the contract between Grain Belt Express and Siemens (the converter station supplier) provides for delivery of bidirectional converter stations.[126] The incremental investment is in reference to withdrawal rights at the various regional transmission organizations.[127] In MISO, withdrawal rights are established through the procurement of transmission service via Module B of MISO's tariff (a process separate and apart from the interconnection and injection rights processes under Attachment GGG and Attachment X).[128] If a GBX customer were to desire to withdraw power from MISO in the future and submit a Transmission Service Request ("TSR"), either independently or through Grain Belt Express, MISO performs analyses on the request to ensure the request is feasible, and if so, allocates those rights or assigns the requestor upgrades to make the request feasible.[129] As it would be difficult for GBX to foresee what kind of market transaction a future customer may desire (long or short term, firm or non-firm rights) GBX has not submitted a request to MISO for a TSR to withdraw energy from their market at this time.[130]

[125] Rebuttal Testimony of Claire Eubanks, pp. 12–13.

[126] Surrebuttal Testimony of Aaron White, p. 4–5.

[127] *Id*.

[128] Surrebuttal Testimony of Carlos Rodriguez, p. 11; Tr. Vol. 9 at 490:5–16.

[129] *Id*. at 11–12.

[130] *Id*.

59. The Amended Project is years away from full operation, and Grain Belt Express or its customer will have ample time to make the necessary requests to allow for withdrawal from the markets to which it interconnects in that time. Even without explicit withdrawal rights, GBX expects the joint operating agreements that it will be required to put in place with SPP, MISO and PJM will also include provisions governing the operation of the line during events when it may make sense to reverse power flow,[131] which will be negotiated and finalized prior to the project's commercial operation date. Near instantaneous bidirectionality is a capability of HVDC facilities like Grain Belt Express that is not physically possible for the alternating current transmission system that exists today or is being proposed in Missouri via MISO's MTEP and LRTP. The Amended Project would truly be a one-of-one national reliability backbone in having bidirectional capability across three RTOs. It is a mistake for Staff to dismiss this capability out of hand.

60. Staff's concerns regarding black-start capability are similarly short-sighted. The Amended Project will operationally capable of providing black-start services.[132] Though registration, studies, and agreements are required to fully utilize black-start services, that does not mean the Commission should ignore the Amended Project's black-start capability in its review of this Amended Application as suggested by Staff,[133] especially since Grain Belt Express has demonstrated its knowledge and familiarity with these processes at SPP, AECI, MISO, and PJM.[134] Additionally, black-start/system restoration needs will continue to evolve in coming years and potentially increase due to retirements of large local MISO base load units, further demonstrating

[131] Tr. Vol. 9 at 483:3–484:9.

[132] Surrebuttal Testimony of Carlos Rodriguez, p. 13; Direct Testimony of Anthony Petti, Schedule AP-2, p. 33–34 (providing real-life examples of VSC HVDC being used as a black start resource).

[133] Rebuttal Testimony of Claire Eubanks, p. 17.

[134] Surrebuttal Testimony of Robert Baker, Schedule RB-1.

the need for the Amended Project. The value of the Amended Project's black-start capability to the public interest is discussed below in Section II.B.

iv. Phasing of the Project is Needed

61. Phasing the Amended Project allows Missouri to benefit from aspects of the Amended Project that will otherwise be delayed by the administrative and judicial processes of other states.[135] When Phase I is completed, the Amended Project will deliver 2,500 MW into Missouri, including 1,500 MW into MISO and an additional 1,000 MW into AECI.[136] That delivery, once contracted, supports Phase I construction and is sufficient for Phase I to remain economically viable throughout the Amended Project life without any additional delivery into PJM.[137]

62. Phasing the Amended Project will also give Grain Belt Express a head-start in completing the entire length of the Amended Project as one half of the line would already be constructed. This is critical as, while Phase I is not physically or economically reliant on Phase II, Phase II is physically reliant on Phase I.[138] Streamlining Phase II will accelerate the realization of the benefits of the completed Amended Project, which include the benefit of being bidirectionally linked to PJM markets, and thus increasing the reliability and resilience benefits of the Amended Project.

63. Staff's opposition to phasing the Amended Project due to alleged economic feasibility concerns is addressed below in Section II.C. ("Economic Feasibility of the Amended

[135] Direct Testimony of Shashank Sane, p. 10.

[136] Surrebuttal Testimony of Shashank Sane, p. 17–19.

[137] *Id.*; *see also* Surrebuttal Testimony of Rolanda Shine, Schedule RS-4 (the "Financial Model").

[138] *Id.*

Project").[139] Staff's other basis for opposing phasing is that "Illinois has recently approved the [] portion of the project in Illinois."[140] However, regulatory approval by the Illinois Commerce Commission is far from the only event required to ready the Illinois portion of the Project for construction.[141] Staff does not account for the divergent land acquisition and development timelines in Kansas and Missouri, as compared to Illinois, and as discussed further below.[142] Staff's unsubstantiated concern should be dismissed by the Commission.

64. For clarity, Phase I will comprise the HVDC portion of the Amended Project starting in Ford County, Kansas and traversing the State of Missouri to the converter station in Monroe County, and including the AC Tiger Connector, which will traverse southeast from the Monroe County converter station to points of interconnection in Callaway County. Phase II is anticipated to comprise the HVDC transmission line starting at the Monroe County converter station and ending at the AEP Sullivan Substation in Sullivan County, Indiana.

65. If the Commission rejects Grain Belt Express' request to construct the Amended Project in two phases, and, by extension, Grain Belt Express' Amended Financing Condition, the substantial benefits of the Project to Missouri will be delayed by 18 months or more.[143] Such a decision would also be at odds with the Order Granting Motion to Amend the Unanimous Settlement Agreement issued by the Kansas Corporation Commission ("KCC") on June 13, 2023. The KCC found:

> Phase I is economically viable absent Phase II. Even if Phase II never materializes, Phase I will be operational and capable of moving wind from Western Kansas east,

[139] Rebuttal Testimony of Michael Stahlman, pp. 1–2 ("By constructing the project in two phases, it creates additional uncertainty about the feasibility of the project.").

[140] Rebuttal Testimony of Claire Eubanks, p. 4.

[141] Surrebuttal Testimony of Kevin Chandler, pp. 5–7.

[142] Tr. Vol. 10 at 811:2–812:4; Tr. Vol. 10 at 827:10-828:3.

[143] Surrebuttal of Kevin Chandler, p. 5.

