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-2016-0358

PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW ON REMAND

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INTRODUCTION

Grain Belt Express Clean Line LLC ("Grain Belt Express" or "Company"), pursuant to the October 24, 2018 Order Setting Supplemental Procedural Schedule and Other Procedural Requirements issued by the Missouri Public Service Commission ("PSC" or "Commission"), files these Proposed Findings of Fact and Conclusions of Law.

On remand from Grain Belt Express Clean Line LLC v. PSC, 555 S.W.3d 469 (Mo. en banc 2018), the Commission made clear that only "material changes" in the evidence and facts previously presented would be accepted, and that inquiry into "unchanged information would be unduly repetitious and subject to exclusion" under Section 536.070.8. See Tr. 1766; Order Setting Procedural Conference at 1 (Sept. 28, 2018). That approach was the logical and proper way to approach the evidentiary hearing.

However, at this stage of the proceeding a comprehensive proposal regarding findings of fact and conclusions of law is appropriate as the Commission prepares to deliberate on whether Grain Belt Express should be issued a Certificate of Convenience and Necessity ("CCN"). Because the Commission's report and order will assess all the facts in the record, this proposal reflects both the facts that have not materially changed, as well as new facts. It also addresses all pending legal issues raised by any party that have not been previously resolved.

The major factual changes are reflected in the following Proposed Findings of Fact in Section I:

Sections I(A)-(B): These sections have been updated to reflect the proposed acquisition of the Company by Invenergy Transmission LLC, and include facts regarding Invenergy's business operations and how the Grain Belt Express Project will be built and operated.

Section I(E): Other Regulatory Approvals. Updates to the status of the Company's regulatory proceedings in other states are discussed here.

Section I(F): Missouri's Need for the Service. This section contains new facts relating to the amendment to the Transmission Service Agreement between Grain Belt Express and the Missouri Joint Municipal Electric Utility Commission, and to the acquisition of the Iron Star Wind Project by ENGIE North America.

Section I(G): The Economic Feasibility of the Project. Changes in the facts related to the interconnection process with regional transmission organizations, as well as revised estimates of upgrade cost are presented here.

Section I(H): Financial Resources. This section proposes new facts regarding the financial resources of Invenergy Transmission LLC and its affiliates. This section also describes the stipulation that was reached with Staff regarding the disclosure of confidential financial information by Invenergy.

Section I(I): Operational Qualifications. New facts regarding the qualifications of the Company to operate the Project as part of Invenergy Transmission LLC and its affiliates are presented here.

Section II: Proposed Conclusions of Law. The proposed legal conclusions reflect facts stated in the Proposed Findings of Fact. The order of topics in these legal conclusions generally follows the order of the factual findings.

Section III: Conditions. Paragraph 2(ii) of Section III(A) contains the stipulation that Staff and the Company agreed to regarding Commissioner Hall's question related to the disposition of involuntary easements if the Project is not built.

I. FINDINGS OF FACT

A. Grain Belt Express, Clean Line, and Invenergy

1. The Grain Belt Express Clean Line Project ("Project") is a high-voltage, direct current ("HVDC") transmission line project that has been under development by Clean Line Energy Partners LLC ("Clean Line"), which is the ultimate parent company of Grain Belt Express. See Ex. 115 at 19 (Lawlor Direct). The primary owners of Clean Line are National Grid USA ("National Grid"), ZAM Ventures, LP ("ZAM Ventures"), Clean Line Grid Holdings, LLC, a subsidiary of Bluescape Resources Company, LLC ("Bluescape"), Michael Zilkha, and Clean Line Investment LLC. See Ex. 100 at 9, 19-20 (Skelly Direct).

2. Grain Belt Express is a limited liability company organized under the laws of the State of Indiana. See Ex. 100 at 3 (Skelly Direct). Grain Belt Express is a wholly-owned subsidiary of Grain Belt Express Holding LLC, a Delaware limited liability company, which is a wholly-owned subsidiary of Clean Line, a Delaware LLC, and is a privately-held electrical corporation. See Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity ("Application") at 2, 6. The Company is an electrical corporation that owns electric plant. See Tr. 2143-45 (Detweiler), Tr. 1824-31 (Skelly); Ex. 300 (Lowenstein Rebuttal), Sched. LD-3 at 1-2, 4 (county assents). Grain Belt Express is qualified to conduct business in the State of Missouri for the purpose of carrying on any lawful business purpose allowed under Missouri law, which includes constructing, owning, operating, managing, and maintaining electric transmission facilities. See Ex. 100 at 3 (Skelly Direct); Application at Ex. 1.

3. On November 9, 2018 Grain Belt Express Holding LLC entered into a Membership Interest Purchase Agreement with Invenergy Transmission LLC ("Invenergy Transmission" and, together with its affiliates, "Invenergy") which agreed to acquire Grain Belt Express and the Project. See Ex. 142 at 3 (Berry Supp. Direct); Ex. 145 at 3-4 (Zadlo Supp. Dir.) & Sched. KZ-3

(MIPA). Pursuant to a Development Management Agreement, also signed on November 9, 2018, Invenergy Transmission began funding and managing the development of the Project. See Ex. 142 at 3-4 (Berry Supp. Direct); Ex. 145 at 4 (Zadlo Supp. Dir.) & Sched. KZ-4 (Dev. Mgmt. Agmt.); Tr. 2056-60, 2073-74 (Zadlo).

4. Invenergy is a leading U.S.-based developer of wind, solar, and natural gas-fueled power generation projects, and is the largest privately held renewable energy provider in North America. Over the last 17 years, Invenergy has developed more than 20,200 megawatts ("MW") of projects in the United States, Canada, Europe, Latin America, and Japan via Invenergy's strong relationships with over 60 financial institutions worldwide. The value of such transactions exceeds $30 billion. See Ex. 145 at 6-12 (Zadlo Supp. Direct); Ex. 146 at 3 (Hoffman Supp. Direct).

B. The Project

5. The Project is an approximately 780-mile, overhead, multi-terminal ±600 kilovolt ("kV") HVDC transmission line ("HVDC Line") and associated facilities that will collect over 4,000 MW of low-cost, wind-generated power in western Kansas. See Ex. 100 at 3 (Skelly Direct); Ex. 108 at 4 & Sched. AWG-1 (Galli Direct). This western terminus of the Project will interconnect to the alternating current ("AC") system of ITC Great Plains, which is located in Southwest Power Pool, Inc. ("SPP"), a regional transmission organization ("RTO") authorized by the Federal Energy Regulatory Commission ("FERC") to engage in regional planning and operate energy markets in Kansas and neighboring states. See Ex. 108 at 1, 5 & Sched. AWG-1 (Galli Direct).

6. The Project will have three converter stations. One converter station will be located in western Kansas, where new wind generating facilities will connect to the Project via AC lines. The two other converter stations in eastern Missouri and eastern Illinois, respectively, will deliver electricity to the AC grid through interconnections with transmission owners in the systems of

Midcontinent Independent System Operator, Inc. ("MISO") and PJM Interconnection, L.L.C. ("PJM"). See Ex. 108 at 5-6 (Galli Direct); Ex. 104 at 4-5 (Berry Direct); Application at 8-9. The Project will deliver 500 MW of power into Missouri and 3,500 MW into Illinois, Indiana, and states farther east. See Ex. 100 at 3 (Skelly Direct); Ex. 108 at 4, 7, 23, 27 (Galli Direct).

7. The Company proposes to construct in Missouri the approximately 206-mile portion of the HVDC Line on a route that crosses the Missouri River south of St. Joseph and continues across the state in an easterly direction to south of Hannibal in Ralls County, where the HVDC Line will cross the Mississippi River into Illinois. See Ex. 100 at 4 (Skelly Direct); Ex. 119 at 14 & Sched. JPG-2, Fig. 1 (Puckett Direct).

8. In its Application, the Company provided a list of all electric and telephone lines, railroad tracks, and underground facilities in Missouri that the Project will cross. See Application at Ex. 3; Addendum to Application (Oct. 27, 2016); Ex. 115 at 14 (Lawlor Direct); Ex. 119 at 115 (Puckett Direct).

9. The Company also proposes to construct a converter station and associated AC interconnecting facilities in Ralls County. See Ex. 100 at 4 (Skelly Direct); Ex. 119 at 14 & Sched. JPG-2, Fig. 1 (Puckett Direct). This intermediate 500 MW converter station will be located in proximity to Ameren's Montgomery-Maywood 345 kV transmission line which will facilitate the interconnection to the energy market operated by MISO, an RTO recognized by FERC that oversees the electric grid in eastern Missouri and other midwestern and southern states. See Ex. 119 at 14 & Sched. JPG-2, Fig. 1 (Puckett Direct); Ex. 108 at 4, 6 (Galli Direct).

10. The intermediate converter station will have bi-directional functionality, allowing Missouri utilities the opportunity to sell up to 500 MW of excess power into the energy markets operated by PJM, an RTO recognized by FERC that oversees the grid in eastern Illinois, Indiana

and states farther to the east. See Ex. 100 at 8 (Skelly Direct); Ex. 108 at 7 (Galli Direct). The Project's eastern 3500 MW converter station will deliver power into PJM. See Ex. 104 at 5 (Berry). The additional revenue from Missouri off-system sales can be used to reduce the cost of electricity for the end-use customers of the Missouri utilities who use the service. See Ex. 100 at 8 (Skelly Direct).

11. The Project will interconnect with the Ameren Missouri system in Ralls County along the Maywood-Montgomery 345 kV AC transmission line, which connects the Maywood 345 kV substation in Marion County with the Montgomery 345 kV substation in Montgomery County. See Ex. 108 at 4, 6 (Galli Direct). This connection will be made via a single 345 kV circuit line from the converter station to a new AC switching station tapping the Maywood-Montgomery transmission line. See Ex. 108 at 6 (Galli Direct).[1]

12. The interconnection process has progressed and continues at SPP, MISO and PJM, the three independent RTOs responsible for seeing that the Project is safely and reliably integrated into the electric grid. See Ex. 109 at 2-32 & Sched. AWG-7 (Galli Surrebuttal). See 18 C.F.R. § 35.34 (Regional Transmission Organizations).[2] The Company signed an interconnection agreement with SPP and ITC Great Plains on October 17, 2016. See Ex. 109 at 30-31 (Galli Surrebuttal). SPP, MISO, and PJM each operate under FERC authority in separate geographical areas, with SPP in the western Midwest, MISO in the central Midwest and portions of the South, and PJM in the eastern Midwest and mid-Atlantic region.[3] No transmission project can

[1] The Missouri portion of the HVDC Line, the converter station in Ralls County, and the associated AC transmission and interconnection facilities are referred to herein as the "Missouri Facilities."

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

[3] Hughes v. Talen Energy Marketing, LLC, 136 S. Ct. 1288, 1293 (2016); Southwest Power Pool, Inc. v. FERC, 736 F.3d 994, 995 (D.C. Cir. 2013); Revised Report and Order at 6-7, 10-14, In re Entergy Arkansas, Inc., No. EO-2013-0431 (Mo. P.S.C., Nov. 26, 2013).

interconnect and operate without the approval of the relevant RTOs that are charged with ensuring the reliability of the transmission system. See Ex. 109 at 15 (Galli Surrebuttal); Ex. 112 at 1-2 (Kelly Surrebuttal). As a result, regulatory approvals and RTO studies can occur in parallel and need not occur sequentially. Tr. 501 (Galli). RTO interconnection agreements were not a pre-condition required by the Illinois, Indiana, and Kansas Commissions when they granted certificates to Grain Belt Express. Tr. 501 (Galli).[4]

13. Grain Belt Express will offer transmission service to load-serving entities and other wholesale transmission customers through an open access transmission tariff that will be filed with and subject to the jurisdiction of FERC under the Federal Power Act. See Ex. 100 at 23-24 (Skelly Direct); Ex. 104 at 4-7 (Berry Direct). The Company will not provide service to end-use customers or provide retail service in Missouri, and, therefore, the Project will not be rate-regulated by the Commission. See Ex. 100 at 24 (Skelly Direct).

14. Thomas F. Shiflett, Executive Vice President of Quanta Services and a former president of PAR Electrical Contractors Inc. ("PAR Electric"), presented a detailed organizational structure that can be used to implement the Project's construction program, as well as a 140-page Construction Plan that describes the segments of the Project and their construction schedule. See Sched. TFS-3 & TFS-4, Ex. 121 (Shiflett Direct). Upon acquisition of the Project, Invenergy plans to evaluate existing contracts in place, and the contractor chosen by Invenergy will have the qualifications as discussed by Mr. Shiflett in his direct testimony. Invenergy will follow the emergency response and restoration best practices that Mr. Shiflett generally describes. See Ex. 145 at 10-12 & Sched. KZ-5 (Zadlo Supp. Direct); Ex. 121 at 14-16 & Sched. TFS-5 (Shiflett Direct).

[4] As discussed below, the Illinois Commission's decision was later reversed on procedural grounds.

C. High-Voltage Direct Current Technology

15. The HVDC technology of the Project is the most cost-effective and efficient way to move large amounts of renewable energy over distances longer than 300 miles. See Ex. 108 at 7-8 (Galli Direct). HVDC lines can transfer significantly more power with lower line losses over long distances than comparable AC lines. Such lines also complement AC networks without contributing to short-circuit current power or additional reactive power requirements. Id. at 8. HVDC lines can dampen power oscillations in an AC grid through fast modulation of the AC-to-DC converter stations, and thus improve system stability. Id. HVDC technology gives the operators complete control of energy flows, which makes HVDC particularly well-suited to managing the injection of variable wind generation. Id. at 9.

16. HVDC lines, unlike AC lines, will not become overloaded by unrelated outages because the amount of power delivered is strictly limited by the DC converters at each end of the HVDC line, thereby reducing the likelihood that outages will propagate from one region to another. Id. Such lines utilize narrower rights-of-way, shorter towers, and fewer conductors than comparable AC lines, thereby making more efficient use of transmission corridors, minimizing visual and land use impacts, and offering a transmission solution with a lower capital cost per mile. Id. On an HVDC line there is virtually no congestion, making the Project attractive to customers. See Ex. 476 at 5-6 (Grotzinger Rebuttal); Ex. 477 at 4-5 (Grotzinger Surrebuttal).

17. No witness contested the assertions of Grain Belt Express that the Project's HVDC design will provide a congestion-free delivery source, in contrast to the AC interconnected grid which is frequently characterized by congestion that raises transmission costs. See Ex. 108 at 9-10 (Galli Direct); Ex. 109 at 17-18 (Galli surrebuttal); Ex. 104 at 34 (Berry Direct).

D. The Missouri Route

18. The proposed Missouri route was developed by the Grain Belt Express Routing Team, a multidisciplinary group of individuals from Clean Line and the Louis Berger Group, Inc. See Ex.115 at 11 (Lawlor Direct); Ex. 119 at 1 (Puckett Direct). This team developed and analyzed routes, performed extensive public outreach, coordinated with state and federal agencies, compared alternative routes, and participated in determining the proposed route of the Project. See Ex.115 at 4-9, 11 (Lawlor Direct); Ex. 119 at 2-3, 5-6 (Puckett Direct).

19. In determining this proposed route, the Routing Team engaged the public in community leader roundtables and open houses. See Ex. 119 at 6-7 (Puckett Direct).

20. The Routing Team held more than 24 roundtables, at which more than 250 community leaders from more than 40 counties, including county and municipal elected officials, local government planners, community and business leaders, economic development experts, local utilities and cooperatives, as well as federal and state agency officials, gathered in small working groups to provide information about each county they represent to the Routing Team. See Ex. 119 at 6-7 (Puckett Direct).

21. The Routing Team also held more than 13 open houses, at which more than 1,200 members of the general public and potentially affected landowners gathered to learn more about the Project and potential routes. See Ex. 119 at 7 (Puckett Direct). Attendees were encouraged to submit written comments about their observations, recommendations, or concerns. See Ex. 115 at 12 (Lawlor Direct); Ex. 119 at 7 (Puckett Direct).

22. After the open houses, the Routing Team reviewed the public input, revised the Project's potential routes where necessary, and compiled a series of nine Alternative Routes for detailed analysis and comparison. See Ex. 119 at 7 (Puckett Direct).

23. The nine Alternative Routes were assessed on the basis of their potential impacts on natural resources (water resources, wildlife and habitats, special status species, and geology and soils), human uses (agricultural use, populated areas and community facilities, recreational and aesthetic resources, and cultural resources), and with respect to any engineering or construction challenges (transportation, existing utility corridors, other existing infrastructure, and the Mississippi River crossings). Id. at 8. The Routing Team then recommended a combination of two alternative routes as the proposed route for the Project, which met the overall goal of minimizing impacts on the natural, human, and historic resources along the route, while best utilizing existing linear rights-of-way ("ROW") and avoiding non-standard design requirements. Id.

24. In March 2014, the Routing Team prepared the Missouri Route Selection Study ("Route Selection Study"), which identified the proposed route for the Project. This Study resulted from extensive public outreach efforts and coordination with state and federal agencies. See Ex.115 at 11 (Lawlor Direct); Ex. 119 at 3-6 (Puckett Direct).

25. Even after filing the proposed route in its 2014 CCN case,[5] the Company continued to engage landowners along the proposed route regarding the location of the route on their individual properties, resulting in certain revisions to the route. See Ex.115 at 7, 13-14 (Lawlor Direct); Ex. 119 at 10, 13 (Puckett Direct). Revisions based on such landowner feedback were included in the route shown to stakeholders during the Public Landowner Meetings held in June 2016. See Ex. 119 at 10 (Puckett Direct).

26. The Company has made 16 route adjustments since the filing of its 2014 Case. Tr. 313:16-24 (Lawlor); Ex. 119 at 11 and JPG-2 (Puckett Direct). There have been no further

[5] Case No. EA-2014-0207 ("2014 Case").

adjustments in the Missouri Route since the case was submitted to the Commission in March 2017. Tr. 1969-70, 1997 (Detweiler).

27. In 2016 the Routing Team created an addendum to the 2014 Route Selection Study ("Routing Study Addendum") that reflects the public and agency outreach that has occurred since the 2014 Case, as well as changes that were made in response to landowner concerns. See Ex.115 at 11 (Lawlor Direct); Ex. 119 at 11-13 & Sched. JPG-2 (Puckett Direct).

28. In developing this Routing Study Addendum, the Routing Team held discussions with individual landowners along the proposed route and held public landowner meetings in each of the eight counties along the proposed route. See Ex. 119 at 13 (Puckett Direct). Attendees at these meetings were encouraged to submit written routing-specific comments. See Ex. 115 at 12 (Lawlor Direct); Ex. 119 at 13 (Puckett Direct). Although not required to do so, the Company provided notice of its Application with the Commission to every person or entity listed by the county tax collector as an owner of property located within the ROW of the proposed route. See Ex. 115 at 14 & Sched. MOL-6 (Lawlor Direct).

