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Exhibit No. 146 Issues: Financial Capabilities Witness: Andrea Hoffman Type: Supplemental Direct Testimony

Sponsoring Party: Grain Belt Express Clean Line LLC Case No. EA-2016-0358

Date Testimony Prepared: November 12, 2018

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EA-2016-0358

SUPPLEMENTAL DIRECT TESTIMONY OF ANDREA HOFFMAN SENIOR VICE PRESIDENT, FINANCIAL OPERATIONS, INVENERGY LLC

ON BEHALF OF GRAIN BELT EXPRESS CLEAN LINE LLC

November 12, 2018

Grainbelt Cambring 146

Date 12-19-18 Reporter TV

File No. Ek-2016-0358

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I. INTRODUCTION AND PURPOSE OF TESTIMONY

- 2 Q. Please state your name and business address.
- 3 A. My name is Andrea Hoffman and I am the Senior Vice President, Financial Operations
- 4 for Invenergy LLC (together with its affiliate, Invenergy Transmission LLC,
- 5 "Invenergy"). My business address is One South Wacker, Suite 1900, Chicago, IL
- 6 60606.

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- 7 Q. Please discuss your educational background and work experience.
- 8 A. I am responsible for managing Invenergy's Accounting, Tax, Treasury, Financial
- 9 Planning, Risk, and International Financial Operations. I have over 25 years of
- experience in finance and engineering in the energy, transportation, and petrochemicals
- industries. I have a Bachelor of Science in Chemical Engineering from The University of
- 12 Iowa and an MBA in Finance from The University of Chicago. My C.V. is attached as
- Schedule AH-1.
- 14 Q. Have you previously testified before the regulatory commission of any state or the
- 15 Federal Energy Regulatory Commission?
- 16 A. No.
- 17 Q. What is the purpose of your testimony in this proceeding?
- 18 A. I will provide an explanation of Invenergy's financial abilities to provide service in
- connection to Invenergy's pending acquisition of Grain Belt Express Clean Line LLC
- 20 ("GBE" or "Grain Belt Express") through its subsidiary Invenergy Transmission LLC
- 21 ("Invenergy Transmission"). GBE is currently owned by Grain Belt Express Holding
- 22 LLC ("GBE Holding"), which is a wholly-owned subsidiary of Clean Line Energy
- 23 Partners LLC ("Clean Line"). GBE is developing the Grain Belt Express Clean Line
- 24 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 megawatts ("MW") of low-cost, wind-generated power in western Kansas.. First, I will provide an overview of Invenergy's extensive experience and success in financing large energy projects. Second, I will provide a description of the financial considerations particular to the GBE Project.

6 Q. What is your understanding regarding the purpose of the current proceeding?

It is my understanding that the Commission's September 28, 2018 Order setting a procedural conference noted that the primary purpose of the procedural schedule in this case is to receive "any evidence that has materially changed" since the filing of the GBE's direct case in 2016. A review of the voluminous record in this docket establishes that the Project is needed, that the Project will have favorable economic impacts, and that the public interest factors required to be considered by the Commission have been fully met. Therefore, the purpose of this Supplemental Direct Testimony is to discuss the financial resources and experience of Invenergy. The Supplemental Direct Testimony of Kris Zadlo, filed simultaneously herewith, discusses the acquisition of the Project by Invenergy, including a discussion of Invenergy's managerial and operational qualifications to successfully own, operate, and manage the Project.

18 II. OVERVIEW OF INVENERGY'S FINANCIAL ABILITY

19 Q. Who is Invenergy?

A. Headquartered in Chicago, Illinois, Invenergy is a U.S.-based company 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.

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A more complete overview of Invenergy is provided in the testimony of Invenergy Senior Vice President Kris Zadlo.

Q. What is the financial profile of Invenergy?

A.

A. Invenergy is a privately-held company and does not publicly release financial statements.

However, as discussed below, 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). In addition, as discussed below, Invenergy has raised more than \$30 billion to support more than 20,046 MW of generation project development since 2001. Invenergy maintains strong relationships with a variety of investment partners and has been awarded Project Finance Borrower of the Year by Power Finance & Risk on multiple occasions.