> on a merchant line paid for by subscribers, not Kansas ratepayers. Approving the proposed revision to the Settlement Agreement does not remove or alter any of the protections for Kansas landowners that were include[ed] in the original Settlement Agreement.[144]
>
> ***
>
> The proposed amendment to the Unanimous Settlement Agreement [permitting phasing] is in the public interest because it expedites the benefits of the Project to Kansas, while maintaining all of the safeguards contained in the Unanimous Settlement Agreement, including requiring [Grain Belt Express] to confirm its financial ability to construct and operate a useful project before installing transmission facilities on easement property.[145]

66. The request to phase the Amended Project is primarily due to the fact that land acquisition for Phase II significantly trails land acquisition for Phase I.[146] This delay in land acquisition has subsequently delayed other facets of development such as environmental studies, surveying, and engineering. As of May 2023, Grain Belt Express has obtained over 87% of the easements for Phase I, which includes 366 easements in Missouri. Land acquisition in Missouri is in an advanced stage largely due to the full-scale land acquisition efforts since the Commission issued the CCN to Grain Belt Express in 2019.[147]

67. Land acquisition for Phase II remains in very early stages. Until earlier this year, judicial reviews and the Illinois statutory environment delayed Grain Belt Express' receipt of a certificate from the Illinois Commerce Commission to own, control, operate, or manage the portion of the Amended Project in Illinois. Although the Amended Project has now overcome the judicial, legislative, and regulatory hurdles in Illinois, those circumstances have caused the land acquisition

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[144] *Order Granting Motion to Amend the Unanimous Settlement Agreement*, KCC Docket No. 19-GBEE-253-ACQ, ¶ 11, *available at* https://estar.kcc.ks.gov/estar/ViewFile.aspx/20230613103715.pdf?Id=9ac1ec54-c643-43de-b952-8fb04fb2df23

[145] *Id*. ¶ 16.

[146] *Id*. at 5–6.

[147] *Id*.

process, environmental permitting process, and engineering to significantly trail those activities in Kansas and Missouri.[148]

68. Grain Belt Express estimates that it will take approximately two years for land acquisition in Illinois to reach the current level of land acquisition in Missouri.[149] As discussed by Rolanda Shine, lenders require evidence of an advanced project developmental stage in order to obtain financing, and the progress of land acquisition, or lack thereof, plays a crucial role in advancing the Amended Project to a point that financing would be achievable.

69. Stated another way, if the Commission adopts Staff's position and does not permit the Amended Project to be constructed in phases, the benefits that would accrue to Missouri as a result of the Project will not occur until land acquisition has reached an advanced state in Illinois such that financing for both Phase I and Phase II could be obtained. As a result, the benefits to Missouri, including reliability and resiliency benefits, economic benefits, and environmental benefits will be significantly delayed. Although there are benefits to Missouri associated with Phase II of the Project, the majority of the benefits accrue to Missouri in Phase I.[150]

B. Public Interest of the Amended Project

70. The Commission has heard ample evidence of the public interests advanced by the Amended Project. The Amended Project will benefit Missouri economically, both in driving investment in local communities during construction and providing low-cost, reliable energy to Missouri ratepayers and utilities during operation. The Amended Project provides much needed electricity that will help Missouri to meet the demands of customers, businesses, governments, and utilities who all demand cleaner, cheaper, and more reliable electricity. The reliability and

[148] *Id*. at 6.

[149] *Id*.

[150] Surrebuttal of Kevin Chandler, pp. 7–8.

resilience aspects of the Amended Project will serve the public interest in limiting the effects of demand spikes and reduce the chances that a storm or some other event that causes grid instability will cripple the local and regional electric grid. Grain Belt Express has also provided ample evidence that it has met public interest goals in balancing the benefits of building a low-cost, high-efficiency line with the challenge of reducing potential impacts on nearby landowners and habitats.

71. Against this mountain of evidence, there has been essentially no evidence presented that contradicts these wide-reaching benefits or points to harm that would outweigh the significant benefits. Notably, the largest representatives of landowners in this matter—Missouri Landowners Alliance[151] and Eastern Missouri Landowners Alliance[152] presented no affirmative evidence of how Missouri landowners will be harmed by the Amended Project. The only party that advanced any evidence regarding alleged detriment to the public interest was Missouri Farm Bureau—stating only that it is generally opposed to the use of eminent domain to build transmission projects.[153]

72. The public interest is a matter of policy to be determined by the Commission.[154] It is within the Commission's discretion to determine when the evidence indicates the public interest

[151] Mot. to Intervene by the Missouri Landowner Alliance ("MLA"), p. 1 (Aug. 12, 2023) (stating MLA's membership consists of 1,100 members).

[152] Mot. to Intervene by the Eastern Missouri Landowner Alliance ("EMLA"), p. 1 (Aug. 12, 2023) (stating EMLA's membership consists of 400 members).

[153] Patricia and David Stemme did provide rebuttal testimony, but it centered on a legal argument relating to Grain Belt Express' authority to use eminent domain. *See* Rebuttal Testimony of Patricia Stemme, p. 9–10.

[154] *State ex rel. Public Water Supply District v. Public Service Commission*, 600 S.W.2d 147, 154 (Mo. App. 1980). The dominant purpose in creation of the Commission is public welfare. *State ex rel. Mo. Pac. Freight Transport Co. v. Public Service Commission*, 288 S.W.2d 679, 682 (Mo. App. 1956).

would be served.[155] Determining what is in the interest of the public is a balancing process that requires the Commission to carefully weigh the positions of the parties and the impact of its decision to the state and region.[156] The precedent is clear that in making such a determination, the total interests of the public served must be assessed,[157] which means that there may be inconveniences suffered by some for the benefit of the overall public interest.[158] The "dominant purpose" of the Commission is to provide for the public welfare, and to elevate the needs of the public above rights of an individual.[159] The "public interest" necessarily must include the interests of both the ratepaying public and the investing public; however, as noted, the rights of individual groups are subservient to the rights of the public in general.

73. In the Prior CCN Order, the Commission found that the Certificated Project promotes the public interest because:

> There can be no debate that our energy future will require more diversity in energy resources, particularly renewable resources. We are witnessing a worldwide, long-term and comprehensive movement towards renewable energy in general and wind energy specifically. Wind energy provides great promise as a source for affordable, reliable, safe, and environmentally-friendly energy. The Grain Belt Project will

[155] *State ex rel. Intercon Gas, Inc. v. Public Service Comm'n of Missouri*, 848 S.W.2d 593, 597–598 (Mo. App. 1993). That discretion and the exercise, however, are not absolute and are subject to a review by the courts for determining whether orders of the P.S.C. are lawful and reasonable. *State ex rel. Public Water Supply Dist. No. 8 of Jefferson County v. Public Service Commission*, 600 S.W.2d 147, 154 (Mo. App. 1980). *In the Matter of Sho-Me Power Electric Cooperative's Conversion from a Chapter 351 Corporation to a Chapter 394 Rural Electric Cooperative*, Case No. EO-93-0259, Report and Order (Sept. 17, 1993).

[156] *In the Matter of Sho-Me Power Electric Cooperative's Conversion from a Chapter 351 Corporation to a Chapter 394 Rural Electric Cooperative*, Case No. EO-93-0259, Report and Order (Sept. 17, 1993).

[157] *Id.*

[158] *Id.*

[159] *State ex rel. Mo. Pac. Freight Transport Co. v. Public Serv. Comm'n*, 288 S.W.2d 679, 682 (Mo. App. 1956) ("The rights of an individual with respect to issuance of a certificate are subservient to the rights of the public.").