29. The ultimate proposed route integrates this input from the general public, local officials, and government agencies. See Ex. 119 at 15 (Puckett Direct). Accordingly, it minimizes the overall effect of the Missouri Facilities on the natural and human environment while avoiding unreasonable and circuitous routes, unreasonable costs, and special design requirements. Id.

E. Other Regulatory Approvals

30. The Indiana Utility Regulatory Commission granted Grain Belt Express public utility status on May 22, 2013 in Cause No. 44264, authorizing the Company to construct and operate the Project in Indiana. See Ex. 100 at 9 (Skelly Direct).

31. The Kansas Corporation Commission ("KCC") granted Grain Belt Express public utility status on December 7, 2011 in Docket No. 11-GBEE-624-COC, and a siting permit on

November 7, 2013 authorizing it to construct the 370-mile Kansas portion of the Project in Docket No. 13-GBEE-803-MIS, which required construction to begin within five years. See Ex. 100 at 9 (Skelly Direct). Given the delays in Missouri and Illinois, as well as the Company's agreement to be purchased by Invenergy Transmission, the KCC granted requests by Grain Belt Express to extend the sunset term of the siting permit to December 2, 2019 to consider issues related to this transaction. See Ex. 148 (Order Canceling Procedural Schedule and Granting Limited Extension of Sunset Provisions); Tr. 1966-68 (Detweiler). Subsequent to consideration of the transaction, the KCC will address the Company's request for a full five-year extension.

32. The Illinois Commerce Commission ("ICC") issued Grain Belt Express a certificate of public convenience and necessity to construct, operate, and maintain its transmission line and to conduct transmission public utility business, along with a request for authorization to construct the line, on November 12, 2015 in Docket No. 15-0277. See Ex. 100 at 9 (Skelly Direct). The ICC's decision was later reversed on procedural grounds. See Ex. 144 at 3-4 (Detweiler). An appellate court held that Grain Belt Express was required under Illinois law to "own, control, operate or manage" utility property or equipment "at the time of application" before it could qualify as a "public utility," and remanded the case to the ICC.[6] The court specifically found that applicants like the Company "may seek recognition as a public utility while, at the same time, applying for a certificate of public convenience and necessity … as long as they have obtained the ownership, management, or control of utility-related property or equipment at the time of the application."[7] Once the Company acquires property in Illinois to be used for the transmission of electricity, it can re-file its application with the ICC. See Ex. 144 at 3-4 (Detweiler Supp. Direct).

[6] Concerned Citizens & Property Owners v. Illinois Commerce Comm'n, 2018 IL App. (5th) 150551, 2018 WL 1858128 (Ill. App., Apr. 27, 2018).
[7] Id. at *5-*7.

33. FERC conditionally authorized the Company to charge negotiated rates for transmission rights on the Project and granted waivers of certain requirements. See Grain Belt Express Clean Line LLC, 147 FERC ¶ 61,098, Docket No. 14-409-000 (2014). See Ex. 104 at 8-9 (Berry Direct).

F. Missouri's Need for the Service

34. On June 2, 2016, Grain Belt Express entered into a Transmission Service Agreement ("TSA") with the Missouri Joint Municipal Electric Utility Commission ("MJMEUC") to purchase up to 250 MW of capacity from the Project. See Ex. 100 at 5, 8, 13-14 (Skelly Direct); Ex. 115 at 2-3 & Sched. MOL-1 (Lawlor Direct); Ex. 104 at 3-4, 34 (Berry Direct). The TSA will help to replace a 100 MW coal energy and capacity contract with Illinois Power Marketing Company that expires in 2021. See Ex. 475 at 4-5 (Kincheloe Direct).

35. The TSA remains fully in place, but has been amended to provide even greater benefits to Missouri customers by lowering the transmission price of the second 100 MW tranche to that of the first 100 MW tranche. See Ex. 480 at 2-3 (Grotzinger Supp. Direct). John Grotzinger, MJMEUC's Chief Operating Officer and Executive Director for Engineering and Operations, testified that these changes result in additional savings per year of approximately $2.8 million. Id. at 2; Tr. 2110. These savings are derived not only from the TSA's price decrease, but also because the costs of alternative SPP-to-MISO point-to-point transmission service have increased. See Ex. 480 at 2 (Grotzinger Supp. Direct). While MJMEUC will look for bridging arrangements to buy energy, given the Project's current schedule, it will not encounter any issues from a capacity planning standpoint. Tr. 2126-27 (Grotzinger). Mr. Grotzinger confirmed that MJMEUC and its members have contracted for 136 MW of capacity from the Project. Tr. 2114.

36. On February 28, 2018, ENGIE North America Inc. purchased certain assets of Infinity Wind Renewables, including the Iron Star Wind Project, LLC ("Iron Star") and its power

purchase agreement ("PPA") with MJMEUC. See Ex. 780 1-2 (Riley Supp. Direct). ENGIE North America's purchase of Iron Star did not change any of the terms or conditions in the PPA. Id. at 2. In addition, MJMEUC designated 136 MW of wind energy from the Iron Star Wind Project in December 2017 for the benefit of its member utilities. Id. at 2-3.

37. The TSA between Grain Belt Express and MJMEUC, coupled with MJMEUC's Iron Star PPA, allows MJMEUC to purchase 200 MW of transmission capacity from the Project's western Kansas converter station to its Missouri converter station. See Ex. 100 at 13-14 (Skelly Direct); Ex. 476-78 (Grotzinger Rebuttal).

38. The Iron Star PPA requires that MJMEUC provide written notice to Iron Star and designate its Buyer's Share which shall "not be less than 100 MW." See Sched. JG-4 at § 3.1, Ex. 476 (Grotzinger Rebuttal) (HC). MJMEUC has obtained a commitment from the Missouri Public Energy Pool ("MoPEP") for 60 MW, plus contracts with the City of Kirkwood (25 MW), the City of Hannibal (15 MW), the City of Columbia (35 MW), and the City of Centralia (1 MW). Tr. 980-81, 984, 994-96 (Kincheloe). More than three dozen Missouri municipal utilities and their customers have committed to the Project and expressed their need for the services that Grain Belt Express will provide. See Ex. 476 at 6-7 (Grotzinger Rebuttal); Tr. 980-81, 995-96 (Kincheloe).

39. MJMEUC cannot currently meet the existing demand for retail renewable power from its MoPEP members, a group of 35 Missouri cities that MJMEUC supplies wholesale energy, capacity, and ancillary services on a full-requirements basis. Tr. 1112-13 (Grotzinger); Ex. 475 at 2-4 (Kincheloe Rebuttal). The offers that MJMEUC has extended from its existing Kansas wind project to the MoPEP cities with high-load commercial and industrial customers are currently over-subscribed. Tr. 1112-13 (Grotzinger).

40. The Company also has a TSA for 50 MW from an Illinois load-serving entity called Realgy, which has agreed to buy 25 MW of transmission service for delivery to Missouri and 25 MW to PJM. Tr. 914, 965 (Berry).

41. The Company held the first phase of an open solicitation process from January to March 2015. See Ex. 104 at 24-25 (Berry Direct); Ex. 100 at 14 (Skelly Direct). Eleven shippers have made 3,524 MW of requests for capacity to the Project's MISO delivery point in Missouri alone. Id. For the service offered from Kansas to the Illinois converter station in PJM, 17,301 MW of service was requested. See Ex. 104 at 25 (Berry Direct). In other words, the total capacity requested for both MISO and PJM delivery points of 20,825 MW is approximately five times the total available capacity of the Project. Id. & Sched. DAB-3 (HC). The Company also opened a supplemental window for transmission service requests in February 2016. See Ex. 104 at 10 (Berry Direct). MJMEUC submitted two requests, one for 200 MW for transmission from Kansas to Missouri, and the other for 50 MW from Missouri to PJM. See Ex. 104 at 10 (Berry Direct).

42. Steve Chriss, Director of Energy and Strategy Analysis for Wal-Mart Stores, Inc., testified that there is demand for the renewable wind power that would be delivered into Missouri through the Grain Belt Express 500 MW converter station. See Ex. 900 at 5-6 (Chriss Rebuttal). Having established "aggressive and significant renewable energy goals, as well as a science-based target to reduce emissions in our operations by 18 percent by 2025 through the deployment of energy efficiency and consumption of renewable energy," Wal-Mart and other business customers with renewable energy and sustainability goals "provide demand for the proposed service." Id. at 3, 7-8.

43. The Missouri Industrial Energy Consumers, Missouri Retailers Association, and the Consumer Council of Missouri support the Project because it "provides an opportunity for

consumers in Missouri to take advantage of low-cost and clean wind energy resources." See Ex. 800 at 2 (Dauphinais Rebuttal). Testifying on behalf of these organizations, James Dauphinais stated that "if other Missouri utilities followed the lead of MJMEUC, customers of those utilities may see benefits comparable to those that MJMEUC customers expect to receive." Id. at 5. Mr. Dauphinais stated that he "would expect Ameren Missouri to carefully analyze the benefits of taking power from the Project and give it serious consideration." Id. If Ameren cannot meet its Renewable Energy Standard obligations under Section 393.1030[8] because its renewables are too expensive, Ameren will need to buy low-cost power from the Project which will allow it to meet its obligations without hitting the statutory cost cap and save money. Tr. 920-21, 934 (Berry Responses to Bench Questions).

44. No one rebutted the testimony provided by interveners that there is a clear demand for the services provided by the Project. See Ex. 675 at 11-24 (Michael Goggin Rebuttal on behalf of Wind on the Wires and The Wind Coalition); Ex. 725 at 2-3 (Ashok Gupta for the Natural Resources Defense Council).

45. Demand for the service being offered by Grain Belt Express will continue even though other transmission projects are being built in MISO and SPP. In addition to such projects being cost-allocated to ratepayers (unlike the Grain Belt Express Project which is participant funded), the AC grid is subject to major constraints because as transmission lines are built, wind generation continues to be installed. To the extent additional capacity is created, it will quickly be absorbed by the AC system as new wind generators are constructed, with prices continuing to go up and congestion returning. Tr. 932-33 (Berry). However, with a project like Grain Belt Express, MJMEUC and other customers will have a locked-in price from a wind generator and a locked-in

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

price for transmission capacity rights on an HVDC line without exposure to congestion. Tr. 933 (Berry).

G. The Economic Feasibility of the Project

46. Missouri ratepayers will bear no risks related to the construction of the Project. See Ex. 100 at 15, 31-32 (Skelly Direct); Ex. 112 at 4-5 (Kelly Direct). This is because Grain Belt Express will employ a participant-funded or "shipper pays" model under which the cost to construct the Project will *not* be borne by load-serving entities or their ratepayers through the RTO cost allocation processes of SPP, MISO, or PJM. See Ex. 100 at 17 (Skelly Direct); Ex. 104 at 3, 8 (Berry Direct).

47. Grain Belt Express estimates that the total cost of the Project will be approximately $2.35 billion,[9] with $525 million of this estimate attributable to the portion of the Project to be located in Missouri. See Ex. 100 at 19 (Skelly Direct). Grain Belt Express and Invenergy will pay for the costs of the development, construction, and operation of the Project, and will recover these costs by selling transmission service to wind generators and load-serving entities that use the line. See Ex. 100 at 31-32 (Skelly Direct); Ex. 104 at 3, 8 (Berry Direct); Ex. 145 at 7-11 (Zadlo Supp. Direct); Tr. 2066-68, 2072-74 (Zadlo).

48. The first method for estimating benefits to MJMEUC customers is to compare the cost of the Grain Belt Express TSA and the Iron Star PPA to MJMEUC's existing contract with the Illinois Power Marketing Company. The analysis that MJMEUC conducted showed that purchasing 60 MW of wind power from the Project would produce annual savings to the MoPEP cities of about 34% over the existing Illinois contract, coupled with natural gas and other renewable

[9] In addition, Grain Belt Express will fund network upgrades required to interconnect the Project to the electric transmission grid, estimated to be $500 million. Of this amount, $21 million is estimated for upgrade costs in Missouri. See Ex. 105 at 28 (Berry Surrebuttal); Ex. 109 at 9 & Sched. 9 (Galli Surrebuttal); Ex. 143 at 5 (Abebe Supp. Direct). PJM upgrade costs are currently estimated at $464 million. Id. at 4-5 (Abebe Supp. Direct).

resources. See Ex. 476 at 8 (Grotzinger Rebuttal). In 2018 Mr. Grotzinger testified that this translates to an approximately $11 million annual savings versus MJMEUC's current energy supply contract. See Ex. 480 at 3-4 & Sched. JG-13 (Grotzinger Supp. Direct).

49. The second method of estimating benefits to MJMEUC customers is to compare the cost of the Project's transmission service to the cost of using SPP and MISO transmission. MJMEUC estimates it will save its members approximately $9.5 million per year compared to MISO renewable resources and over $11 million per year compared to SPP renewable resources if it were to use the entire 200 MW of service to Missouri under the TSA. See Ex. 476 at 5 & Sched. JG-3 (Grotzinger Rebuttal); Tr. 999 Kincheloe); Ex. 480 at 2-3 & Sched. JG-10 (Grotzinger Supp. Direct); Tr. 1096-97 (Grotzinger). Mr. Grotzinger testified in March 2017 that even if only the first 100 MW of the TSA were used, MJMEUC would save about $6 million annually. See Ex. 476 at 7.

50. A final method of estimating benefits to MJMEUC customers is to compare the cost of the Grain Belt Express TSA and the Iron Star PPA to MJMEUC's other options to procure renewable energy. Mr. Grotzinger performed this comparison for 135 MW of MISO wind power, covering the 100 MW already contracted for by MoPEP, Kirkwood, and Hannibal, as well as the 36 MW of wind power for the Cities of Columbia and Centralia. Tr. 995-97 (Kincheloe). He estimated annual savings at $9-$24 million annually compared to MISO wind. Ex. 476 at 8 (Grotzinger Rebuttal); Ex. 480, Sched. JG-12 (Grotzinger Supp. Direct). Comparing the cost of the Project with purchasing wind energy out of SPP using the existing AC system, the Project is expected to save MJMEUC's customers about $8 million annually if the total 200 MW of transmission service is used. See Ex. 476 at 7-8 (Grotzinger Rebuttal); Ex. 480, Sched. JG-12 (Grotzinger Supp. Direct). Mr. Grotzinger testified at the December 2018 hearing that the

amendment to MJMEUC's TSA with Grain Belt Express will result in additional savings per year of approximately $2.8 million. See Ex. 480 at 2 (Grotzinger Supp. Direct). MJMEUC remains fully committed to the TSA because the Project is still the lowest cost alternative. Tr. 2129-30 (Grotzinger).

51. David Berry, the Chief Financial Officer of the Company, presented a levelized cost of energy ("LCOE") analysis that indicated the Project will deliver energy to Missouri at approximately $28/MWh, or $22/MWh when the cost of energy is adjusted for capacity value. See Ex. 104 at 29-30 (Berry Direct). When considered at the "first mover" rate offered to MJMEUC, these figures dropped to $17/MWh and $12/MWh, respectively. Id.

52. The price of Missouri wind, Missouri utility-scale solar generation, and combined-cycle gas generation were all more expensive. Id. at 28-30. Mr. Berry tested the results of this analysis using a range of assumptions for natural gas prices and the cost of carbon dioxide emissions (including a scenario of "no price" on such emissions), and the delivered cost of wind energy on the Project remained the least expensive. Id. at 30-31. The low cost to produce wind energy in western Kansas is the most significant factor in Mr. Berry's analysis, given that the lowest-priced 4000 MW of new generation averaged $20/MWh (2.0 cents/kWh) flat for 25 years. Id. at 24.

53. In 2016-17 Mr. Berry updated his levelized cost of energy ("LCOE") analysis from the 2014 Case, based on recent technology and cost improvements in wind generation, updating the federal production tax credit ("PTC") to 80% of its full value, as well as other revised assumptions contained in Schedule DAB-5 to his direct testimony. Given improvements in wind generation technology, a capacity factor of 55% for western Kansas wind was used by all witnesses who evaluated the economics of the Project and was reasonable. See Ex. 104, Sched. DAB-5 at

1.[10] Mr. Berry's use of a 55% capacity factor was based upon actual wind data collected in western Kansas, confirmed by third-party verification, and is consistent with the deployment of larger turbines and other technological advances in the wind industry. See Tr. 1141, 1150-51, 1172-73 (Goggin); Response to MLA Data Requests to D. Berry DB.87 & DB.91, Att. A, Reply Brief of Grain Belt Express.

54. At the December 2018 hearing Mr. Berry testified that there was no need to re-run his LCOE analysis because "all the trends" have continued to indicate that delivering "wind energy from western Kansas would be even cheaper than it was previously" in 2016-17. Tr. 1957 (Berry). This included consideration of the decline in the federal PTC that has been offset by "the rate of technological improvement [that] has kept up," which "surprised" Mr. Berry. Tr. 1960-61. Because "continual improvements" in off-shore wind turbines "typically … find their way on-shore," new "generations of improved wind technology [are] on their way." Tr. 1962. Even "without PTCs, wind is going to cost in the low two cents," given that "technology improvements have been so fantastic." Tr. 1878 (Skelly).

55. The LCOE analysis provided by Mr. Berry concluded that the Project was economically feasible. His findings were confirmed by Mr. Langley of Infinity Wind Power, an independent wind generator (Ex. 876 at 6-7, Langley Rebuttal); by Michael Goggin of the American Wind Energy Association (Ex. 675 at 2-10, Goggin Rebuttal); and by Prescott Hartshorne of National Grid USA (Ex. 110 at 5, Hartshorne Direct).

56. The MJMEUC/Iron Star contracts confirm the conclusions of the LCOE analysis. Tr. 917 (Berry). The LCOE analysis shows that Grain Belt Express "will likely to be able to replicate those benefits [from the MJMEUC TSA] on future deals" that are not priced at first-

[10] Opposing witnesses accepted the 55% capacity factor. See Ex. 300 at 17 (Jaskulski Rebuttal); Ex. 400 at 13 & Sched. PGJ-1 (no "correction" to capacity factor) (Justis Rebuttal).

mover rates because "there would still be a lot of savings relative to all alternatives which means we'll likely get more contracts and there will be more savings for [utility] customers." Tr. 917-18 (Berry).

57. On behalf of the Missouri Landowners Alliance ("MLA"), Joseph Jaskulsky presented an informal analysis of the Grain Belt Express Project that ultimately required him to admit that MJMEUC's TSA with the Company and its PPA with the Iron Star Project would save its customers "$3 million per year." See Ex. 307 at 2 (Jaskulsky Surrebuttal).