Q. Please provide an overview of Invenergy's project financing experience.

Invenergy is highly experienced in raising corporate and project level financing in support of developing, constructing and operating its energy projects. 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, including over 392 miles of high-voltage transmission lines, over 1,748 miles of distribution lines, 59 substations and 73 generator step-up transformers. Invenergy's financing relationships include such institutions as Wells Fargo, MUFG, GE Capital, JP Morgan, Santander, Morgan Stanley, Natixis, Bank of America, and Rabobank. To further illustrate

Invenergy's financial capability, the Company was able to raise over \$6 billion in debt and equity financings in 2016 and 2017 spanning across technologies and geographies.

Invenergy's financing capabilities have been recognized by many within the industry. Invenergy was awarded the Structured Power Finance 2005 Deal of the Year for its financing of Invenergy Wind Finance Company, a portfolio of 260 MW of wind facilities; the North America Public Power 2007 Deal of the year for its financing of the St. Clair 584 MW combined cycle natural-gas fired facility in Ontario, Canada; and Power, Finance and Risk magazine's 2012, 2013, and 2016 Project Finance Borrower of the Year for the breadth, diversity and volume of deals brought to market and successfully financed by Invenergy.

Q. How does Invenergy typically finance large scale energy projects?

Invenergy continually maintains an active dialogue with key providers of debt and tax equity in order to keep them informed regarding our projects and to generate interest. During the late stages of project development, Invenergy typically approaches target lenders to seek proposals for construction financing. The construction loan combined with Invenergy's equity, and potentially equity from additional investors, will provide sufficient capital for the entire construction costs of the project. Construction financing for a project is typically structured so that the security and collateral package held by the financing parties consists of a pledge of the equity in the project company, a pledge of all project assets, and collateral assignments of certain material project agreements. On or shortly after the commercial operation date, the construction financing is replaced by more permanent financing, such as a senior secured term loan. The security and

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1	collateral j	package	during	the	term	loan	period	depends	on	the	type	of	permanent
2	financing t	hat is put	in place	e.									

3 III. FINANCIAL CONSIDERATIONS PARTICULAR TO THE GBE PROJECT

- 4 Q. Please describe Invenergy's plan to finance the purchase of GBE.
- A. Invenergy Transmission LLC plans to purchase GBE using cash on hand from its parent,
 Invenergy Investment LLC.
- Q. Please describe Invenergy's plan to fund the development and construction of the
 GBE Project.
- 9 A. Consistent with its prior experience, Invenergy plans to use a combination of debt and 10 equity to finance the Project. Specifically, Invenergy expects to engage a lender or group 11 of lenders approximately six to nine months prior to commercial operations to provide a 12 construction loan for the Project. The construction loan and equity capital provided by 13 Invenergy, and potentially other investors, is expected to be sufficient for the entire 14 construction cost of the Project. Financing for the project is typically structured with credit support such as letters of credit or cash reserve accounts that can be used to 15 mitigate certain risks of the project. 16
- 17 Q. Please describe how transmission service will be sold from the Project and discuss
 18 whether they are necessary to support the financing of the Project.
- 19 A. Transmission service will be sold from the Project as described in the Supplemental
 20 Direct Testimony of Kris Zadlo.

In addition to obtaining regulatory commission approvals and other permits, key project agreements, and construction contracts, it is necessary for Invenergy to enter into long-term transmission service or capacity contracts with its transmission customers prior to securing financial commitments for the Project. GBE's transmission services

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agreement with the Missouri Joint Municipal Electric Utility Commission is an example of such a contract. The required percentage of contracted capacity will depend on the price, counterparty creditworthiness, contract term, and other commercial terms within the transmission contracts. As stated previously, Invenergy will provide equity capital and plans to obtain a construction loan, and potentially equity from additional investors, to finance the development and construction activities and to reach commercial operation of the Project. Following achievement of commercial operations, the more permanent financing, such as term debt and equity financing, will rely on the contracted cash flow from the Project for repayment, and the debt will also be secured by the Project's assets and contracts.