> facilitate this movement in Missouri, will thereby benefit Missouri citizens, and is, therefore, in the public interest.[160]

74. More recently, the Commission confirmed that the movement towards renewable energy continues, and indeed, has accelerated. In reviewing Ameren Missouri's recent application for a certificate to acquire a solar project, the Commission found, in an Order dated April 12, 2023 (the Boomtown Solar Order):

> Legislative changes considered by the U.S. Congress in the last two years could significantly change energy policy and 'drive the need for an imminent and significant expansion of renewable energy resources within an uncomfortably short timeframe.[161]
>
> ***
>
> The large-scale expansion of renewable resources, such as the Project, provides significant risk mitigation to Ameren Missouri's generation portfolio, particularly with respect to the potential for additional environmental regulations, changes in climate policy and carbon dioxide prices, and other factors that may significantly affect the operating costs and benefits of the Company's existing coal-fired resources.[162]
>
> ***
>
> Demand for clean, reliable, and affordable energy is an increasingly important factor in determining where businesses locate new jobs and investment. Missouri is competing with other states for new jobs and investment from businesses that have large energy demand and a need for renewable energy resources. Customer preferences for renewable energy and corporate sustainability goals by Missouri's large employers for their energy needs should not be dismissed.[163]

75. The record in this docket supports the conclusion that the Project serves the public interests described in the Prior CCN Order and the Boomtown Solar Order. For example, the Project reduces total energy and capacity expenditures for Missouri residents by over $17.6 billion

[160] Prior CCN Order, p. 47.

[161] Boomtown Solar Order, p. 12

[162] Boomtown Solar Order, p. 17

[163] Boomtown Solar Order, p. 31.

and creates $7.6 billion in social benefits from avoided emissions during the 2027-66 period.[164] Avoided emissions include the reduction of CO_2, SO_2, and NOx in Missouri by 9.3%, 19.2%, and 17.2%, respectively.[165] Reducing CO_2 by 9.3% is the equivalent of removing over 13 million gasoline cars from Missouri roads for one year.[166] And the reduction in SO_2 and NOx represents a reduction in air pollution, and therefore, a reduction in respiratory illness.[167]

76. The Project is also in the public interest because, all else equal, adding transmission capacity to the power grid improves reliability by creating more numerous and robust energy pathways from sources to loads, allowing more economic flow, and increasing available capacity during times of transmission and/or generator outages.[168]

77. As described in Jonathan Monken's testimony and schedules, a more reliable and resilient grid is also in the in the interest of national security. The Project generates these benefits by interconnecting four regions with black-start and bidirectional capabilities. The combination of these features make Grain Belt Express a unique system restoration resource, capable of restarting the electric system from a shutdown condition.[169] This becomes particularly critical in an environment of increasing "desire on the part of nation state adversaries to deliberately target grid infrastructure as a means of degrading mission capability of United States forces that are based in the continental United States."[170] The Department of Defense ("DOD"), Department of Energy

[164] Direct Testimony of Mark Repsher, Schedule MR-2, p. 14.

[165] *Id.* at 15.

[166] *Id.* at 15.

[167] *Id.* at 16.

[168] *Id.* at 16.

[169] Direct Testimony of Anthony Petti, Schedule AP-2, p. 34.

[170] Tr. Vol. 9 at 551:3–552:5.

("DOE"), RTOs, and the National Association of Regulatory Commissioners ("NARUC") have all recognized the need to mitigate these risks.[171]

78. Power system operators have typically relied on fossil fuel powered generating stations with coupled auxiliary power units such as reciprocating engines and stand-alone diesel generation units to perform system restoration or black-start services.[172] However, recent investigations into the extreme weather events described in the Guidehouse Report revealed that more than one-third of the plants that lost generation during the 2018 Northeast "Bomb Cyclone" cold snap did not have winterization procedures in place during the time of the event. Since that time, owners of fossil powered plants have made little progress and the failure to winterize generating stations became a major contributor to electric system failures during Winter Storm Uri.[173] FERC reported that "a combination of freezing issues (44.2%) and fuel issues (31.4%) caused 75.6% of the unplanned generating unit outages, derates, and failures to start.[174] Of particular note, protecting just four types of power plant components from icing and freezing could have reduced outages by 67% in the ERCOT region, 47% in the SPP, and 55% in the MISO regions."[175]

79. HVDC transmission lines with VSC technology, like the Amended Project, have demonstrated the capability to restart a major power grid,[176] and so are an additional option to power system operators. Thus, the fact the Amended Project will be operationally capable of

[171] Tr. Vol. 9 at 552:6–553:20.

[172] *Id*.

[173] *Id*.

[174] *Id*.

[175] *Id*. (*citing* FERC, Final Report on February 2021 Freeze Underscores Winterization Recommendations (Nov. 16, 2021), https://www.ferc.gov/news-events/news/final-report-february-2021-freeze-underscores-winterization-recommendations).

[176] Direct Testimony of Anthony Petti, Schedule AP-2, p. 34–35.

acting as a black-start/system restoration resource certainly makes it a relevant factor to the Commission's ultimate determination of whether the Amended Project is in the public interest. The unique capabilities of the Amended Project improve the national security of the United States and the citizens of Missouri.[177]

80. Furthermore, as explained in Dr. Loomis' testimony and schedules, the Amended Project advances the public interest through its impact on local economic, fiscal, and employment benefits.[178] For example, the Amended Project will support 5,757 construction jobs statewide and a significant number of construction jobs in the Missouri counties it crosses: 247 for Audrain County, 318 for Buchanan County, 243 for Caldwell County, 66 for Callaway County, 303 for Carroll County, 362 for Chariton County, 226 for Clinton County, 804 for Monroe County, 356 for Ralls County, and 284 for Randolph County.[179] In addition to construction jobs, the Amended Project will support 104.4 long-term positions statewide and long-term jobs in the Missouri counties it crosses: 10.6 for Audrain County, 3.8 for Buchanan County, 1.9 for Caldwell County, .3 for Callaway County, 3.2 for Carroll County, 4.1 for Chariton County, 1.4 for Clinton County, 16.2 for Monroe County, 2.0 for Ralls County, and 2.6 for Randolph County.[180] These jobs are estimated to result in total worker earnings from the Amended Project for Missouri of $586,118,331 during construction and $8,113,077 during the operation phase of the Amended Project.[181]

[177] Tr. Vol. 9 at 554:9–13.

[178] Direct Testimony of David Loomis, p. 7–8 *and see* Schedule DL-2, pp. 10–14.

[179] *Id.* at 7–8.

[180] *Id.* at 8.

[181] *Id.* at 8.

81. The State will also benefit from economic output and increased income tax generation from wages paid during construction in Missouri and during the operation phase of the Amended Project. During the construction phase of the Project, it will support over $986 million in economic output for Missouri, and during the first 20 years of the Amended Project's life, over $15.8 million in long-term output supported annually for Missouri.[182]

82. Nevertheless, Staff has described Dr. Loomis' report as "irrelevant to any determination under the Tartan criteria" and has advised the Commission to give it no weight.[183] Presumably, Staff did not mean irrelevant in the legal sense because relevance, in the legal sense, refers to evidence having some value or tendency to prove a matter of fact of significance to the case.[184] Here, Dr. Loomis' report *is relevant* because it describes the amount of local impact of the Amended Project, economic output from the Amended Project, and tax benefits from the Amended Project *in Missouri*. Obviously, that information *is relevant* to the Commission determination of public interest in this proceeding. Staff can disagree with it, which it has, but Staff's disagreement does not render it irrelevant.