58. Mr. Jaskulsky did not conduct either an LCOE analysis, a levelized avoided cost of energy analysis, or a loss of load expectation ("LOLE") analysis. Tr. 1468. He did not conduct a production cost model analysis using a tool like PROMOD that would have assessed the effect of the Grain Belt Express Project on wholesale energy costs. Tr. 1468.

59. Mr. Jaskulsky minimized the ability of wind farms that would connect to the Project to take advantage of the federal PTC because of possible delays. However, on cross-examination he admitted that IRS Notice 2016-31 provided guidance on the "continuity safe harbor" applicable to the tax credit for renewable electricity production. See Tr. 1469-73; Ex. 132, IRS Notice 2016-31.[11]

60. Mr. Langley of Infinity Wind disputed Mr. Jaskulsky's interpretation of the rule as "a worst-case scenario," which wrongly assumed that no wind farms would be able to demonstrate continuous construction to qualify for receipt of 100% of the PTC. See Ex. 876 at 2 (Langley Surrebuttal). Mr. Jaskulsky also failed to consider the circumstance where a wind farm would be brought on-line prior to the end of 2020 and operated in the SPP market until the Grain Belt

[11] The notice provides guidance regarding the credit for renewable electricity production under Section 45(a) of the Internal Revenue Code, 26 U.S.C. § 45.

Express Project is operational. Id. at 3. Accord Ex. 676 (Goggin Surrebuttal) (rejecting Jaskulsky PTC analysis).

61. Another error in the Jaskulsky analysis is his statement that the Company "does not yet have interconnection agreements for any of the three places it will connect to the AC transmission system." See Ex. 300 at 16 (Jaskulsky Rebuttal). He failed to take note of the interconnection agreement that Grain Belt Express, SPP, and ITC Great Plains signed in October 2016, which was produced to all parties during discovery and noted by Dr. Galli in his surrebuttal testimony (Ex. 109 at 30).

62. Mr. Jaskulsky also changed his opinion on the value of the PTC in MJMEUC's Iron Star PPA, admitting that any risk regarding the PTC would not be borne by MJMEUC or the ratepayers of the cities that it represents under the Iron Star contract. Tr. 1454-55, 1474-75.

63. On behalf of the Eastern Missouri Landowners Alliance, d/b/a Show Me Concerned Landowners ("Show Me"), P.G. Justis performed an LCOE analysis, in an attempt to rebut Mr. Berry's LCOE study in his direct testimony. See Ex. 400 at 10-15 & Sched. PJG-1 (Justis Rebuttal). However, Mr. Justis significantly altered his analysis with a seven-page "Summary of Corrections" (Ex. 420), and he admitted additional errors and omissions regarding congestion costs from alternative wind generation sources in northern Iowa, capital and operating costs for wind generators, and key tax issues.

64. Mr. Justis' analysis of the cost of wind energy inappropriately used an elevated capital cost of $1,877/kW in 2016 dollars, which he escalated to $2,177/kW to estimate the cost of wind generators. See Sched. PJG-1, Ex. 400 (Justis Rebuttal). A study of actual installation costs by Lawrence Berkeley National Laboratory indicated that the actual average installed project cost stood at approximately $1,690/kW in the interior region of the U.S., and that the trend is for

such costs to decrease. Tr. 1594-96 (Justis); Sched. ML-2, Wind Technologies Market Report at 52-53, Ex. 876 at 3-4 (Langley Surrebuttal); Ex. 676 at 4-5 (Goggin Surrebuttal). A recent western Kansas 280 MW wind project developed by Westar Energy in collaboration with Infinity Wind was built with an even lower capital investment of approximately $1,554/kW. See Ex. 876 at 4 (Langley Surrebuttal).

65. Mr. Justis assumed operating and maintenance (O&M) costs of $44.92/kW in his analysis of the Project. Tr. 1599. However, based upon industry data reported by the EIA, O&M costs have dropped to $26/kW for projects constructed since 2010. See Sched. ML-2 at 5 & n.56, Ex. 876 (Langley Surrebuttal).

66. Although Mr. Justis has performed production cost modeling in the past, he did not perform any analysis in this case that would have shown the effect of the Project on wholesale prices. Tr. 1585-86 (Justis). Although he asserted that there "is adequate transmission service through the existing RTO structure," he performed no engineering or economic analysis that showed acquiring transmission service through MISO or SPP to deliver wind power to Missouri was more cost-effective than acquiring service through the Grain Belt Express Project. Tr. 1586-87; Ex. 136 (Response to Data Request 5). Similarly, he made no estimate of the cost to construct the necessary upgrades that he admitted would be required to provide transmission service comparable to the Project. See Ex. 136, Response to Data Request PGJ-12 (b)-(d); Tr. 1588-90.

67. When he took the stand on March 24, 2017 and summarized the list of his "corrections," Mr. Justis admitted that he had made a $400 million error in estimating the cost of the Project's Missouri converter station. Tr. 1434. He agreed with Mr. Berry that the cost of that converter station would be $100 million, not the $500 million that he originally assumed. See Ex.

420 at 1 ("cost of smaller Missouri Converter Station should have been lower than larger converter stations …").

68. Mr. Justis stated that he was aware of the Kansas 10-year tax abatement statute relating to "electric transmission lines and appurtenances." Tr. 1603-06; K.S.A.79-259 and 66-128 (Ex. 137). Upon examining the language of the statute and his workpapers, he confirmed that Mr. Berry was correct that he should have assumed that no Kansas property taxes would be owed during the first ten years, but admitted that he failed to do so in his LCOE analysis. Tr. 1604-07. Compounding this mistake, Mr. Justis failed to apply the correct property tax rates for each of the states where the Project will be located (Kansas, Missouri, Illinois and Indiana). Tr. 1607.

69. The most dubious cost input to the Justis LCOE model is his "capacity adder" penalty of 80.5%, i.e., for every 100 MW of wind generation brought into eastern Missouri, 80.5 MW of gas generation must be required to support that addition. Tr. 1524-27. At the evidentiary hearing, Mr. Justis agreed that if his arbitrary adder of 80.5% was not added to the cost of the Grain Belt Express Project, it would reduce the cost of the Project under his own analysis from $93.77/MWh to $62.60/MWh. Tr. 1537-39; Ex. 420 at 1 (Summary of Corrections to Justis Rebuttal). As Mr. Berry pointed out in his surrebuttal, when the capacity adder is removed from the Justis analysis, Grain Belt Express is the lowest cost option. See Ex. 105 at 6-8 (Berry Surrebuttal).

70. Mr. Justis conceded on cross-examination that the MISO system currently has available capacity of over 6,000 MW to support new wind generation without the necessity of any load-serving entity having to factor in an 80% penalty for every megawatt of wind generation that it procures. Tr. 1548-49; Ex. 877, p. 8 (MISO 2016-17 Planning Resource Option Results showing 6,041 MW of additional capacity available). Indeed, there is no evidence in this case that any

load-serving entity or wind generator in MISO or PJM has installed even one simple-cycle gas generator as a dedicated "backup" to new wind generation. See Ex. 5 at 7 (Berry Surrebuttal).

71. Mr. Justis claimed in his surrebuttal testimony that MJMEUC could purchase wind more cheaply from elsewhere in MISO than through the Grain Belt Express Project. He relied on a comparison of (1) the cost of MJMEUC purchasing power from the Iron Star Project and delivering it via the Project to (2) the PPA price for the Crystal Lake Wind Project (located in Hancock and Winnebago Counties in Iowa on the Minnesota border [Tr. 1607-08]) from which the City of Columbia purchases power. See Ex. 405 at 10 & Sched. PGJ-3 (Justis Surrebuttal). However, during cross-examination, Mr. Justis conceded that the opportunity that MJMEUC has through its TSA with Grain Belt Express and its Iron Star PPA was actually less expensive. He admitted that he did not consider any congestion costs to bring power from Crystal Lake to Columbia. Tr. 1562-63. When those costs were included, the total cost of delivered energy from Crystal Lake to Columbia was far more expensive than the MJMEUC arrangement with Grain Belt Express and the Iron Star Project. Tr. 1574-76 (HC).

72. Congestion costs are an appropriate consideration in evaluating the economic feasibility of and need for transmission service, given that severe transmission congestion inhibits the delivery of low-cost wind generation from western Kansas and other parts of western SPP to Missouri by imposing congestion costs that in many cases exceed the price of wind energy. See Ex. 675 at 29 & n.56, citing SPP's 2015 State of the Market Report (Aug. 2016) (Goggin Rebuttal).

73. Although the Commission has routinely allowed witnesses to correct minor errors in their pre-filed testimony or to update statements in light of more current events, the seven pages of corrections in Exhibit 420 (including three elaborate tables) presented by Mr. Justis from the witness stand on March 24, 2017, in light of Mr. Berry's surrebuttal testimony filed on February

21, 2017, are extraordinary. Even with the brief amount of time that Grain Belt Express, MJMEUC and other parties had to review Exhibit 420, it is apparent that the analysis provided by Mr. Justis is seriously flawed in many respects.

74. In response to Staff's concerns regarding RTO interconnection studies, Dr. Galli explained how these studies are progressing at SPP, MISO, and PJM, the three independent RTOs responsible for seeing that the Project is safely and reliably integrated into the electric grid. See Ex. 109 at 2-32 (Galli Surrebuttal). He testified that the level of study conducted by the Company indicates that no further significant transmission upgrades are likely. Tr. 502-03 (Galli). Of the 12 interconnection studies that need to be completed, all but two are either completed or in their final stages. See Ex. 109 at 14, 24-27 & Sched. AWG-7 (Galli Surrebuttal). Engineering firms retained by Grain Belt Express have performed technical analyses that have confirmed the required upgrades to construct the Project. Id. at 3, 10-11, 23-26.

75. Based on a January 2017 study prepared by Ameren Missouri, the necessary MISO upgrades costs are estimated at $21 million. See Ex. 109 at 9 & Sched. AWG-9 (Galli Surrebuttal); Ex. 143 at 5 (Abebe Supp. Direct). Invenergy's internal studies have assessed these costs in a range of $20-40 million, which, even at the high end, are not expected to significantly impact the economic feasibility of the Project. See Ex. 147 at 5 (Zadlo Supp. Surrebuttal). Although the Company withdrew from the MISO queue in September 2017 to conserve resources when there was no additional benefit (Tr. 1891-92, 1902-04), Invenergy plans to re-enter the MISO queue during the first half of 2019. Tr. 1896. Invenergy has extensive experience with the MISO queue, having developed 23 projects totaling more than 5,000 MWs in MISO. See Ex. 147 at 5 (Zadlo Supp. Surrebuttal).

76. On October 12, 2018 FERC approved MISO's proposed set of connection procedures and a connection agreement of Merchant High-Voltage Direct Current ("MHVDC") transmission projects like the Grain Belt Express Project. See Ex. 143 at 5 (Abebe Supp. Direct). FERC also approved MISO's Generator Interconnection Procedures in Attachment X of its tariff, which include an injection rights construct for the use of MHVDC connection customers like the Company.[12] MISO will now be able to grant injection rights to generation facilities connecting to the Project's Kansas converter station. This development provides additional commercial certainty for the Company's converter station in Ralls County, Missouri. Id. at 5-6. Invenergy expects to seek interconnection under MISO's new MHVDC process and to request injection rights of 500 MW. See Ex. 147 at 5 (Zadlo Supp. Surrebuttal).

77. The PJM October 2014 System Impact Study is being updated in a supplemental study, referred to as a "re-tooled" study. At the present time there has been no increase in the estimated costs required to upgrade the transmission system to accommodate the 3,500 MW injection in PJM at the Illinois-Indiana border. To the contrary, as of December 2017, PJM now estimates these costs at $464 million, with potential positive developments from other projects that should strengthen the grid at the point of interconnection. See Ex. 143 at 4-5 (Abebe Supp. Direct); Ex. 109 at 24-27 (Galli Surr.). Although it is common for study cost numbers to fluctuate, this current estimate represents a $36 million decrease from earlier in the case when the projected cost of the PJM upgrades was $500 million. See Ex. 109 at 26-27 (Galli Surr.).

78. The 2016 interconnection agreement with SPP and ITC Great Plains remains in place with no changes in estimated interconnection costs. See Ex. 143 at 3-4 (Abebe Supp. Direct).

[12] Order Accepting Tariff Provisions, Midcontinent Indep. System Operator, Inc., No. ER18-1410, 165 FERC ¶ 561,016 (Oct. 12, 2018).

79. Regarding Staff's concerns related to the Mark Twain transmission project of Ameren Transmission Co. of Illinois ("ATXI"), this project has been modeled in every transmission expansion plan and generation interconnection study performed by MISO, Associated Electric Cooperative, SPP, and the Southwestern Power Administration since it was approved by the MISO board of directors in 2012. See Ex. 109 at 16 (Galli Surrebuttal). All transmission and generation projects under development in MISO are premised on the Mark Twain project being built. Id. at 16-17. Should it not proceed, MISO must identify and implement other projects to address any future reliability issues, and continue to operate the grid in a reliable manner. Id. at 17. However, since the Commission issued a line CCN to ATXI in early 2018, the Mark Twain project is proceeding. See Order Approving Unanimous Stipulation & Agreement, In re ATXI, No. EA-2017-0345 (Jan. 10, 2018).

80. The evidence that the Project is economically feasible also remains strong on remand, given that the price of wind power generation continues fall. See Ex. 142 at 5 (Berry Supp. Direct). Mr. Berry testified that prior to remand U.S. Government data showed that wind farms in the interior region of the country, which includes Kansas, cost an average $1.64 million per MW. Id. at 5, citing Ex. 105 at 25-31 & Sched. DAB-5 (Berry Direct). The most recent government data from the same source and the same region show an average cost of $1.55 million per MW. Id. at 5, citing 2017 Wind Technologies Market Report, U.S. Dep't of Energy.

81. Moreover, advances in wind generation technology continue, "bringing costs down quite dramatically." Tr. 1878 (Skelly). Even without the production tax credit, which phases out by the end of 2023, Mr. Skelly testified that "wind is going to cost in the low two cents," as it did when this proceeding was first filed. Tr. 1877-78. In addition, the demand for renewable energy

in Missouri, in MISO and in PJM continues to be strong. See Ex. 142 at 6 (Berry Supp. Direct); Tr. 2132-33, 2136 (Grotzinger).

H. Financial Resources

82. Grain Belt Express has sufficient financial resources to provide the services proposed by the Project as a result of the funding provided by Clean Line and by Invenergy. See Ex. 141 at 2 (Skelly Supp. Direct); Ex. 145 at 7 (Zadlo Supp. Direct); Ex. 146 at 2-6 (Hoffman Supp. Direct); Ex. 147 at 2-6 (Zadlo Supp. Surrebuttal). Staff concluded that the Company "is financially capable to construct the Project." See Ex. 210 at 6-10, Staff Rev. Supp. Rebuttal Report ("2018 Staff Report"). No party challenged this proposition.

83. To date, National Grid has invested $55.7 million in the development of the Clean Line projects, including the Grain Belt Express Project. See Ex. 110 at 6 (Hartshorne Direct); Tr. 408. Clean Line's other major investors are Bluescape's subsidiary Clean Grid Holdings, LLC and ZAM Ventures, LP's subsidiary Clean Line Investor Corp., both of which focus on long-term investments in the energy sector. See Ex. 100 at 9, 19-20 (Skelly Direct); Ex. 200 at 20 (Staff Report) (HC). Each of these investors has made substantial investments in Clean Line Energy Partners LLC. See Ex. 200 at 20 (Staff Report) (HC).

84. Consistent with its prior experience, Invenergy plans to use a combination of debt and equity to finance the Project. Specifically, Invenergy expects to engage a lender or group of lenders approximately six to nine months prior to commencement of construction to provide a construction loan for the Project. Tr. 2003 (Hoffman). The construction loan and equity capital provided by Invenergy, and potentially other investors, is expected to be sufficient for the entire construction cost of the Project. Following achievement of commercial operations, more permanent financing, such as term debt and equity financing, will rely on the contracted cash flow

from the Project for repayment, and the debt will be secured by the Project's assets and contracts. See Ex. 146 at 3-6 (Hoffman Supp. Direct); Ex. 147 at 3-4 (Zadlo Supp. Surrebuttal).

85. During the remand proceedings, Staff evaluated both the resources of Grain Belt Express and Invenergy. See Ex. 210, 2018 Staff Report at 5-10. In response to the supplemental direct testimony of the Company that disclosed the agreement to sell Grain Belt Express to Invenergy Transmission, the 2018 Staff Report analyzed the abilities of both Grain Belt Express and Invenergy to determine whether the Company had the requisite operational expertise. See Ex. 210 at 5-6. Staff advised it "has no reason to dispute that Grain Belt, and subsequently Invenergy, are qualified to own, operate, control and manage the Project …." Id. at 6.

86. To assess the current financial ability of the Company to carry out the Project, Staff recognized that the owner of Grain Belt Express and Invenergy Transmission had executed the MIPA on November 9, 2018 which would place Invenergy Transmission in the position of being the sole equity investor in the Company, as Clean Line is today. See Ex. 210 at 6. In conducting its analysis, Staff reviewed the financial resources and operational qualifications of purchaser Invenergy Transmission, its owner Invenergy Investment Company LLC ("Invenergy Investment"), and its affiliate Invenergy LLC to determine "the ability of the new owners to finance the remaining estimated start-up equity capital." Id. at 3, 5-6. The Staff Report advised that, based on the Company's supplemental direct testimony, as well as publicly available information, "it is clear that Invenergy has established an extensive network of access to private debt and equity investors." Id. at 3.

87. After analyzing the financial statements of both Invenergy Investment and Clean Line, Staff's Utility Regulatory Manager of Financial Analysis David Murray concluded that "Invenergy's financial resources are stronger than Clean Line's." See Ex. 210 at 7. Staff's

conclusion that Grain Belt Express "under Invenergy ownership, still has the financial ability to be granted a CCN" was contingent not only upon the conditions in Section I of Exhibit 206, but also of Invenergy's agreement to provide Staff with access to its financial records. Id. at 9-10.

88. At the evidentiary hearing on remand, the Exhibit 206 conditions were explicitly agreed to by Kris Zadlo, Invenergy's Senior Vice President. See Ex. 147 at 5-6; Tr. 2024. Regarding access to financial records, Staff, the Company, and Invenergy stipulated that Invenergy Investment and Invenergy Transmission shall cooperate with Staff in providing reasonable access to its unredacted consolidated financial records (including *in camera* review of notes to financial statements) until the completion or official abandonment of the Project. Tr. 1964. Invenergy has also affirmed its concurrence with the condition agreed to by Staff and the Company that Invenergy will not begin to install transmission facilities on easement property until it has demonstrated through a Commission filing that it has obtained commitments for funds that are equal to or greater than the total Project cost, and that the contracted transmission service revenue is sufficient to service the debt financing of the Project, taking into account any planned refinancing of debt. See Ex. 206, § I(d); Ex. 211 at 7-8 (Staff Rev. Supp. Report).

