Exhibit No. ___
Issues: Project Overview
Witness: Kris Zadlo
Type: Direct Testimony
Sponsoring Party: Invenergy Transmission LLC
Case No. EM-2019-0150
Date Testimony Prepared: February 1, 2019

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EM-2019-0150

DIRECT TESTIMONY OF KRIS ZADLO

SENIOR VICE PRESIDENT, INVENERGY LLC

ON BEHALF OF JOINT APPLICANTS

FEBRUARY 1, 2019

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I. INTRODUCTION AND PURPOSE OF TESTIMONY

Q. Please state your name and business address.

A. My name is Kris Zadlo and I am the Senior Vice President, Commercial Analytics, Regulatory Affairs and Transmission for Invenergy LLC. My business address is One South Wacker Drive, Suite 1800, Chicago, IL 60606.

Q. Please explain the relationship of Invenergy LLC to Invenergy Transmission LLC.

A. Invenergy LLC is an affiliate of Invenergy Transmission LLC ("Invenergy Transmission"), the proposed purchaser of Grain Belt Express Clean Line LLC ("GBE"). Invenergy LLC and Invenergy Transmission have a common parent company, Invenergy Investment Company LLC ("Invenergy Investment"). Invenergy Transmission is a special purpose entity that currently relies on the personnel of Invenergy LLC and the financial resources of Invenergy Investment. I will refer to all three entities collectively as "Invenergy."

Q. Please discuss your educational background and work experience.

A. I received a Master of Science in Electrical Engineering from Purdue University in 1990 and a Bachelor of Science from Rose-Hulman Institute of Technology in 1989. I am a licensed professional engineer in the State of Illinois (license number 062-049149). I am responsible for managing services provided to all Invenergy projects with respect to their commercial activities pertaining to transmission assets. These responsibilities include managing technical and regulatory issues, as well as supporting filings before the Federal Energy Regulatory Commission ("FERC"). Previously, I was employed with Calpine Corporation ("Calpine") as Vice President of Transmission. I worked for Calpine for 8 years. Prior to Calpine I worked for Commonwealth Edison Company of Chicago

("Commonwealth Edison" or "ComEd") as Technical Studies Director. I worked for 10 years at Commonwealth Edison, holding various positions in transmission planning, generation planning, operations, and strategic analysis. My C.V. is attached hereto as **Schedule KZ-1**.

Q. Please describe your utility experience.

A. I started my career at Commonwealth Edison in Chicago where I worked for 10 years in various positions in Transmission Planning and Strategic Analysis. As Technical Studies Director, I was responsible for transmission engineers that performed stability and voltage studies and maintained the equipment rating data base for the entire transmission system. I personally wrote Commonwealth Edison's "Guidelines for Interconnection of Generation" and "Guidelines for Dynamic Scheduling." I also wrote ComEd's first "Interconnection for Photovoltaic Power System."

Over my career I have overseen the interconnection of over 6,000 megawatts ("MWs") of utility scale generation of various technologies. In 2001-2002, I was part of a small group of industry experts that crafted FERC's Large Generator Interconnection Procedures which were issued in 2003.

Q. Please describe your experience in implementing new technologies.

A. I founded Invenergy's energy storage business in 2012. In 2015 Invenergy's Grand Ridge Energy Center received two prestigious industry awards, Power Engineering's Renewable Energy Project of the Year and Energy Storage North America's Innovation Award. Since 2012 our storage program has grown to twelve facilities totaling 307 MW/965 MWh of built or planned projects.

Earlier in my career, I worked with General Electric ("GE") to develop a Trailer Mounted Combustion Turbine (TM2500) to help meet a critical energy need in the City of Chicago in 2000. The project was developed in 10 months, was the first deployment of its kind, and was the beginning of a new product line for GE. In both cases I was able to create or implement new utility scale technologies for safe and useful deployment.

Q. Have you previously testified before the regulatory commission of any state or the Federal Energy Regulatory Commission?

A. Yes. I have previously testified before the Missouri Public Service Commission ("Commission" or "PSC"), the Wisconsin Public Service Commission, the Kansas Corporation Commission ("KCC"), and FERC. My most recent testimony at FERC was at the April 3-4, 2018 technical conference concerning the coordination of affected systems in the generator interconnection process. As it pertains to GBE, I filed testimony with this Commission on November 12, 2018 and December 10, 2018 in Case No. EA-2016-0358 (the "CCN Proceeding") and I testified at the evidentiary hearing on December 18, 2018. I also filed direct testimony at the KCC on December 28, 2018 in Docket No. 19-GBEE-253-ACQ. A complete list of proceedings in which I have testified is attached hereto as **Exhibit KZ-2**.