83. And while Staff has challenged Dr. Loomis' report, Staff's challenge is not well-founded. Staff asserts that Dr. Loomis' report represents additional costs on Grain Belt Express, and then enumerates "taxes and expenditures of the project."[185] But the costs of the Amended Project (including taxes and expenditures) *were* inputs into Dr. Loomis' study.[186] The benefits

[182] Direct Testimony of David Loomis, Schedule DL-2, p. 6.

[183] Rebuttal Testimony of Michael Stahlman, pp. 1, 8.

[184] *Brown v. Hamid*, 856 S.W.2d 51, 56 (Mo. 1993) (en banc) ("The test for relevancy is whether an offered fact tends to prove or disprove a fact in issue or corroborates other relevant evidence").

[185] Rebuttal Testimony of Michael Stahlman, p. 8.

[186] Surrebuttal Testimony of David Loomis, p. 4.

shown by Dr. Loomis' study are not negated simply by the fact that Grain Belt Express is the entity that will be paying for such taxes and other expenditures.

84. Staff also asserts that Dr. Loomis' report ignores opportunity costs to workers, land, and investment capital.[187] Again, that is not correct. Dr. Loomis did not ignore opportunity costs. Rather, he assumes that there are idle resources in the economy that can be put to good use as a result of the Amended Project.[188] That assumption is reasonable and no party in this Docket has presented evidence to the contrary beyond mere speculation by counsel.[189]

85. With respect to opportunity cost to workers, these would only increase as a result of the Project, all else equal, if the Missouri economy were at full employment.[190] With respect to the opportunity costs to land, one of the benefits of the Amended Project's design is its minimal impact to land.[191] For example, in situations where the Amended Project is located on agricultural land, in addition to the fact that transmission facilities will be located on a very small portion of the land, landowners will be able to farm around the Amended Project's structures.[192] With respect to opportunity costs to investment capital, Staff's assertions are flawed because they assume the Amended Project is constrained by the lack of capital and that the capital and investments attendant

[187] Rebuttal Testimony of Michael Stahlman, p. 8.

[188] Surrebuttal Testimony of David Loomis, p. 4.

[189] Counsel for the Agricultural Associations offered non-expert, non-testimony, and unfounded speculation ranging from alleged impacts of temporary employment to the use of Roundup for vegetation control—none of which were supported by expert analysis and none of which had any impact on the conclusions of Dr. Loomis' study. *See* Tr. Vol. 10 at 764:13–765:11 (counsel for Missouri Agricultural Associations discussing the temporary impact of the Project); Tr. Vol. 10 at 765:25–770:9 (counsel for Missouri Agricultural Associations discussing the purchase of Roundup).

[190] Surrebuttal Testimony of David Loomis, p. 4.

[191] Surrebuttal Testimony of Aaron White, pp. 9–12.

[192] Surrebuttal Testimony of Kevin Chandler, p. 16.

to the Amended Project would still be allocated to Missouri if the Project was not constructed.[193] There is no evidence to support either of Staff's capital investment assumptions, *i.e.*, there are no known projects that will be built if the Amended Project is not built, therefore, the capital and investments attendant to the Amended Project would simply not be allocated to Missouri.[194]

86. At hearing, Dr. Loomis discussed the total employment impact the direct construction of the Project would have locally. For example, Dr. Loomis engaged in a discussion with counsel for the Agricultural Associations regarding the assumption that that the Project will create 100 full-time equivalent jobs over three years in Audrain County and 122 full-time equivalent jobs over three years in Caldwell County.[195] As recognized during the discussion, there is substantial impact on rural counties from such an influx of employment.[196] Dr. Loomis also discussed the hidden (or indirect) impact of supplies and materials that are typically purchased locally and ongoing services that are needed, such as vegetation management.[197] Finally, Dr. Loomis discussed the accuracy of the economic model used in his study (the IMPLAN Model), confirming that a post-mortem analysis of an IMPLAN study in Macon County, Illinois demonstrated that the results are reliable.[198]

87. Further, Grain Belt Express' proposal meets public interest goals by mitigating impacts on nearby landowners and habitats through appropriate routing procedures, environmental

[193] Surrebuttal Testimony of David Loomis, p. 4.

[194] *Id.* at 4.

[195] Tr. Vol. 10 at 762:5–764:5.

[196] Tr. Vol. 10 at 763:22–764:5.

[197] Tr. Vol. 10 at 765:12–24.

[198] Tr. Vol. 10 at 777:4–778:11.

compliance, and continued application of the Missouri Landowner Protocol, Code of Conduct, and the Missouri Agricultural Mitigation Protocol.[199]

C. Economic Feasibility of the Amended Project

88. As discussed earlier in this brief, the general standard of "whether the improvement justifies its cost" guides the Commission's interpretation of the "economic feasibility" factor. In contrast, the Commission Staff would have the Commission find that the standard for "economic feasibility" is present tense economic certainty or omniscient knowledge of future costs and revenue streams.[200] Such an interpretation is at odds with both Commission precedent and the reality and timing of obtaining the necessary regulatory approvals for a transmission project the size and scope of the Project.

89. The very term "feasible" is by definition forward-looking in nature.[201] The Commission and its Staff routinely conclude that projects and proposals are economically feasible based on an evaluation of a variety of factors.[202] In the Prior CCN Docket, the Commission found

[199] Direct Testimony of Kevin Chandler, pp. 6–21 (discussing how Grain Belt Express will manage relations with landowners on or around the proposed route); Direct Testimony of Jennifer Stelzleni, pp. 5–11 (discussing how Grain Belt Express will comply with environmental law); and Direct Testimony of Andrew Burke at 5–9 *and* Schedule AB-2, pp. 66–68 (discussing how the Tiger Connector route was selected and how numerous interests were balances to create a reasonable route).

[200] Tr. Vol. 12 at 901:15–903:2 (Mr. Stahlman testifying that Staff considered future revenue streams to be the only relevant metric for economic feasibility).

[201] "Feasible: Capable of being done or carried out; capable of being used or dealt with successfully; reasonable, likely, probable." Merriam-Webster, 2022; *available at* https://www.merriam-webster.com/dictionary/feasible

[202] *Order Approving Acquisition of Assets and Granting a Certificate of Convenience and Necessity*, Case No. WA-2023-0003, p. 3 (Dec. 8, 2022) ("The proposed transaction is economically feasible due to its being financially feasible, as well as [the applicant's] ability to draw resources from its parent company."); *Order Granting Certificate of Convenience and Necessity*, Case No. SA-2020-0013, p. 2 (Sept. 11, 2019) ("The proposal is economically feasible as the expansion will be funded by the property owner."); *Order Approving Unanimous Stipulation and Agreement*, Case No. EA-2018-0327, p. 4 (Nov. 28, 2018) ("The Project is economically feasible because [the applicant] plans to finance the estimated cost of $27.6 million either through available cash on hand or through short-term borrowing.")

that the Project is economically feasible because the Project links customers in Missouri who desire to purchase low-cost wind power from western Kansas with wind generation companies who supply the power.[203] In that proceeding, the Commission further found:

> The economic feasibility of the Grain Belt Project is also demonstrated by (a) a very strong corporate demand for renewable energy in PJM where users will pay a higher price; (b) the cost of generating wind energy in western Kansas continues to drop; (c) wind speeds in western Kansas are substantially higher than Missouri, Illinois, Indiana, and Iowa; (d) Kansas wind generators can produce energy at a lower cost because of two Kansas tax incentives and the low cost to construct wind farms; and (e) the wind industry will not be dependent on the federal production tax credit after 2023 because of continuing technology improvements. For all of the reasons stated above, the Commission concludes that the Grain Belt Project is economically feasible.[204]

90. The Commission's prior findings regarding economic feasibility continue to be salient, relevant, and persuasive. Moreover, the Commission is entitled to interpret any of its own orders as they may relate to a present matter.[205] When interpreting its own orders, and ascribing a proper meaning to them, the Commission is not acting judicially, but rather as a fact-finding agency.[206] Grain Belt Express urges the Commission to reaffirm its prior findings with respect to economic feasibility, which findings are further bolstered by the evidence adduced in this current proceeding.