I. Operational Qualifications

89. The management of Grain Belt Express and Invenergy both have substantial knowledge and experience to develop the Project to meet the requirements of the capital markets and to operate it. See Ex. 104 at 12-14 (Berry Direct); Ex. 145 at 8-12 (Zadlo Supp. Direct).

90. Mr. Zadlo testified that the management team of Invenergy has extensive experience developing, constructing, and operating a variety of transmission and other energy infrastructure projects. Invenergy's expertise includes a complete range of fully integrated in-house capabilities, including: Project Development, Permitting, Transmission, Interconnection, Energy Marketing, Finance, Engineering, Project Construction, Operations and Maintenance.

Invenergy's senior executives, each with more than 25 years in the energy generation industry, have worked together for more than two decades. See Ex. 145 at 6-7 & Sched. KZ-5 (Zadlo Supp. Direct).

91. Invenergy has built its core competencies around power plant operations and maintenance. It operates its power plant fleet through the wholly owned subsidiary, Invenergy Services LLC ("Invenergy Services"), which is staffed with experienced industry personnel and currently operates 10,896 MW of natural gas and renewable generating capacity in North America. Combining asset management, operations, maintenance, and commercial execution functions allows Invenergy Services to provide a single, comprehensive solution to overall management of the asset. See Ex. 145 at 8 (Zadlo Supp. Direct).

92. Since 2001 Invenergy has built all required transmission and distribution lines, generator step-up transformers ("GSUs"), and substations for its facilities in numerous regions, including 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 adds up to over 392 miles of high-voltage transmission lines, over 1,748 miles of distribution lines, 59 substations and 73 GSUs of which several have been built for utilities. Invenergy has also negotiated leases and easements with over 13,000 landowners constituting over 10 million acres. Id. at 6-12 (Zadlo Supp. Direct).

93. Regarding RTO interconnection issues, Invenergy has extensive experience with the MISO queue, having developed 23 projects in the RTO's footprint. Invenergy is also an active participant in MISO's Interconnection Process Working Group and currently has over 60 active requests in the queue. Grain Belt Express and Invenergy are committed to completing the RTO studies for the Project and providing Staff with RTO interconnection agreements and associated

studies when they become available. See Ex. 143 at 5-6 (Abebe Supp. Direct); Ex. 147 at 4-5 (Zadlo Supp. Surrebuttal).

94. Additionally, Invenergy has contracted for construction work on its renewable energy projects in a variety of manners ranging from executing full engineering, procurement and construction ("EPC") contracts to executing individual specialty contracts with engineering, construction, and supply firms. For renewable projects such as the Grain Belt Express Project, Invenergy typically executes separate major component procurement contracts, electrical engineering contracts, balance of plant type construction contracts, and high-voltage substation and transmission line contracts. These contracts are executed and managed by Invenergy project management teams based in Chicago and Invenergy site management teams based in the field. Invenergy's Senior Vice President of Renewable Engineering and Project Management Art Fletcher will oversee all project engineering and construction activities, including the management of a top tier construction firm contracted to build the facility. See Ex. 145 at 9-11 (Zadlo Supp. Direct).

95. Upon acquisition of the Project, Invenergy plans to evaluate existing contracts in place, and the contractor chosen by Invenergy will have the qualifications and experience discussed by Thomas F. Shiflett of Quanta Services in his direct testimony. Invenergy will follow the emergency response and restoration best practices that Mr. Shiflett generally describes. See Ex. 145 at 10-12 & Sched. KZ-5 (Zadlo Supp. Direct); Ex. 121 at 14-16 & Sched. TFS-5 (Shiflett Direct).

96. No party has raised any specific concerns about Grain Belt Express and Invenergy's ability to construct, own, operate, control, manage, and maintain the Missouri Facilities.

97. Grain Belt Express is qualified to provide the service it is offering. Staff agreed, stating that it "has no reason to dispute that Grain Belt, and subsequently Invenergy, are qualified to own, operate, control and manage the Project subject to the agreed upon conditions in Staff Exhibits 205 and 206." See Ex. 210 at 6 (2018 Staff Report).

J. The Project is in the Public Interest

98. As summarized in the rebuttal testimony of Allan Spell, the Economic and Workforce Research Manager at the Missouri Economic Research and Information Center ("MERIC"), a research arm of the Missouri Department of Economic Development, "the construction phase of the Project is expected to support 1,527 total jobs over three years, create $246 million in personal income, $476 million in GDP, and $9.6 million in state general revenue for the state of Missouri" and "$249 million in Missouri-specific manufacturing and profession service contracting spending …." See Ex. 526 at 3 (Spell Rebuttal).

99. Among the companies that Grain Belt Express has committed to work with are ABB Inc. (St. Louis), which will manufacture transformers; Hubbell Power Systems (Centralia) which will manufacture the insulator cores and conductor hardware; and General Cable Industries (Sedalia) which will manufacture the steel core for the line's conductor. See Ex. 115 at 15-17 (Lawlor Direct). Invenergy will evaluate the existing contracts that the Company has in place and determine how they align with its plans to advance the Project. See Ex. 145 at 11-12 (Zadlo Supp. Direct).

100. Mr. Spell's economic forecast is the product of the Regional Economic Models, Inc. Policy Insight ("REMI") model, which "is used by government agencies on the national, state, and local level, as well as by private consulting firms, utilities, and universities." See Ex. 526 at 4 & Sched. AES-1 (REMI Model Equations) (Spell Rebuttal).

101. Richard Tregnago, the former Randolph County Assessor, estimated that in the first year of its operation, the Project will bring in more than $720,000 in tax revenue to Randolph County alone. See Ex. 123 at 4 (Tregnago Direct). Mr. Tregnago testified to the importance of such revenue to his county, stating: "I've had school superintendents call to inform me of a new home immediately after it is constructed to ensure that we are assessing it, and they are getting the benefit. Every penny matters to these school districts." Ex. 124 at 8 (Tregnago Surrebuttal).

102. During its first year of operation, Grain Belt Express will pay approximately $7.2 million to the eight Missouri counties that the Project will cross. See Ex. 115 at 15 & Sched. MOL-7 at 3-4 (Lawlor Direct).

103. Furthermore, because of the Company's industry-leading Easement Agreement, it is estimated that $14.97 million in easement payments will be made in the first year of Project operation. See Ex. 115, Sched. MOL-7 at 2. Additionally, in the Project's first year, 91 jobs, $17.9 million worth of personal income, and $9.1 million in gross domestic product will be created. See Ex. 115 at Sched. MOL-7 at 3 (Lawlor Direct).

104. Such economic projections are forecasts, and it is impossible to predict the exact amount of property tax that will be generated. See Ex. 116 at 116 (Lawlor Surrebuttal). However, intervenor opposition to the Project does not dispute that property tax revenue will be generated from the Project, or offer any evidence to the contrary. Intervenors merely assert that the exact amount is unknown. See Ex. 300 at 32 (Lowenstein Rebuttal).

105. J. Neil Copeland of GDS Associates prepared a production cost analysis using PROMOD IV software that indicated the Project will lower both adjusted production costs and demand costs. See Ex. 106 at 4-5 (Copeland Direct). His analysis concluded that the Project would lower production costs in Missouri by $40 million in its first year of operation under a

"business as usual" scenario, with additional savings projected under the "high growth," "generation shift," and "public policy" scenarios. Id. at 7-8, 10-12 & Sched. JNC-2. It will also lower sulfur dioxide, nitrous oxide, and carbon dioxide emissions in the Eastern Interconnection. Id. at 4 & Sched. JNC-2 at 4. These scenarios were developed and approved by MISO in its 2015 MISO Transmission Expansion Plan, and are not based on the Clean Power Plan. Id. at 12 (Copeland Direct).

106. The studies that Mr. Copeland carried out reflected input received from Staff members who recommended that he consider the effect of wind variability on the analysis, and include updated information on the status of certain Ameren power plans, among other items. Id. 14-15 (noting five Staff recommendations) (Copeland Direct); Tr. 1306 (Kliethermes). Mr. Copeland's analysis made other changes to the production cost model data presented in the 2014 Case, including the MJMEUC transmission contract with Grain Belt Express. See Ex. 106 at 16-17 (Copeland Direct).

107. After reviewing the Staff Report, Mr. Copeland confirmed in surrebuttal that his study had taken off-system sales into account, and stressed that the benefits provided by the Missouri 500 MW converter station would have a greater positive impact than a renewable resource located elsewhere in the Eastern Interconnection because it will deliver wind power directly to Missouri. See Ex. 107 at 2-4 (Copeland Surrebuttal). Responding to other issues noted in the Staff Report, he confirmed that his analysis did assess changes in emissions from the provision of ancillary services necessary to support increases in wind generation, and concluded that the effect of wind variability on such emissions "is very minor compared to the much larger effect of adding pollution-free wind energy to the generation portfolio." Id. at 5. He also testified that his analysis did consider the "basis differential" between the Project's Missouri converter

station and the Missouri Load Hub. Id. at 4-5. Mr. Copeland concluded that the basis differential between the converter station and the load hub actually decreases with the Project and "therefore lowers the cost to serve Missouri load." Id. at 6.

108. To assess the reliability benefits of the Project, the Company retained Edward C. Pfeiffer of Quanta Technology, LLC to conduct a LOLE study. Mr. Pfeiffer's initial LOLE study analyzed Missouri with and without the capacity of the Grain Belt Express Project by evaluating the availability of generation to meet load during a given year. See Ex. 117 at 3-5 (Pfeiffer Direct). Noting that LOLE studies have been conducted for decades to determine proper capacity reserve levels, he concluded that the Project would have a "substantial and favorable effect on the reliability of electric service in Missouri." Id. at 5.

109. In response to comments in the Staff Report (Ex. 200), Mr. Pfeiffer updated his LOLE study to include a broader range of resources that serve load in Missouri but are located in adjoining states. See Ex. 118 at 2-4 (Pfeiffer Surrebuttal). Although he observed that his study was not intended to justify the Project as necessary to meet the resource adequacy metrics of specific utilities or any RTO (id. at 4), he updated his LOLE study and modified his assumptions based on Staff's comments. See Ex. 118 at 9-11 (Pfeiffer Surrebuttal). Based on these additional factors, he confirmed his finding that the Project continues to have "a substantial and favorable effect" on the reliability of electric service in Missouri. Id. at 11-12.

110. The routing guidelines and methodology used by Grain Belt Express ensured the least intrusive and most efficient route for the Project. Company witness James G. Puckett, an environmental scientist and experienced planner from Louis Berger Group, Inc., was a key member of the Routing Team that prepared the 2014 Missouri Route Selection Study and its 2016 Addendum. See Ex. 119 at 1-3 & Sched. JGP-1 (Puckett Direct). The routing process "involved

iterative phases of information gathering, outreach, route development and route review and revision." See Ex. 119, Sched. JGP-1 at 12 (Puckett Direct). This effort produced multiple possible routes which were compared and analyzed with respect to their impact on natural resources, human uses and environment, and engineering and construction challenges. Id. at 13-14. The final route was a combination of several alternative routes which, when combined, represented the least impactful and technically most efficient route. Id. From a routing perspective, cost was not considered in the siting of the Project. Tr. 577 (Puckett).

111. After the 2014 Case, Grain Belt Express had many constructive conversations with landowners. These included two rounds of both one-on-one meetings and public landowner meetings. See Ex. 119, Sched. JGP-2 at 13 (Puckett Direct). Grain Belt Express hosted eight Public Landowner Meetings in the affected counties in June of 2016. Id. at 9. The Company also coordinated with multiple state and federal agencies, such as the Missouri Department of Natural Resources, the Missouri Department of Conservation, and the State Historic Preservation Office. Id. at 12.

112. The Company's community outreach and engagement with landowners resulted in the refinement of the Proposed Route in which specific impacts to individual parcels were identified at a finer scale. Id. at 18. These conversations with landowners led to 16 new changes to the route, all of which are described in detail in the 2016 Routing Study Addendum. See Ex. 119, Sched. JGP-2 at 15-36 (Puckett Direct).

113. These 2016 route adjustments illustrate the Company's ability to work with landowners. Grain Belt Express moved the route 1,600 feet from Intervenors Christina and Matthew Reichert's Sycamore Valley Farms Bed and Breakfast, located in Chariton County,

which was an issue in the 2014 CCN Case.[13] A route adjustment was made in Buchanan County at the request of a landowner, allowing structures to be placed at the edge of productive agricultural ground.[14] Similarly, in Carroll County route adjustments were made to shift the line from cultivated land to pasture land.[15] In total, the re-routing process reduced the number of residences within 500 feet of the Project, affected fewer churches and cemeteries within 1,000 feet, crossed fewer parcels, and reduced the number of archaeological sites within 1,000 feet of the Project from 49 to 41. See Ex. 119, Sched. JGP-2 at 37-39 (Puckett Direct).

114. The Missouri Landowner Protocol ("Protocol") incorporates three documents: (1) a Code of Conduct for Employees, Right-of-way Agents and Subcontractor Employees, (2) an Easement Agreement, and (3) the Missouri Agricultural Mitigation Impact Protocol. See Ex. 131 & Sched. DKL-1 to DLK-4 (Lanz Direct). The Protocol was developed by Grain Belt Express based "on hundreds, if not thousands, of conversations with landowners and other stakeholders over the last several years." Tr. 430-31 (Lanz).

115. This engagement with stakeholders is reflected in Staff's March 2017 testimony that 53% of the thousands of public comments submitted to the Commission expressed support for the Project. See Tr. 1393-94 (Schallenberg). Out of approximately 11,800 comments, over 6,200 favored the Project. See Staff Ex. 207. Accordingly, a majority of the public comments registered on its Electronic Filing and Information System expressed support for the Project. Additional comments received in early-to-mid 2017 continued to express support for the Project. See Ex. 210, 2018 Staff Report at 13.

[13] Sched. JGP-2 at 29-30, Ex. 119 (Puckett Direct).
[14] Id. at 28.
[15] Id. at 27.

116. The testimony of Wayne Wilcox, a Missouri Century Farm owner and a Randolph County Commissioner, reflects this support. He stated that county commissioners look to see if project developers "treat the residents fairly" and that "[w]e have not had any issue whatsoever with the folks at Grain Belt Express." See Ex. 125 at 3 (Wilcox Direct); Ex. 126. Mr. Tregnago found that the Company's representatives "knew the answers to my questions" and provided "regular updates … keeping me apprised of the Project's progress." See Ex. 124 at 2 (Tregnago Surrebuttal).

117. The Company's Easement Agreement contains an industry-leading compensation package offered to landowners. See Tr. 440 (Lanz). The Company offers (a) 110% of the average fee value for the right-of-way to ensure market value is reached,[16] (b) at landowners' option, a 2% annual escalating structure payments or a one-time structure payment for each structure,[17] and (c) agriculture impact payments.[18] No evidence was produced to suggest that any other transmission company operating in Missouri has offered similar or equal financial terms to those offered by the Company's Easement Agreement. Indeed, the evidence was that these payments will compensate landowners at levels superior to most utilities. Tr. 440-41 (Lanz in response to questions from Chairman Hall). Grain Belt Express agreed to incorporate the terms and obligations of the Missouri Landowner Protocol in its easement agreements with landowners. See Tr. 411-13 (Lanz); Ex. 114 at 5 (Lanz Surrebuttal). The Company further agreed that it would follow the Protocol as a condition to the CCN. Tr. 158 (Skelly).

118. The Company presented credible evidence that transmission lines cause minimal or no impact on property values. See Sched. RJR-1 at 9, Ex. 120 (Roddewig Surrebuttal). The most

[16] Ex.113 at 6 (Lanz Direct).
[17] Id. at 7.
[18] See Ex. 113 at 6-9 & Sched. DKL-3 (Missouri Landowner Compensation Factsheet); Ex.130 (structure payments); Ex. 131 (damage calculation sheet).

relevant study of the effect of a transmission line on farmland property values was conducted in Christian County, Illinois. Based on a comparison of median sale prices of property on the transmission line's right-of-way corridor with property not on the right-of-way, "prices on a transmission line corridor in Christian County are selling at only a small discount of perhaps no more than a negative -2.0% per acre." Id. at 15, ¶ 21.

119. If Grain Belt Express cannot come to an agreement on compensation with a landowner, the Company will offer binding arbitration to the landowner. See Ex. 113 at 11-12 (Lanz Direct). Binding arbitration is typically a simpler, more cost effective, and less time consuming means of resolving financial compensation issues than eminent domain proceedings. Id. at 12.

120. Confirmation of the industry-leading status of the Company's Easement Agreement and its Missouri Landowner Protocol came from Donald Shaw, a witness for Show Me. Mr. Shaw served as CEO and General Manager for Central Electric Power Cooperative ("Central") from 1993 to 2015. See Ex. 402 at 3 (Shaw Rebuttal). On cross-examination, Mr. Shaw conceded that during his time at Central (a) there was no written landowner policy or protocol provided to landowners, (b) no code of conduct guiding employees or land-agents in their interaction with landowners, (c) no agricultural impact protocol, and (d) the compensation offered by Central was inferior to what Grain Belt Express is offering under its Easement Agreement. Tr. 1180-83 (Shaw).

121. Central offered one-time payments of 70% to 110% of the value of the property, with no payments for structures and no option for periodic payments that escalate over time. Tr. 1181-82 (Shaw). By contrast, the Company offers a uniform payment of 110% of the average fee value of the land, plus a structure payment with a 2% escalator provision and damage payments

without any cap on the amount or time for claiming them. See Ex. 113 at 6-9 & Sched. DLK-3 (Lanz Direct).

122. The evidence shows that the Company's proposed route significantly limits the Project's impact to agricultural operations. See Ex. 119 at 28 & Sched. JGP-2 (Puckett Direct); Tr. 565-66 (Puckett). As explained by Dr. James Arndt, an eminent soil scientist with Merjent Inc., the overall effect of the Project on agriculture will be limited. He estimates that out of the 206 miles that the Grain Belt Express Project will traverse in Missouri, at most a total of nine acres of land will be taken out of agricultural production as a result of the Project. See Ex. 101 at 14. The Company's industry-leading compensation package is meant to make a landowner, at a minimum, whole for any economic loss that occurs as a result of the construction and operation of the Project. See Tr. 440 (Lanz).

123. Dr. Arndt further testified that much of the land traversed by the Project is not suited for center pivot irrigation, which is the primary agricultural concern when constructing transmission projects because of the fixed infrastructure design of such systems. Id. at 15. Further, the proposed route for the Project does not affect any existing center-pivot irrigation systems. See Ex. 102 at 17 (Arndt Surrebuttal). This was not disputed by any party.

