CIVIL PROCEDURE FORM NO. 8-A(2)

~~IN THE _____ JUDICIAL CIRCUIT,~~ PUBLIC SERVICE COMMISSION ~~COUNTY, MISSOURI~~

Judge or Division: PSC **Judge Michael Bushmann**	**Circuit Court Case Number:** **MO. Public Service Commission File No. EA-2016-0358**	
Plaintiff/Petitioner: **Missouri Farm Bureau Federation**	Appellate Number:	☐ Filing as an Indigent
	Date of Judgment/Decree/Order: (ATTACH A COPY) **March 20, 2019**	Court Reporter: **Various**
vs.	Date Post Trial Motion Filed: **April 18, 2019**	☐ Sound Recording Equipment
Defendant/Respondent: **Missouri Public Service Commission**	Date Ruled Upon: **April 24, 2019**	The Record on Appeal will consist of: ___ Legal File only or **X** Legal File and Transcript

(Date File Stamp)

Notice of Appeal to Missouri Court of Appeals - Civil

District: ☒ Western ☐ Eastern ☐ Southern

Notice is given that **Missouri Farm Bureau Foundation** appeals from the judgment/decree/order entered in this action on **March 20, 2019** (date).

Appellant's Name (If multiple, list all or attach additional pages) **Missouri Farm Bureau Federation**	Respondent's Name (If multiple, list all or attach additional pages) **Missouri Public Service Commission**
Address **701 S. Country Club Drive** **Jefferson City, MO 65109**	Address **PO Box 360** **Jefferson City, MO 65102**
Appellant's Attorney/Bar Number (If multiple, list all or attach additional pages) **Brent E. Haden** **MO Bar # 54148**	Respondent's Attorney/Bar Number (If multiple, list all or attach additional pages) **Kevin A. Thompson** **MO Bar # 36288**
Address **827 E. Broadway** **Columbia, MO 65201**	Address **PO Box 360** **Jefferson City, MO 65102**
E-mail Address **brent@hadenlaw.com**	E-mail Address **Kevin.Thompson@psc.mo.gov**
Telephone **573-442-3535**	Telephone **573-751-6514**

Brief Description of Case (May be completed on a separate page)

Grain Belt Express Clean Line LLC ("Grainbelt") has filed an Application for a certificate of convenience and necessity with the Missouri PSC. Missouri Farm Bureau Federation intervened as a party in the case before the PSC. The PSC issued its Report and Order on March 20, 2019 approving Grainbelt's application. Missouri Farm Bureau Federation files this appeal of the PSC's Report and Order of March 20, 2019 approving Grainbelt's application.

Issues Expected To Be Raised On Appeal (May be completed on a separate page. Appellant is not bound by this list.)

Missouri Farm Bureau expects to raise the follwing issues on appeal:

1. Whether the PSC may legally grant a certificate of convenience and necessity to Grainbelt, in that:

a. Grainbelt is not indiscriminately offering power to the public, and therefore is not "an electrical corporation" under Missouri law, and

b. Grainbelt has no asset that would qualify as an "electric plant", and therefore is not an "electrical corporation" under Missouri law and is outside the jurisdiction of the PSC.

Signature of Attorney or Appellant	Date **5/23/2019**

Certificate of Service on Persons other than Registered Users of the Missouri eFiling System

I certify that on _____ (date), a copy of the foregoing was sent to the following by facsimile, hand-delivery, electronic mail or U.S. mail postage prepaid to their last known addresses.

_____

_____

_____

_____
Appellant or Attorney for Appellant

Directions to Clerk

Transmit a copy of the notice of appeal and all attached documents to the clerk of the Court of Appeals and to any person other than registered users of the eFiling system in a manner prescribed by Rule 43.01. Clerk shall then fill in the memorandum below. See Rule 81.08(i). Forward the docket fee to the Department of Revenue as required by statute.

Memorandum of the Clerk

I have this day served a copy of this notice by ☐ regular mail ☐ registered mail ☐ certified mail ☐ facsimile transmission to each of the following persons at the address stated below. If served by facsimile, include the time and date of transmission and the telephone number to which the document was transmitted.

_____

_____

_____

_____

_____

_____

I have transmitted a copy of the notice of appeal to the clerk of the Court of Appeals, _____ District.

☐ Docket fee in the amount of $70.00 was received by this clerk on _____ (date) which will be disbursed as required by statute.

☐ No docket fee was received because:

☐ a docket fee is not required by law under _____ (cite specific statute or other authority).

☐ a motion to prosecute the appeal in forma pauperis was received on _____ (date) and was granted on _____(date).

_____
Date

_____
Clerk

Additional Parties and Attorneys

List every party involved in the case not listed on page 1, indicate the position of the party in the circuit court (e.g. plaintiff, defendant, intervenor) and in the Court of Appeals (e.g. appellant or respondent) and the name of the attorney of record, if any, for each party. Attach additional pages to identify all parties and attorneys if necessary.

Party Name	Attorney Name
Address	Address
City, State, Zip Code	City, State, Zip Code
	E-mail Address
	Telephone
Party Name	Attorney Name
Address	Address
City, State, Zip Code	City, State, Zip Code
	E-mail Address
	Telephone
Party Name	Attorney Name
Address	Address
City, State, Zip Code	City, State, Zip Code
	E-mail Address
	Telephone
Party Name	Attorney Name
Address	Address
City, State, Zip Code	City, State, Zip Code
	E-mail Address
	Telephone

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 345kV Transmission Line	)))))))	**File No. EA-2016-0358**

REPORT AND ORDER ON REMAND

Issue Date: March 20, 2019

Effective Date: April 19, 2019

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 345kV Transmission Line	)))))))	**File No. EA-2016-0358**

REPORT AND ORDER ON REMAND

TABLE OF CONTENTS

APPEARANCES[1]

GRAIN BELT EXPRESS CLEAN LINE, LLC:

Karl Zobrist and **Jacqueline M. Whipple**, Dentons US LLP, 4520 Main Street, Suite 1100, Kansas City, Missouri 64111.

Frank A. Caro, Jr., Anne E. Callenbach, and **Andrew O. Schulte**, Polsinelli PC, 900 W. 48th Place, Suite 900, Kansas City, Missouri 64112.

STAFF OF THE MISSOURI PUBLIC SERVICE COMMISSION:

Kevin Thompson, Chief Staff Counsel, Post Office Box 360, Governor Office Building, 200 Madison Street, Jefferson City, Missouri 65102.

MISSOURI LANDOWNERS ALLIANCE, EASTERN MISSOURI LANDOWNERS ALLIANCE d/b/a SHOW ME CONCERNED LANDOWNERS, CHARLES AND ROBYN HENKE, R. KENNETH HUTCHINSON, MATTHEW AND CHRISTINA REICHERT and RANDALL AND ROSEANNE MEYER:

Paul A. Agathen, 485 Oak Field Ct., Washington, Missouri 63090.

MISSOURI JOINT MUNICIPAL ELECTRIC UTILITY COMMISSION:

Douglas L. Healy, Peggy A. Whipple, and **Penny M. Speake,** Healy Law Offices, LLC, 3010 E. Battlefield, Suite A, Springfield, Missouri 65804.

ROCKIES EXPRESS PIPELINE LLC:

Colly J. Durley and **Sarah E. Giboney,** Smith Lewis, LLP, Suite 200,111 South Ninth Street, PO Box 918, Columbia, Missouri 65205-0918.

SIERRA CLUB AND NATURAL RESOURCES DEFENSE COUNCIL:

Henry B. Robertson, Great Rivers Environmental Law Center, 800 N. Fourth St., Suite 800, St. Louis, Missouri 63102.

CLEAN GRID ALLIANCE AND THE WIND COALITION:

Sean R. Brady, Senior Counsel & Regional Policy Manager, PO Box 4072, Wheaton, Illinois 60189-4072.

[1] The following parties did not participate in the remand evidentiary hearing or file a brief: Walmart Stores, Inc., Missouri Industrial Energy Consumers, IBEW Unions Local 2 and 53, Missouri AFL-CIO, and the Missouri Retailers Association.

Deirdre Kay Hirner, Hirner Associates LLC, 2603 Huntleigh Place, Jefferson City, Missouri 65109.

ENGIE NORTH AMERICA, INC.:

Terri Pemberton, Cafer Pemberton LLC, 3321 SW Sixth Avenue, Topeka, Kansas 66606.

RENEW MISSOURI ADVOCATES:

Timothy Opitz, 409 Vandiver Dr., Bldg. 5, Suite 205, Columbia, Missouri 65202.

MISSOURI FARM BUREAU:

Brent E. Haden, 827 E. Broadway, Suite B, Columbia, Missouri 65201.

THE OFFICE OF THE PUBLIC COUNSEL:

Marc D. Poston, Public Counsel, PO Box 2230, Jefferson City, Missouri 65102.

MISSOURI DEPARTMENT OF ECONOMIC DEVELOPMENT:

Michael Lanahan, 301 W. High Street, Jefferson City, Missouri 65102.

CONSUMERS COUNCIL OF MISSOURI:

John B. Coffman, 871 Tuxedo Boulevard, St. Louis, Missouri 63119.

SENIOR REGULATORY LAW JUDGE: Michael Bushmann

REPORT AND ORDER ON REMAND

I. Procedural History

On August 30, 2016, Grain Belt Express Clean Line LLC ("Grain Belt") filed an application with the Missouri Public Service Commission ("Commission"), pursuant to Section 393.170.1, RSMo[2], 4 CSR 240-2.060 and 4 CSR 240-3.105(1)(B), for a certificate of convenience and necessity ("CCN") to construct, own, operate, control, manage and maintain a high voltage, direct current transmission line and associated facilities within Buchanan, Clinton, Caldwell, Carroll, Chariton, Randolph, Monroe and Ralls Counties, Missouri, as well as an associated converter station in Ralls County.

The Commission issued notice of the application and provided an opportunity for interested persons to intervene. The Commission granted intervention to the following parties: Missouri Landowners Alliance and Eastern Missouri Landowners Alliance d/b/a Show Me Concerned Landowners (collectively, "Landowners"); Missouri Joint Municipal Electric Utility Commission ("MJMEUC"); Missouri Farm Bureau Federation; Missouri Department of Economic Development; Matthew and Christina Reichert; Randall and Roseanne Meyer; Charles and Robyn Henke; R. Kenneth Hutchinson; Rockies Express Pipeline LLC; Sierra Club; Natural Resources Defense Council; The Wind Coalition; Clean Grid Alliance (f/k/a Wind on the Wires); Infinity Wind Power[3]; Walmart Stores, Inc.; Missouri Industrial Energy Consumers; Renew Missouri Advocates; International Brotherhood of Electrical Workers Locals 2 and 53; Consumers Council of Missouri; Missouri Retailers Association; and Missouri AFL-CIO. The Commission granted the petitions of Energy for Generations, LLC and SSM Health Care Corporation to file amicus curiae briefs.

[2] All statutory references are to the Missouri Revised Statutes (2016), as revised, unless otherwise noted.
[3] On November 20, 2018, the Commission granted a motion to substitute ENGIE North America, Inc. ("ENGIE") as a party in this proceeding for Infinity Wind Power.

The Commission conducted local public hearings for members of the general public in each of the eight counties where the proposed transmission line would be located.[4] The Commission held an evidentiary hearing on March 20-24, 2017.[5] The parties submitted initial, reply, and supplemental post-hearing briefs. After the filing of two post-hearing motions[6], oral arguments were conducted on August 3, 2017.[7] On August 16, 2017, the Commission issued a Report and Order denying Grain Belt's application for a CCN after concluding that the Commission lacked the statutory authority to issue the CCN based on a decision by the Missouri Court of Appeals for the Western District ("ATXI")[8] because Grain Belt had not obtained the necessary county assents under Section 229.100, RSMo. However, four Commissioners also signed a concurring opinion stating that they would have granted Grain Belt's application had it not been for the Western District's ATXI decision, which the Commission found compelled denial of the application based on lack of statutory authority.

On appeal, the Missouri Court of Appeals for the Eastern District determined that the Commission erred in finding it could not lawfully grant a line CCN to Grain Belt under Section 393.170.1, RSMo, due to Grain Belt's lack of county assents, but transferred the case to the Supreme Court of Missouri.[9] The Supreme Court of Missouri concluded that the Commission had erred in finding it could not lawfully grant a CCN to Grain Belt,

[4] Transcript, Vols. 2-9. The public hearings were conducted in Buchanan, Clinton, Caldwell, Carroll, Chariton, Randolph, Monroe, and Ralls counties.
[5] Transcript, Vols. 10-19. The Commission admitted the testimony of 54 witnesses and 135 exhibits into evidence during the evidentiary hearing.
[6] Missouri Landowner Alliance's Motion to Dismiss Application filed on July 4, 2017 and Grain Belt's Motion for Waiver or Variance of Filing Requirements filed on June 29, 2017.
[7] Transcript, Vol. 20. At the oral arguments, the Commission admitted four additional exhibits into the record and took official notice of Section 393.170, RSMo 1949.
[8] *Matter of Ameren Transmission Co. of Illinois*, 523 S.W.3d 21, 27 (Mo. Ct. App. 2017), *reh'g denied* (Apr. 27, 2017), *transfer denied* (Apr. 27, 2017), *transfer denied* (June 27, 2017), and *abrogated by Grain Belt Express Clean Line, LLC v. Pub. Serv. Comm'n*, 555 S.W.3d 469 (Mo. 2018).
[9] *Grain Belt Express Clean Line, LLC v. Pub. Serv. Comm'n*, No. ED 105932, 2018 WL 1055858, at *5 (Mo. Ct. App. Feb. 27, 2018).

abrogating that portion of the ATXI opinion regarding county assents, and remanded this case back to the Commission to determine whether Grain Belt's proposed transmission line project is necessary or convenient for the public service.[10]

During the remand evidentiary hearing held on December 18-19, 2018[11], the parties presented evidence relating to the following unresolved issues previously identified by the parties:

1. Does the evidence establish that the Commission may lawfully issue to Grain Belt the certificate of convenience and necessity it is seeking for the high-voltage direct current transmission line and converter station with an associated AC switching station and other AC interconnecting facilities?
2. Does the evidence establish that the high-voltage direct current transmission line and converter station for which Grain Belt is seeking a certificate of convenience and necessity are necessary or convenient for the public service, within the meaning of that phrase in Section 393.170, RSMo?
3. If the Commission grants the CCN, what conditions, if any, should the Commission impose?
4. If the Commission grants the CCN, should the Commission exempt Grain Belt from complying with the reporting requirements of Commission rules 4 CSR 240-3.145, 4 CSR 240-3.165, 4 CSR 240-3.175, and 4 CSR 240-3.190(1), (2) and (3) (A)-(D)?