91. In the current case, Grain Belt Express has submitted evidence of demand for the proposed 2500 MW of delivery in Missouri, evidence of savings induced by the Amended Project that far outweigh the costs, and evidence of a Financial Model (Schedule RS-4 to Rolanda Shine's

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[203] Prior CCN Order, pp. 43–44.

[204] *Id*.

[205] *State ex rel. Beaufort Transfer Co. v. Public Serv. Comm'n of Missouri*, 610 S.W.2d 96, 100 (Mo. App. 1980); *State ex rel. Missouri Pacific Freight Transport Co. v. Public Serv. Comm'n*, 312 S.W.2d 363, 368 (Mo. App. 1958); *State ex rel. Orscheln Bros. Truck Lines v. Public Serv. Comm'n*, 110 S.W.2d 364, 366 (1937).

[206] *Id.*

Surrebuttal Testimony) that shows revenues in excess of costs. Moreover, the Commission will receive future further assurances of the economic feasibility of the Project due to the Financing Condition. Before any transmission facilities are installed on easement property in Missouri, the Financing Condition requires that each Phase of the Amended Project be fully financed. As a result, Grain Belt Express will establish the economic feasibility twice: both through its evidence in this case *and* when it achieves full financing for each Phase.

92. The evidence presented by Grain Belt Express confirms that the purpose of the Project remains the same as the Prior CCN Docket, but that demand from customers and utilities in both MISO and PJM for low-cost, high capacity, geographically diverse renewable resources to replace retiring fossil fuel resources has grown exponentially in recent years, as stated above in the economic need section.[207] There is also a significant interest in wind development in Kansas as evidenced by the many gigawatts of projects in SPP's queue.[208] This interest will only grow given the recent passage of the Inflation Reduction Act.[209]

93. Although the revised projected cost of the entire Amended Project ($4.95 billion) is higher than the 2016 projected cost ($2.35 billion), the Amended Project remains economically feasible because the cost of alternative supply side resources has also significantly increased, while the demand for renewable energy continues to grow. Accordingly, even with the higher projected cost, the energy and capacity offered by Grain Belt Express is more economically attractive than the alternatives.[210]

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[207] *See* Direct Testimony of Shashank Sane, pp. 28–31 *and see* discussion *supra* at ¶¶ 28–33.

[208] *Id.*

[209] *Id.*

[210] *Id.*

94. Added to this, the Project will provide its customers and the region with the critical operational flexibility necessary to respond to extreme grid conditions, by virtue of its connection with four separate balancing authorities. The ability to access geographically diverse resources as well as the ability to access other energy markets when needed for reliability only bolsters the attractiveness of the project and therefore its economic feasibility.

95. Further, Grain Belt Express has demonstrated that it has a clear and viable plan to raise the capital necessary to construct each Phase of the Amended Project.[211] Ms. Shine testified that there are benefits to financing the Project in two phases, as opposed to one:

> By breaking it up into phases, there is a high likelihood that we can replicate a lot of the financing due diligence from Phase I into Phase II. Perhaps the documentation will be more straight forward for Phase II because it will look very similar to Phase I. Perhaps we can even use the same lender for Phase II that we will use in Phase I but the interest rates will stay the same. Fees will probably be around the same, maybe a little bit less. In terms of disadvantages, I can't really think of any.[212]

96. There are also very practical and pragmatic reasons to construct the Project in two phases, as discussed above in Section II.A.iv ("Phasing of the Amended Project is Needed"). Grain Belt Express expects to be in a position to finance Phase I in the near future.[213] As explained by Ms. Shine, "we do not want to hold up Phase I simply because of where we are on Phase II. So in my opinion, we are breaking it up into phases so we can successfully finance and build the part of the line that is ready to go."[214] Many (but not all) of the benefits of the Project to Missouri will be

[211] Direct Testimony of Rolanda Shine, pp. 7–10; Surrebuttal Testimony of Rolanda Shine, pp. 7–8 *and see* Schedule RS-4 (Grain Belt Express' financing model).

[212] Tr. Vol. 9 at 449:16–25.

[213] Tr. Vol. 8 at 247:20–248:6 (Mr. Sane testifying that Grain Belt Express expects ***[redacted]***).

[214] Tr. Vol. 9 at 449:6–10.

realized with Phase I, so constructing the Project in phases will result in Missouri accruing benefits much earlier.[215]

97. Staff argues that phasing creates additional uncertainty about the feasibility of the Project.[216] Unfortunately, Staff relies on outdated and limited information suggesting that energy prices in PJM are higher than prices for energy in the MISO market, while ignoring the plethora of clear evidence the project provided to support the feasibility of additional sales in the MISO region.[217] Staff's reference to a snapshot comparison of prices from 2019 is the foundation of its assertion that phasing creates additional uncertainty. Staff does not make any attempt to analyze current energy prices in MISO.[218] Yet, Staff acknowledges that if prices in MISO are sufficient to support the cost of Phase I, then Phase I is feasible regardless of what the prices are in PJM.[219]

98. The most current and relevant evidence of the Project's impact on energy and capacity prices in MISO is provided in the PA Consulting Study and the testimony of Grain Belt Express witness Mark Repsher. Mr. Repsher testified that the Amended Project will lower energy and capacity costs in Missouri by approximately 6.1% over the 2027-2066 time period, resulting in over $17.6 billion of savings for Missouri residents.[220] Mr. Repsher also testified that the Project is projected to reduce harmful emissions, quantified by Mr. Repsher as an additional $7.6 billion in social benefits over the same time period.[221] Combined, the direct ratepayer savings in energy

[215] Surrebuttal Testimony of Kevin Chandler, p. 5.

[216] Rebuttal Testimony of Michael Stahlman at pp. 1–2.

[217] *Id.*; Tr. Vol. 12 at 897:19–899:16; 900:15–901:25.

[218] Tr. Vol. 12 at 921:21–24.

[219] Tr. Vol. 12 at 904:1–10.

[220] Direct Testimony of Mark Repsher, p. 6.