124. The evidence also shows that while there may be issues to resolve between agricultural operations and transmission development, these industries can co-exist. Randolph County Commissioner Wayne Wilcox, an experienced farmer, testified that "I am very used to farming around structures," including 345 kV and 161 kV power lines. See Ex. 125 at 4 (Wilcox Direct). "They are not a problem. I do it all the time and anyone with these structures knows that you just adjust to it." Id. When operating spray equipment, "[y]ou just have to drive your sprayer around the poles. I see it done all the time, and I've ridden with a spray operator who's done it on

my field." See Ex. 126 at 4 (Wilcox Surrebuttal). As far as fertilizing, he stated: "If you're running a spreader truck, you just go right on by it. You don't have to worry about it." Tr. 673 (Wilcox).

125. Based on feedback from Missouri agricultural producers, Grain Belt Express created a comprehensive Missouri Agricultural Impact Mitigation Protocol ("Missouri Ag Protocol"). See Sched. JLA-2, Ex. 101 (Arndt Direct). The Missouri Ag Protocol provides a detailed plan for mitigating or eliminating specific agricultural concerns and impacts during the construction phase of the Project even though the State of Missouri does not provide guidelines or requirements regarding agricultural impact protocols, as is the case in other states. Id. at 7. Grain Belt Express developed the Missouri Ag Protocol to provide landowner protections for a multitude of issues during the construction of transmission lines, such as soil compaction, erosion, organic farms, drainage tiles, and the clearing of trees and brush. Id. at 2.

126. Grain Belt Express will retain an Agricultural Inspector with a professional background in production agriculture, soil and water conservation, and general farm operations and practices. Id. at 11. The sole responsibility of the Agricultural Inspector will be to ensure compliance with the Missouri Ag Protocol. The Agricultural Inspector will have the authority to stop all construction activities to ensure compliance with the Missouri Ag Protocol. See Ex. 101 at Sched. JLA-2 at 10 (Arndt Direct). All affected landowners will be given the phone number and contact information for the Agricultural Inspector. Id., Sched. JLA-2 at 6.

127. Grain Belt Express has agreed to establish the first decommissioning fund of a transmission line in the United States, which would be set up no earlier than the 20th anniversary of the completion of the Project and would be based upon the estimates of an independent engineer. Ex. 113 at 12-13 (Lanz Direct). In the highly unlikely event that the Project is retired from service, this decommissioning fund would pay for (a) the dismantling, demolishing and removal of all

equipment, facilities and structures; (b) terminating all easement agreements in real property records; (c) securing, maintaining and disposing of debris from the Project facilities; and (d) performing any activities needed to comply with applicable laws, contractual obligations or other prudent actions necessary to retire the Project facilities and to restore any landowner property. See Ex. 113 at Sched. DKL-1 at 7 (Lanz Direct).

128. When Dr. William H. Bailey, a distinguished scientist on the health effects of electric and magnetic fields ("EMF"), was asked whether the Project would "pose any known risk to human health," he stated: "My conclusion, made to a reasonable degree of scientific certainty, is no." See Ex. 103 at 24 (Bailey Direct). This finding stands unchallenged in the evidence.

129. Citing some of the same studies relied upon by Dr. Bailey, including reports published by the World Health Organization and the International Agency on Cancer Research, Staff concluded that "concerns about the impact of EMF on health" did not support the rejection of the Application. See Ex. 200, Staff Report at 46-47.

II. CONCLUSIONS OF LAW

A. Grain Belt Express is an Electrical Corporation, a Public Utility and May Be Granted a CCN

1. Grain Belt Express is an electrical corporation that owns electric plant and is a public utility in Missouri. See Application at 2, 6. Grain Belt Express will not offer retail electric service in Missouri because the service it proposes to provide is interstate transmission service through an open access transmission tariff that will be regulated by FERC, consistent with its Order Conditionally Authorizing Proposal and Granting Waivers in Grain Belt Express Clean Line LLC., 147 FERC ¶ 61,098, No. ER 14-409-000 (2014). See Ex. 100 at 23-24 (Skelly Direct); Ex. 104 at 4-5 (Berry Direct).

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

3. Mr. Detweiler testified that the Company currently has 39 active easements in Missouri. Tr. 2143. He additionally stated that Grain Belt Express owns an option to purchase land in fee simple in Ralls County on which to build the converter station. Tr. 2145.[19] Mr. Skelly and Mr. Berry testified that the Company currently has money or cash in hand. Tr. 1824-26, 1919. Finally, the Company holds county road-crossing assents (also referred to as franchises) that were issued to it by Buchanan and Carroll Counties. See Ex. 300, Sched. LD-3 at 1-2, 4 (Lowenstein Rebuttal).

4. Easements have long been held to be real estate interests in Missouri. Kansas City Power & Light Co. v. Riss, 312 S.W.2d 846, 847 (Mo. 1958) ("an easement is an interest in real estate"); Berry v. Shinkle, 193 S.W.3d 435, 439-40 (Mo. App. W.D. 2006) ("an easement constitutes an interest in real estate"). The easements held by Grain Belt Express are "to be used for or in connection with" the development of the Project whose purpose is the transmission and sale of electricity, and fall within the meaning of "electric plant" under Section 386.010(14).

5. The option that Grain Belt Express holds to purchase property in Ralls County on which the convertor station will be built is property, with characteristics of both real and personal property. As noted in the 2014 Case, the option agreement was recorded on June 3, 2014 with the

[19] The option agreement was previously admitted into evidence in the 2014 Case. See Ex. 201, Sched. MOL-14 (Lawlor Surrebuttal).

Ralls County Recorder of Deeds. See Ex. 201 at 19 & Sched. MOL-14 (Lawlor Surrebuttal). In City of Peerless Park v. Dennis, 42 S.W.3d 814, 817-18 (Mo. App. E.D. 2001), the Court of Appeals held that an option to purchase real property is a property right. It further noted that "recent legal trends support the conclusion that the owner of an unexercised option to purchase land possesses a property right that is compensable in eminent domain." Id. at 119, citing 2 J.L. Sackman, Nichols on Eminent Domain (2000). Missouri's eminent domain statute applies to the taking of "land," "real property," or "other property." See §§ 523.010, 523.250. See also JAM Inc. v. Nautilus Ins. Co., 128 S.W.3d 879, 891-92 (Mo. App. W.D. 2004) (option to purchase real property is an insurable interest in the property). The option held by the Company is, therefore, within the definition of "electric plant" under Section 386.010(14).

6. The money or cash that the Company holds, "to be used for or in connection with" the development of the Project, is also considered personal property and "electric plant." See Fleischmann v. Mercantile Trust Co., 617 S.W.2d 73, 73-74 (Mo. en banc 1981); In re Armistead, 245 S.W.2d 145, 147 (Mo. 1952) ("money[s] on deposit" are "intangible personal property" subject to taxation); State ex rel. Reid v. Barrett, 118 S.W.2d 33, 37 (Mo. App. St. L. 1938).

7. Additionally, the county road-crossing assents issued to Grain Belt Express by the Buchanan County Commission and the Carroll County Commission are considered franchises or licenses and, therefore, a form of personal property. The Supreme Court has referred to the assent that a county may grant before any person, corporation or other entity can erect poles for the suspension of electric wires that cross the public roads or highways of any county as a "franchise." Missouri Public Serv. Co. v. Platte-Clay Elec. Coop., 407 S.W.2d 883, 889 (Mo. 1966) (citing § 7924 of the 1929 Revised Statutes, the predecessor of § 229.100). See § 229.100, History & Statutory Notes. Similarly, the Court of Appeals in StopAquila.org v. Aquila, Inc., 180 S.W.3d

24, 40-41 (Mo. App. W.D. 2005), expressly referred to the assent that a county commission issues under Section 229.100 as a franchise.

8. Under Missouri law franchises are personal property, typically classified as intangible. See Norris v. Norris, 731 S.W.2d 844, 845 (Mo. en banc 1987); Ackerman Buick, Inc. v. General Motors Corp., 66 S.W.3d 51, 61 (Mo. App. E.D. 2001) (a franchise is "personal property"); Ludlow-Saylor Wire Co. v. Wollbrinck, 205 S.W. 196, 198 (Mo. en. banc. 1918); State ex rel. Reid v. Barrett, 118 S.W.2d 33, 36-37 (Mo. App. St. L. 1938) (property includes "physical things, such as lands, goods, money; intangible things, such as franchises"). Therefore, the Section 229.100 county assents or franchises held by Grain Belt Express are personal property under the definition of "electric plant."

9. The Company intends to devote this property and other electric plant that it plans to acquire and construct to the public service through the Grain Belt Express Project which will provide electricity on a wholesale basis through transmission service. See Ex. 100 at 3-10 (Skelly Direct); Ex. 141 at 1-5 (Skelly Supp. Direct); Ex. 145 at 3-16 (Zadlo Supp. Direct).

10. Under FERC protocols, Grain Belt Express must broadly solicit interest in the Project and the rates that Grain Belt Express negotiates must be just and reasonable, without undue discrimination or preference. The Project must not impair regional reliability and operational efficiency. Tr. 2039-40 (K. Zadlo). See Grain Belt Express Clean Line LLC, 147 FERC ¶ 61,098 at Para. 9 (2014). Because the Company will offer transmission service on an indiscriminate basis to the public through wholesale service, it is an electrical corporation and public utility that requires a CCN from the Commission under Section 393.170.1.

11. The Commission has exercised this authority in many cases where it has granted a line CCN to wholesale transmission projects that are rate regulated by FERC but which required

the permission of this Commission to be constructed in Missouri. See In re Ameren Trans. Co. of Ill., Order Approving Unanimous Stipulation & Agreement, No. EA-2017-0345 (Jan. 10, 2018); In re Transource Missouri LLC, Report and Order, No. EA-2013-0098 (2013); In re Interstate Power & Light Co., Order Granting Certificate of Convenience and Necessity, No. EO-2007-0485 (2007); In re IES Utilities, Inc., Order Granting Certificate of Convenience and Necessity, No. EA-2002-296 (2002).

12. The Project and the service it proposes to provide is not comparable to the cases cited by MLA where a supplier of electricity only served a limited number of private customers, never offered its services to the public on either a retail or wholesale basis, and was not subject to the requirements of FERC's policies on just and reasonable rates, non-discrimination, and a comprehensive open access transmission tariff. State ex rel. M.O. Danciger & Co. v. PSC, 205 S.W. 36, 39-40 (Mo. 1918) (brewery that sold excess power to limited number of private customers within three blocks of its facility not "devoted to the public use"). See Palmer v. City of Liberal, 64 S.W.2d 265, 268 (Mo. 1933) (seller "does not propose to deal with the public, but only to furnish the city of Liberal with electric current"); State ex rel. Buchanan County Power Transmission Co. v. Baker, 9 S.W.2d 589, 590-92 (Mo. en banc 1928) (company that sells electric energy "to only one customer" … "is not a public utility").

13. Under Section 393.170.1, an electrical corporation must obtain a CCN from the Commission before it can begin construction of an electric plant, which includes both transmission and distribution systems, as well as generating facilities.[20] Grain Belt Express is a public utility properly seeking this Commission's permission to construct electric plant in Missouri.

B. Section 393.170.1 is the Governing Statute

[20] See § 386.020(14).

14. The Commission has the power to authorize the construction of "electric plant" in Missouri that is "necessary or convenient for the public service."[21] Pursuant to Section 393.170, the Commission may grant an applicant a "line" CCN under subsection 1 or an "area" CCN under subsection 2.[22]

15. The Commission's regulations in effect when the Application was filed contain separate and distinct requirements for "line" applications and for "area" applications.[23] Grain Belt Express applied to this Commission for a line or construction CCN under Section 393.170.1. See Application at 1.

16. After conducting an evidentiary hearing in March 2017 and hearing oral argument on August 3, 2017, the Commission determined that it could not lawfully issue a CCN to the Company because it had not obtained the necessary county assents under Section 229.100. See Report & Order at 13-15 (Aug. 16, 2017).

17. Accompanying the Report & Order was the Concurring Opinion of four Commissioners who stated that but for the appellate decision they believed they were obligated to follow, they would have granted the Application because the Grain Belt Express Project was necessary or convenient for the public service. See Concurring Opin. at 2, 7 (Aug. 16, 2017). The decision is In re Ameren Transmission Co. of Illinois, 523 S.W.3d 21 (Mo. App. W.D. 2017) ("ATXI").

18. On appeal, the Court of Appeals for the Eastern District found that the PSC erred in finding that it could not lawfully grant a line CCN to the Company under Section 393.170.1

[21] § 393.170.3.
[22] See StopAquila.org v. Aquila, Inc., 180 S.W.3d 24, 32-34 (Mo. App. W.D. 2005); State ex rel. Harline v. PSC, 343 S.W.2d 177, 182-85 (Mo. App. W.D. 1960).
[23] The Application was filed under the CCN regulations then in effect. See 4 CSR 240.3-105(1)(B) (requirements "[i]f the application is for electrical transmission lines, gas transmission lines or electrical production facilities ...") and 4 CSR 240.3-105(1)(A) (requirements "[i]f the application is for a service area ...").

because the ATXI decision was in error. Grain Belt Express Clean Line LLC v. PSC, No. ED 105932, slip op. at 10 (Feb. 27, 2018). However, instead of reversing the order and remanding the case to the Commission, it transferred the case to the Supreme Court under Rule 83.02 because of the general interest and importance of the question. Id. at 10-11.

19. The Supreme Court held that the Commission erroneously concluded that it could not grant a line CCN to the Company without it first obtaining consents from the affected counties. Grain Belt Express Clean Line LLC v. PSC, 555 S.W.3d 469, 470, 474 (Mo. en banc 2018). Declaring that ATXI should not be followed, the Supreme Court remanded the case to the PSC to determine whether the Grain Belt Express Project is necessary or convenient for the public service. Id. at 474.

C. Necessary or Convenient Legal Standard

20. The CCN Application must be granted if the proposed infrastructure is "necessary or convenient for the public service."[24] Missouri appellate courts have held that necessity does not require that the improvement be "essential" or "absolutely indispensable."[25]

21. If the project "is of sufficient importance to warrant the expense of making it, it is a public necessity."[26] Moreover, if the granting of the authorization provides a "genuine and reasonable public interest in promptness and economy of service," then the public "convenience or necessity" is served.[27] Future needs must be part of a comprehensive evaluation of the public convenience or necessity.[28]

[24] See Section 393.170.3. See also 4 CSR 240-3.105(1)(E) (now rescinded).
[25] State ex rel. Intercon Gas, Inc. v. PSC, 848 S.W.2d 593, 597 (Mo. App. W.D. 1993).
[26] State ex rel. Missouri, Kan. & Okla. Coach Lines, Inc. v. PSC, 179 S.W.2d 132, 136 (Mo. App. K.C. 1944).
[27] State ex rel. Twehous Excavating Co. v. PSC, 617 S.W.2d 104, 106 (Mo. App. W.D. 1981).
[28] United for Missouri v. PSC, 2016 WL 7650615 at *4 (Mo. App. W.D., Dec. 20, 2016); State ex rel. Gulf Transport Co. v. PSC, 658 S.W.2d 448, 458 (Mo. App. W.D. 1983); Ringo v. PSC, 132 S.W.2d 1080, 1082 (Mo. App. K.C. 1939).

22. The Commission has stated that it will apply five criteria in CCN cases to determine whether the proposed service is necessary or convenient for the public service, commonly referred to as the Tartan factors: (1) There must be a need for the service the applicant proposes to provide; (2) The applicant's proposal must be economically feasible; (3) The applicant must have the financial ability to provide the service; (4) The applicant must be qualified to provide the proposed service; and (5) The proposed service must be in the public interest.[29] The Project meets each of these standards and is, therefore, necessary or convenient for the public service.

23. In the Tartan case, the Commission described each of the above elements, including that the service must promote the public interest, stating:

> The requirement that an applicant's proposal promote the public interest is in essence a conclusory finding as there is no specific definition of what constitutes the public interest. Generally speaking, positive findings with respect to the other four standards will in most instances support a finding that an application for a certificate of convenience and necessity will promote the public interest.[30]

24. In a decision approving the CCN application of Ameren for the Callaway-Franks 345-kV transmission line, the Commission described the public in regard to the "public interest" requirement in the following terms:

> Who are "the public"? Concerned Citizens argues that the Commission should not consider the benefits it admits exist for AmerenUE, Associated, or Associated's customers. Concerned Citizens would have the Commission consider only the interests of the affected landowners. However, this argument is contrary to the case law.
>
> In the *Missouri Pacific Freight Transport Company* case, the Court stated that the 'rights of an individual with respect to issuance of a certificate are subservient to the rights of the public …' And, in a case affirming the Commission's grant of a certificate of convenience and necessity to a water utility, the Court in *Public Water Supply District No. 8* stated, 'the ultimate interest is that interest of the public as a whole … and not the potential hardship to individuals ….'

[29] In re Tartan Energy Co., Report and Order, Case No. GA-94-127, 1994 WL 762882 at 3 (1994).
[30] Id. at 10.

> The Commission is also aided by zoning and eminent domain cases where the issue of public interest is often addressed. An examination of those cases in Missouri finds that the determination of public interest is a balancing test between public and private interests. And further, '[n]o one factor is dispositive in balancing public versus private interests. Each case stands on its own facts and circumstances.'
>
> Section 386.610, RSMo, which applies to the Commission's general regulatory power over electric corporations, supports this balancing test approach ....
>
> The Commission must, therefore, balance all the relevant factors, both the benefits and detriments, and determine whether the public benefits of the project outweigh the individual detriments. It is not within the authority of this Commission to determine the monetary value or just compensation for such detriments other than to determine if the costs of the project outweigh the benefits provided by it.[31]

25. Accordingly, "the rights of an individual with respect to issuance of a certificate are subservient to the rights of the public."[32]

26. The Commission must balance both the benefits and the detriments of the Project[33] so as to ensure that there is no overall detriment to the public.[34] In other words, the term "in the public interest" "can reasonably mean no more than 'not detrimental to the public.'"[35] Consequently, the Commission may not withhold its granting of the authority sought where the benefits of the Project outweigh the individual detriments.[36]

27. The Missouri Facilities are necessary or convenient for the public service. Granting Grain Belt Express a CCN so that it may construct the Missouri portion of the Project "is of sufficient importance to warrant the expense of making it"[37] and it meets the five Tartan criteria. Accordingly, the public convenience or necessity is served.[38]

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[31] In re Union Electric Co., Report and Order, Case No. EO-2002-351, 2003 WL 22017276 at *15 (2003).
[32] State ex rel. Mo. Pac. Freight Transp. Co. v. PSC, 288 S.W.2d 679, 682 (Mo. App. K.C.), aff'd sub nom. State ex rel. Mo. Pac. Freight Transp. Co. v. PSC, 295 S.W.2d 128 (Mo. 1956).
[33] In re Union Electric Co., 2003 WL 22017276 at *15.
[34] State ex rel. City of St. Louis v. PSC, 73 S.W.2d 393, 400 (Mo. en banc 1934).
[35] City of St. Louis, 73 S.W.2d at 400.
[36] Id. See State ex rel. Fee Fee Trunk Sewer, Inc. v. Litz, 596 S.W.2d 466, 468 (Mo. App. E.D. 1980).
[37] State ex rel. Mo., Kan. & Okla. Coach Lines, Inc. v. PSC, 179 S.W.2d 132, 136 (Mo. App. K.C. 1944).
[38] State ex rel. Mo., Kan. & Okla. Coach Lines, 179 S.W.2d at 136; Twehous, 617 S.W.2d at 106.