[10] *Grain Belt Express Clean Line, LLC v. Pub. Serv. Comm'n*, 555 S.W.3d 469, 474 (Mo. 2018), *reh'g denied* (Aug. 21, 2018).
[11] Transcript ("Tr."), Vols. 22-24. The Commission admitted the testimony of 12 witnesses and 16 exhibits into evidence during the remand evidentiary hearing.

The parties submitted initial and reply post-hearing briefs following the remand evidentiary hearing, and the case was deemed submitted for the Commission's decision after the filing of briefs when the Commission closed the record.[12] On February 15, 2019, the Landowners filed a motion to offer an additional exhibit into the record of the case, and this motion is discussed below.

II. Findings of Fact

Any finding of fact for which it appears that the Commission has made a determination between conflicting evidence is indicative that the Commission attributed greater weight to that evidence and found the source of that evidence more credible and more persuasive than that of the conflicting evidence.

A. Project Description

1. Grain Belt is a limited liability company organized under the laws of the State of Indiana. Grain Belt 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 Energy Partners LLC ("Clean Line").[13]

2. Grain Belt filed its application for a CCN pursuant to Section 393.170.1, RSMo, and Commission administrative rules.[14]

3. The Staff of the Missouri Public Service Commission ("Staff") is a party in all Commission investigations, contested cases and other proceedings, unless it files a

[12] "The record of a case shall stand submitted for consideration by the commission after the recording of all evidence or, if applicable, after the filing of briefs or the presentation of oral argument." Commission Rule 4 CSR 240-2.150(1).
[13] Ex.100, Skelly Direct, p. 3.
[14] Ex. 100, Skelly Direct, p. 4.

notice of its intention not to participate in the proceeding within the intervention deadline set by the Commission.[15] Staff participated in this proceeding.

4. The transmission line proposed to be constructed by Grain Belt in the application is an approximately 780-mile, overhead, multi-terminal +600 kilovolt ("kV") high-voltage, direct current ("HVDC") transmission line and associated facilities (collectively, the "Project").[16]

5. The Project would traverse the states of Kansas, Missouri, Illinois and Indiana, including approximately 206 miles in Missouri.[17] The Project would deliver 500 megawatts ("MW") of wind-generated electricity from western Kansas to customers in Missouri, and another 3,500 MW to states further east.[18]

6. The Missouri portion of the Project would be located in the Missouri counties of Buchanan, Clinton, Caldwell, Carroll, Chariton, Randolph, Monroe, and Ralls.[19]

7. The Project would have three converter stations. One converter station would be located in western Kansas, where wind generating facilities would connect to the Project via alternating current ("AC") lines. The two other converter stations in eastern Missouri and eastern Illinois would deliver electricity to the AC grid through interconnections with transmission owners in the systems of Midcontinent Independent System Operator, Inc. ("MISO") and PJM Interconnection, LLC ("PJM"), respectively.[20] Power delivered at the PJM interconnection could be delivered to all the states along the Eastern coast.[21]

[15] Commission Rules 4 CSR 240-2.010(10) and (21) and 2.040(1).
[16] Ex. 100, Skelly Direct, p. 3.
[17] Ex. 100, Skelly Direct, p. 4.
[18] Ex. 108, Galli Direct, p. 4.
[19] Ex. 100, Skelly Direct, p. 4.
[20] Ex. 108, Galli Direct, p. 4-7; Ex. 104, Berry Direct, p. 4-5.
[21] Tr. Vol. 12, p. 481.

8. Grain Belt proposes to construct the Missouri converter station and associated AC interconnecting facilities in Ralls County. This converter station will be located near Union Electric Company d/b/a Ameren Missouri's Montgomery-Maywood 345 kV transmission line, which will facilitate the interconnection to the energy market operated by MISO in eastern Missouri and other Midwestern and southern states.[22]

9. The Missouri converter station will have bi-directional functionality, allowing Missouri utilities an additional means to earn revenue from off-system sales of up to 500 MW of excess power into the PJM energy markets.[23] Energy injected at the Missouri converter station will be regulated by MISO to ensure reliability.[24]

10. The HVDC technology of the Project is the most cost-effective and efficient way to move large amounts of electric power over long distances and can transfer significantly more power with lower line losses over longer distances than comparable AV lines.[25] The HVDC design will provide a congestion-free delivery source of power, unlike using an interconnected AC system to move power.[26]

11. The Project's development, construction, and operations costs would be borne by the investors in Grain Belt and the transmission customers. The Project's costs would not be recovered through the cost allocation process of any regional transmission organization approved by the Federal Energy Regulatory Commission ("FERC").[27]

[22] Ex. 100, Skelly Direct, p. 4; Ex. 108, Galli Direct, p. 4, 6; Ex. 119, Puckett Direct, p. 14.
[23] Ex. 100, Skelly Direct, p. 8.
[24] Tr. Vol. 12, p. 509.
[25] Ex. 108, Galli Direct, p. 7-8.
[26] Ex. 108, Galli Direct, p. 9.
[27] Ex. 100, Skelly Direct, p. 7; Ex. 104, Berry Direct, p. 8.

12. The Project is a participant-funded, “shipper pays” transmission line. Grain Belt would recover its capital costs by entering into voluntary, market-driven contracts with entities that want to become transmission customers of the Project.[28]

13. Grain Belt would offer transmission service through an open access transmission tariff that would be filed with and subject to the jurisdiction of FERC under the Federal Power Act and FERC regulations. Grain Belt customers would consist principally of wind energy producers in western Kansas and wholesale buyers of electricity, such as utilities, competitive retail energy suppliers, brokers, and marketers.[29]

14. The Project would not provide service to end-use customers or provide retail service in Missouri, so the Project would be rate-regulated by FERC and not by the Commission.[30]

15. Under FERC requirements, Grain Belt must broadly solicit interest in the Project, the rates negotiated must be just and reasonable and without undue discrimination or preference, and the service must not impair regional reliability and operational efficiency.[31]

16. FERC has specifically found Grain Belt’s process to select customers and allocate capacity to be “not unduly discriminatory”.[32]

17. The Project will cross the property of approximately 570 landowners in Missouri.[33]

[28] Ex. 100, Skelly Direct, p. 12; Ex. 104, Berry Direct, p. 8; Ex. 111, Kelly Direct, p. 4.
[29] Ex. 100, Skelly Direct, p. 23-24; Ex. 104, Berry Direct, p. 6; Ex. 111, Kelly Direct, p. 4-5.
[30] Ex. 100, Skelly Direct, p. 24; Ex. 322.
[31] Transcript, Vol. 22, p. 2039-40.
[32] Ex. 322, 147 F.E.R.C. ¶61,098, p.10, paragraph 23 (May 8, 2014).
[33] Tr. Vol. 12, p. 438.

18. Grain Belt has acquired 39 easements for the transmission line from Missouri landowners.[34]

19. Grain Belt uses a standard form of agreement when acquiring easement rights from Missouri landowners. The agreement includes the right to construct, operate, repair, maintain, and remove an overhead transmission line and related facilities, along with rights of access to the right-of-way for the transmission line.[35]

20. The easement agreement limits the landowner's legal rights and use of the easement property, including prohibiting any landowner activity that would interfere with Grain Belt's use of the easement.[36]

B. Need for the Project

21. MJMEUC is a joint action agency and a public and corporate body of the State of Missouri authorized by legislation to: (1) construct, operate, and maintain transmission and generation facilities for the production and transmission of electric power for its members, (2) purchase and sell electric power and energy, and (3) enter into agreements with any person for the transmission of electric power. It is organized to promote efficient wheeling, pooling, generation, and transmission arrangements to meet the power and energy requirements of municipal utilities.[37]

22. MJMEUC has 68 Missouri municipal utility members, and Citizens Electric Corporation, a rural electric cooperative with more than 21,000 customers, is an advisory

[34] Tr. Vol. 24, p. 2143, 2145.
[35] Ex. 113, Lanz Direct, p. 15-16, Schedule DKL-4.
[36] Ex. 113, Lanz Direct, Schedule DKL-4, Sections 4, 9, and 13.
[37] Ex. 475, Kincheloe Rebuttal, p. 3.

member of MJMEUC. Together, MJMEUC's members serve some 347,000 retail electric customers in Missouri, and their combined peak load is approximately 2,600 MW.[38]

23. The Missouri Public Energy Pool ("MoPEP") is a group of 35 Missouri cities for which MJMEUC provides full requirements for wholesale energy, capacity, and ancillary services.[39]

24. MJMEUC's wholesale customers, including MoPEP, have a demand for affordable renewable energy, as some are leaders within Missouri in providing renewable energy to their customers.[40]

25. MoPEP is oversubscribed in its ability to offer renewable energy and cannot meet the needs of its city members until it adds additional renewable resources.[41]

26. While MJMEUC owns generation that supplies some of its members' energy needs, MJMEUC has primarily used purchase power agreements and transmission service agreements with other utilities to provide energy to its members.[42]

27. On June 2, 2016, MJMEUC entered into a transmission service agreement with Grain Belt. Under the agreement, MJMEUC agreed to purchase a minimum of 100 MW and up to 200 MW of firm transmission capacity rights on the Project from Grain Belt's western converter station in Ford County, Kansas to the converter station in Missouri for the benefit of its existing full-requirements pool members and other members. In addition, MJMEUC agreed to purchase 25 MW of capacity (with the option to purchase another 25 MW) from the Missouri converter station to the Sullivan Substation in PJM. This allows

[38] Ex. 475, Kincheloe Rebuttal, p. 3.
[39] Ex. 475, Kincheloe Rebuttal, p. 4; Schedule DK-1.
[40] Ex. 475, Kincheloe Rebuttal, p. 5; Tr. p. 1113.
[41] Tr. Vol. 16, p. 1112.
[42] Ex. 475, Kincheloe Rebuttal, p. 2.

MJMEUC utilities the ability to directly make off-system sales into the PJM market and derive additional financial benefits.[43]

28. MJMEUC subsequently executed a power purchase agreement with Iron Star Wind Project, LLC ("Iron Star") which would allow Kansas wind energy to flow across Grain Belt's transmission line and into MISO where MoPEP and individual MJMEUC members can deliver that renewable energy to their customers.[44] On February 20, 2018, Iron Star was acquired from Infinity Wind Power by ENGIE North America, Inc., but that transaction did not change any of the terms or conditions of the power purchase agreement with MJMEUC.[45]

29. In 2021, MoPEP's contract with Illinois Power Marketing Company providing 100 MW of coal energy and capacity to MoPEP will expire.[46] MJMEUC's agreements with Grain Belt and Iron Star would help MoPEP to replace the energy from Illinois Power Marketing Company with more affordable renewable energy.[47]

30. In December 2016, MoPEP committed to purchase 60 MW of wind energy over the Grain Belt transmission line.[48]

31. The following Missouri cities have also contracted to purchase Kansas wind energy delivered over the Grain Belt transmission line: City of Kirkwood-25MW; City of Hannibal-15MW; City of Columbia-35MW; and City of Centralia-1MW. These contracts, when combined with the MoPEP agreement, commit at least 136 MW of wind energy available to MJMEUC through its transmission service agreement with Grain Belt.[49]

[43] Ex. 115, Lawlor Direct, p. 2-3; Schedule MOL-1.
[44] Ex. 475, Kincheloe Rebuttal, p. 2; Ex. 476, Grotzinger Rebuttal, Schedule JG-4HC.
[45] Ex. 878, Riley Supp. Direct, p. 2-3.
[46] Ex. 475, Kincheloe Rebuttal, p. 4.
[47] Ex. 475, Kincheloe Rebuttal, p. 4-5.
[48] Tr. Vol. 16, p. 995-996, 1004-1005; Ex. 478.
[49] Tr. Vol. 16, p. 990-991, 995-996; Ex. 479; Tr. Vol. 24, p. 2114.