- 11 Q. Is it your opinion that Invenergy has the financial ability to provide the proposed 12 service offered by the GBE Project?
- **A.** Yes. Invenergy has the financial ability to provide the proposed service. As described earlier in my testimony, Invenergy has a strong financial profile and a proven track record of successfully financing large energy projects.
- 16 Q. Does that conclude your testimony?
- **A.** Yes.

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, Control, Manage, Operate 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 AFFIDAVIT OF ANDREA HOFFMAN STATE OF Illinois) ss COUNTY OF Cook) ss COUNTY OF Cook) Andrea Hoffman, being first duly sworn upon his oath, states: 1. My name is Andrea Hoffman. I am Senior Vice President, Financial Operations for Invenergy LLC. 2. Attached hereto and made a part hereof for all purposes is my Supplemental Direct Testimony on behalf of Grain Belt Express Clean Line LLC, 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. Andrea Hoffman Subscribed and sworn before me this 12th day of November 2018. Andrea Hoffman Subscribed and sworn before me this 12th day of November 2018. What Andrea Hoffman		
STATE OF	Clean Line LLC for a Certificate of Convenience and Necessity Authorizing it to Construct, Own, Control, Manage, Operate and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood-) Case No. EA-2016-0358))
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ERIKA M CLIFFORD Official Seal Notary Public – State of Illinois My Commission Expires Nov 6, 2021

ANDREA L. HOFFMAN

1 South Wacker, Suite 1900, Chicago, IL 60606

EXECUTIVE SUMMARY

Performance focused leader with proven track record in project finance, equity, and lease transactions in the energy, aircraft, water, and oil & gas industries. Strong relationships with financing parties and cross-functional teams throughout transaction life, including construction, operations, refinancing, and sale. Key competencies:

• Project Finance

- Power/Renewables Industry
- Term Conversions

Valuations

- Debt/Equity Management
- Refinancing

- Equity Purchase/Sale
- Asset Management
- Project Management

PROFESSIONAL EXPERIENCE

INVENERGY LLC. CHICAGO, IL

Senior Vice President - Financial Operations.

September 2018 to Present

Manage a team of over 65 professionals covering Accounting, Tax, Treasury, Financial Planning, Risk, and International Financial Operations. Activities are primarily directed to support the management of the over 20,000 MW of clean energy assets in operation, construction, and development in North America, South America, Europe, and Asia. Member of Management Committee, Risk Committee, Operating Committee, and participate in Investment Committee. Officer of 345 limited liability companies.

Vice President / Director - Portfolio Finance.

September 2008 to August 2018

Managed an \$118 portfolio of project and corporate financings for commercial power projects employing wind, thermal, solar, and battery storage technology. Portfolio includes 68 projects (9,600 MW) in operation or construction with financings from over 50 financial institutions. Deals vary by offtake arrangement (PPA, hedge, merchant), capital structure, and location (ERCOT, PJM, SPP, MISO, NYISO, IESO). Accomplishments include:

- Developed Portfolio Finance team of 11 professionals as portfolio capacity (MW) tripled over 10 years.
 - o Officer of over 100 limited liability companies with wire approval and signing authority.
- Term converted, tax/cash equity funded, or transferred over \$7.0B in approx. 35 project financings.
 - Led cross-functional teams through construction borrowings and ECCA and LLCA obligations.
 - o Managed partnership flip, credit facility repayment, DSCRs, distributions, and covenant compliance.
 - o Negotiated Co-Tenancy Agreements and wake payments for 10 (500MW) expansion projects.
- Completed \$2.3B (1,250MW) wind/solar build-transfers to Southern, Duke, Berkshire, NextEra, NRG.
 - o Completed CPs to transfer and construction loan repayment following substantial completion.
- Closed \$762MM in wind and thermal refinancings, providing approx. \$112MM in excess proceeds.
 - o Negotiated debt sizings, term sheets, financing documents, swaps, and due diligence requirements.
- Closed \$124MM in tax equity buy-outs on 5 transactions involving 7 wind farms totaling 910MW.
 - o Performed valuations and negotiated purchase agreement and assignment documents.
- Led lender/tax equity consents for sale to TerraForm of \$1B (914MW) portfolio of 5 wind projects.
 - o Negotiated transaction documents and \$348MM in loan prepayments and swap terminations.