D. There is a Need for the Service

28. The TSA between Grain Belt Express and MJMEUC, coupled with MJMEUC's Iron Star PPA, demonstrates a clear need for the service that the Company will provide. See Ex. 100 at 13-14 (Skelly Direct); Ex. 476-78 (Grotzinger Rebuttal). The TSA allows MJMEUC to purchase 200 MW of transmission capacity from the Project's western Kansas converter station to its Missouri converter station. See Ex. 100 at 13-14 (Skelly Direct).

29. MJMEUC and its customers have committed to purchase at least 136 MW of wind power utilizing transmission service purchased from Grain Belt Express. Tr. 2114 (Grotzinger).

30. MoPEP has committed to buy 60 MW. See Ex. 476 at 6 (Grotzinger Rebuttal). MoPEP is a group of 35 Missouri cities for which MJMEUC provides full requirements for wholesale energy, capacity, and ancillary services. See Ex. 477 at 2 (Grotzinger Surrebuttal); Ex. 475 at 4 (Kincheloe Rebuttal). The 35 municipal members of MoPEP are in all parts of Missouri, from Rock Port and Lamar in the west to Palmyra and Monroe City in the northeast, as well as to Jackson in the southeast and Thayer on the Arkansas border. See Sched. DK-1, Ex. 475 (Kincheloe Rebuttal).

31. The Cities of Kirkwood and Hannibal together committed to purchase an additional 40 MW. See Tr. 980-81 (Kincheloe); Ex. 479 (Kirkwood and Hannibal contracts). In addition to the firm commitments by MoPEP, Kirkwood, and Hannibal, the Cities of Columbia and Centralia have contracted for 36 MW of renewable power through the TSA with Grain Belt Express. See Ex. 476 at 6-7 (Grotzinger Rebuttal); Tr. 980-81, 995-96 (Kincheloe).

32. MJMEUC President Duncan Kincheloe expects that the full 200 MW provided by the TSA with Grain Belt Express will be subscribed by MJMEUC members. Id.

33. The need for MJMEUC and its customers to obtain a new source of electricity is clear. MoPEP currently buys 100 MW of energy and capacity under a contract with Illinois Power

Marketing, an affiliate of Dynegy, Inc., which had bought coal plants in Illinois formerly owned by Ameren Corporation. See Ex. 475 at 4 (Kincheloe Rebuttal). Because this contract expires in 2021, MJMEUC must replace that energy and capacity with more affordable energy. Id. MJMEUC concluded that the TSA with Grain Belt Express and the Iron Star PPA "will form the cornerstone of the resource mix to replace" that contract. Id.

34. MJMEUC's Chief Operating Officer John Grotzinger confirmed that Columbia and the MoPEP cities have expressed a desire to purchase more renewable energy, and that a recent offering for renewable energy by MJMEUC to MoPEP "was fully subscribed, with additional demand unmet." See Ex. 476 at 9-10 (Grotzinger Direct). He also noted the need to provide renewable energy to industrial retail customers of MJMEUC's cities who have placed "renewable energy goals in their corporate procurement policies." Id. at 10. Given that the offers MJMEUC has extended from its Kansas wind project to the MoPEP cities with high-load commercial and industrial customers are currently over-subscribed, MJMEUC cannot currently meet the existing demand for retail renewable power. Tr. 1112-13 (Grotzinger).

35. Equally clear are the benefits to MJMEUC's customers. Numerous witnesses presented estimates of the savings to MJMEUC's customers. Although the exact estimate of savings varies somewhat depending on the calculation method used, as cited in detail in Section I(G) above, the record in this case makes it indisputable that substantial savings exist for MJMEUC customers.

36. If the Project is built, MJMEUC's obligation to buy power from the Iron Star Wind Project is clear. Id. The PPA between Iron Star and MJMEUC requires that MJMEUC provide written notice to Iron Star and designate its Buyer's Share which shall "not be less than 100 MW."

See Sched. JG-4, Ex. 476 at Sec. 3.1 (Grotzinger Rebuttal) (HC). That minimum quantity has already been met.

37. Importantly, the Grain Belt Express Project will operate for many decades and can continue to provide benefits for this entire time period. The total benefits will be a large multiple of the annual savings. Tr. 1002 (Kincheloe: Projected savings to MoPEP of $10-11 million is only an annual figure, not total); Tr. 1112 (Grotzinger: Additional benefits include emissions savings and ability to fulfill commercial and industrial demand for renewable energy).

38. Moreover, the estimates of benefits described above are only with respect to the 200 MW portion of the Project's transmission service to Missouri, which has been purchased by MJMEUC. Since the Project delivers a total of 500 MW to Missouri, it will provide benefits far beyond those provided to MJMEUC and its customers. Mr. Copeland of GDS Associates estimated that the Project in its entirety would lower annual adjusted production costs in Missouri by $40 million during its first year of operation under a "business as usual" assumption scenario, with additional savings projected in other scenarios. See Ex. 106 at 10-12 (Copeland Direct) & Sched. JNC-2. Mr. Copeland's analysis is further discussed below in Section II(I)(ii).

39. Beyond the MJMEUC contract, Grain Belt Express also has a TSA for 50 MW from an Illinois load-serving entity called Realgy, which has agreed to purchase 25 MW of the Project's transmission service to Missouri and 25 MW to PJM. Tr. 914, 965 (Berry).

40. Steve Chriss, Director of Energy and Strategy Analysis for Wal-Mart Stores, Inc., testified that there is demand for the renewable wind power that would be delivered into Missouri through the Grain Belt Express 500 MW converter station. See Ex. 900 at 5-6 (Chriss Rebuttal). The Missouri Industrial Energy Consumers, Missouri Retailers Association, and the Consumer Council of Missouri support the Project because it "provides an opportunity for consumers in

Missouri to take advantage of low-cost and clean wind energy resources." See Ex. 800 at 2 (Dauphinais Rebuttal).

41. Finally, the need for the Project has been demonstrated by the responses to the various open solicitations that Grain Belt Express conducted in 2015 and in early 2016. Regarding the 500 MW Kansas-to-Missouri service, ten wind generators and one load-serving entity submitted transmission service requests of 3,524 MW, more than six times the available service offered by the Company. See Ex. 104 at 24-25 (Berry Direct). For the service offered from Kansas to the Illinois converter station in PJM, 17,301 MW of service were requested. Id. at 25. Thus, the total capacity requested for both MISO and PJM delivery points at 20,825 MW was approximately five times the total available capacity of the Project. Id. & Sched. DAB-3 (HC).

42. Based upon the totality of the evidence, there is clearly a need for the Grain Belt Express Project. The first Tartan factor has been met.

E. The Project is Economically Feasible

43. Because it will link untapped, low-cost wind resources in western Kansas with the demand for renewable energy in Missouri and other states, the Project is economically feasible. This is particularly true given that the Company and its investors bear all risk associated with recovering the costs of the Project, which is the specific test the Commission applied in the Tartan case to determine that the project under review was economically feasible.[39] Using the ordinary meaning of the word, the concept of feasibility simply means "capable of being done" or "achievable."[40]

[39] In re Tartan Energy Co., Report and Order, Case No. GA-94-127, 1994 WL 762882 at 10 (1994) (finding that Tartan's proposal "represents a viable project" as "Tartan bears most of the risk if it has underestimated the economic feasibility of its project").

[40] American Textile Mfrs. Inst., Inc. v. Donovan, 452 U.S. 490, 508 (1981) (citing the plain meaning of the word "feasible" in rejecting imputation of a higher standard).

44. Moreover, the cost of the Project will not be recovered from Missouri ratepayers through either SPP or MISO regional cost allocation tariffs. See Ex. 100 at 15 (Skelly Direct).

45. Former New Mexico and FERC Commissioner Suedeen G. Kelly testified that the Commission can and should evaluate the Project's economic feasibility in light of its participant-funded business model. Under the participant-funded business model, Grain Belt Express will recover its costs only from those wholesale transmission customers who choose to purchase its service. See Ex. 111 at 4-5 (Kelly Direct). There are at least four other participant-funded transmission line projects currently in operation today. Id. at 10. Because the Project is funded and paid for by private investors, and not recovered through cost-of-service rates, it is not necessary for the Commission to determine whether the Project's service is an improvement that justifies its cost. Id. at 3. Finally, Ms. Kelly noted that any concerns regarding the interconnection of the Project are the responsibility of the relevant RTOs who, overseen by FERC together with NERC, will preserve the reliability of the bulk electric system. Id. at 2 (Kelly Surrebuttal).

46. RTOs are responsible for assuring that those portions of the electric grid subject to their authority are being operated in an efficient and reliable manner, with particular responsibility for maintaining short-term reliability. See Regional Transmission Organizations, 18 C.F.R. § 35.34(a), (j)(3)-(4). Pursuant to the 2005 Energy Policy Act amendments to the Federal Power Act, RTOs are explicitly obligated to comply with FERC-approved reliability standards, as promulgated by NERC and as subject to applicable FERC rules, orders and tariffs.[41]

47. This interconnection process has continued to advance since the 2014 Case. The additional technical studies conducted by SPP, MISO, and PJM provide "sufficient detail to support [the Project's] cost estimates with a reasonable level of certainty." See Ex. 109 at 3 (Galli

[41] See 16 U.S.C. § 824*o* ("Electric Reliability").

Surrebuttal). Based on a January 2017 study prepared by Ameren Missouri, the necessary MISO upgrades costs are estimated at $21 million. See Ex. 109 at 9 & Sched. AWG-9 (Galli Surrebuttal); Ex. 143 at 5 (Abebe Supp. Direct). Invenergy's internal studies have assessed these costs in a range of $20-40 million, which, even at the high end, are not expected to significantly impact the economic feasibility of the Project. See Ex. 147 at 5 (Zadlo Supp. Surrebuttal). Although the Company withdrew from the MISO queue in September 2017 to conserve resources when there was no additional benefit (Tr. 1891-92, 1902-04), Invenergy plans to re-enter the MISO queue during the first half of 2019. Tr. 1896. Invenergy has extensive experience with the MISO queue, having developed 23 projects totaling more than 5,000 MWs in MISO. See Ex. 147 at 5 (Zadlo Supp. Surrebuttal).

48. On October 12, 2018 FERC approved MISO's proposed set of connection procedures and a connection agreement of Merchant High-Voltage Direct Current ("MHVDC") transmission projects like the Grain Belt Express Project. See Ex. 143 at 5 (Abebe Supp. Direct). FERC also approved MISO's Generator Interconnection Procedures in Attachment X of its tariff, which include an injection rights construct for the use of MHVDC connection customers like the Company.[42] MISO will now be able to grant injection rights to generation facilities connecting to the Project's Kansas converter station. This development provides additional commercial certainty for the Company's converter station in Ralls County, Missouri. Id. at 5-6. Invenergy expects to seek interconnection under MISO's new MHVDC process and to request injection rights of 500 MW. See Ex. 147 at 5 (Zadlo Supp. Surrebuttal).

49. The PJM October 2014 System Impact Study is being updated in a supplemental study, referred to as a "re-tooled" study. At the present time there has been no increase in the

[42] Order Accepting Tariff Provisions, Midcontinent Indep. System Operator, Inc., No. ER18-1410, 165 FERC ¶ 561,016 (Oct. 12, 2018).

estimated costs required to upgrade the transmission system to accommodate the 3,500 MW injection in PJM at the Illinois-Indiana border. To the contrary, as of December 2017, PJM now estimates these costs at $464 million, with potential positive developments from other projects that should strengthen the grid at the point of interconnection. See Ex. 143 at 4-5 (Abebe Supp. Direct); Ex. 109 at 24-27 (Galli Surr.). Although it is common for study cost numbers to fluctuate, this current estimate represents a $36 million decrease from earlier in the case when the projected cost of the PJM upgrades was $500 million. See Ex. 109 at 26-27 (Galli Surr.).

50. The interconnection agreement signed with SPP and ITC Great Plains in October 2016 remains in place with no changes in estimated interconnection costs. See Ex. 143 at 3-4 (Abebe Supp. Direct).

51. Beyond the fact that the Project's developers have assumed the risk of failure, the results of the open solicitation process, as well as the MJMEUC/Iron Star contracts, provide additional strong evidence that the Project is economically feasible and financially viable. Id. at 30-32; Ex. 112 at 4-5 (Kelly Surrebuttal).

52. Mr. Berry explained that while the MJMEUC/Iron Star contracts demonstrate the economic feasibility of the Project compared to MISO wind (Tr. 929-933), it was the 3500 MW of energy to be sold into PJM that "demonstrates the financial viability of the project" overall. Tr. 937-38. PJM operates the largest wholesale energy market in the world with 71 million customers (Tr. 938), where power prices are generally $10.00/MWh higher than prices that would be paid for the 500 MW sold into the MISO market in Missouri. Tr. 915.

53. Mr. Berry also noted there was a "very strong corporate demand" for renewable energy in PJM where the Project's participant-funded model permits the Company to "build a project at a price that people are willing to pay" and to operate it under "market conditions in PJM"

where users will "pay a higher price." Tr. 915-16. He additionally observed that when Grain Belt Express conducted its open solicitation, it offered a price that was higher than both the MJMEUC "first-mover" price and the normal Missouri rate, and that it received bids that were 6½ times the capacity available on the Project, "a solid indication" of economic feasibility. Tr. 941.

54. The economics of generating low-cost wind energy in western Kansas for export to Missouri and farther east are attractive, as prices continue to decline. Mr. Berry testified that a contract executed in 2015 set the price of energy from one western Kansas provider at $19.15/MWh.[43] The cost of wind power from western Kansas has continued to drop, as evidenced by the pricing in MJMEUC's Iron Star PPA of $16.50 per MWh. See Sched. JG-4 at 3, Ex. 476 (Grotzinger Rebuttal).

55. Kansas has some of the highest wind speeds in the country, routinely reaching between 8.5 and 9.0 meters per second with an 80-meter wind turbine. See Ex. 104 at 25-26 (Berry Direct). Wind speeds in western Kansas are substantially higher than Missouri, Illinois, Indiana, and even Iowa. Id. & Sched. DAB-4 (NREL Wind Map). Because wind power varies proportionally to wind velocity by the third power, a Kansas wind site with an average of 8.8 meters/second produces ***double*** the power of a site in Missouri with a 7.0 meter/second average. Id. at 26.

56. Mr. Berry testified that prior to remand U.S. Government data showed that wind farms in the interior region of the country, which includes Kansas, cost an average $1.64 million per MW. Id. at 5, citing Ex. 105 at 25-31 & Sched. DAB-5 (Berry Direct). The most recent government data from the same source and the same region show an average cost of $1.55 million per MW. Id. at 5, citing 2017 Wind Technologies Market Report, U.S. Dep't of Energy.

[43] Berry Direct at 23, Ex. 104 (Cedar Bluff Wind Farm).

57. Moreover, advances in wind generation technology continue, "bringing costs down quite dramatically." Tr. 1878 (Skelly). Even without the production tax credit, which phases out by the end of 2023, Mr. Skelly testified that "wind is going to cost in the low two cents," as it did when this proceeding was first filed. Tr. 1877-78. In addition, the demand for renewable energy in Missouri, in MISO and in PJM continues to be strong. See Ex. 142 at 6 (Berry Supp. Direct); Tr. 2132-33, 2136 (Grotzinger).

58. All of these facts show that the Project presents a compelling business case which, on the basis of its economics, is likely to attract transmission service customers in addition to MJMEUC and Realgy. Wind generators in western Kansas or load-serving entities in Missouri will be able to pay the Project's transmission charge and still deliver energy to Missouri at a competitive price. See Ex. 104 at 31 (Berry Direct). The attractive business proposition of the Project and the resulting benefits to Missouri electric users were further quantified by the LCOE analysis Grain Belt Express presented in this case. None of the criticisms offered by witnesses opposing the Application successfully detract from the Project's economic feasibility.

F. Grain Belt Express Has the Proper Financial Resources

59. Grain Belt Express has sufficient financial resources to provide the services proposed by the Project as a result of the funding provided by Clean Line and by Invenergy. See Ex. 141 at 2 (Skelly Supp. Direct); Ex. 145 at 7 (Zadlo Supp. Direct); Ex. 146 at 2-6 (Hoffman Supp. Direct); Ex. 147 at 2-6 (Zadlo Supp. Surrebuttal). Staff concluded that the Company "is financially capable to construct the Project." See Ex. 210 at 6-10, Staff Rev. Supp. Rebuttal Report ("2018 Staff Report"). No party challenged this proposition.

60. To date, National Grid has invested $55.7 million in the development of the Clean Line projects, including the Grain Belt Express Project. See Ex. 110 at 6 (Hartshorne Direct); Tr. 408. Clean Line's other major investors are Bluescape's subsidiary Clean Grid Holdings, LLC

and ZAM Ventures, LP's subsidiary Clean Line Investor Corp., both of which focus on long-term investments in the energy sector. See Ex. 100 at 9, 19-20 (Skelly Direct); Ex. 200 at 20 (Staff Report) (HC). Each of these investors has made substantial investments in Clean Line Energy Partners LLC. See Ex. 200 at 20 (Staff Report) (HC).

61. Consistent with its prior experience, Invenergy plans to use a combination of debt and equity to finance the Project. Specifically, Invenergy expects to engage a lender or group of lenders approximately six to nine months prior to commencement of construction to provide a construction loan for the Project. Tr. 2003 (Hoffman). The construction loan and equity capital provided by Invenergy, and potentially other investors, is expected to be sufficient for the entire construction cost of the Project. Following achievement of commercial operations, more permanent financing, such as term debt and equity financing, will rely on the contracted cash flow from the Project for repayment, and the debt will be secured by the Project's assets and contracts. See Ex. 146 at 3-6 (Hoffman Supp. Direct); Ex. 147 at 3-4 (Zadlo Supp. Surrebuttal).