32. MJMEUC is contractually obligated under the power purchase agreement with Iron Star to take electric power and pay for it, assuming the Project is built and available for service.[50]

33. On November 12, 2018, MJMEUC and Grain Belt entered into an Interim Agreement and Amendment to their transmission service agreement. The amendment reduced the transmission price for MJMEUC of the second tranche of electric energy to the same price as the first 100 MW of electric energy. This means that the entire 200 MW transmission service agreement price is $1,167/Mw-month, which is a 30% decrease in the price of the second 100 MW tranche (previously $1,667/Mw-month), and a 17.6% decrease in the overall cost of the full 200 MW transmission service agreement.[51]

34. MJMEUC witness John Grotzinger testified credibly that with regard to MoPEP's 60 MW of energy contracted to be generated by Iron Star and delivered to MoPEP through the transmission service agreement with Grain Belt, MoPEP cities will save over $11 million annually compared to its existing contract for Illinois coal resources.[52]

35. Mr. Grotzinger testified credibly that under the original Grain Belt transmission service agreement with MJMEUC, if MJMEUC were to use the entire 200 MW of energy it would save approximately $10 million per year for MJMEUC's wholesale customers in transmission charges alone, compared to SPP to MISO transmission rates.[53]

36. Considering the entire 200 MW of energy provided to MJMEUC through the amended Grain Belt transmission service agreement, the transmission cost savings from the Grain Belt Project versus a traditional SPP to MISO point-to-point service agreement

[50] Tr. Vol. 16, p. 1001-1002.
[51] Ex. 480, Grotzinger Supp. Direct, p. 1-2, Schedule JG-9; Tr. Vol. 24, p. 2115.
[52] Ex. 480, Grotzinger Supp. Direct, p. 3, Schedule JG-13.
[53] Ex. 476, Grotzinger Rebuttal-HC, p. 4-5, Schedule JG-3; Tr. Vol. 16, p. 1108.

are approximately an additional $2.8 million annually. Those additional savings are derived from (1) the additional decrease in costs of the amended Grain Belt transmission service agreement, and (2) the costs of SPP to MISO point-to-point transmission service having risen from $2,880/Mw-month to the current rate of $3,800/Mw-month, which is more than three times as much as the Grain Belt transmission service agreement.[54]

37. The annual cost savings to MJMEUC member cities that participate in the Project will be dollar for dollar and will likely be passed through to their residential and industrial customers in the form of rate relief or invested in deferred maintenance to their electrical distribution systems.[55]

38. Grain Belt has a transmission service agreement with 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.[56]

39. Grain Belt held an open solicitation process in 2015 and 2016 to gauge the demand from energy generators in western Kansas to fill the Project's line capacity to deliver wind energy to both MISO and PJM. The total capacity requested by the energy generators to both MISO and PJM delivery points of the Project was 20,825 MW, almost five times the total available capacity of the Project.[57]

40. Wal-Mart Stores, Inc. operates 158 retail units and four distribution centers and employs 44,356 associates in Missouri. In fiscal year ending 2016, Wal-Mart Stores,

[54] Ex. 480, Grotzinger Supp. Direct, p. 2, Schedule JG-10.
[55] Tr. Vol. 16, p. 1000-1001.
[56] Tr. Vol. 14, p. 914, 965.
[57] Ex. 104, Berry Direct, p. 24-25.

Inc. purchased $7.3 billion worth of goods and services from Missouri-based suppliers, supporting 59,953 supplier jobs.[58]

41. Wal-Mart Stores, Inc. has established aggressive and significant renewable energy goals, including: (1) to be supplied 100 percent by renewable energy, and (2) by 2025, to be supplied by 50 percent renewable energy. Additionally, Wal-Mart Stores, Inc. has set a science-based target to reduce emissions in its operations by 18 percent by 2025 through the deployment of energy efficiency and consumption of renewable energy.[59]

42. Wal-Mart Stores, Inc. has a demand for the additional renewable power that would be delivered by the Grain Belt Project into Missouri and PJM. In Missouri, Wal-Mart Stores, Inc. would work with Missouri utilities to develop programs to purchase significant quantities of grid-connected renewable energy. In the competitive retail markets east of Missouri, Wal-Mart Stores, Inc. would be able to directly contract for renewable power delivered by Grain Belt's Project to serve Wal-Mart Stores, Inc.'s facilities in those markets.[60]

43. Wind power transmitted to Missouri would be of interest to commercial and industrial customers, such as Missouri Industrial Energy Consumers and the Missouri Retailers Association.[61]

44. A number of large industrial, manufacturing, and consumer companies, such as General Mills, Target, General Motors, Proctor & Gamble, and Owens Corning, require

[58] Ex. 900, Chriss Rebuttal, p. 3.
[59] Ex. 900, Chriss Rebuttal, p. 3.
[60] Ex. 900, Chriss Rebuttal, p. 6-7.
[61] Ex. 800, Dauphinais Rebuttal, p. 4-5.

access to renewable energy as part of their corporate energy strategies and support the Grain Belt Project for that purpose.[62]

C. Applicant's Qualifications and Financial Ability

45. Grain Belt currently has no employees.[63]

46. Jonathan Abebe is a former employee of Clean Line and now is responsible for Grain Belt's transmission, engineering, and interconnection activities.[64] Mr. Abebe has over 14 years of experience in the electric transmission industry, ranging from power system planning, power system outage planning, asset management, and project development.[65]

47. Hans Detweiler is not now employed by Clean Line, but is currently acting as the lead developer of the Grain Belt Project.[66] While previously working for Clean Line, Mr. Detweiler led or advised on the development of all of Clean Line's electric transmission projects. In this role he was responsible for permitting, land acquisition, routing, and numerous other project development activities.[67]

48. Grain Belt has cash on hand, but not enough to complete either the development phase or construction of the Project.[68]

49. On November 9, 2018, Grain Belt Express Holding LLC entered into a Membership Interest Purchase Agreement ("Purchase Agreement") with Invenergy

[62] Tr. Vol. 10, p. 255-259; Ex. 100, Skelly Direct, Schedule MPS-3; Tr. Vol. 22, p. 1962-1963.
[63] Tr. Vol. 22, p. 1836, 1838, 1921.
[64] Ex. 143, Abebe Supp. Direct, p. 1; Tr. Vol. 22, p. 1887, 1890.
[65] Ex. 143, Abebe Supp. Direct, p. 2.
[66] Tr. Vol. 22, p. 1965, 1970.
[67] Ex. 144, Detweiler Supp. Direct, p. 1.
[68] Tr. Vol. 22, p. 1921-1922.

Transmission LLC ("Invenergy"), an affiliate of Invenergy, LLC, in which Invenergy will purchase Grain Belt.[69]

50. Also on November 9, 2018, Grain Belt Express Holding LLC and Invenergy entered into a Development Management Agreement ("Development Agreement") for Invenergy to provide development funding for the Project through the projected closing date of the Purchase Agreement.[70]

51. Invenergy (and its affiliate) is a U.S.-based company founded in 2001and is North America's largest privately held company that develops, owns, and operates large-scale renewable and other clean energy generation, energy storage facilities, and electric transmission facilities across North America, Latin America, Japan and Europe. 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. To date, Invenergy has developed more than 20,046 MW of large-scale wind, solar, natural gas, and energy storage facilities. This includes more than 10,896 MW of projects in operation, with more than 9,150 MW contracted or in construction.[71]

52. Following the closing of the Purchase Agreement, Invenergy will fund the development costs of the Project as its owner. At the end of the development phase of the Project, Invenergy will use project funding to construct the Project.[72]

53. Construction of the Project will not begin until all the financing necessary to build the Project has been obtained.[73]

---

[69] Ex. 142, Berry Supp. Direct, p. 3; Ex. 145, Zadlo Supp. Direct, p. 3-4, Schedule KZ-3C; Tr. Vol. 22, p. 1906-1907.
[70] Ex. 142, Berry Supp. Direct, p. 3; Ex. 145, Zadlo Supp. Direct, p. 3-4, Schedule KZ-4C.
[71] Ex. 145, Zadlo Supp. Direct, p. 6.
[72] Ex. 142, Berry Supp. Direct, p. 4.

54. Invenergy is not obligated to close on the Purchase Agreement unless (1) this Commission has approved the transaction proposed in the Purchase Agreement and has granted Grain Belt a certificate of convenience and necessity for the Project, and (2) the Kansas Corporation Commission has granted at least a 5 year extension of its certificate to Grain Belt and approved the change in ownership in the Purchase Agreement.[74]

55. Under the Development Agreement, Invenergy is contractually obligated to manage the business and affairs of the Project, and shall perform all services related to the development, ownership, and maintenance of the Project. Invenergy has care, custody, and control over the Project in all day-to-day activities, and has authorization to execute documents and act on behalf of Grain Belt.[75]

56. Invenergy is spending money now on development of the Project, and expects to spend up to $2 million over the next nine months on regulatory matters.[76] Invenergy projects that it will spend approximately $50 to $100 million on development of the Project before it can obtain funding from institutional investors.[77]

57. Invenergy's senior management executives, each with more than 25 years of experience in the energy generation industry, have worked together for more than two decades. Invenergy's project management team has extensive experience in construction of energy generation projects, contract negotiation, material procurement, right-of-way issues, utility interconnections, and construction of electrical transmission and substations.[78]

---

[73] Tr. Vol. 10, p. 279.
[74] Ex. 145, Zadlo Supp. Direct, p. 3-4, Schedule KZ-3C.
[75] Ex. 145, Zadlo Supp. Direct, Schedule KZ-4C.`
[76] Tr. Vol. 22, p. 2072-2074.
[77] Tr. Vol. 22, p. 2067.
[78] Ex. 145, Zadlo Supp. Direct, Schedule KZ-5.

58. Since 2001, Invenergy has built all required transmission and distribution lines, generator step-up transformers, and substations for its facilities in numerous regions, including within the regions managed by SPP, MISO and PJM. Invenergy developed, permitted and constructed this infrastructure across various terrains, state and local jurisdictions, and in vastly differing environmental and regulatory conditions. This experience has resulted in over 392 miles of high-voltage transmission lines, over 1,748 miles of distribution lines, 59 substations, and 73 generator step-up transformers.[79]

59. Invenergy and its affiliates have in excess of $9 billion in total assets and $3 billion in total equity on a consolidated basis (as of December 31, 2017).[80]

60. Over the last 17 years, Invenergy has raised more than $30 billion of financing in connection with the successful development of more than 20,046 MW in projects in the United States, Canada, Europe, Central America, and Japan. Invenergy maintains strong relationships with more than 60 financial institutions worldwide, including international and domestic banks, multilateral development banks, export credit agencies and pension funds. In the U.S. alone, Invenergy has financed and executed on projects in 23 states.[81]

61. Invenergy will fund the Project's capital needs during the development stage by using its cash on hand, and possibly equity capital from other investors. Invenergy's cash balance as of December 31, 2017, was approximately six times greater than Clean Line's cash balance as of the same date, and the book value of its equity is twenty times greater than Clean Line's equity.[82]

[79] Ex. 145, Zadlo Supp. Direct, p. 9.
[80] Ex. 146, Hoffman Supp. Direct, p. 3.
[81] Ex. 146, Hoffman Supp. Direct, p. 3.
[82] Ex. 211, Staff Revised Supp. Rebuttal Report, p. 7; Tr. Vol. 24, p. 2096-2097.

62. Invenergy plans to fund construction of the Project through credit agreements with lenders for debt financing obligations and equity contribution agreements with investors for equity commitments.[83]

63. Invenergy has demonstrated that it has the ability to raise capital for large energy projects through access to its vast network of private debt and equity investors.[84]

D. Economic Feasibility of the Project

64. The American transmission grid is divided into regional transmission systems for operational and rate-making purposes. Generally speaking, each region corresponds to the footprint of a utility or regional transmission organization, such as MISO, SPP, and PJM, that operates the regional transmission system. Electricity is transmitted at the same flat rate, called a "postage stamp rate," between all locations within a regional transmission system, regardless of how far the electrons have actually traveled. Within each transmission region, the transmission system operator is responsible for maintaining a balance between power and load by dispatching resources to meet demand.[85]

65. When the boundary of one regional transmission system abuts the boundary of another regional transmission system, this is called a "seam." Because there are usually a limited number of transmission connections across a seam boundary, regional seams can create congestion, limit the efficient use of electric infrastructure near the seam boundary, and cut off utilities from cost-effective generation resources, even those located geographically nearby, but on the other side of the seam. Transmitting energy across seams usually results in additive transmission costs, i.e. rate pancaking, where the transmission customer pays the postage stamp rate for both regions. The presence of

[83] Ex. 211, Staff Revised Supp. Rebuttal Report, p. 7-8.
[84] Ex. 211, Staff Revised Supp. Rebuttal Report, p. 10-11.
[85] Ex. 111, Kelly Direct, p. 15.

multiple transmission seams within Missouri has resulted in increased costs to consumers.[86]

66. The Grain Belt Project is an interregional transmission line because it will extend from Kansas to Indiana and cross the seams of three regions, SPP, MISO, and PJM.[87]

67. An interregional transmission line allows for low cost energy to be imported from a region with an excess of generation resources to a region with higher demand. The Grain Belt Project provides this benefit by moving wind power from Kansas (where there is an abundance of wind) into Missouri, MISO, and PJM, which will increase the supply of low-cost power in those markets.[88]

68. The interregional transmission line itself produces consumer benefits by providing an alternate pathway for electricity between and within regions. This additional path can reduce transmission congestion, which leads to lower congestion costs for utilities and reduces these utilities' cost to serve their load.[89]

69. Transmission customers can import or export power on the Project without incurring a "pancaked" transmission rate. Rate pancaking happens when power is transmitted across a regional seam using ordinary transmission. In that case, the customer has to pay the transmission charge in region one (region one's postage stamp rate), and the transmission charge in region two (region two's postage stamp rate). With a dedicated interregional line, however, the customer simply pays the transmission rate for that line, rather than each region's postage stamp rates. Avoiding pancaked rates decreases the

[86] Ex. 111, Kelly Direct, p. 15-16.
[87] Ex. 111, Kelly Direct, p. 16.
[88] Ex. 111, Kelly Direct, p. 16.
[89] Ex. 111, Kelly Direct, p. 18.

costs of importing and exporting power, which enables more, and more economically efficient, import and export of electricity between regions.[90]

70. The total cost of the Project will be approximately $2.35 billion, with the portion to be located in Missouri projected to cost $525 million.[91] These amounts do not include the $550 million cost of network upgrades required to interconnect the Project to the electric transmission grid, of which $21 million is estimated for upgrade costs in Missouri.[92]

71. Grain Belt 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.[93]

72. Since the Project will employ a participant-funded or "shipper pays" model under which the costs of the Project are imposed on shippers who use the Project, none of those costs will be recovered through the cost allocation process of MISO, PJM, or SPP. Accordingly, none of these costs will be passed through to Missouri ratepayers and will not result in an increase in the transmission component of their retail rates. Missouri retail customers will only incur costs related to the Project to the extent that their local utility voluntarily chooses to purchase transmission capacity on the Project or purchases power transmitted on the Project by a third party.[94]

[90] Ex. 111, Kelly Direct, p. 19.
[91] Ex. 100, Skelly Direct, p. 19; Tr. Vol. 22, p. 2006-2007.
[92] Ex. 100, Skelly Direct, p. 19; Ex. 143, Abebe Supp. Direct, p. 5.
[93] Ex. 104, Berry Direct, p. 3, 8; Ex. 100, Skelly Direct, p. 31-32; Ex. 145, Zadlo Supp. Direct, p. 7-11.
[94] Ex. 104, Berry Direct, p. 8; Ex. 100, Skelly Direct, p. 17; Ex. 111, Kelly Direct, p. 4-5.