GE - ENERGY FINANCIAL SERVICES (EFS). STAMFORD, CT

Vice President - Portfolio Management.

June 2006 to August 2008

Managed \$500MM portfolio of debt, equity, and lease transactions in the energy, water, and oil & gas industries, including 7 transactions in North and South America. Accomplishments include:

- Managed equity interest in \$20MM wastewater treatment facility in US, utilizing GE Zenon membranes.
- Managed \$130MM equity interest in gas processing facility in Trinidad. Alternate director on board.

- Managed \$240MM in lease equity and debt in combined cycle power plants in the US and Mexico.
- Managed transfer of \$200MM in lease equity on exploration & production equipment in Mexico.
- Managed equity interest in \$300MM drilling rig in Brazil. Worked with managing member and operator to ensure compliance with \$235MM debt obligation. Monitored rig performance and deal economics.

GE - AVIATION SERVICES (GECAS). SHANNON, IRELAND AND STAMFORD, CT

Vice President / Assistant Vice President - Risk Management.

February 2003 to May 2006

Managed 31 airline accounts involving 110 aircraft across Europe, the Middle East, Africa, and North America with exposures exceeding \$3B. Risk lead in aircraft lease underwriting, account management, and restructuring activities. Responsible for airline credit analysis and KYC review as well as risk analysis of jurisdiction, deal structure, and deal execution. Accomplishments include:

- Led underwriting and account management of 83 aircraft operating leases involving 38 airlines (including 5 aircraft to the former Nigerian start-up Virgin Nigeria). Exposure exceeded \$1.3B.
- Supported Regional Risk Manager on \$3.6B in new aircraft operating leases with Emirates Airlines (14) Boeing 777s and Qatar Airways (2) Airbus 330s.
- Supported acquisition of the Finova leveraged lease portfolio (33 aircraft with \$515MM exposure).
- Managed contracts and funding for the purchase of 34 Airbus 319/320s, Boeing 737s, and CRJ aircraft.
- Risk lead in the acquisition integration of 89 aircraft leases, loans, and JVs from Heller portfolio.
- Co-led work-out and repossession of 6 aircraft and a spare engine from Volare Airlines of Italy (\$11MM delinquency).
 Led restructuring analysis of \$20MM settlement (received over \$15MM prior to default).
- Pitched credit rating comparison (SURE vs. KMV) to over 200 of GE's Chief Risk Managers.

ADDITIONAL EXPERIENCE

- GE Risk Management Leadership Program (GECAS, Structured Finance). Stamford, CT.
 GE Certified Six Sigma Black Belt.
- BP/Amoco Pipeline Company Financial Analyst and Project Coordinator. Chicago, IL. 1995 to 1997
 - Performed financial analysis for joint ventures and acquisitions necessary to develop new business for the 15,000-mile domestic crude oil, natural gas, and products pipeline system.
- BP/Amoco Chemical Company Project Engineer. Chicago, IL.
 1990 to 1995
 - Managed projects to improve and/or expand the purified terephthalic acid, paraxylene, poly alphaolefins and fine acid facilities. Constructed 5 projects located in 3 states.

EDUCATION AND TRAINING

- MBA Finance and Marketing. The University of Chicago Booth School of Business. March 1995
- o MBA Enterprise Corps (Bulgarian American Enterprise Fund-Investment Advisor). Sofia, Bulgaria.
- BS Chemical Engineering. The University of Iowa.

May 1990

ADDITIONAL INFORMATION

- Member of Women of Renewable Industries and Sustainable Energy, Society of Women Engineers, and Chicago Booth Alumni Network.
- Founding member of Invenergy's Women's Network since 2015.
- Traveled extensively in Europe, North and South America, Middle East, Africa, Australia, and SE Asia.
- Enjoy downhill skiing, hiking, and scuba diving.