[221] *Id.*

and capacity costs plus the social benefits of emission reductions, result in a total cumulative benefits to over $25.3 billion by 2066.[222]

99. The $17.6 billion in savings for Missouri residents provides more than enough headroom to cover the costs of Phase I, which are estimated to be $3.52 billion.[223] Such costs will be recovered through the sale of capacity on the Project and Mr. Sane testified that ***[redacted]***[224] Accordingly, the 2500 MW of delivery associated with Phase I "supports Phase I construction and is sufficient for Phase I to remain economically viable throughout the Project life without any additional delivery into PJM."[225] This is reflected in the Financial Model provided as Schedule RS-4 to Rolanda Shine's Surrebuttal Testimony. In light of this evidence, a snapshot of energy price differentials between MISO and PJM from testimony in 2019 is not compelling or even relevant.

100. Staff's claim that the PA Consulting Study does not support the economic feasibility of the Amended Project misapplies the economic feasibility standard. The PA Consulting Study demonstrates that the benefits of the Amended Project vis-à-vis savings to ratepayers more than outweighs the cost of the Amended Project, thus the Amended Project is "an improvement justifying its cost."[226]

101. Finally, Invenergy Transmission and Grain Belt Express (not ratepayers) will continue to bear the financial risk of the Project, and that cost will continue to be recovered through

[222] *Id.*

[223] Direct Testimony of Aaron White, p. 19; Direct Testimony of Mark Repsher, p. 18.

[224] Tr. Vol. 8 at 256:6–16.

[225] Surrebuttal Testimony of Shashank Sane, p. 17.

[226] *Intercon Gas, Inc.*, 848 S.W.2d at 597–598.

a merchant business model. Section I of Attachment 1 to the Prior CCN Order prohibits Grain Belt Express from installing transmission facilities on easement property in Missouri until it has obtained commitments for funds in an amount equal to or greater than the total cost to build the entirety of the multi-state transmission project. As part of this Application, Grain Belt Express is seeking to modify that condition to permit the construction of Phase I prior to Phase II, but Grain Belt Express will still be required to have full financing in place for each respective phase of the Project before construction begins on that phase. Accordingly, Grain Belt Express will continue to bear all financial risk of the Amended Project.

D. Financial Ability of Grain Belt Express

102. The Commission previously found that "Grain Belt and Invenergy together have … the financial ability to develop, construct, and operate the Project," concluding that "Invenergy's financial condition is very strong."[227] And in the Commission's September 11, 2019 Report and Order in Docket No. EM-2019-0150, the Commission restated that Invenergy possessed requisite financial abilities.[228]

103. Grain Belt Express continues to have access to the necessary financial resources to carry out the necessary development work for the Amended Project prior to engaging in project specific financings for the construction of the Amended Project. Invenergy Renewables has sufficient capital resources to provide the funding necessary to enable Invenergy Transmission and

[227] Prior CCN Order, p. 43. In the Commission's Findings of Fact, it referenced, among other things, that: Invenergy has raised more than $30 billion of financing in connection with the successful development of more than 20,046 MW in projects in the United States, Canada, Europe, Central America, and Japan (*id.* ¶ 60); and that Invenergy and its affiliates have in excess of $9 billion in total assets and $3 billion in total equity on a consolidated basis (as of December 31, 2017) (*id.* ¶ 59).

[228] *Report and Order*, Docket No. EM-2019-0150, ¶ 7 (June 5, 2019).

its subsidiaries to undertake the initial development and permitting work for the Amended Project.[229]

104. Grain Belt Express has also provided ample evidence that it has a viable plan for raising the capital necessary to finance the cost of constructing the Project on a project financing basis.[230] Specifically, after advancing development and permitting activities to a status at which developers of wind and solar generation facilities and other potential customers of the transmission line are willing to enter into commercial agreements for an undivided interest (purchase or lease) or long-term contracts for transmission capacity on the Amended Project, Grain Belt Express will enter such contracts with interested parties that satisfy necessary creditworthiness requirements.[231] Grain Belt Express will then raise debt capital using the aforementioned contracts as security for the debt. Grain Belt Express may also raise additional equity capital.[232]

105. No party has challenged the financial ability of Grain Belt Express and Staff found that Grain Belt Express has the requisite financial ability.[233]

E. Qualifications of Grain Belt Express

106. In the Commission's CCN Order, the Commission found that "Grain Belt and Invenergy together have the qualifications … to develop, construct, and operate the Project," citing Invenergy's management team's extensive experience in developing, constructing and operating transmission and energy infrastructure projects and Invenergy's impressive record of development and construction of energy projects, including hundreds of miles of transmission lines, substations

[229] App. ¶¶ 74–79.

[230] *See* Direct Testimony of Rolanda Shine, pp. 5–14.

[231] *Id.* at 7–8.

[232] *Id.*

[233] Rebuttal Testimony of Seoung Joun Won, p. 6.

and transformers.[234] And in the Commission's September 11, 2019 Report and Order approving Invenergy's acquisition of Grain Belt Express, the Commission restated that Invenergy possessed requisite technical abilities.[235]

107. Grain Belt Express has shown through the testimony of each of its witnesses that it continues to possess the degree of expertise required to carry out the engineering, procurement, construction, equipment design, routing and land acquisition tasks required to construct the Amended Project and place it into operation.[236] This point is uncontroverted. No party has challenged the qualifications of Grain Belt Express and Staff found that Grain Belt Express has the requisite qualifications.[237]

III. The Commission Should Impose the Agreed-Upon Conditions and Reject Additional Conditions

A. Agreed Upon Conditions

108. Grain Belt Express has requested or agreed to a number of terms requested by various parties that should be included in the Commission's order approving the Application. These terms are:

[234] Prior CCN Order, p. 43. In the Commission's Findings of Fact, it referenced, among other things, that Invenergy's senior management executives, each with more than 25 years of experience in the energy generation industry, have worked together for more than two decades; Invenergy's project management team has extensive experience in construction of energy generation projects, contract negotiation, material procurement, right-of-way issues, utility interconnections, and construction of electrical transmission and substations (*id.* ¶ 57); and that since 2001, Invenergy has built all required transmission and distribution lines, generator step-up transformers, and substations for its facilities in numerous regions, including within the regions managed by SPP, MISO and PJM. Invenergy developed, permitted and constructed this infrastructure across various terrains, state and local jurisdictions, and in vastly differing environmental and regulatory conditions. This experience has resulted in over 392 miles of high-voltage transmission lines, over 1,748 miles of distribution lines, 59 substations, and 73 generator step-up transformers (*id.* ¶ 58).

[235] *Report and Order*, Docket No. EM-2019-0150, ¶ 7 (June 5, 2019).

[236] App. ¶¶ 67–73.