73. Compared to wind energy from Kansas delivered to Missouri with the Grain Belt Project, wind energy generated in MISO and delivered to Missouri is substantially more expensive due primarily to transmission congestion costs.[95]

74. PJM operates the largest wholesale energy market in the world with 71 million customers.[96]

75. Power prices in PJM are generally $10.00/MWh higher than prices that would be paid for the 500 MW of energy sold over the Project into the MISO market in Missouri.[97]

76. There is a very strong corporate demand for renewable energy in PJM, which contributes to Grain Belt being able to charge higher prices for that energy in PJM.[98]

77. Western Kansas has some of the highest wind speeds in the country, routinely reaching between 8.5-9.0 meters per second at 80 meters above the ground, a typical hub height for wind turbines. Wind speeds in western Kansas are substantially higher than states to the east, such as Missouri, Illinois, and Indiana. Higher wind speeds lead to a higher capacity factor, meaning that the wind generator runs at a higher average percentage of its maximum power output.[99]

78. 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 almost double the power of a site in Missouri with a 7.0 meter/second average. This exponential effect substantially reduces the cost of wind energy produced by facilities located in areas with higher average wind speeds.[100]

---

[95] Tr. Vol. 14, p. 929-933.
[96] Tr. Vol. 14, p. 938.
[97] Tr. Vol. 14, p. 915, 963.
[98] Tr. Vol. 14, p. 915-916.
[99] Ex. 104, Berry Direct, p. 25-26, Schedule DAB-4.
[100] Ex. 104, Berry Direct, p. 26.

79. The State of Kansas offers two tax incentives, a ten-year property tax exemption and a sales tax exemption, that reduce the tax burden on generators in western Kansas and allow them to produce energy at lower cost.[101] Further, construction costs in Kansas are lower than in many other regions of the country, and continue to drop.[102] Because of these advantages, western Kansas wind farms can generate electricity at a lower cost than wind farms located farther east in Missouri, Illinois, Indiana, and other target markets for the Grain Belt Project.[103]

80. Grain Belt witness David Berry compared the Project's delivered cost of wind energy to Missouri to the cost of other energy alternatives by performing a levelized cost of energy analysis, which is the best financial technique to compare different energy generation sources.[104]

81. Mr. Berry testified credibly that the Project's total delivered cost of energy is less than other renewable or conventional energy alternatives, such as Missouri wind energy, Missouri utility-scale solar energy, and combined-cycle gas energy generation.[105] This result remained true after Mr. Berry tested the analysis using a range of assumptions for natural gas prices and the cost of carbon dioxide emissions.[106]

82. By building a single transmission project of 4,000 MW that serves the renewable energy needs of wholesale customers in both MISO and PJM, the Grain Belt Project would achieve an economy of scale that is significantly less expensive than a project that served the needs of Missouri alone.[107]

---

[101] Ex. 104, Berry Direct, p. 27.
[102] Ex. 142, Berry Supp. Direct, p. 4-6.
[103] Ex. 104, Berry Direct, p. 27.
[104] Ex. 104, Berry Direct, p. 27.
[105] Ex. 104, Berry Direct, p. 28-30; Tr. Vol. 22, p. 1956-1958.
[106] Ex. 104, Berry Direct, p. 30-31.
[107] Ex. 104, Berry Direct, p. 34.

83. Michael Goggin testified credibly that Mr. Berry's assumption of a capacity factor of 55% for western Kansas wind in Berry's analysis was reasonable due to larger and taller wind turbines from technology improvements resulting in higher energy capture.[108]

84. Landowners' witness Joseph Jaskulsky's analysis and conclusions relating to economic feasibility were not as credible as those of David Berry because Mr. Jaskulsky's testimony contained errors, and he did not conduct an analysis of either the levelized cost of energy, levelized avoided cost of energy, loss of load expectation, or production cost model.[109]

85. Landowners' witness Paul G. Justis' analysis and conclusions relating to economic feasibility were not as credible as those of David Berry because Mr. Justis' testimony contained numerous errors and incorrect assumptions.[110]

86. With regard to the interconnection process of the Project with SPP, the western terminus of the Project will interconnect to the ITC Great Plains ("ITC") 345 kV system in SPP in Ford County in southwestern Kansas, near Dodge City. On September 6, 2013, the SPP's Transmission Working Group approved the Criteria 3.5 studies inclusive of additional analysis that assessed the Project at the tap of the ITC 345 kV line. Following the completion of Criteria 3.5 studies, Grain Belt and ITC entered into a Facilities Study Agreement on September 30, 2014. On March 19, 2015, ITC completed the Facilities Study, which identified the required attachment facilities, as well as about $21 million of improvements needed to physically interconnect the Project's Kansas converter station to ITC's 345 kV system in Ford County, Kansas. On October 17, 2016, an Interconnection

[108] Tr. Vol. 16, p. 1141, 1150-1151, 1172-1173.
[109] Tr. Vol. 18, p. 1451, 1468-1469.
[110] Tr. Vol. 18, p. 1431-1436,1594-1596;1604-1607; Ex. 420; Ex. 105, Berry Surrebuttal-HC, p. 4-27.

Agreement was executed by ITC, SPP, and Grain Belt for the Project's Kansas converter station. Grain Belt and ITC are currently in the process of updating the Interconnection Agreement.[111]

87. Regarding the interconnection process of the Project with PJM, PJM is engaged in performing a supplemental System Impact Study, but at the present time there has been no increase in the estimated costs that will be required to upgrade the transmission system to accommodate the 3,500 MW injection in PJM at the Illinois/Indiana border. On December 8, 2017, PJM released an updated study estimating the costs of network upgrades at $464 million for a new 765 kV transmission line and $1 million for a wavetrap at a substation.[112]

88. Regarding the interconnection process of the Project with MISO, at the present time there has been no increase in the estimated costs that will be required to upgrade the transmission system to accommodate the 500 MW injection in MISO at the converter station planned for Ralls County, Missouri. Grain Belt estimates that approximately $21 million will be allocated to Missouri upgrades in MISO.[113]

89. Grain Belt has withdrawn from the MISO generator interconnection queue to await the proper time to refile when the PJM studies have been completed. Although Grain Belt is not currently active in the MISO interconnection process, it plans to enter the final study stage of MISO's interconnection process (known as the Definitive Planning Phase or "DPP") after (1) the PJM interconnection studies have sufficiently progressed and (2) Grain Belt is able to meet the readiness milestones for the MISO interconnection process.

[111] Ex. 143, Abebe Supp. Direct, p. 3-4.
[112] Ex. 143, Abebe Supp. Direct, p. 4-5.
[113] Ex. 143, Abebe Supp. Direct, p. 5.

Coordination of the MISO study process with that of PJM will allow for the results of the PJM studies to be incorporated into the scope of the DPP.[114]

90. Invenergy has extensive experience with the MISO queue, having developed 23 projects totaling approximately 5,160 MWs in MISO.[115]

91. On October 12, 2018, FERC approved MISO's proposed set of connection procedures and a connection agreement for Merchant High Voltage Direct Current ("MHVDC") transmission projects. MISO's proposal to revise its Generator Interconnection Procedures in Attachment X of its tariff to include an injection rights construct for the use of MHVDC connection customers was also approved. Under this new tariff MISO is now able to grant injection rights to generation facilities connecting to the Project's Kansas converter station. This development provides additional commercial certainty for the Grain Belt converter station in Ralls County, Missouri.[116]

92. Invenergy's internal studies estimate that MISO upgrade costs to integrate Grain Belt's Missouri converter station to be in the range of $20-40 million, which, even at the high end, are not expected to significantly impact the economic feasibility of the Project.[117]

93. When Grain Belt conducted its open solicitation, it offered a price that was higher than both the MJMEUC "first-mover" price and the normal Missouri rate, and it received bids that were 6½ times the capacity available on the project.[118]

94. The wind industry will not need the federal production tax credit after 2023 because of continuing technology improvements.[119]

---

[114] Ex. 143, Abebe Supp. Direct, p. 5-6; Tr. Vol. 22, p. 1898-1899.
[115] Ex. 147, Zadlo Supp. Surrebuttal, p. 5.
[116] Ex. 143, Abebe Supp. Direct, p. 5-6.
[117] Ex. 147, Zadlo Supp. Surrebuttal, p. 5; Ex. 100, Skelly Direct, p. 261-262.
[118] Tr. Vol. 14, p. 940-941.

E. Public Interest

95. Grain Belt identified the proposed route of the transmission line Project through Missouri by performing a routing study, which was conducted by an interdisciplinary team of experts in transmission line route planning and selection, impact assessment for natural resources, land use assessment and planning, cultural resource identification and assessment, impact mitigation, and transmission engineering, design, and construction.[120]

96. In determining a proposed route from a variety of alternatives, Grain Belt obtained information and input from the general public, local officials, and government agencies.[121]

97. The alternative routes were assessed and compared with respect to 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 noted engineering or construction challenges (transportation, existing utility corridors, other existing infrastructure, and the Mississippi River crossings).[122]

98. The final proposed route of the Project represents the best route to minimize the overall effect of the Project on the natural and human environment while avoiding unreasonable and circuitous routes, unreasonable costs, and special design requirements.[123]

---

[119] Tr. Vol. 10, p. 264-265; Tr. Vol. 22, p. 1877-1878.
[120] Ex. 119, Puckett Direct, p. 2-3.
[121] Ex. 119, Puckett Direct, p. 5-7.
[122] Ex. 119, Puckett Direct, p. 8.
[123] Ex. 119 Puckett Direct, p. 10.

99. Grain Belt subsequently updated and adjusted the proposed route by making 16 revisions to accommodate affected landowners.[124]

100. The Grain Belt Project would lower adjusted energy production costs in Missouri under future energy scenarios developed by MISO. Adjusted production cost is a metric to estimate the cost for load-serving entities to supply power to their end-use customers.[125]

101. The generation of electricity from wind energy results in no emissions, in contrast to traditional fossil fuel-fired generation. Grain Belt's Project will provide an additional option for utilities to reduce their emissions of criteria air pollutants (e.g., sulfur dioxide), hazardous air pollutants (e.g., mercury), and carbon dioxide by purchasing cleaner renewable power for delivery on the transmission line in lieu of using existing or constructing new fossil fuel-fired generation assets.[126]

102. The renewable energy delivered by the Project will reduce emissions in the Eastern Interconnection by displacing thermal generation, which emits sulfur dioxide, nitrogen oxides, and carbon dioxide, and will decrease water usage, all to the benefit Missouri's environmental and public health.[127]

103. The Project would have a substantial and favorable effect on the reliability of electric service in Missouri.[128]

104. The construction phase of the Project will support 1,527 total jobs over the three years of construction and create $246 million in personal income, $476 million in

[124] Ex. 119, Puckett Direct, p. 10-13, Schedule JGP-2.
[125] Ex. 106, Copeland Direct, p. 4, 18, Schedule JNC-2.
[126] Ex. 525, Meisenheimer Rebuttal, p. 9.
[127] Ex. 106, Copeland Direct, p. 4; Ex. 675, Goggin Rebuttal, p. 27-28; Ex. 100, Skelly direct, p. 7.
[128] Ex. 117, Pfeiffer Direct, p. 5; Ex. 118, Pfeiffer Surrebuttal, p. 12.

gross domestic product, and $9.6 million in state general revenue for the state of Missouri.[129]

105. The economic impact of the Project in its first year of operation will support 91 total jobs and create $17.9 million in personal income, $9.1 million in gross domestic product, and $720,000 in state general revenue for the state of Missouri.[130] Approximately $14.97 million in easement payments will be made in the first year of Project operation.[131]

106. In subsequent years of operation, the economic impact of the Project will support 28 total jobs and create $2.6 million in personal income, $4.2 million in gross domestic product, and $111,000 in state general revenue on an annual basis.[132]

107. Grain Belt estimates that it will pay approximately $7.2 million annually in total county property taxes to the eight Missouri counties through which the transmission line crosses.[133] Randolph County alone would receive more than approximately $720,000 in new tax revenue in the first year of operation of the Project.[134]

108. Grain Belt has signed preferred supplier agreements to purchase materials or components from three Missouri businesses.[135] Invenergy has agreed, upon acquisition of the Project, to evaluate any existing contracts that Grain Belt has in place and determine how they align with its plan to advance the Project.[136]

109. Grain Belt developed the Missouri Landowner Protocol as part of its approach to right-of-way acquisition for the Project. The Landowner Protocol is a comprehensive policy of how Grain Belt Express interacts, communicates, and negotiates with affected

[129] Ex. 526, Spell Rebuttal, p. 3.
[130] Ex. 526, Spell Rebuttal, p. 3.
[131] Ex. 115, Lawlor Direct, Schedule MOL-7, p. 2.
[132] Ex. 526, Spell Rebuttal, p. 3.
[133] Ex. 526, Spell Rebuttal, p. 3; Ex. 115, Lawlor Direct, p. 15, Schedule MOL-7.
[134] Ex. 123, Tregnago Direct, p. 4.
[135] Ex. 115, Lawlor Direct, p. 16-17.
[136] Ex. 145, Zadlo Supp. Direct, p. 11-12.