62. During the remand proceedings, Staff evaluated both the resources of Grain Belt Express and Invenergy. See Ex. 210, 2018 Staff Report at 5-10. In response to the supplemental direct testimony of the Company that disclosed the agreement to sell Grain Belt Express to Invenergy Transmission, the 2018 Staff Report analyzed the abilities of both Grain Belt Express and Invenergy to determine whether the Company had the requisite operational expertise. See Ex. 210 at 5-6. Staff advised it "has no reason to dispute that Grain Belt, and subsequently Invenergy, are qualified to own, operate, control and manage the Project …." Id. at 6.

63. To assess the current financial ability of the Company to carry out the Project, Staff recognized that the owner of Grain Belt Express and Invenergy Transmission had executed the MIPA on November 9, 2018 which would place Invenergy Transmission in the position of being

the sole equity investor in the Company, as Clean Line is today. See Ex. 210 at 6. In conducting its analysis, Staff reviewed the financial resources and operational qualifications of purchaser Invenergy Transmission, its owner Invenergy Investment, and its affiliate Invenergy LLC to determine "the ability of the new owners to finance the remaining estimated start-up equity capital." Id. at 3, 5-6. The Staff Report advised that, based on the Company's supplemental direct testimony, as well as publicly available information, "it is clear that Invenergy has established an extensive network of access to private debt and equity investors." Id. at 3.

64. After analyzing the financial statements of both Invenergy Investment and Clean Line, Staff's Utility Regulatory Manager of Financial Analysis David Murray concluded that "Invenergy's financial resources are stronger than Clean Line's." See Ex. 210 at 7. Staff's conclusion that Grain Belt Express "under Invenergy ownership, still has the financial ability to be granted a CCN" was contingent not only upon the conditions in Section I of Exhibit 206, but also of Invenergy's agreement to provide Staff with access to its financial records. Id. at 9-10.

65. The Commission may properly consider the financial ability and other qualifications of not only the applicant for a CCN, but also its parent and affiliated corporations, and entities with whom it has binding contractual relations, in determining whether a CCN is "necessary or convenient for the public service" under Section 393.170.3. State ex rel. Intercon Gas, Inc. v. PSC, 848 S.W.2d 593, 597-98 (Mo. App. W.D.1993) (reliance on contract between applicant's parent corporation and a customer, and on parent corporation's commitments supported the issuance of a CCN); In re Ameren Transmission Co. of Illinois, Report & Order at 22-23, No. EA-2015-01456 (2016) (support of Ameren Corp.); In re Transource Missouri, LLC, Report & Order at 12, No. EA-2013-0098 (Aug. 7, 2013) (support of Great Plains Energy Inc. and

American Electric Power Co.); In re Tartan Energy Co., 1994 WL 762882 (1994) (CCN granted if financial and others conditions are agreed to by affiliated corporations).

66. In this proceeding the Commission may consider the financial resources not only of Grain Belt Express and Clean Line, but also Invenergy Transmission and its affiliates. Invenergy is already invested in the Project under the DMA, pursuant to which it is now actively managing and funding the Project. See Tr. 1910 (Berry); 2072-73 (Zadlo); Ex. 145 at 4 (Zadlo Supp. Direct) & Sched. KZ-4 (DMA). Invenergy is also under contract to become the sole equity investor in the Project, pending the satisfaction of certain conditions precedent. See Ex. 145 at 3-4 & Sched. KZ-3 (MIPA). Review and consideration of the financial resources of Invenergy under these circumstances is consistent with past Commission decisions, noted above, that have analyzed the qualifications of the applicants, its parent corporations, and entities with whom they have contractual relationships.

67. Staff agrees that the resources of both Clean Line and Invenergy Transmission, and their affiliates may be properly considered by the Commission in determining whether to grant a CCN to Grain Belt Express. See 2018 Staff Report at 5-10. The Commission is within its authority to approve projects and transactions such as proposed by the Company's Application even if "the precise timing is uncertain and risks are involved." Love 1979 Partners v. PSC, 715 S.W.2d 482, 489 (Mo. en banc 1986).

68. At the evidentiary hearing on remand, the Exhibit 206 conditions were explicitly agreed to by Mr. Zadlo, Invenergy's Senior Vice President. See Ex. 147 at 5-6; Tr. 2024. Regarding access to financial records, Staff, the Company, and Invenergy stipulated that Invenergy Investment and Invenergy Transmission shall cooperate with Staff in providing reasonable access to its unredacted consolidated financial records (including *in camera* review of notes to financial

statements) until the completion or official abandonment of the Project. Tr. 1964. Invenergy has also affirmed its concurrence with the condition agreed to by Staff and the Company that Invenergy will not begin to install transmission facilities on easement property until it has demonstrated through a Commission filing that it has obtained commitments for funds that are equal to or greater than the total Project cost, and that the contracted transmission service revenue is sufficient to service the debt financing of the Project, taking into account any planned refinancing of debt. See Ex. 206, § I(d); Ex. 211 at 7-8 (Staff Rev. Supp. Report).

G. Grain Belt Express is Qualified to Provide the Service

69. Grain Belt Express is qualified to provide the service it is offering. The management of Grain Belt Express and Invenergy have substantial knowledge and experience to develop the Project to meet the requirements of the capital markets and to operate it. See Ex. 104 at 12-14 (Berry Direct); Ex. 145 at 8-12 (Zadlo Supp. Direct). As discussed above in Section II(F) with regard to financial resources, it is proper for the Commission to consider the qualifications of Invenergy to provide the service.

70. The management team of Invenergy has extensive experience developing, constructing, and operating a variety of transmission and other energy infrastructure projects. Invenergy's expertise includes a complete range of fully integrated in-house capabilities, including: Project Development, Permitting, Transmission, Interconnection, Energy Marketing, Finance, Engineering, Project Construction, Operations and Maintenance. Invenergy's senior executives, each with more than 25 years in the energy generation industry, have worked together for more than two decades. See Ex. 145 at 6-7 & Sched. KZ-5 (Zadlo Supp. Direct).

71. Invenergy has built its core competencies around power plant operations and maintenance. It operates its power plant fleet through the wholly owned subsidiary, Invenergy Services. Invenergy Services is staffed with experienced industry personnel and currently operates

10,896 MW of natural gas and renewable generating capacity in North America. Combining asset management, operations, maintenance, and commercial execution functions allows Invenergy Services to provide a single, comprehensive solution to overall management of the asset. See Ex. 145 at 8 (Zadlo Supp. Direct).

72. Since 2001 Invenergy has built all required transmission and distribution lines, generator step-up transformers ("GSUs"), and substations for its facilities in numerous regions, including 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 adds up to over 392 miles of high-voltage transmission lines, over 1,748 miles of distribution lines, 59 substations and 73 GSUs of which several have been built for utilities. Invenergy has also negotiated leases and easements with over 13,000 landowners constituting over 10 million acres. Id. at 6-12 (Zadlo Supp. Direct).

73. Regarding RTO interconnection issues, Invenergy has extensive experience with the MISO queue, having developed 23 projects in the RTO's footprint. Invenergy is also an active participant in MISO's Interconnection Process Working Group and currently has over 60 active requests in the queue. Grain Belt Express and Invenergy are committed to completing the RTO studies for the Project and providing Staff with RTO interconnection agreements and associated studies when they become available. See Ex. 143 at 5-6 (Abebe Supp. Direct); Ex. 147 at 4-5 (Zadlo Supp. Surrebuttal).

74. Additionally, Invenergy has contracted for construction work on its renewable energy projects in a variety of manners ranging from executing full engineering, procurement and construction ("EPC") contracts to executing individual specialty contracts with engineering, construction, and supply firms. For renewable projects such as the Grain Belt Express Project,

Invenergy typically executes separate major component procurement contracts, electrical engineering contracts, balance of plant type construction contracts, and high-voltage substation and transmission line contracts. These contracts are executed and managed by Invenergy project management teams based in Chicago and Invenergy site management teams based in the field. Invenergy's Art Fletcher will oversee all project engineering and construction activities, including the management of a top tier construction firm contracted to build the facility. See Ex. 145 at 9-11 (Zadlo Supp. Direct).

75. Upon acquisition of the Project, Invenergy plans to evaluate existing contracts in place, and the contractor chosen by Invenergy will have the qualifications and experience discussed by Mr. Shiflett in his direct testimony. Invenergy will follow the emergency response and restoration best practices that he generally describes. See Ex. 145 at 10-12 & Sched. KZ-5 (Zadlo Supp. Direct); Ex. 121 at 14-16 & Sched. TFS-5 (Shiflett Direct).

76. No party has raised any specific concerns about Grain Belt Express and Invenergy's ability to construct, own, operate, control, manage, and maintain the Missouri Facilities.

77. Grain Belt Express is qualified to provide the service it is offering. Staff agreed, stating that it "has no reason to dispute that Grain Belt, and subsequently Invenergy, are qualified to own, operate, control and manage the Project subject to the agreed upon conditions in Staff Exhibits 205 and 206." See Ex. 210 at 6 (2018 Report).

78. Because the Grain Belt Express and Invenergy management teams, and the outside firms supporting the Project, have extensive experience developing, constructing, and operating a variety of transmission and other energy infrastructure projects, the Company is qualified to provide the service it is offering.

H. The Project is in the Public Interest

79. In the Tartan case, the Commission found that the public interest factor "is in essence a conclusory finding as there is no specific definition of what constitutes the public interest."[44] The Commission concluded that "positive findings with respect to the other four standards will in most instances support a finding that an application for a certificate of convenience and necessity will promote the public interest."[45] The Company has shown not only that there is a demonstrated need for the service, that the Project is economically feasible, that it can successfully finance the Project, and that it is qualified to provide the service, but also that the Project provides a variety of benefits that are in the public interest without creating any substantial detriments.

i. The Project is Economically Beneficial to Missouri

80. The evidence presented in this case overwhelmingly shows that the Project will result in substantial economic growth and development in Missouri and increased tax revenues for Missouri communities.

81. Mr. Spell of the Missouri Department of Economic Development's witness testified that "the construction phase of the Project is expected to support 1,527 total jobs over three years, create $246 million in personal income, $476 million in GDP, and $9.6 million in state general revenue for the state of Missouri" and "$249 million in Missouri-specific manufacturing and profession service contracting spending …." See Ex. 526 at 3 (Spell Rebuttal).

82. Mr. Tregnago estimates that in the first year of its operation, the Project will bring in more than $720,000 in tax revenue to Randolph County alone. See Ex. 123 at 4 (Tregnago Direct).

[44] In re Tartan Energy Company, L.C., Report and Order, Case No. GA-94-127, 1994 WL 762882 at 10 (1994).
[45] Id.

83. During the first year of operation, Grain Belt Express will pay approximately $7.2 million to the eight Missouri counties that the Project will cross. See Ex. 115 at 15 & Sched. MOL-7 at 3-4 (Lawlor Direct). Intervenor opposition to the Project does not dispute that property tax revenue will be generated from the Project.

84. The magnitude of the Project undoubtedly will create large economic benefits for Missouri in general, and specifically for the local economies of the affected Missouri counties. There was no evidence offered to the contrary.

ii. The Project Will Lower Production Costs and Improve Reliability

85. The record shows that the Project will lower energy production costs and provide additional reliability benefits to Missouri.

86. Mr. Copeland of GDS Associates prepared a production cost analysis using PROMOD IV software that indicated the Project will lower both adjusted production costs and demand costs. See Ex. 106 at 4-5 (Copeland Direct). His analysis concluded that the Project would lower production costs in Missouri by $40 million during its first year of operation under a "business as usual" scenario, with additional savings projected under the "high growth," "generation shift," and "public policy" scenarios. Id. at 10-12 & Sched. JNC-2. These scenarios were developed and approved by MISO in its 2015 MISO Transmission Expansion Plan, and are not based on the Clean Power Plan. Id. at 12 (Copeland Direct). The Project will also reduce sulfur dioxide, nitrous oxide, and carbon dioxide emissions in the Eastern Interconnection. See Ex. 106 at 4 (Copeland Direct).

87. After reviewing the Staff Report, Mr. Copeland confirmed in surrebuttal that his study had taken off-system sales into account, and stressed that the benefits provided by the Missouri 500 MW converter station would have a greater positive impact than a renewable

resource located elsewhere in the Eastern Interconnection because it will deliver wind power directly to Missouri. See Ex. 107 at 2-4 (Copeland Surrebuttal). Responding to other issues noted in the Staff Report, he confirmed that his analysis did assess changes in emissions from the provision of ancillary services necessary to support increases in wind generation, and concluded that the effect of wind variability on such emissions "is very minor compared to the much larger effect of adding pollution-free wind energy to the generation portfolio." Id. at 5. He also testified that his analysis did consider the "basis differential" between the Project's Missouri converter station and the Missouri Load Hub. Id. at 4-5. Mr. Copeland concluded that the basis differential between the converter station and the load hub actually decreases with the Project and "therefore lowers the cost to serve Missouri load." Id. at 6.

88. To assess the reliability benefits of the Project, the Company retained Edward C. Pfeiffer of Quanta Technology, LLC to conduct a LOLE study. Mr. Pfeiffer's initial LOLE study analyzed Missouri with and without the capacity of the Grain Belt Express Project by evaluating the availability of generation to meet load during a given year. See Ex. 117 at 3-5 (Pfeiffer Direct). Noting that LOLE studies have been conducted for decades to determine proper capacity reserve levels, he concluded that the Project would have a "substantial and favorable effect on the reliability of electric service in Missouri." Id. at 5.

89. In response to comments in the Staff Report (Ex. 200), Mr. Pfeiffer updated his LOLE study to include a broader range of resources that serve load in Missouri but are located in adjoining states. See Ex. 118 at 2-4 (Pfeiffer Surrebuttal). Although he observed that his study was not intended to justify the Project as necessary to meet the resource adequacy metrics of specific utilities or any RTO (id. at 4), he updated his LOLE study and modified his assumptions based on Staff's comments. See Ex. 118 at 9-11 (Pfeiffer Surrebuttal). Based on these additional

factors, he confirmed his finding that the Project continues to have "a substantial and favorable effect" on the reliability of electric service in Missouri. Id. at 11-12.

iii. Landowner Interests and the Broader Public Interest in Low-Cost Renewable Energy Are Compatible

90. In a decision approving the CCN application of Ameren for the Callaway-Franks transmission line, the Commission found that the "public interest" is broadly defined. The Commission found that "the ultimate interest is that interest of the public as a whole … and not the potential hardship to individuals …."[46] This is consistent with the historic practice of the Commission, confirmed by Missouri appellate courts, that holds the overall interests of the general public as supreme when making a public interest determination.[47]

91. The record here demonstrates that the balance of interests favors approval of the Project and its Missouri Facilities, which are not detrimental and are indeed highly beneficial to the public.[48]

a. The Routing Process

92. The routing guidelines and methodology used by Grain Belt Express ensured the least intrusive and most efficient route for the Project. Company witness James G. Puckett, an environmental scientist and experienced planner from Louis Berger Group, Inc., was a key member of the Routing Team that prepared the 2014 Missouri Route Selection Study and its 2016 Addendum. See Ex. 119 at 1-3 & Sched. JGP-1 (Puckett Direct). The routing process "involved iterative phases of information gathering, outreach, route development and route review and revision." See Ex. 119, Sched. JGP-1 at 12 (Puckett Direct). The final route was a combination

[46] In re Union Electric Co., Report and Order, Case No. EO-2002-351, 2003 WL 22017276 at *15 (2003).
[47] In re Sho-Me Power Corp., Report and Order, Case No. EO-93-259, 1993 WL 719871 (1993); State ex rel. Mo. Pac. Freight Transp. Co. v. PSC, 288 S.W.2d 679, 682 (Mo. App. K.C.) aff'd sub nom. State ex rel. Mo. Pac. Freight Transp. Co. v. PSC, 295 S.W.2d 128 (Mo. 1956).
[48] See City of St. Louis, 73 S.W.2d at 400; Fee Fee Trunk Sewer, 596 S.W.2d at 468.

of several alternative routes which, when combined, represented the least impactful and technically most efficient route. Id.

93. The routing process is an important indicator of the Company's continued commitment to work with landowners and other stakeholders to minimize the environmental impact of the Project. The Company's community outreach and engagement with landowners, as detailed above, resulted in the refinement of the Proposed Route in which specific impacts to individual parcels were identified at a finer scale. Id. at 18. These conversations with landowners led to 16 variations to the route since 2014, all of which are described in detail in the 2016 Routing Study Addendum. See Ex. 119, Sched. JGP-2 at 15-36 (Puckett Direct).

94. The Company welcomed the opportunity to find solutions to specific concerns and issues raised by landowners. The routing process demonstrates that Grain Belt Express has not simply given lip-service to working with landowners, but has and will continue to work to minimize any negative impacts of the Project on landowners, including on agricultural operations.

b. Missouri Landowner Protocol

95. The Protocol incorporates three documents: (1) a Code of Conduct for Employees, Right-of-way Agents and Subcontractor Employees, (2) an Easement Agreement, and (3) the Missouri Agricultural Mitigation Impact Protocol. See Ex. 131 & Sched. DKL-1 to DLK-4 (Lanz Direct). It was developed by Grain Belt Express based "on hundreds, if not thousands, of conversations with landowners and other stakeholders over the last several years." Tr. 430-31 (Lanz).

96. This engagement with stakeholders is reflected in Staff's testimony that 53% of the thousands of public comments submitted to the Commission expressed support for the Project. See Tr. 1393-94 (Schallenberg). The testimony of Wayne Wilcox, a Missouri Century Farm owner and a Randolph County Commissioner, reflects this support. He stated that county commissioners

look to see if project developers "treat the residents fairly" and that "[w]e have not had any issue whatsoever with the folks at Grain Belt Express." See Ex. 125 at 3 (Wilcox Direct); Ex. 126. Mr. Tregnago, the Randolph County Assessor, found that the Company's representatives "knew the answers to my questions" and provided "regular updates … keeping me apprised of the Project's progress." See Ex. 124 at 2 (Tregnago Surrebuttal).

c. The Easement Agreement

97. As described above, the Company's Easement Agreement contains an industry-leading compensation package offered to landowners. See Tr. 440 (Lanz).

98. The Company presented credible evidence that transmission lines cause minimal or no impact on property values. See Sched. RJR-1 at 9, Ex. 120 (Roddewig Surrebuttal). The most relevant study of the effect of a transmission line on farmland property values was conducted in Christian County, Illinois. Based on a comparison of median sale prices of property on the transmission line's right-of-way corridor with property not on the right-of-way, "prices on a transmission line corridor in Christian County are selling at only a small discount of perhaps no more than a negative -2.0% per acre." Id. at 15, ¶ 21.

d. Agricultural Impacts

99. The evidence shows that the Company's proposed route significantly limits the Project's impact to agricultural operations. See Ex. 119 at 28 & Sched. JGP-2 (Puckett Direct); Tr. 565-66 (Puckett). As explained by Dr. James Arndt, an eminent soil scientist with Merjent Inc., the overall effect of the Project on agriculture will be limited. He estimates that out of the 206 miles that the Grain Belt Express Project will traverse in Missouri, at most a total of nine acres of land will be taken out of agricultural production as a result of the Project. See Ex. 101 at 14.