[237] Rebuttal Testimony of Jordan T. Hull, p. 2.

a. All conditions established by the Existing CCN Order shall remain in place unless specifically modified by the CCN Amendment Order.

b. Grain Belt Express shall not install transmission facilities associated with Phase 1 on easement property in Missouri until it has submitted documentation to Commission Staff regarding compliance with all applicable federal and Missouri environmental permits associated with Phase 1. Further, Grain Belt Express shall not install transmission facilities associated with Phase 2 on easement property in Missouri until it has submitted documentation to Commission Staff regarding compliance with all applicable federal and Missouri environmental permits associated with Phase 2.[238]

c. The "Financing Condition" as set forth in Section I of Exhibit 1 to the CCN Order should be modified as follows:

Grain Belt Express will not install transmission facilities associated with Phase I of the Project on easement property in Missouri until it has obtained commitments for funds in an amount equal to or greater than the total cost to build the entirety of Phase I of the Project. Further, GBE will not install transmission facilities associated with Phase II of the Project on easement property in Missouri until it has obtained commitments for funds in an amount equal to or greater than the total cost to build the entirety of Phase II of the Project. The term "install transmission facilities" means "to affix permanently to the ground transmission towers or other transmission equipment, including but not limited to bases, poles, towers and structures, such wires and cables as Grain Belt shall from time to time suspend therefrom, foundations, footings, attachments, anchors, ground connections, communications devices and other equipment, accessories, access roads and appurtenances, as Grain Belt may deem necessary or desirable in connection therewith, but shall not include (A) preparatory work such as surveys, soil borings, engineering and design, obtaining permits and other approvals from governmental bodies, acquisition of options and easements for right of-way, and ordering of equipment and materials, and (B) site preparation work and procurement and installation of equipment and facilities on property owned in fee by Grain Belt Express including the converter station site." To allow the Commission to verify compliance with this condition, GBE shall file the following documents with the Commission at such a time as GBE is prepared to begin to construct electric transmission facilities in Missouri associated with Phase I and Phase II, respectively:

i. On a confidential basis, equity and loan or other debt financing agreements and commitments entered into or obtained by GBE or its parent company for the purpose of funding the respective Phase of the transmission project that, in the aggregate, provide commitments for the total cost of such Phase.

[238] This condition was requested by Staff Witness Cedric Cunigan. Rebuttal Testimony of Cedric Cunigan, pp. 4:1–9. Grain Belt has stated it is amenable to that condition. Surrebuttal Testimony of Jennifer Stelzleni, pp. 3–4.

ii. An attestation by an officer of GBE that GBE has not, prior to the date of the attestation, installed transmission facilities associated with the respective Phase on easement property; or a notification that such installation is scheduled to begin on a specified date.

iii. A statement of the total cost of the respective Phase, broken out by the categories of engineering, manufacturing and installation of converter stations; transmission line engineering; transmission towers; conductor; construction labor necessary to complete the Phase; right-of way acquisition costs; and other costs necessary to complete the Phase, and certified by an officer of GBE, along with a reconciliation of the total cost of such Phase in the statement to the total cost of such Phase as of the Application to Amend (i.e., $3.52 billion for Phase I and $1.43 billion for Phase II as set forth in the Direct Testimony of Aaron White); and property owned in fee by GBE associated with the respective Phase, including the converter station sites.

iv. A reconciliation statement certified by an officer of GBE showing that (1) the agreements and commitments for funds provided in subsection (i), above, are equal to or greater than the total cost of the Phase provided in subsection (iii), above; and (2) the contracted transmission service revenue is sufficient to service the debt financing of the Phase (taking into account any planned refinancing of debt).[239]

d. The Missouri Landowner Protocol, as referenced and incorporated into the CCN Order at Ordering Paragraph 8, should be modified to allow compensation to Tiger Connector Landowners at 150%. Such modification to the Missouri Landowner Protocols is set forth in Schedule KC-5, filed with the Commission on August 31, 2022.

e. If Grain Belt Express is designated as a system restoration resource by a regional transmission organization, it shall provide notice of such designation to Commission Staff, subject to external confidentiality protections limiting disclosure of certain documents or information.[240]

B. The Commission Should Reject Staff's Definitions of Material Change

109. The Commission should reject Staff's proposed definitions of "material change."

[239] This is a modified condition proposed by Dr. Won in his Rebuttal Testimony at pages 7–8. Grain Belt Express has expanded upon Dr. Won's condition further to include a definition for the term "install transmission facilities." An explanation for the added definition is in the Surrebuttal testimony of Rolanda Shine at pages 4–5.

[240] This modification was suggested in the Rebuttal Testimony of Claire Eubanks at page 17. Grain Belt Express signaled it does not object to that modification on page 14 of the Surrebuttal Testimony of Carlos Rodriguez.

110. Staff Witness Michael Stahlman suggests the Commission define a material change to include: (1) a change in the converter station location or point(s) of interconnection, (2) a modification of 100 MW in converter station design size, (3) a change of a half billion dollars in estimated cost; or (4) a change to injection rights and withdrawal rights.[241]

111. As reflected by the current Application, Grain Belt Express will file an updated application with the Commission if there are design and engineering changes that are materially different from the certificated Project. Staff has not demonstrated why defining material changes is necessary or appropriate, particularly given Grain Belt Express' demonstration of compliance with the current condition. Further, Staff's recommended definitions would establish thresholds that are either too low or too insubstantial (or both), which could trigger unnecessary additional applications with the Commission that further delay the construction of the Project and result in unnecessary re-litigation of issues.[242] Finally, Staff's recommendation to establish a cost threshold is not related to "design and engineering" issues and would fundamentally change the purpose of Ordering Paragraph 6. It is unnecessary to expand a "design and engineering" condition to include a financial component when the Project is already subject to (and will continue to be subject to) the Financing Condition or the Amended Financing Condition. Grain Belt Express' surrebuttal testimony describes why each of Staff's proposed thresholds are not appropriate.[243]

[241] Rebuttal Testimony of Michael Stahlman, pp. 8–9.

[242] *See* Tr. Vol. 12 at 930:3–9 (Staff counsel acknowledging that additional applications would likely lead to hearing).

[243] Surrebuttal Testimony of Rolanda Shine, pp. 13–14 (discussing change in cost); Surrebuttal Testimony of Carlos Rodriguez, pp. 14–15 (discussing injection and withdrawal rights); Surrebuttal Testimony of Aaron White, pp. 5–9 (discussing changes to converter station location or point(s) of interconnection and modifying converter station design size by 100 MW).

112. If the Commission determines that definitions for "material change to the design and engineering of the Project" are necessary, Grain Belt Express proposes the following alternative definitions:

a. A change in the location of the converter station outside of Monroe County[244];

b. Modification of the location of the Project's points of interconnection ("POIs") in Missouri[245]; or

c. An increase in the injection rights of the Project in Missouri beyond 2518 MW.[246]

C. The Commission Should Approve the Easement Compensation Modifications Proposed by Grain Belt Express and Reject All Further Easement Compensation Modifications

113. The Commission should approve the modifications included in Schedule KC-5, which was attached to the Direct Testimony of Kevin Chandler and reject all proposals for easement compensation that go beyond those set forth in Schedule KC-5.

i. Grain Belt Express' Proposed Easement Compensation Should be Approved

114. For public utilities filing applications for new line CCNs after August 28, 2022, House Bill 2005 creates a requirement to pay owners of agricultural or horticultural land 150% of the fair market value of such land in the event of condemnation.[247] Although House Bill 2005 does not apply to this Project, Grain Belt Express is not opposed to paying 150% of fair market value to landowners along the Tiger Connector, but certain modifications to the Landowner Protocol are required to allow for that payment structure. Additionally, Grain Belt Express recognized that some stakeholders, including the Missouri Farm Bureau, have called for 150% payment values.[248]

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[244] Surrebuttal Testimony of Aaron White, p. 9.

[245] Surrebuttal Testimony of Carlos Rodriguez, p. 15.