landowners and includes: the establishment of a code of conduct, its approach to landowner and easement agreement negotiations, a compensation package, updating of land values with regional market studies, tracking of obligations to landowners, the availability of arbitration to landowners, the Missouri Agricultural Impact Mitigation Protocol, and a proposed decommissioning fund.[137]

110. For those landowners whose property the Project will cross, Grain Belt will offer three types of compensation: an easement payment, structure payments, and crop or damages payments.[138] Grain Belt's compensation package is superior to that of most utility companies.[139]

111. If Grain Belt obtains an easement from a landowner, the property will still belong to the landowner and can be utilized for activities such as farming, recreation, and other activities that do not interfere with the operation of the transmission line. After construction of the facilities, the landowner will retain the ability to continue agricultural production on the entirety of the easement area except for the relatively small footprint of the structures, which typically occupy less than 1% of the total easement area.[140]

112. If Grain Belt and a landowner have reached agreement on the form of easement but are unable to reach agreement on the appropriate compensation, then at the landowner's request, Grain Belt will submit the issue of landowner compensation to binding arbitration under Missouri law. The option of binding arbitration typically costs less, has

[137] Ex. 113, Lanz Direct, p. 3-4, Schedules DKL-1 through DKL-4.
[138] Ex. 113, Lanz Direct, p. 6-8.
[139] Tr. Vol. 12, p. 440.
[140] Ex. 113, Lanz Direct, p. 8-9.

more simplified procedures, and results in a final decision more quickly than circuit court litigation.[141]

113. If the Project should be retired from service, Grain Belt has committed to establish a decommissioning fund to pay for the following wind-up activities: 1) dismantling, demolishing and removing all equipment, facilities and structures; 2) terminating all transmission line easements and filing a release of such easements in the real property records of the county in which the property is located; 3) securing, maintaining and disposing of debris with respect to the Project facilities; and 4) performing any activities necessary to comply with applicable laws, contractual obligations, and that are otherwise prudent to retire the Project facilities and restore any landowner property within the easements to its original condition.[142] Such a fund would be the first of its kind in the country.[143]

114. Out of the 206 miles that the Project will traverse in Missouri, no more than nine acres of land would be taken out of agricultural production as a result of the structures installed for the Project in cultivated lands.[144]

115. Much of the land in Missouri the Project will traverse is not suited for center pivot irrigation, which is the primary agricultural concern when constructing transmission lines because of the permanent nature of such irrigation systems. The proposed route for the Project does not directly impact the operation of any existing center pivot irrigation systems.[145]

---

[141] Ex. 113, Lanz Direct, p. 11-12.
[142] Ex. 113, Lanz Direct, p. 12-13.
[143] Tr. Vol. 12, p. 452.
[144] Ex. 101, Arndt Direct, p. 14.
[145] Ex. 101, Arndt Direct, p. 15; Ex. 102, Arndt Surrebuttal, p. 17.

116. While there are no federal or Missouri requirements regarding agricultural impact mitigation practices for constructing overhead transmission lines, Grain Belt has created the Missouri Agricultural Impact Mitigation Protocol, which establishes standards and policies to avoid, minimize, or mitigate any negative agricultural impacts that may result due to transmission line and converter facilities construction and operation.[146]

117. Grain Belt witness Richard J. Roddewig testified credibly that based on published research and Mr. Roddewig's own research, transmission lines do not have a significant adverse impact on farmland prices and values.[147]

118. The scientific weight of evidence does not support the conclusion that electric and magnetic fields cause any long-term adverse health effects, and the levels of electric and magnetic fields associated with the Project do not pose any known risk to human health.[148]

F. Conditions and Waivers

119. Grain Belt and Staff agreed to seven categories of conditions to a CCN issued by the Commission.[149]

120. Grain Belt and Rockies Express Pipeline LLC agreed to a number of conditions that are reflected in Grain Belt's responses to Rockies Express' data requests.[150]

121. Grain Belt has agreed to incorporate the Missouri Landowner Protocol into the easement agreements with landowners and follow the protocol as a condition to the CCN.[151]

---

[146] Ex. 101, Arndt Direct, p. 7; Schedule JLA-2, p. 3.
[147] Ex. 120, Roddewig Surrebuttal, p. 9, Schedule RJR-1, p. 12; Tr. Vol. 14, p. 696-697, 700-701.
[148] Ex. 103, Bailey Direct, p. 24.
[149] Ex. 206; Tr. Vol. 12, p. 466.
[150] Ex. 205.
[151] Ex. 114, Lanz Surrebuttal,p. 5; Tr. Vol. 12, p. 411; Tr. Vol. 10, p. 158.

122. Grain Belt and Invenergy agreed that Invenergy Transmission, LLC and Invenergy Investment Company, LLC shall cooperate with Staff in providing reasonable access to Invenergy's un-redacted consolidated financial records (including *in camera* review of notes to financial statements) until completion or official abandonment of the Project.[152]

123. Grain Belt and Staff agreed that if Grain Belt acquires any involuntary easements in Missouri by means of eminent domain and does not obtain the necessary financial commitments within five years of the date such easement rights are recorded, Grain Belt agrees to return possession of the easement to the landowner within 60 days and record the dissolution of the easement without requiring any reimbursement of payments by the landowner.[153]

124. Grain Belt and Invenergy 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 will file an updated application subject to further review and determination by the Commission.[154]

125. Grain Belt and Invenergy agreed that if outstanding regional transmission organization studies raise any new issues, then the Commission must be satisfied with how Grain Belt resolves the issues.[155]

126. Grain Belt agreed in paragraph 76 of its application to file with the Commission a copy of its annual report that is filed with FERC.

[152] Tr. Vol. 22, p. 1964, 2024.
[153] Initial Post-Hearing Brief on Remand of Applicant Grain Belt Express Clean Line LLC, p. 30.
[154] Tr. Vol. 22, p. 2025-2026.
[155] Tr. Vol. 22, p. 2025.

III. Conclusions of Law and Discussion

A. Statutory Authority

The first issue is whether the Commission may lawfully issue a CCN to Grain Belt. Grain Belt has applied for a line certificate under Section 393.170.1, RSMo.[156] The Landowners assert that the Commission does not have the statutory authority to issue such a CCN because Grain Belt is not an electrical corporation or a public utility providing a public use or service.

Section 386.020(15), RSMo, defines an "electrical corporation" as "…every corporation, [or] company…owning, operating, controlling or managing any electric plant…" Electric plant is defined in Section 386.020(14), RSMo, as "all real estate… and personal property…used or to be used for or in connection with or to facilitate the…transmission…of electricity for…power…". Grain Belt's 39 easements that it has signed with Missouri landowners are interests in real estate[157], and its cash on hand for project development is personal property.[158] The words "to be used for or in connection with" in the statutory definition mean that the electric plant in question may be future or intended electric plant. That real estate and personal property are to be used for or in connection with Grain Belt's Project, so the Commission concludes that they meet the definition of electric plant. Grain Belt owns its cash on hand and controls or manages the easement property under the easement agreement it executes with landowners, because those agreements grant Grain Belt certain rights to use the property and limit the landowner's use. Therefore, the

[156] Section 393.170.1, RSMo, states that "No gas corporation, electrical corporation, water corporation or sewer corporation shall begin construction of a gas plant, electric plant, water system or sewer system, other than an energy generation unit that has a capacity of one megawatt or less, without first having obtained the permission and approval of the commission.."

[157] *Kansas City Power & Light Co. v. Riss*, 312 S.W.2d 846, 847 (Mo. 1958); *Beery v. Shinkle*, 193 S.W.3d 435, 440 (Mo. Ct. App. 2006).

[158] *In re Armistead,* 362 Mo. 960, 964, 245 S.W.2d 145, 147 (1952); *State ex rel. Reid v. Barrett*, 234 Mo. App. 684, 118 S.W.2d 33, 37 (1938)..

Commission determines that Grain Belt is an "electrical corporation" within the meaning of Section 386.020(15), RSMo, and subject to the jurisdiction of the Commission.

Missouri courts have stated that for a company to qualify as a public utility, the company must be devoted to a public use for the general public.[159] The evidence showed that when the Project is constructed and begins operation, it will transmit energy from wind farms in Kansas to wholesale customers in Missouri. In the case of MJMEUC, those customers are Missouri cities and towns that serve as electric providers to approximately 347,000 Missouri citizens. The hallmark of a public utility is the offering of utility service to the public without discrimination. Grain Belt will offer indiscriminate transmission service through an open access transmission tariff that will be filed and subject to the jurisdiction of FERC. While the Commission only has authority over facilities that are devoted to public use, an entity that constructs and operates a transmission line bringing electrical energy from electrical power generators to public utilities that serve consumers is a necessary and important link in the distribution of electricity and qualifies as a public utility.[160] The Commission concludes that Grain Belt's Project will serve the public use, and Grain Belt qualifies as a public utility.

Landowners also argue that this Commission does not have jurisdiction because Grain Belt will only provide wholesale transmission service in Missouri, not retail service, and those customers may pay different rates for capacity, as Grain Belt will be subject to regulation by FERC and not subject to rate regulation by this Commission. Landowners

[159] *State ex rel. M.O. Danciger & Co. v. Pub. Serv. Commission of Missouri*, 275 Mo. 483, 205 S.W. 36, 39 (1918); *State ex rel. Buchanan County Power Transmission Co. v. Baker*, 320 Mo. 1146, 1153, 9 S.W.2d 589, 591 (1928).

[160] *State ex rel. Buchanan County Power Transmission Co. v. Baker*, 9 S.W.2d at 592. While the Buchanan County transmission company was determined not to be a public utility because it transmitted electricity to a private company for private use, the court clearly implied that if the electricity had been transmitted to a public utility for public use the transmission company would also be considered to be a public utility.

also state that Grain Belt is not subject to this Commission's jurisdiction because it will be engaged in the interstate transmission of electricity, citing Sections 386.250(1)[161] and 386.030[162], RSMo.

The fact that FERC regulates wholesale electric rates does not mean that this Commission lacks the authority to issue a CCN for construction of the Grain Belt Project. The basic division of regulatory authority between the federal government and the states has existed since the Federal Power Act was enacted in 1935.[163] This law established authority for the federal government to regulate wholesale sales and transmission of electricity in interstate commerce, but also left the states with authority to regulate other matters not specifically granted to the federal government.[164] States retain the authority to regulate such matters as retail sales of electricity, electric generation, and facilities used for transmission of electricity in the state.[165] Since the Grain Belt Project will transmit energy to a converter station located in Missouri to provide that energy to Missouri citizens, neither FERC regulations nor Sections 386.250(1) and 386.030, RSMo, operate to deprive this Commission of the jurisdiction to decide this CCN case. In the Supreme Court of Missouri's opinion remanding this case, the Court noted that the Grain Belt project was an interstate transmission line, but then remanded the case to determine if the Grain Belt project meets

[161] Section 386.250(1), RSMo, states that "The jurisdiction, supervision, powers and duties of the public service commission herein created and established shall extend under this chapter: (1) To the manufacture, sale or distribution of gas, natural and artificial, and electricity for light, heat and power, within the state, and to persons or corporations owning, leasing, operating or controlling the same; and to gas and electric plants, and to persons or corporations owning, leasing, operating or controlling the same;…"
[162] Section 386.030, RSMo, states that "Neither this chapter, nor any provision of this chapter, except when specifically so stated, shall apply to or be construed to apply to commerce with foreign nations or commerce among the several states of this union, except insofar as the same may be permitted under the provisions of the Constitution of the United States and the acts of Congress."
[163] 16 U.S.C. §§791a – 824w; Jeffery S. Dennis, *et al.*, *Federal/State Jurisdictional Split: Implications for Emerging Electricity Technologies,* Energy Analysis and Environmental Impacts Division, Lawrence Berkeley National Laboratory, p. 3 (December 2016).
[164] 16 U.S.C. §824(a).
[165] 16 U.S.C. §824(b)(1).

the criteria for granting a CCN, suggesting that, if so, the Commission has the authority to issue it. The Commission concludes that it has the legal authority to issue a CCN to Grain Belt for the construction of the Project.

Since Grain Belt brought the application, it bears the burden of proof.[166] The burden of proof is the preponderance of the evidence standard.[167] In order to meet this standard, Grain Belt must convince the Commission it is "more likely than not" that its allegations are true.[168]

B. Need for the Project

When making a determination of whether an applicant or project is convenient or necessary, the Commission has traditionally applied five criteria, commonly known as the Tartan factors, which are as follows:

a)There must be a need for the service;

b)The applicant must be qualified to provide the proposed service;

c)The applicant must have the financial ability to provide the service;

d)The applicant's proposal must be economically feasible; and

e)The service must promote the public interest. [169]

[166] "The burden of proof, meaning the obligation to establish the truth of the claim by preponderance of the evidence, rests throughout upon the party asserting the affirmative of the issue". *Clapper v. Lakin*, 343 Mo. 710, 723, 123 S.W.2d 27, 33 (1938).
[167] *Bonney v. Environmental Engineering, Inc.*, 224 S.W.3d 109, 120 (Mo. App. 2007); *State ex rel. Amrine v. Roper*, 102 S.W.3d 541, 548 (Mo. banc 2003); *Rodriguez v. Suzuki Motor Corp.*, 936 S.W.2d 104, 110 Mo. banc 1996).
[168] *Holt v. Director of Revenue, State of Mo.*, 3 S.W.3d 427, 430 (Mo. App. 1999); *McNear v. Rhoades*, 992 S.W.2d 877, 885 (Mo. App. 1999*); Rodriguez*, 936 S.W.2d at 109 -111; *Wollen v. DePaul Health Center*, 828 S.W.2d 681, 685 (Mo. banc 1992).
[169] *In re Tartan Energy,* Report and Order, 3 Mo.P.S.C. 3d 173, Case No. GA-94-127, 1994 WL 762882 (September 16, 1994).