100. Dr. Arndt further testified that much of the land traversed by the Project is not suited for center pivot irrigation, which is the primary agricultural concern when constructing

transmission projects because of the fixed infrastructure design of such systems. Id. at 15. Further, the proposed route for the Project does not affect any existing center-pivot irrigation systems. See Ex. 102 at 17 (Arndt Surrebuttal). This was not disputed by any party.

101. Further, the Missouri Ag Protocol provides landowner protections for a multitude of issues during the construction of transmission lines, such as soil compaction, erosion, organic farms, drainage tiles, and the clearing of trees and brush. See Sched. JLA-2, Ex. 101 (Arndt Direct).

102. The Agricultural Inspector will have the authority to stop all construction activities to ensure compliance with the Missouri Ag Protocol. See Ex. 101 at Sched. JLA-2 at 10 (Arndt Direct). All affected landowners will be given the phone number and contact information for the Agricultural Inspector. Id., Sched. JLA-2 at 6.

e. Decommissioning Fund

103. Grain Belt Express has agreed to establish the first decommissioning fund of a transmission line in the United States which will be set up no earlier than the 20th anniversary of the completion of the Project. Ex. 113 at 12-13 (Lanz Direct). This decommissioning fund would pay for (a) the dismantling, demolishing and removal of all equipment, facilities and structures; (b) terminating all easement agreements in real property records; (c) securing, maintaining and disposing of debris from the Project facilities; and (d) performing any activities needed to comply with applicable laws, contractual obligations or other prudent actions necessary to retire the Project facilities and to restore any landowner property. See Ex. 113 at 12-13 & Sched. DKL-1 at 7 (Lanz Direct).

104. If on the 20th anniversary of the date of the Project's completion the remaining useful life of the Project facilities is reasonably estimated to be in excess of ten years, Grain Belt Express may delay the establishment of the decommissioning fund until a date that is reasonably

estimated by an independent engineer to be ten years prior to the expiration of the useful life of the project facilities. The decommissioning fund may be collateralized with a letter of credit or cash, or any combination thereof. Id.

f. Health Effects of Electro-Magnetic Fields

105. Citing some of the same studies relied upon by Dr. Bailey, including reports published by the World Health Organization and the International Agency on Cancer Research, Staff concluded that "concerns about the impact of EMF on health" did not support the rejection of the Application. See Ex. 200, Staff Report at 46-47. Dr. Bailey's finding that the Project would pose no known risk to human health stands unchallenged in the evidence. See Ex. 103 at 24 (Bailey Direct).

106. Looking at the broad interests of the general public and Grain Belt Express' commitments to avoid or mitigate landowner impacts, the benefits of the Project and its Missouri portion in particular far outweigh any alleged detriments.[49]

III. CONDITIONS

A. Conditions Agreed to by Staff and Grain Belt Express

1. Under Section 393.170.3, the Commission has the power to "impose such condition or conditions as it may deem reasonable and necessary" to serve the public interest

2. Staff and the Company agreed to seven categories of conditions, which are set forth in Exhibit 206, as well as certain other conditions.

3. The conditions agreed to by Staff and Grain Belt Express in Exhibit 206, as well as the post-hearing condition regarding involuntary easements, are accepted. In summary, they provide:

[49] In re Union Electric Co., Report and Order, Case No. EO-2002-351, 2003 WL 22017276 at *15 (2003).

i. The Company will not install transmission facilities on easement property until it obtains commitments for funds in an amount equal to or greater than the total cost to build the entire Project. The four subsections to this condition recommended by Staff witness David Murray also are accepted. See Staff Report, Ex. 200 at 19-21, 63-64; Ex. 206, § I. In addition, Staff, the Company, and Invenergy stipulated that Invenergy Investment and Invenergy Transmission shall cooperate with Staff in providing reasonable access to its unredacted consolidated financial records (including in camera review of notes to financial statements) until the completion or official abandonment of the Project. Tr. 1964 (stipulation); Tr. 2024 (Zadlo).

ii. Grain Belt Express and Staff agreed to the following condition which addresses what would happen to involuntary easements if the Project is not completed: If Grain Belt Express acquires any involuntary easement in Missouri by means of eminent domain ("easement") and does not obtain the financial commitments referred to in Section I(1) and Section I(1)(a) of the Conditions Agreed to by Grain Belt Express and Staff (Exhibit 206) within five years of the date that such easement rights are recorded with the appropriate county recorder of deeds, the Company agrees to return possession of the easement to the fee simple title holder ("title holder") within 60 days and to cause the dissolution of the easement to be recorded with the county recorder of deeds. In the event of such a return of the easement to the title holder, no reimbursement of any payment made by Grain Belt Express to the title holder shall be due. See Grain Belt Express Brief at 30; Staff Brief at 34.

iii. The Company will provide Staff with completed RTO interconnection agreements and any associated studies. If any studies raise new issues, the Company will provide its plan to address those issues. The Company also will provide the Commission with completed documentation to comply with the relevant NERC standards, the National Electric Safety Code, the Overhead Power Safety Act, and any other applicable Missouri state law for a project of this scope and size. Such documentation shall be provided to the Commission prior to the commercial operational date of the Project. See Staff Report, Ex. 200 at 67; Ex. 206, § II.

iv. The conditions that will confirm that the Company is using commercially reasonable efforts to identify existing underground utility plant, and to coordinate with the owners of such facilities, are accepted. These conditions also relate to steps that Grain Belt Express will take before commencing commercial operation of the Project regarding the technical operation of the line, including building the entire line with dedicated metallic return conductors and complying with other safety standards. Finally, these conditions require the Company to perform various engineering studies to be conducted by qualified persons, and to make these studies available to Staff and affected facility owners. The Company will also file annual updates regarding the need for any additional studies and other measures. See Staff Report, Ex. 200 at 64-66; Ex. 206, § III. The Company and Invenergy have also agreed that if there are any material changes in the design and engineering of the Project from what is contained in the Application, Grain Belt Express will file an updated

application subject to further review and determination by the Commission. Tr. 2025-26 (Zadlo).

v. The Company will provide a copy of its final emergency restoration plan to the Commission prior to commercial operation of the Project. See Staff Report, Ex. 200 at 66; Ex. 206, § IV.

vi. The 14 specific standards relating to the construction of the Project and the clearing of vegetation are accepted. These conditions were based upon recommendations in the Staff Report, as modified by subsequent agreements by the Company and Staff. See Staff Report, Ex. 200 at 67-68; Ex. 206, § V.

vii. The six conditions with regard to a variety of future maintenance and repair practices, as well as right-of-way maintenance after construction is completed, are accepted. The Company will notify all landowners in writing of its Transmission Vegetation Management Policy, and to meet with landowners regarding the use of herbicides. See Staff Report, Ex. 200 at 68-69; Ex. 206, § VI.

viii. The seven conditions regarding ROW acquisition and how interactions with landowners will occur are accepted. The CCN issued in this case is limited to the construction of the line in the location specified in the Application and as represented to landowners on aerial photographs provided to them by the Company. "Application" in this context incorporates the Company's pre-filed testimony, including the Direct Testimony of James G. Puckett (Ex. 119), which attached the 2014 Routing Study and its June 2016 Addendum (Schedules 1-2).

ix. If a written agreement is obtained from the landowner or the Company obtains a variance from the Commission for a particular property, the CCN will conform to such agreement or variance. Minor deviations to the location of the line not exceeding 500 feet will be permitted as a result of surveying, final engineering and design, and landowner consultation, so long as the line and required easements stay within the property boundaries of that landowner and do not involve a new landowner. See Staff Report, Ex. 200 at 43, 69; Ex. 206, § VII. Such minor deviations may be necessary to move the line in order to address safety issues, cultural sites, or environmental or other conditions that may be encountered in the final siting of the line. See Tr. 923-24 (Berry).

B. Grain Belt Express - Rockies Express Pipeline Conditions

4. The conditions that Grain Belt Express agreed to in response to data requests served by Rockies Express Pipeline LLC, reflected in Exhibit 205 (several of which reflect the agreements with Staff in Section III ("Nearby Utility Facilities") of Exhibit 206), are accepted.

C. Incorporating the Landowner Protocol into ROW Easements

5. In addition to the foregoing conditions, Grain Belt Express will incorporate the terms and obligations of the Missouri Landowner Protocol in the easement agreements with landowners. See Tr. 411-13 (Lanz); Ex. 114 at 5 (Lanz Surrebuttal). The Company further will would follow the Protocol as a condition to the CCN. Tr. 158 (Skelly).

D. Staff Conditions Not Agreed to by the Company

6. Staff proposed three conditions earlier in the case that Grain Belt Express did not agree to. The first condition was that the Company not seek RTO cost allocation for any portion of the Project under any circumstances and not to present such a request to the Commission in a future proceeding. See Staff Report, Ex. 200 at 30-31). Although the Company has stated that it

has no present intention to seek cost allocation, it wishes to retain the ability to ask the Commission to review any RTO cost-allocation proposal based upon the standard cost-allocation process that RTOs follow. See Ex. 104 at 9 (Berry Direct); Ex. 105 at 4 & Sched. DAB-9 at 11 (Berry Surrebuttal); Tr. 925-26 (Berry). Because the Commission would determine whether such a cost allocation proposal benefits Missouri electric utility customers and have the authority to deny such a request, Staff's condition is not necessary.

7. Staff's second condition was that the Company submit a modified plan to address congestion issues should ATXI's Mark Twain Project not proceed as planned. See Staff Report, Ex. 200 at 7. Given that the Mark Twain Project has been granted a CCN by this Commission and is proceeding, and that Grain Belt Express has agreed to cooperate with any RTO-sponsored system planning related to the Mark Twain Project, this condition is not necessary. See Ex. 105, Sched. DAB-9 at 11 (Berry Surrebuttal).

8. Finally, Staff requested that the Grain Belt Express plan to establish a decommissioning fund for the Project begin when it commences commercial operation. See Staff Report, Ex. 200 at 44-45. There has never been a decommissioning fund established in the United States with regard to any electric transmission project. Tr. 1355 (Beck). The Company's plan to set up the first such decommissioning fund would occur no earlier than the 20th anniversary of the completion of the Project, with the advice of an independent engineering firm that could then more accurately estimate the cost of such a fund. See Ex. 113 at 12-13 & Sched. DKL-1 at 7 (Lanz Direct); Tr. 942-43 (Berry). As Staff witness Mr. Beck stated, this Commission has never required a decommissioning fund in connection with granting a CCN to a transmission line. Tr. 1354. He was only aware of decommissioning funds being established regarding nuclear generating plants, and was aware of no transmission line ever being decommissioned in its first 20 years of operation.

Tr. 1354-55 (Beck). Transmission lines present different circumstances than nuclear generating plants, particularly with regard to radioactive fuel, and related storage and disposal issues. See Ex. 114 at 9 (Lanz Surrebuttal). Consequently, there is no need to modify the Company's plan to establish a decommissioning fund for the Project.

E. Commission Question Regarding Conditioning the CCN on the Operational Readiness of the Missouri Converter Station

9. Under Section 393.170.1, a CCN is required for an "electrical corporation … [to] begin construction of … electric plant …." Under Section 386.020(14) "electric plant" includes assets like the Missouri converter station and the transmission line itself. Therefore, a CCN, even with conditions, must be issued so that the Grain Belt Express Project can be constructed.

10. Conditioning the CCN on the Company's constructing the proposed Missouri converter station to be capable of the actual delivery of 500 MW of wind power to the converter station is consistent with the Section II(1) of the Conditions that Staff and the Company agreed to regarding pre-operational compliance with NERC standards and other safety requirements in Ex. 206, as well as with the general concept of new plant fulfilling in-service criteria. This also is consistent with Section III(2)-(3) of Ex. 206 regarding certain demonstrations that must be made with regard to nearby utility facilities prior to the Project commencing operations.

11. Accordingly, the Commission conditions the CCN on the Company constructing the proposed Missouri converter station to be capable of the actual delivery of 500 MW of wind power to the converter station.

12. Granting a CCN to the Company with the appropriate conditions discussed above will assure that the Project proceeds in a manner that allows the Commission, Staff, and other parties to monitor its progress, as well as to assure that the Project is planned, constructed, and operated in the public interest.

F. Other Conditions

13. The Commission takes the following action regarding the conditions proposed by MLA and Farm Bureau.

14. MLA Condition 1 proposed that Grain Belt Express establish a decommissioning fund for the Project "from the beginning of construction" in a "detailed proposal" to be submitted to the Commission "at least six months before construction." For the reasons stated above, the Company's proposal in Section 8 of the Missouri Landowner Protocol to establish a fund no earlier than the 20th anniversary of the Project's completion, based upon the advice and guidance of an independent engineering firm that could then accurately estimate the cost of such a fund, is reasonable and will be approved. See Ex. 113 as 12-13 & Sched. DKL-1 at 7 (Lanz Direct); Ex. 141 at 5 (Skelly). MLA's condition will not be accepted.

15. MLA Condition 2 requested that the Landowner Protocol, the Agricultural Impact Mitigation Protocol, and the Code of Conduct be incorporated into the Company's Easement Agreement and made a condition of the CCN. Grain Belt Express has agreed to do so. See Tr. 411-13 (Lanz); Ex. 114 at 5 (Lanz Surrebuttal); Tr. 158 (Skelly); Ex. 144 at 4 (Detweiler Supp. Direct); Tr. 1979-81 (Detweiler). This condition will be accepted.

16. MLA Condition 3 requested that Grain Belt Express agree that there will be no reduction to its highest and best offer in the event of an arbitration or a court proceeding. The Company agreed that the methodology for determining payments to landowners would not be changed during an arbitration proceeding or a court case. Tr. 417-18 (Lanz). As Grain Belt Express has agreed that it will not change its structure for determining compensation in an arbitration proceeding or in a Circuit Court case, this condition will be accepted.

17. MLA Condition 4 proposed two modifications to the Easement Agreement language. The first proposal concerns the Company's agreement to pay landowners for

agricultural-related impacts resulting from the Project, regardless of when they occur and without any cap on the amount of damages. See Sched. DKL-1, Missouri Landowner Protocol, §3.3, Ex. 113 (Lanz Direct). This language is already contained in the Landowner Protocol which Grain Belt Express has agreed to incorporate into the Easement Agreement. Tr. 158 (Skelly; Tr. 411-13 (Lanz).

18. The second proposed modification of MLA Condition 4 is to remove the words "gross negligence" from Section 11(c) of the Easement Agreement. Removing this phrase from the Easement Agreement could allow landowners to commit grossly negligent acts or engage in other conduct that does goes beyond simple negligence and demonstrates complete indifference to or conscious disregard for the safety of others. Because MLA's proposal could result in the Company's facilities within the easement right-of-way being damaged without landowners bearing any responsibility for their grossly negligent conduct, it will not be accepted.

19. MLA Condition 5 proposed that any construction on the Project be forbidden until the Company obtains "a final non-appealable order from the Illinois Commerce Commission allowing it to build the Illinois section of the line," and requires the Company to return to this Commission for further proceedings if such a "non-appealable" order is not obtained within four years from the final order in this case. Both the Company and Invenergy have committed that if there are any material changes in the design and engineering of the Project from what is contained in the Application, Grain Belt Express will file an updated application subject to further review and determination by the Commission. See Reply Brief of Applicant at 46 (Apr. 24, 2017); Ex. 147 at 5-6 (Zadlo Supp. Surrebuttal); Tr. 2025-26 (Zadlo). Additionally, the Company and Staff have agreed to an additional condition that if the financial commitments required by Section I of Exhibit 206 are not obtained within five years of the date that involuntary easements are recorded,

Grain Belt Express will return possession of the easement to the title holder and cause the dissolution of the easement to be recorded. See Staff Brief at 34; Grain Belt Express Brief at 30. Because these additional conditions do not provide any benefit to Missouri consumers, but instead would create unnecessary legal and regulatory barriers for the Project, they are not necessary and will not be accepted.

20. Farm Bureau likewise proposed that a decommissioning fund be set up "from the inception of the project." For the reasons discussed above, this condition will not be accepted.

21. Farm Bureau also proposed that if the Commission grants a line CCN to Grain Belt Express, it prohibit the Company from exercising the power of eminent domain. Because issues regarding eminent domain are not pertinent to the Commission's duties under Section 393.170, and are beyond its authority as a matter of law, the condition will not be accepted. Any review of the law under which the state has delegated the power of eminent domain to electrical corporations and other private entities is a matter for the General Assembly, not this Commission which has no power to alter state statutes.

IV. WAIVERS

1. Pursuant to 4 CSR 240-2.060(4)(B), the Commission may waive a rule for good cause. "Good cause means a good faith request for reasonable relief."[50] The Company requested that the Commission waive the reporting requirements of 4 CSR 240-3.145, 4 CSR 240-3.165, 4 CSR 240-3.175, and 3.190(1), (2) and (3)(A)-(D).

2. Staff stated in its 2017 Brief that the "Commission should find that there is good cause to relieve Grain Belt from the filing and reporting requirements" as requested.[51] We agree

[50] In re Application of Transource Missouri, LLC for a Certificate of Convenience and Necessity, Case No. EA-2013-0098, Report and Order at 9 (Aug. 7, 2013), citing American Family Ins. v. Hilden, 936 S.W.2d 207, 210 (Mo. App. W.D. 1996).
[51] See Staff Brief at 28 (Apr. 10, 2017).

with Staff that "these requirements are intended for ratemaking, but this Commission will have no jurisdiction over Grain Belt's rates because it will have no retail customers," and, therefore, waiver of the requirements is appropriate as they "would impose a burden on Grain Belt with little commensurate benefit." Id.

3. Grain Belt Express agreed in Paragraph 76 of the Application to file with the Commission its annual report that is filed at the Federal Energy Regulatory Commission, which complies with 4 CSR 240-3.165. Because the Missouri Facilities will not provide retail service to end-use customers and will not be rate-regulated by the Commission, good cause exists to waive these requirements, and no public utility will be affected by their waiver. See Application at ¶ 78.

4. Accordingly, Grain Belt Express has demonstrated the necessary good cause for the Commission to waive the reporting requirements of 4 CSR 240-3.145, 4 CSR 240-3.175, and 3.190(1), (2) and (3)(A)-(D). The Commission waives these requirements in issuing the CCN in this case.

January 18, 2019

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ATTORNEYS FOR GRAIN BELT EXPRESS CLEAN LINE LLC

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing was served upon all parties of record by email or U.S. mail, postage prepaid, this 18th day of January 2019.

/s/ Karl Zobrist
Attorney for Grain Belt Express Clean Line LLC