Q. What is the purpose of your testimony in this proceeding?

A. I will provide an introduction to Invenergy, including its history, organization, business model, and electric asset ownership and operating philosophy. I will describe Invenergy Transmission's proposed acquisition of GBE (the "Transaction"). GBE is currently owned by Grain Belt Express Holding LLC ("GBE Holding"), which is a wholly-owned subsidiary of Clean Line Energy Partners LLC. GBE is developing the Grain Belt

Express Clean Line Project ("GBE Project" or "Project"), an approximately 780-mile, overhead, multi-terminal ±600 kilovolt ("kV") high voltage direct current ("HVDC") transmission line and associated facilities that will connect over 4,000 MW of low-cost, wind-generated power in western Kansas. I will discuss the operational and managerial qualifications of Invenergy to acquire, own, and operate the Project. I will also discuss how the proposed Transaction is not detrimental to the public interest and how the public interest will, in fact, be promoted by the Commission's approval of the Transaction.

Q. Please describe Invenergy's pending acquisition of GBE.

A. On November 9, 2018 Invenergy Transmission entered into a Membership Interest Purchase Agreement (the "MIPA") with GBE Holding to acquire GBE, which is the owner of all of the assets comprising the GBE Project. The MIPA is attached to the application as **Exhibit F**, and contains a requirement that the change in ownership in GBE from GBE Holding to Invenergy Transmission be approved by both the KCC and this Commission as conditions precedent to closing the acquisition. The related Development Management Agreement ("DMA") that provides development funding through the projected closing date of the MIPA is attached as **Exhibit G** to the Application.

Q. Please explain the difference between the MIPA and the DMA.

A. The MIPA goes into effect only after regulatory approval in Kansas and Missouri is secured. The DMA is currently the governing document that covers the present development costs and will terminate at the conclusion of the regulatory process.

Q. What is your understanding of GBE's regulatory status before the PSC?

A. On August 30, 2016, GBE applied for a certificate of convenience and necessity ("CCN") from the PSC. On August 16, 2017, the PSC denied the application on the grounds that GBE failed to obtain all county assents to the Project required by Section 229.100, Mo. Rev. Stat., following the decision in an unrelated case, *In re Ameren Trans. Co. of Ill* ("*ATXI*").[1] Several parties appealed the Commission's denial of the application, and on July 17, 2018, the Missouri Supreme Court issued a unanimous opinion[2] that reversed the Commission's Report and Order denying the application for a CCN. In particular, the Missouri Supreme Court ruled that the Commission's reliance on *ATXI* was in error, and that *ATXI* should not be followed to the extent that it held that an applicant for a CCN is required to obtain county assents pursuant to Section 229.100 before the PSC can grant a CCN. The Missouri Supreme Court issued an Order remanding the case to the Commission on September 24, 2018.

Q. What is the status of the remand proceeding?

A. The Commission conducted additional proceedings on remand in 2018, in order to address any material changes in the evidence and facts previously presented with regard to GBE's request for a CCN.[3] As part of the remand proceedings, GBE informed the Commission of the pending Transaction and provided evidence of Invenergy's technical and financial ability to manage the Project going forward. The record in the CCN Proceeding is now closed, and GBE is awaiting the Commission's report and order.

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[1] 523 S.W.3d 21 (Mo. App. W.D. 2017) (hereafter, "*ATXI*")

[2] *Grain Belt Express Clean Line LLC v. PSC*, 2018 WL 3432778, No. SC 96993 (Mo. en banc 2018).

[3] Case No. EA-2016-0358, Order Setting Procedural Conference at 1 (Sept. 28, 2018).

II. OVERVIEW OF INVENERGY

Q. Please provide an overview of Invenergy.

A. The Invenergy family of companies is headquartered in Chicago, Illinois. It was founded in 2001 and 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, the Company has developed more than 20,220 MW of large-scale wind, solar, natural gas, and energy storage facilities. This includes more than 12,400 MW of projects in operation, with more than 7,800 MW contracted or in construction.

Q. Please provide an overview of Invenergy's leadership and business philosophy.

A. Invenergy's senior executives—each with more than 25 years in the energy generation industry—have worked together for more than two decades. Invenergy's founder, president and CEO Michael Polsky, is a recognized and respected industry leader and is the majority owner of Invenergy and its affiliated companies. Profiles of Invenergy's Senior Management and Project Management teams are attached as **Schedule KZ-2**.