When determining whether the project is necessary or convenient for the public service, the "term 'necessity' does not mean 'essential' or 'absolutely indispensable', but that an additional service would be an improvement justifying its cost".[170]

The Project is needed primarily because of the benefits to MJMEUC and its customers, who have committed to purchase 136 MW of wind power utilizing transmission service purchased from Grain Belt. The transmission service agreement between Grain Belt and MJMEUC allows MJMEUC to purchase up to 200 MW of transmission capacity from the Grain Belt project. MJMEUC plans to use cheaper wind power from Grain Belt to replace the 100 MW of energy and capacity it currently purchases from Illinois Power Marketing, which contract will expire in 2021. MJMEUC calculates that their MoPEP members will save over $11 million annually under the transmission service agreement with Grain Belt compared to its existing contract for those Illinois coal resources. These annual cost savings to MJMEUC member cities that participate in the Project will likely be passed through to their residential and industrial customers in the form of rate relief or invested in deferred maintenance to their electrical distribution systems.

The transmission service agreement has recently been amended to lower the price of the second 100 MW tranche to that of the first 100 MW tranche, resulting in additional annual savings (for 200 MW) to MJMEUC of approximately $2.8 million compared to a traditional SPP to MISO point-to-point service agreement. Evidently, the elected decision makers for MJMEUC's member cities recognized a need for these savings, and there was also evidence that wind power transmitted to Missouri would have been of interest to

[170] *State ex rel. Intercon Gas, Inc. v. Pub. Serv. Commission of Missouri*, 848 S.W.2d 593, 597 (Mo. Ct. App. 1993).

commercial and industrial customers, such as Walmart, Missouri Industrial Energy Consumers, the Missouri Retailers Association, and other national companies.

Of course, MJMEUC and Missouri industrial customers are not the only energy customers we must consider in this analysis. In a state whose regulated utilities participate in two regional transmission organizations, it is appropriate to consider the Project's effect on other market participants. There was substantial evidence of demand for this project, both on the production and delivery side, within the relevant regional markets. For instance, Grain Belt presented evidence of a commitment by an Illinois load-serving entity to purchase 50 MW of the project's transmission service. On the production side, during open solicitations in 2015 and 2016, transmission service requests for the line far exceeded the total available capacity of the project. Clearly, there is a demonstrable need for the service the Grain Belt Project offered both in Missouri and in the regions that affect Missouri energy markets.

C. Applicant's Qualifications and Financial Ability

Grain Belt currently has no employees and does not have sufficient cash on hand to complete either the development phase or construction of the Project. However, Invenergy entered into a Membership Interest Purchase Agreement with Grain Belt Holding to acquire all of the assets comprising the Grain Belt Project, and a Development Management Agreement that provides development funding by Invenergy through the projected closing date of the sale. Invenergy is spending money now on development of the Project, and expects that it will spend $50 to $100 million on development before it can obtain funding from institutional investors. Under the Development Agreement, Invenergy is contractually obligated to manage the business and affairs of the Project, and performs all services

related to the development, ownership, and maintenance of the Project. Invenergy has care, custody, and control over the Project in all day-to-day activities, and has authorization to execute documents and act on behalf of Grain Belt. Due to these contractual obligations, it is proper and necessary for the Commission to consider Grain Belt and Invenergy together in evaluating the Tartan factors.

Invenergy's management team has extensive experience in developing, constructing and operating transmission and energy infrastructure projects. Invenergy has an impressive record of development and construction of energy projects, including hundreds of miles of transmission lines, substations and transformers. Invenergy's financial condition is very strong, as Invenergy and its affiliates have in excess of $9 billion in total assets and $3 billion in total equity on a consolidated basis. Invenergy has demonstrated that it has the ability to raise capital for large energy projects through access to its vast network of private debt and equity investors, having raised more than $30 billion of financing in connection with the successful development of more than 20,046 MW in projects in the United States, Canada, Europe, Central America, and Japan. The Commission concludes that Grain Belt and Invenergy together have the qualifications and financial ability to develop, construct, and operate the Project.

D. Economic Feasibility of the Project

Grain Belt's Project is economically feasible because it links customers in Missouri who desire to purchase low-cost wind power from western Kansas with wind generation companies like Iron Star who propose to supply that energy, all under a business model under which Grain Belt assumes the financial risk of building and operating the

transmission line. Moreover, the cost of the project will not be recovered from Missouri ratepayers through either SPP or MISO regional cost allocation tariffs.

Grain Belt also presented a credible levelized cost of energy analysis from witness David Berry to show that the cost to bring wind energy from western Kansas to Missouri and eastward using the Grain Belt project is the lowest-cost resource option compared to Missouri wind, combined cycle gas, and Missouri utility-scale solar generation. While the MJMEUC and Iron Star contract demonstrates the economic feasibility of the Project compared to MISO wind, it is the 3500 MW portion of the project to be sold in PJM that demonstrates the financial viability of the project overall, since power prices for PJM are generally $10/MWh higher than prices paid for the energy sold into the MISO market in Missouri. When Grain Belt conducted its open solicitation, it offered a price that was higher than both the MJMEUC “first-mover” price and the normal Missouri rate, and it received bids that were 6½ times the capacity available on the project, which is a substantial indication of economic feasibility.

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

E. Public Interest

Public policy must be found in a constitutional provision, a statute, regulation promulgated pursuant to statute, or a rule created by a governmental body. The public interest is a matter of policy to be determined by the Commission.[171] It is within the discretion of the Commission to determine when the evidence indicates the public interest would be served.[172] Determining what is in the interest of the public is a balancing process.[173] In making such a determination, the total interests of the public served must be assessed.[174] In Missouri, state energy policy can be found in laws such as the Renewable Energy Standard[175], established by vote of the Missouri public in 2008, and the Energy Efficiency Investment Act[176], promulgated by the Missouri legislature in 2013, as well as the Comprehensive State Energy Plan, an initiative implemented by the Missouri Division of Energy in 2015. Consistent with these state policies, this Commission has in the past expressed strong support for the "development of economical renewable energy sources to provide safe, reliable, and affordable service while improving the environment and reducing the amount of carbon dioxide released into the atmosphere".[177]

---

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

[172] *State ex rel. Intercon Gas, Inc. v. Public Service Com'n of Missouri*, 848 S.W.2d 593, 597 -598 (Mo. App. 1993). That discretion and the exercise, however, are not absolute and are subject to a review by the courts for determining whether orders of the P.S.C. are lawful and reasonable. *State ex rel. Public Water Supply Dist. No. 8 of Jefferson County v. Public Service Commission*, 600 S.W.2d 147, 154 (Mo. App. 1980).

[173] *In the Matter of Sho-Me Power Electric Cooperative's Conversion from a Chapter 351 Corporation to a Chapter 394 Rural Electric Cooperative*, Case No. EO-93-0259, Report and Order issued September 17, 1993 , 1993 WL 719871 (Mo. P.S.C.).

[174] *Id*.

[175] Section 393.1030, RSMo.

[176] Section 393.1075, RSMo.

[177] *In the Matter of the Application of KPC&L Greater Missouri Operations Company for Permission and Approval of a Certificate of Public Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage Solar Generation Facilities in Western Missouri,* File No. EA-2015-0256, Report and Order issued March 2, 2016, p. 15. See also, *In the Matter of the Application of The Empire District Electric Company for Approval of Its Customer Savings Plan,* File No. EO-2018-0092,

The Grain Belt Project will lower energy production costs in Missouri under future energy scenarios developed by MISO and will have a substantial and favorable effect on the reliability of electric service in Missouri, particularly through its effect on wind diversity in the region. Geographic diversity in wind resources inevitably helps to reduce system variability and uncertainty in regional energy systems. In addition, the Project will provide positive environmental impacts, since displacement of fossil fuels for wind power will reduce emissions of carbon dioxide, sulfur dioxide, and nitrogen oxide, and reduce water usage in Missouri.

The construction phase of the Project will support 1,527 total jobs over three years, and create $246 million in personal income, $476 million in gross domestic product, and $9.6 million in state general revenue for the state of Missouri. The Project will also result in significant property tax benefits to affected counties, a total of approximately $7.2 million in the first year of operation. In that first year, Randolph County alone will receive more than $720,000 in additional tax revenue. In the first year of operation, the project will result in approximately $14.97 million in easement payments to landowners and create 91 jobs, $17.9 million worth of personal income, and $9.1 million in gross domestic product.

Any negative impacts of the Project on the land and landowners will be mitigated by (a) a landowner protocol to protect landowners; (b) superior compensation payments; (c) a binding arbitration option for easement negotiations; (d) a decommissioning fund; and (e) an agricultural impact mitigation protocol to avoid or minimize negative agricultural impacts. Agricultural impacts will also be reduced because no more than nine acres of land in Missouri will be taken out of agricultural production as a result of Project structures, and the

---

Report and Order issued July 11, 2018, p. 20; *In the Matter of Union Electric Company d/b/a Ameren Missouri's Voluntary Green Program/Pure Power Program Tariff Filing*, File No. EO-2013-0307, Report and Order issued April 24, 2013, p. 14.

proposed route does not directly impact the operation of any existing center pivot irrigation systems.

It is the Commission's responsibility to balance the interests of all stakeholders, including the affected landowners, to determine what is in the best interest of the general public as a whole. The evidence in the case demonstrated that the Grain Belt Project will create both short-term and long-term benefits to ratepayers and all the citizens of the state. In the Commission's view, the broad economic, environmental, and other benefits of the Project to the entire state of Missouri outweigh the interests of the individual landowners. Many of the landowners' concerns will be addressed through carefully considered conditions placed on the CCN.

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

F. Conditions and Waivers

Section 393.170.3, RSMo, states that "[t]he commission may by its order impose such condition or conditions as it may deem reasonable and necessary". The parties have proposed numerous conditions should the Commission decide to grant Grain Belt a CCN. The Commission finds that those conditions to which Grain Belt has agreed are reasonable and necessary, so those conditions will be imposed below. The Commission concludes that

the remaining proposed conditions are unreasonable, unnecessary, or moot, so those will not be adopted.

One condition to which Grain Belt agreed relates to a decommissioning fund to pay for wind-up activities in the unlikely circumstance that the transmission line is retired from service. Grain Belt proposed that the fund be established beginning on the 20th anniversary of the completion of the Project. The Commission finds that this establishment date is insufficient to protect affected landowners should the transmission line be abandoned after construction begins or retired before the 20th year of operation. So, the Commission concludes that the decommissioning fund should be established at the outset of construction and increased during construction in an amount needed to perform necessary wind-up activities for any facilities that have been constructed and installed. Another condition that protects affected landowners is the requirement that if Grain Belt fails to obtain the necessary financial commitments for the Project within 5 years of obtaining an easement through eminent domain proceedings, Grain Belt must dissolve the easement and return possession of it to the landowner without any reimbursement of payments to the landowner for that easement.

For all of the conditions that the Commission includes as part of the CCN, if Grain Belt does not comply with such conditions the company may be subject to penalties in a subsequent complaint proceeding. If the Commission and a court find that the company fails to comply, then it is subject to penalties ranging from $100 to $2,000 per day of noncompliance, pursuant to Section 386.570, RSMo. Also, unless Grain Belt exercises the authority conferred by the CCN within two years, the CCN becomes null and void under Section 393.170.3, RSMo.

The rules for which a waiver is requested - Commission rules 4 CSR 240-3.145, 4 CSR 240-10.145[178], 4 CSR 240-3.175, and 4 CSR 240-3.190(1), (2) and (3) (A)-(D) -relate to the filing of rate schedules, annual reports, depreciation studies, and reports regarding various safety, accident and other events. Commission Rule 4 CSR 240-3.015 provides that waivers or variances from Chapter 3 filing requirements are the same as in Commission Rule 4 CSR 240-2.015, which requires a showing of good cause for the waiver or variance. Good cause means a good faith request for reasonable relief.[179] Grain Belt alleges that good cause exists for the waiver because the proposed facilities will not provide retail service to customers and will not be rate-regulated by the Commission. Staff agrees with the waivers as long as Grain Belt is required to file with the Commission the annual report that it files with FERC, and Grain Belt has agreed to comply. The Commission finds that good cause exists for the waivers, so they will be granted, subject to Staff's condition.

G. Motion for Additional Exhibit

On February 15, 2019, after the record in this case had closed, Eastern Missouri Landowners Alliance d/b/a Show Me Concerned Landowners ("Show Me") filed a motion to offer an additional exhibit for the record and submit additional argument regarding that exhibit. The offered exhibit is an affidavit alleging that Grain Belt's option to purchase land in Ralls County, Missouri for purposes of constructing a converter station has now expired. Show Me states that good cause exists for granting the motion, in that without the additional exhibit the Commission would be "left in the dark" concerning a significant

[178] The Grain Belt request was for a waiver of Commission rule 4 CSR 240-3.165. That rule was rescinded by the Commission effective January 30, 2019, and the requirements of that rule were moved to 4 CSR 240-10.145.
[179] *American Family Ins. Co. v. Hilden*, 936 S.W.2d 207 (Mo. App. W.D. 1996).

change of fact. Grain Belt opposed the motion, arguing that expiration of the purchase option has no impact on the issue of Grain Belt's CCN, there is no good cause to accept the exhibit, accepting the exhibit would violate due process, and Show Me should not be permitted to reverse its prior position with post-hoc arguments.

Information relating to the expiration of the option agreement was already in the record of this case prior to Show Me's motion.[180] Show Me had every opportunity to make arguments and present further evidence relating to this option agreement at the remand evidentiary hearing and while the record of the case was open. Accepting this untimely exhibit now would deprive the parties of an opportunity to cross-examine witnesses or offer additional arguments regarding the exhibit. The Commission concludes that Show Me has failed to demonstrate good cause for including the additional exhibit in the record of the hearing, so Show Me's motion will be denied.