[246] *Id.* at 15.

[247] Direct Testimony of Kevin Chandler, p. 20–21.

[248] *Id.* at 16, fn. 2.

115. Grain Belt Express proposes a modification to the Landowner Protocol specifying that different compensation methodologies apply to the AC portion of the Amended Project than for the HVDC portion. As the original Landowner Protocol was designed for the HVDC route and did not consider the AC connector lines involved with the Project, the current Protocol does not allow Grain Belt Express to control for the difference in transmission siting concerns when determining landowner payments.[249]

116. While the modifications will mean Tiger Connector landowners will not receive the one-time structure payment of $6,000 (for monopole structures), Grain Belt Express agrees with Missouri Farm Bureau that many Tiger Connector landowners will receive more value from 150% of fair market value without a structure payment than 110% of fair market value plus the structure payment.[250] This is especially true in a period of increasing land values. Therefore, Grain Belt Express made the proposed modifications to the Landowner Protocol to accommodate Missouri Farm Bureau's request.[251]

ii. Other Compensation Proposals Should be Rejected as Arbitrary and Capricious and Unlawful

117. Staff initially recommended that the Commission reject Grain Belt Express' Modification.[252] Staff later revised its position, noting that Staff's concerns were alleviated, assuming Grain Belt Express commits to file a revised Landowner Protocol with the Commission that clearly articulates the compensation package offered to landowners, by phase and/or line type and assuming the Commission adopts Grain Belt Express' modification to the Protocol.[253] The

[249] *Id.* at 20–21.

[250] Tr. Vol. 10 at 593:23-595:8

[251] Surrebuttal of Kevin Chandler, pp. 14–15.

[252] Staff's Report, p. 10.

[253] Staff's Pre-Filed Exhibits List and Revised Statement of Positions, p. 5.

Agricultural Associations state that they are opposed to any proposal to pay landowners less or diminish conditions and obligations owed by Grain Belt Express to landowners on the Tiger Connector line, and further submit that Grain Belt Express should be required to comply with the provisions of HB 2005.[254] MLA also urges the Commission to reject Grain Belt Express' proposed modification based upon amorphous and conclusory assertions that the lack of structure payments for landowners along the Tiger Connector may not be beneficial for some landowners. MLA also suggests that, for easements signed after the final Order in this case, landowners should be given the choice of the payment schedule proposed in this case by Grain Belt, or the payment schedule approved by the Commission in the prior CCN case.[255]

118. The self-serving and unsupported assertions of the Agricultural Associations and the MLA should be rejected as simply going too far. In order to place Grain Belt Express' proposed modification to the Landowner Protocol in the appropriate context, the origins of the Landowner Protocol must be considered. When Grain Belt filed for its original CCN in 2016, Dianne Lanz provided direct testimony explaining Grain Belt's approach to landowner outreach and land acquisition.[256] In order to document Grain Belt's approach, Ms. Lanz attached the Landowner Protocol, Code of Conduct, and AIMP.[257] During the course of the proceeding, some parties suggested that those documents should be made conditions of the CCN and Grain Belt did not object.[258] However, the Landowner Protocol, Code of Conduct and AIMP were not the subject

[254] Amended Joint Position Statement of Agricultural Associations, p. 3.

[255] Amended Position Statement of the Missouri Landowner's Alliance, p. 6–7.

[256] Prior CCN Order, pp. 32-33.

[257] *Id*. at n.137.

[258] *Id*. at p. 35.

of negotiation and neither the parties nor the Commission attempted to modify the Protocol from what was originally presented by Ms. Lanz.

119. Since 2016, Grain Belt Express has made efforts that far exceed the routine practices of incumbent electric utilities in an effort to collaboratively engage with landowners and address individual issues, to adopt specific policies, procedures, and protocols to address their concerns, and to ensure fair compensation to those whose property is impacted by the Project. Grain Belt Express has gone so far as to accommodate the Missouri Landowner's Alliance's request that the terms of key protocols be incorporated into its standard easement agreement.[259]

120. Notably, CCNs issued to other transmission developers in Missouri do not include any conditions related to landowner compensation. Some transmission developers, such as Ameren Transmission Company of Illinois (ATXI), have protocols that include provisions similar to Grain Belt's Landowner Protocols, Code of Conduct, and AMIP – but importantly – those protocols are silent on landowner compensation.[260] This is for good reason. Landowner compensation is a function of private negotiations between the transmission developer and the individual landowners. If required as a last resort, landowner compensation is determined by District Courts pursuant to the eminent domain procedure statues.[261] To be clear, Grain Belt Express is committed to abiding by the Landowner Protocol that it has agreed to, including the landowner compensation provisions. Additionally, Grain Belt is committed to negotiating with each landowner individually.[262] However, any attempts by the Agricultural Associations or the

[259] *See generally Surrebuttal Testimony of Deann Lanz*, Case No. EA-2016-0358, Ex. 114 p. 5 (Feb. 21, 2017); Initial Post-Hearing Brief of the Missouri Landowner's Alliance et al, Case No. EA-2016-0358, p. 80 (Apr. 10, 2017).

[260] File No. EA-2021-0087, Direct Testimony of Craig Hiser, Schedule CH-03.

[261] Section 523.250 *et seq*.

[262] Tr. Vol. 10 at 697:4–12.

MLA to leverage this proceeding for Commission-mandated landowner compensation provisions beyond what Grain Belt has already offered is inappropriate and, if successful, would lead to an arbitrary, capricious and unlawful condition.[263]

IV. Conclusion

121. For the reasons set forth above, Grain Belt Express respectfully requests that the Commission:

a. Approve the following amendments to the Project:

   i. Relocating the Missouri converter station from Ralls County to Monroe County and increasing the capacity of the Missouri converter station from 500 MW to 2500 MW;

   ii. Relocating the AC connector line from Ralls County to Monroe, Audrain, and Callaway Counites, allowing for greater access of renewable power to Missouri and increasing benefits to Missouri; and

   iii. Constructing the Project in two phases, allowing Missouri to realize the benefits of the Project earlier than it otherwise would.

b. Impose the agreed-upon conditions set forth in Paragraph 108 of this Brief.

c. Decline to establish definitions for "material change in the design and engineering of the Project"; or alternatively, impose the following definitions for "material change in the design and engineering of the Project":

   i. A change in the location of the converter station outside of Monroe County.

[263] *State ex rel. Praxair, Inc. v. Missouri Pub. Serv. Comm'n*, 344 S.W.3d 178, 192 fn. 9 (Mo. 2011) (en banc) ("The decision of the Commission is reasonable where the order is supported by substantial, competent evidence on the whole record and whether the decision is arbitrary or capricious or where the [Commission] has not abused its discretion"

ii. Modification of the location of the Project's points of interconnection ("POIs") in Missouri.

iii. Missouri and/or an increase in the injection rights of the Project in Missouri beyond 2518 MW.

d. Approve modifications to the Landowner Protocols as set forth in Exhibit KC-5.

e. Deny modifications of the easement compensation provisions of the Landowner Protocols that go beyond the modifications proposed by Grain Belt Express.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing document was served upon the parties listed on the official service list by email, this 7th day of July, 2023.

/s/ Andrew O. Schulte
Andrew O. Schulte