Invenergy values integrity, commitment to business partners and host communities, and environmental responsibility. Invenergy is also committed to U.S. military veterans, who make up approximately 11% of Invenergy's nearly 1,000 employees. Invenergy is also committed to an inclusive workplace and to being a responsible community partner. The Invenergy Impact Program builds ongoing,

permanent relationships to connect with host communities and strengthen Invenergy's local presence. Invenergy engages with local organizations, providing volunteers, resources, and donations to a variety of causes including education, emergency medical services, veteran services and environmental stewardship. In 2018, Invenergy and its energy centers invested $865,000 in charitable causes including local schools, environmental sustainability, support for U.S. military veterans, and other causes that support communities.

Q. Please provide an overview of Invenergy's financial abilities.

A. Invenergy has extensive experience and success in raising capital for large scale energy projects. The financial abilities of Invenergy are discussed in more detail in the Direct Testimony of Andrea Hoffman, Senior Vice President of Financial Operations.

III. TECHNICAL AND MANAGERIAL QUALIFICATIONS OF INVENERGY TO OWN AND OPERATE THE PROJECT

Q. Please briefly describe Invenergy's qualifications to efficiently manage and supervise the construction process for the Grain Belt Express Project.

A. Invenergy routinely develops projects with a view toward long-term ownership, performance, profitability and operations. Invenergy has built its core competencies around power plant operations and maintenance ("O&M"). Invenergy operates its power plant fleet through a wholly-owned subsidiary of Invenergy Investment, Invenergy Services LLC ("Invenergy Services"). Invenergy Services is staffed with experienced industry personnel and currently operates 9,663 MW of natural gas and renewable generating capacity primarily in North America but also including projects in South America and Europe. Combining asset management, operations, maintenance, and

commercial execution functions allows Invenergy Services to provide a single, comprehensive solution to overall management of the asset.

Q. Does Invenergy have experience developing and maintaining transmission projects?

A. Yes. Because the core of Invenergy's business model is project development and long-term ownership and operations, the Company takes great care to ensure the longevity, reliability and cost-effectiveness of its assets, especially transmission and interconnection infrastructure for its projects. Since 2001, Invenergy has built all required transmission and distribution lines, generator step-up transformers ("GSUs"), and substations for its facilities in numerous regions, including within the regions managed by Southwest Power Pool, Inc. ("SPP"), Midcontinent Independent System Operator, Inc. ("MISO") and PJM Interconnection, LLC ("PJM"). Invenergy developed, permitted and constructed this infrastructure across various terrains, state and local jurisdictions, and in vastly differing environmental and regulatory conditions. This effort has led to the construction of over 392 miles of high-voltage transmission lines, over 1,748 miles of distribution lines, 59 substations and 73 GSUs of which several have been built for utilities.

Q. Does Invenergy have experience working with landowners to get necessary land rights?

A. Invenergy excels at building infrastructure by working diligently with landowners to build trustworthy relationships, ensuring that the landowners' interests are protected, and their concerns are taken into account. Invenergy has negotiated over 16,000 leases, constituting over 7 million acres.

Q. Who are the individuals at Invenergy that will manage and direct the construction and operation of the Project and what are their specific duties and qualifications?

A. Chris Carter is Director, Renewable Project Management for Invenergy and has 16 years of experience in right-of-way issues, material procurement, contract negotiation, and construction of electrical transmission and substations. He will be supported by Bryan Schueler, the Executive Vice President and Chief Development Officer for Invenergy and a 20-year veteran of the power industry. The team will also include Art Fletcher, Senior Vice President, Renewable Engineering and Project Management for Invenergy, who brings 29 years of experience in managing major civil and power construction projects domestically and abroad. Profiles of the foregoing individuals are provided in **Schedule KZ-3**.

Q. Please describe Invenergy's approach to project management and construction, including the hiring an engineering, procurement and construction ("EPC") contractor.

A. Invenergy has contracted for construction work on its renewable energy projects in a variety of manners ranging from executing full EPC contracts to entering individual specialty contracts with engineering, construction, and supply firms. Each project is assessed on a basis of risk and economics with the chosen means of execution based upon the most favorable overall result for the project. For renewable projects, Invenergy typically executes separate major component procurement contracts, electrical engineering contracts, balance of plant type construction contracts, and high-voltage substation and transmission line contracts. These contracts are executed and managed by Invenergy project management teams based in Chicago and Invenergy site management teams based in the field. Art Fletcher will oversee all project engineering and

construction activities, including the management of a top tier construction firm contracted to build the facility.