IV. Decision

In making this decision, the Commission has considered the positions and arguments of all of the parties. After applying the facts to the law to reach its conclusions, the Commission concludes that the substantial and competent evidence in the record supports the conclusion that Grain Belt has met, by a preponderance of the evidence, its burden of proof to demonstrate that it is qualified for a certificate of convenience and necessity under Section 393.170.1, RSMo. Therefore, the Commission will grant the Grain Belt application, subject to the conditions ordered below.

[180] Ex. 116, Lawlor Surrebuttal, Schedule MOL-14.

THE COMMISSION ORDERS THAT:

1. Grain Belt Express Clean Line LLC's application for a certificate of convenience and necessity filed on August 30, 2016, is granted.

2. The conditions to which Grain Belt Express Clean Line LLC and the Commission's Staff agreed in Exhibit 206 are approved and adopted. Exhibit 206 is attached as Attachment 1 and incorporated herein by reference as if fully set forth. Grain Belt Express Clean Line LLC is ordered to comply with the conditions in Exhibit 206.

3. The conditions to which Grain Belt Express Clean Line LLC and Rockies Express Pipeline LLC agreed in Exhibit 205 are approved and adopted. Exhibit 205 is attached as Attachment 2 and incorporated herein by reference as if fully set forth. Grain Belt Express Clean Line LLC is ordered to comply with the conditions in Exhibit 205.

4. Grain Belt Express Clean Line LLC's owners, including, but not limited to, Invenergy Transmission LLC, Invenergy Investment Company LLC, and any related subsidiaries, shall cooperate with the Commission's Staff in providing reasonable access to its un-redacted financial records until the completion or official abandonment of the Grain Belt Project.

5. If Grain Belt Express Clean Line LLC acquires any involuntary easement in Missouri by means of eminent domain proceedings ("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, Grain Belt Express Clean Line LLC shall return possession of the easement to the fee simple title holder ("title holder") within 60 days and 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 Clean Line LLC to the title holder shall be due.

6. If the design and engineering of the project is materially different from how the Project is presented in Grain Belt Express Clean Line LLC's Application, Grain Belt Express Clean Line LLC must file an updated application with the Commission for further Commission review and determination.

7. If any outstanding studies included as conditions raise any new issue(s), then the Commission must be satisfied with how Grain Belt Express Clean Line LLC resolves the issue(s).

8. Grain Belt Express Clean Line LLC shall comply with the Missouri Landowner Protocol, including, but not limited to, a code of conduct and the Missouri Agricultural Mitigation Impact Protocol, and incorporate the terms and obligations of the Missouri Landowner Protocol into any easement agreements with Missouri landowners.

9. Grain Belt Express Clean Line LLC shall modify the Missouri Landowner Protocol relating to a decommissioning fund as directed herein. At the commencement of construction of the Project, Grain Belt Express Clean Line LLC shall establish a decommissioning fund in an amount reasonably necessary to perform the wind-up activities described below, at Grain Belt Express Clean Line LLC's sole cost and expense, for any portion of the Project that has been constructed and installed. The amount of the decommissioning fund shall be increased as construction of the Project progresses sufficient to cover wind-up activities for any Project facilities that have been constructed and installed. The decommissioning fund may be collateralized with a letter of credit or

cash, or any combination thereof. In any circumstance in which the Project is retired from service or abandoned prior to service, Grain Belt Express Clean Line LLC shall promptly perform the following wind-up activities:

- dismantling, demolishing and removing all equipment, facilities and structures;
- terminating all transmission line easements and filing a release of such easements in the real property records of the county in which the property is located;
- securing, maintaining and disposing of debris with respect to the Project facilities; and
- performing any activities necessary to comply with applicable laws, contractual obligations, and that are otherwise prudent to retire the Project facilities and restore any landowner property.

10. Grain Belt Express Clean Line LLC shall construct the proposed Missouri converter station to be capable of the actual delivery of 500 MW of wind power to the converter station.

11. Grain Belt Express Clean Line LLC is granted a waiver of the requirements in the following Commission rules: 4 CSR 240-3.145, 4 CSR 240-10.145, 4 CSR 240-3.175, and 4 CSR 240-3.190(1), (2) and (3) (A)-(D). Grain Belt Express Clean Line LLC shall promptly file with the Commission a copy of each annual report that Grain Belt Express Clean Line LLC files with FERC.

12. Eastern Missouri Landowners Alliance d/b/a Show Me Concerned Landowners' motion to offer an additional exhibit for the record in this case and to submit additional argument regarding said exhibit, filed on February 15, 2019, is denied.

13. This order shall become effective on April 19, 2019.

BY THE COMMISSION

Morris L. Woodruff
Secretary

Silvey, Chm., Kenney, Hall, Rupp, and Coleman, CC., concur.

Bushmann, Senior Regulatory Law Judge

CONDITIONS AGREED TO BY GRAIN BELT EXPRESS CLEAN LINE LLC AND THE STAFF OF THE MISSOURI PUBLIC SERVICE COMMISSION

In re Grain Belt Express Clean Line LLC, No. EA-2016-0358

Based on the conditions and recommendations in the Staff Rebuttal Report submitted on January 24, 2017, and subsequent discussions between the Staff of the Missouri Public Service Commission ("Staff") and Grain Belt Express Clean Line LLC ("Grain Belt"), Staff and Grain Belt have agreed to the following conditions.

I. Financing Conditions (Staff Rebuttal Report at 63-64)

1. Grain Belt will not install transmission facilities on easement property in Missouri until it has obtained commitments for funds in an amount equal to or greater than the total cost to build the entirety of this multi-state transmission project. To allow the Commission to verify compliance with this condition, Grain Belt shall file the following documents with the Commission at such a time as Grain Belt is prepared to begin to construct electric transmission facilities in Missouri:

(a) On a confidential basis, equity and loan or other debt financing agreements and commitments entered into or obtained by Grain Belt or its parent company for the purpose of funding Grain Belt's multi-state transmission project that, in the aggregate, provide commitments for the total project cost.

(b) An attestation by an officer of Grain Belt that Grain Belt has not, prior to the date of the attestation, installed transmission facilities on easement property; or a notification that such installation is scheduled to begin on a specified date.

(c) A statement of the total multi-state transmission project cost, broken out by the categories of engineering, manufacturing and installation of converter stations; transmission line engineering; transmission towers; conductor; construction labor necessary to complete the project; right-of-way acquisition costs; and other costs necessary to complete the project, and certified by an officer of Grain Belt, along with a reconciliation of the total project cost in the statement to the total project cost as of the Application of $2.35 billion; and property owned in fee by Grain Belt including the converter station sites.

(d) A reconciliation statement certified by an officer of Grain Belt showing that (1) the agreements and commitments for funds provided in subsection (a), above, are equal to or greater than the total project cost provided in subsection (c), above; and (2) the contracted transmission service revenue is sufficient to service the debt financing of the project (taking into account any planned refinancing of debt).

II. Interconnection Studies and Safety (Staff Rebuttal Report at 64, 67)

1. Grain Belt will provide Staff with completed RTO Interconnection Agreements and any associated studies. Should the studies raise new issues, Grain Belt will provide its plan to address those issues.

2. Grain Belt will provide to the Commission completed documentation of the Grain Belt plan, equipment, and engineering drawings to achieve compliance with NERC standards for a project of this scope and size, the National Electric Safety Code for a project of this scope and size, 4 CSR 240-18.010, the Overhead Power Line Safety Act (Section 319.075-.090), and any other applicable Missouri state law for a project of this scope and size prior to the commercial operational date of the Project.

III. Nearby Utility Facilities (Staff Rebuttal Report at 64-66)

1. Grain Belt shall use commercially reasonable efforts (as defined below) to obtain detailed location information on each existing underground utility plant, either crossed by or in close proximity to its proposed route, and to contact and coordinate with the owners of each such facility prior to construction.

(a) Grain Belt intends to undertake several related steps to obtain information about underground utilities. Grain Belt intends to hire a qualified survey firm with experience in locating underground utilities. Prior to field survey, Grain Belt intends to assemble desktop information about underground utility locations along the project route. This desktop information may be assembled by the survey firm, by a different contractor, or by Grain Belt itself. The desktop information will draw from both public and proprietary sources. Publicly available sources may include, but are not limited to, databases maintained by State utility regulatory bodies, Railroad Commissions, Departments of Transportation, Oil & Gas Commissions, Departments of Natural Resources, Municipal Utility Districts, Rural Water Districts, County Engineering Offices, and Electric Cooperatives. Proprietary sources may include, but are not limited to, databases and mapping information such as those maintained by Ventyx or Platts, and GIS or CAD files maintained by underground utility owners and provided to Grain Belt. In advance of field operations Grain Belt will engage in detailed title research to identify all easements of record for each parcel of land traversed by the Grain Belt Project. Field survey will utilize one or more detection methods to "sweep" sections of the right-of-way for underground utilities. These methods may include, but are not limited to: identification of above-ground staking or signage, magnetic, sonic and acoustic technologies, ground penetrating radar, radio frequency detection, and vacuum excavation. The extent of survey coverage will be determined by consulting with the project engineering and construction contractors.

(b) Commercially reasonable efforts, in the context of obtaining information about underground utility plant, are efforts sufficient to identify nearby infrastructure at specific excavation locations for the Project facilities (e.g., foundations for transmission line structures), as well as nearby infrastructure that can be identified using the aforementioned methods within the right-of-way of the Project, as specified by the project engineering and construction contractors, coordination with the utility owner, and applicable laws and regulations. "Commercially reasonable" in this context does not refer to a specific or maximum dollar amount.

2. Grain Belt will show the Commission, before it begins commercial operation of any part of the multi-state Project, that it built the entire multi-state Grain Belt proposed HVDC transmission line with dedicated metallic return conductors which are operational and that the entire multi-state Project has operational protection and control safety systems that automatically

de-energize the Project within approximately 150 milliseconds of when an abnormal or fault condition occurs.

3. Grain Belt will perform engineering studies to determine if the operation of the Grain Belt proposed HVDC transmission line, the Grain Belt proposed Missouri converter station, and the Grain Belt-owned portion of the AC electric transmission line connecting the Grain Belt proposed Missouri converter station to the AC grid have adverse impacts on nearby facilities. These engineering studies must include, but not be limited to the following:

(a) the effects of tower footing groundings, if used;

(b) analysis of metallic underground facilities;

(c) other AC power lines and telecommunications facilities that are located within a distance from the Grain Belt proposed HVDC transmission line, as determined by an appropriately qualified expert, where there may be adverse effects on the facilities;

(d) a determination whether there are locations where the Grain Belt proposed HVDC transmission line parallels a pipeline and an existing AC power line and, if so, whether there are any combined effects on steel pipelines (and other underground metallic facilities); and

(e) the effects of Grain Belt proposed transmission line(s) connecting the Grain Belt proposed Missouri converter station to the AC grid.

If any of these studies show that mitigation measures are identified/needed, those measures must be in place prior to commercial operation of the Grain Belt proposed transmission line.

These studies must be made available to Staff and affected facility owners at least 45 days prior to commercial operation of the Grain Belt proposed HVDC transmission line.

Grain Belt must disclose to Staff and affected facility owners how the parameters for conducting the studies were determined (e.g., continuous 24-hour recordings at a certain time of year).

These studies must be conducted by persons knowledgeable in: (1) HVDC power lines; (2) DC-to-AC converter stations; (3) Pipeline cathodic protection systems; (4) Corrosion of underground metallic facilities; (5) Interference with AC utility lines; (6) Interference with telecommunications facilities; (7) Effects of DC and AC interference on the facilities identified in Exhibit 3, as amended by Grain Belt's Addendum to the Application, and all additional facilities subsequently identified.

4. Grain Belt must file "annual status updates" on discussions with Staff regarding need for additional studies of the impacts of its facilities on other facilities in Missouri, a summary of the results of any additional studies, and any mitigation measures that have been implemented to address underground metallic structures, telecom facilities and AC lines. Mitigation measures indicated by future studies must be implemented within three (3) months of discovery that additional mitigation measures are needed, or as quickly as reasonably practical thereafter.

IV. Emergency Restoration Plans (Staff Rebuttal Report at 66)

1. Grain Belt must provide a copy of the final Grain Belt Emergency Restoration Plan to the Commission prior to the commercial operations date for the Grain Belt Project.

V. Construction and Clearing (Staff Rebuttal Report at 67-68)

1. Prior to construction, Grain Belt will notify all landowners in writing of the name and telephone number of Grain Belt's Construction Supervisor so that they may contact the Construction Supervisor with questions or concerns before, during, or after construction. Such notice will also advise the landowners of the expected start and end dates of construction on their properties.

2. Prior to construction, Grain Belt's Construction Supervisor will personally contact each landowner (or at least one owner of any parcel with multiple owners) to discuss access to the right-of-way on their parcel and any special concerns or requests about which the landowner desires to make Grain Belt aware.

3. From the beginning of construction until end of construction and clean-up of the right-of-way is complete, Grain Belt's Construction Supervisor will be on-site, meaning at or in the vicinity of the route, or on-call, to respond to landowner questions or concerns.

4. If requested by the landowner, Grain Belt will cut logs 12" in diameter or more into 10 to 20 foot lengths and stack them just outside the right-of-way for handling by the landowner.

5. Stumps will be cut as close to the ground as practical, but in any event will be left no more than 4" above grade.

6. Stumps will be treated to prevent regrowth consistent with industry best practices. Vegetation treatments will consider vegetation types, site specific land uses, and any environmental sensitivities. Grain Belt will notify all landowners of the Transmission Vegetation Management Policy and of the specific vegetation treatments for each landowner's property.

7. Unless the landowner does not want the area seeded, disturbed areas will be reseeded consistent with reclamation best practices in consultation with landowners, restoration specialists, and government agencies.

8. Best management practices will be followed to minimize erosion, with the particular practice employed at a given location depending upon terrain, soil, and other relevant factors.