Q. Please describe Invenergy's experience with transmission interconnection issues.

A. Invenergy has extensive experience with the SPP, MISO and PJM interconnection queues. Invenergy has developed 5 projects totaling approximately 840 MWs in the SPP footprint and currently has over 109 active requests in the SPP queue. Invenergy has also developed 23 projects totaling approximately 5,160 MWs in the MISO footprint and currently has over 60 active requests in the queue. Finally, Invenergy has developed 7 projects totaling approximately 2,700 MWs in the PJM footprint and currently has over 65 active requests in the PJM queue.

Q. Has the PSC Staff previously investigated the qualifications of Invenergy?

A. Yes, in the CCN Proceeding, the Revised Staff Supplemental Rebuttal Report stated "Staff has no reason to dispute that Grain Belt, and subsequently Invenergy, are qualified to own, operate, control and manage the Project subject to the agreed upon conditions in Staff Exhibits 205 and 206."[4]

IV. DISCUSSION OF WHY THE TRANSACTION IS NOT DETRIMENTAL TO THE PUBLIC INTEREST

Q. Are you familiar with the standard that that the Commission uses in its evaluation of proposed transaction?

A. Yes. I am not an attorney, but it is my understanding that, in its review of transactions, the Commission applies the "not detrimental to the public interest standard."

Q. In your opinion, is the proposed Transaction detrimental to the public interest?

[4] Case No. EA-2016-0358, Ex. 208 at 6 (Revised Staff Supplemental Rebuttal Report).

A. It is not. The traditional concerns about potential detriments to Missouri retail rates or retail services are not present with this Transaction because GBE will not have any retail customers in Missouri and GBE will not be rate-regulated by the PSC. Moreover, the regional transmission organizations through which the Project will traverse have responsibility for seeing that the Project is safely and reliably integrated into the electric grid.

Q. What other factors demonstrate that the proposed Transaction is not detrimental to the public interest?

A. The Transaction will facilitate the continued development of the Grain Belt Express Project and all of its associated benefits. The benefits of the Project were discussed at length in the CCN Proceeding. These benefits include:

- An estimated 1,500 jobs during the three to four years of construction;
- A continuing source of property tax revenues to the political subdivisions where the facilities are located;[5]
- A participant-funded model, such that GBE assumes all financial risk of building and operating the transmission line, with no costs anticipated to be recovered through the rates of regional transmission organizations;[6]
- An estimated $9.5–$11 million in annual savings for customers of Missouri Joint Municipal Electric Utility Commission ("MJMEUC"), which will receive up to 250 MW of capacity from the Project through an existing Transmission Services Agreement;[7]
- Additional access to high-capacity-factor Kansas wind resources to fulfill the growing demand for renewable energy in Missouri.[8]

[5] *Id*. at 5-6.

[6] CCN Proceeding, Ex. 100 at 17 (Skelly Direct); Ex. 104 at 3, 8 (Berry Direct)

[7] CCN Proceeding, Ex. 480, p. 3, ln. 3-7 & Sch. JG-12 (Grotzinger Supp. Direct).

[8] CCN Proceeding, Ex. 800 at 5 (Dauphinais Rebuttal).

The proposed Transaction does not alter any physical aspects of the Project and will bring the above stated benefits closer to reality by providing GBE with enhanced financial resources, as discussed in the Direct Testimony of Ms. Hoffman. Additionally, Invenergy has an established record of developing, financing, constructing, and operating large-scale energy projects and will bring that experience to bear on the GBE Project.

Q. Does this conclude your testimony?

Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Joint Application of Invenergy Transmission LLC, Invenergy Investment Company LLC, Grain Belt Express Clean Line LLC and Grain Belt Express Holding LLC for an Order Approving the Acquisition by Invenergy Transmission LLC of Grain Belt Express Clean Line LLC	)	Case No. EM-2019-0150

AFFIDAVIT OF KRIS ZADLO

STATE OF Illinois)
) ss
COUNTY OF Cook)

Kris Zadlo, being first duly sworn upon his oath, states:

1. My name is Kris Zadlo. I am Senior Vice President, Commercial Analytics, Regulatory Affairs and Transmission for Invenergy LLC.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Joint Applicants, having been prepared in written form for introduction into evidence in this proceeding.

3. I have knowledge of the matters set forth herein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Kris Zadlo
Kris Zadlo

Subscribed and sworn before me this 28th day of January, 2019.

RUTH M NADOLNY
Official Seal
Notary Public – State of Illinois
My Commission Expires Mar 8, 2021

Ruth M. Nadolny
Notary Public