9. Gates will be securely closed after use.

10. Should Grain Belt damage a gate, Grain Belt will repair that damage.

11. If Grain Belt installs a new gate, Grain Belt will either remove it after construction and repair the fence to its pre-construction condition, or will maintain the gate so that it is secure against the escape of livestock.

12. Grain Belt will utilize design techniques intended to minimize corona.

13. Should a landowner experience radio or television interference issues believed by the landowner to be attributed to Grain Belt's line, Grain Belt will work with the landowner in good faith to attempt to solve the problem.

14. Grain Belt will clearly mark guy wires.

VI. Maintenance and Repair (Staff Rebuttal Report at 68-69)

1. With regard to future maintenance or repair and right-of-way maintenance after construction is completed, Grain Belt will make reasonable efforts to contact landowners prior to entry onto the right-of-way on their property to advise the landowners of Grain Belt's presence, particularly if access is near their residence.

2. All Grain Belt contractors will be required to carry and maintain a minimum of one million dollars of liability insurance available to respond to damage claims of landowners. All contractors will be required to respond to any landowner damage claims within 24 hours. All contractors will be required to have all licenses required by state, federal, or local law.

3. If herbicides are used, only herbicides approved by the EPA and any applicable state authorities will be used, and herbicides will be used in strict compliance with all labeling directions.

4. Routine maintenance will not occur during wet conditions so as to prevent rutting.

5. Existing access roads will be used to access the right-of-way wherever available.

6. Prior to commencing construction, Grain Belt will notify all landowners in writing of the Transmission Vegetation Management Policy and of the specific vegetation treatments for each landowner's property. Grain Belt will personally meet with each landowner who requests such a meeting to determine if the landowner does or does not want herbicides used on the landowner's property. If the landowner does not want herbicides used, they will not be used.

VII. Landowner Interactions and Right-of-Way Acquisition (Staff Rebuttal Report at 43-45, 69)

1. The certificate is limited to the construction of this line in the location specified in the application, and as represented to the landowners on the aerial photos provided by Grain Belt, unless a written agreement from the landowner is obtained, or the company gets a variance from the Commission for a particular property, provided, however, 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.

2. Absent a voluntary agreement for the purchase of the property rights, the transmission line shall not be located so that a residential structure currently occupied by the property owners will be removed or located in the easement requiring the owner to move or relocate from the property

3. Grain Belt shall survey the transmission line location after construction and record the easement location with the Recorder of Deeds in the appropriate counties. Grain Belt shall also file a copy of its survey in this case.

4. Every landowner from whom Grain Belt requires an easement will be contacted personally, and Grain Belt will negotiate with each such landowner in good faith on the terms and conditions of the easement, its location, and compensation therefor. Each landowner will receive an Easement Agreement pertaining to such landowner's land, which Easement Agreement will contain a drawing that shows the location of the easement.

5. After construction is completed, every landowner will be contacted personally to ensure construction and clean-up was done properly, to discuss any concerns, and to settle any damages that may have occurred.

6. If a landowner so desires, Grain Belt will give the landowner a reasonable period of time in advance of construction to harvest any timber the landowner desires to harvest.

7. Grain Belt's right-of-way acquisition policies and practices will not change regardless of whether Grain Belt does or does not yet possess a Certificate of Convenience or Necessity from the Commission.

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

GRAIN BELT EXPRESS RESPONSE TO
ROCKIES EXPRESS PIPELINE LLC'S FIRST SET
OF DATA REQUESTS TO GRAIN BELT EXPRESS CLEAN LINE LLC

Grain Belt Express Clean Line LLC ("GBX") states the following in response to the data requests propounded by Rockies Express Pipeline LLC ("REX"):

1. GBX's application and the testimony and schedules filed in support propose preferred and alternative routes for GBX's high voltage, direct current electric transmission line and associated converter station (the "HVDC Project") that may involve multiple crossings of, and run parallel to, REX's existing high pressure natural gas pipeline (the "Pipeline"). None of said filings address the potential impacts of GBX's HVDC Project on REX's Pipeline, however. It is REX's position that it is not permissible to design, construct or operate GBX's HVDC line in a manner that would pose a risk to the safety or integrity of REX's pipeline. Does GBX support REX's position?

RESPONSE: Yes.

2. REX intends to study the potential impacts of the HVDC Project on the Pipeline. However, the testimony of GBX's witnesses, Anthony Wayne Galli and Thomas F. Shiflett, and the schedules attached thereto, indicate that the design and engineering of the HVDC project is still in a preliminary state. If comprehensive engineering and design work for the HVDC Project have yet to commence, please answer the following:

a) At what identifiable stage or step during the HVDC Project engineering and design work processes does GBX believe that potential impacts of the HVDC Project to the Pipeline may be determined?

RESPONSE: The appropriate time to begin studies would be after the final route alignment and structure spotting exercises are completed. Once a route is approved, significant engineering activities will begin on an engineering commencement date to determine structure locations. At that time enough detail will be available to perform the studies to determine if any mitigation measures will be necessary.

b) Does GBX intend to give REX prompt, advance notice that the stage or step identified in GBX's answer to the immediately preceding question is about to commence?

RESPONSE: Yes.

c) REX anticipates that it will need technical information about the HVDC Project, as well as information about how GBX intends to operate the HVDC Project, in order for REX to study how the HVDC Project might impact the safety or integrity of the Pipeline. Does GBX intend to share such technical and operational information as REX may reasonably request for this purpose? If GBX's answer is conditional, please state GBX's conditions.

RESPONSE: Yes, subject to the execution of confidentiality agreements to protect such information.

d) If GBX's answers to questions b) and c) are in the affirmative, will GBX collaborate with REX to study how the HVDC Project might impact the safety or integrity of the Pipeline? If GBX's answer is conditional, please state GBX's conditions.

RESPONSE: Yes.

3. After studying the HVDC Project, REX's pipeline safety engineers may determine that monitoring, testing and/or mitigation steps are required in order to safeguard the Pipeline from potential adverse effects of the HVDC Project. Does GBX agree that in such event, GBX should be responsible for the costs of installing and operating such monitoring and testing equipment and mitigation measures? If GBX's answer is conditional, please state GBX's conditions.

RESPONSE: Yes, GBX should be responsible for all such costs warranted by reasonable engineering and commercial practices.

4. State whether GBX would be responsible for all direct damages to REX proximately caused by construction and/or ongoing operation of the HVDC Project, including direct damages from fault currents.

RESPONSE: Yes, GBX would be responsible.

VERIFICATION OF RESPONSE

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

Signed: _____

Position: GENERAL COUNSEL

Clean Line Energy Partners LLC

Date: 12/14/17

MISSOURI PUBLIC SERVICE COMMISSION

March 20, 2019

File/Case No. EA-2016-0358

Missouri Public Service Commission
Staff Counsel Department
200 Madison Street, Suite 800
P.O. Box 360
Jefferson City, MO 65102
staffcounselservice@psc.mo.gov

Office of the Public Counsel
Marc Poston
200 Madison Street, Suite 650
P.O. Box 2230
Jefferson City, MO 65102
opcservice@ded.mo.gov

Charles Henke
Paul A Agathen
485 Oak Field Ct.
Washington, MO 63090
paa0408@aol.com

Clean Grid Alliance
Sean Brady
PO Box 4072
Wheaton, IL 60189-4072
sbrady@cleangridalliance.org

Clean Grid Alliance
Deirdre K Hirner
2603 Huntleigh Place
Jefferson City, MO 65109
dhirner@awea.org

Consumers Council of Missouri
John B Coffman
871 Tuxedo Blvd.
St. Louis, MO 63119-2044
john@johncoffman.net

ENGIE North America Inc.
Terri Pemberton
3321 SW 6th Ave
Topeka, KS 66606
terri@caferlaw.com

Grain Belt Express Clean Line, LLC
Anne E Callenbach
900 W. 48th Place, Suite 900
Kansas City, MO 64112
acallenbach@polsinelli.com

Grain Belt Express Clean Line, LLC
Frank A Caro
900 W. 48th Place, Suite 900
Kansas City, MO 64112
fcaro@polsinelli.com

Grain Belt Express Clean Line, LLC
Lisa A Gilbreath
254 Commercial Street
Portland, ME 64111-0410
lgilbreath@pierceatwood.com

Grain Belt Express Clean Line, LLC
Jeremiah W Nixon
7733 Forsyth, Ste. 1900
St. Louis, MO 63105
jnixon@dowdbennett.com

Grain Belt Express Clean Line, LLC
John J Rehmann
7733 Forsyth Blvd. Ste 1900
St. Louis, MO 63105
jrehmann@dowdbennett.com

Grain Belt Express Clean Line, LLC
Andrew O Schulte
900 W. 48th Place, Suite 900
Kansas City, MO 64112-6411
aschulte@polsinelli.com

Grain Belt Express Clean Line, LLC
Adam J Simon
7733 Forsyth Blvd. Ste 1900
St. Louis, MO 63105
asimon@dowdbennett.com

Grain Belt Express Clean Line, LLC
Jacqueline Whipple
4520 Main Street, Ste. 1100
Kansas City, MO 64111
jacqueline.whipple@dentons.com

Grain Belt Express Clean Line, LLC
Karl Zobrist
4520 Main Street, Suite 1100
Kansas City, MO 64111
karl.zobrist@dentons.com

IBEW Local Union 2
Sherrie Hall
710 South Kirkwood Road
Kirkwood, MO 63122
sherrie@spectorwolfe.com

IBEW Local Union 2
Emily Perez
13205 Manchester Rd. Suite 210
St. Louis, MO 63131
eperez@hammondshinners.com

IBEW Local Union No. 53
Sherrie Hall
710 South Kirkwood Road
Kirkwood, MO 63122
sherrie@spectorwolfe.com

IBEW Local Union No. 53
Emily Perez
13205 Manchester Rd. Suite 210
St. Louis, MO 63131
eperez@hammondshinners.com

Matthew and Christina Reichert
Paul A Agathen
485 Oak Field Ct.
Washington, MO 63090
paa0408@aol.com

Missouri AFL-CIO
James Faul
4399 Laclede Ave.,
St. Louis, MO 63108
jfaul@hghllc.net

Missouri Department of Economic Development
Michael B Lanahan
301 W. High Street
Jefferson City, MO 65102
mlanahan.DEenergycases@ded.mo.gov

Missouri Farm Bureau
Brent E Haden
827 E Broadway
Columbia, MO 65201
brent@hadenlaw.com

Missouri Industrial Energy Consumers (MIEC)
Lewis Mills
221 Bolivar Street, Suite 101
Jefferson City, MO 65101-1574
lewis.mills@bclplaw.com

Missouri Industrial Energy Consumers (MIEC)
Diana M Vuylsteke
211 N. Broadway, Suite 3600
St. Louis, MO 63102
dmvuylsteke@bclplaw.com

Missouri Joint Municipal Electric Utility Commission
Douglas Healy
3010 E. Battlefield, Suite A
Springfield, MO 65804
doug@healylawoffices.com

Missouri Joint Municipal Electric Utility Commission
Penny Speake
3010 E. Battlefield, Suite A
Springfield, MO 65804
penny@healylawoffices.com

Missouri Joint Municipal Electric Utility Commission
Peggy A Whipple
514 E. High Street, Suite A
Jefferson City, MO 65101
peggy@healylawoffices.com

Missouri Landowners Alliance
Paul A Agathen
485 Oak Field Ct.
Washington, MO 63090
paa0408@aol.com

Missouri Retailers Association
Diana M Vuylsteke
211 N. Broadway, Suite 3600
St. Louis, MO 63102
dmvuylsteke@bclplaw.com

Natural Resources Defense Council
Henry B Robertson
319 N. Fourth St., Suite 800
St. Louis, MO 63102
hrobertson@greatriverslaw.org

R. Kenneth Hutchinson
Paul A Agathen
485 Oak Field Ct.
Washington, MO 63090
paa0408@aol.com

Randall Meyer
Paul A Agathen
485 Oak Field Ct.
Washington, MO 63090
paa0408@aol.com

Renew Missouri
Andrew J Linhares
3115 S. Grand Ave
Suite 600
St. Louis, MO 63118
Andrew@renewmo.org

Renew Missouri
Tim Opitz
409 Vandiver Dr Building 5, Suite 205
Columbia, MO 65202
tim@renewmo.org

Robyn Henke
Paul A Agathen
485 Oak Field Ct.
Washington, MO 63090
paa0408@aol.com

Rockies Express Pipeline
Colly J Durley
111 S. Ninth St., Suite 200
P.O. Box 918
Columbia, MO 65205-0918
Durley@smithlewis.com

Rockies Express Pipeline
Sarah E Giboney
111 South Ninth Street, Suite 200
P.O. Box 918
Columbia, MO 65205-0918
giboney@smithlewis.com

Roseanne Meyer
Paul A Agathen
485 Oak Field Ct.
Washington, MO 63090
paa0408@aol.com

Show Me Concerned Landowners
Paul A Agathen
485 Oak Field Ct.
Washington, MO 63090
paa0408@aol.com

Sierra Club
Henry B Robertson
319 N. Fourth St., Suite 800
St. Louis, MO 63102
hrobertson@greatriverslaw.org

The Wind Coalition
Sean Brady
PO Box 4072
Wheaton, IL 60189-4072
sbrady@cleangridalliance.org

The Wind Coalition
Deirdre K Hirner
2603 Huntleigh Place
Jefferson City, MO 65109
dhirner@awea.org

Wal-Mart Stores, Inc.
David Woodsmall
308 E. High Street, Suite 204
Jefferson City, MO 65101
david.woodsmall@woodsmalllaw.com

Enclosed find a certified copy of an Order or Notice issued in the above-referenced matter(s).

Sincerely,

Morris L. Woodruff
Secretary

Recipients listed above with a valid e-mail address will receive electronic service. Recipients without a valid e-mail address will receive paper service.