FILED
December 5, 2014
Data Center
Missouri Public
Service Commission

Exhibit No.

Issues: Project Needs

and Benefits

Witness: Frank B. Costanza Type: Rebuttal Testimony

Sponsoring Party: TradeWind

Energy, Inc.

Case No.: EA-2014-0207 Date: September 15, 2014

# MISSOURI PUBLIC SERVICE COMMISSION CASE NO. EA-2014-0207

REBUTTAL TESTIMONY OF
FRANK B. COSTANZA
ON BEHALF OF
TRADEWIND ENERGY, INC.

September 15, 2014

	Exhibit No. 725
Date	Reporter
File No.	A-2014-020

# TABLE OF CONTENTS

1.	INTRODUCTION	. 1
II.	BACKGROUND ON TRADEWIND	. 1
Ш	THE BENEFITS OF GRAIN RELT'S TRANSMISSION LINE	4

### 1 I. <u>INTRODUCTION AND PURPOSE OF TESTIMONY</u>

- 2 Q. Please state your name, present position, and business address.
- 3 A. My name is Frank B. Costanza. I am employed by TradeWind Energy, Inc.
- 4 ("TradeWind") as Executive Vice President Legislative and Regulatory Affairs.
- 5 My business address is 16105 W. 113<sup>th</sup> St, Lenexa, Kansas 66219.
- 6 Q. What is the purpose of your testimony?
- 7 A. TradeWind comes before the Commission to support the Application of Grain
- 8 Belt Express Clean Line LLC ("Grain Belt") for a Certificate of Convenience and
- 9 Necessity ("CNN") authorizing it to construct, own, operate, control, manage, and
- maintain a high voltage direct current transmission line.

#### II. BACKGROUND ON TRADEWIND

- 12 Q. Please describe TradeWind's business.
- 13 A. TradeWind is a privately held renewable energy development company
- headquartered in Lenexa, Kansas. The company was initially formed in 2003 and
- has been continuously engaged in the development of wind and solar energy
- 16 projects since its inception.

11

- 17 Q. Where are TradeWind's projects located?
- 18 A. TradeWind has successfully developed over 1,000 MWs of operating wind
- 19 projects located in the Great Plains wind belt in Kansas and Oklahoma. These
- wind energy plants became operational over a period from 2007 thru 2013. The
- 21 wind energy customers for these projects include investor owned, cooperative
- and municipal electric utilities primarily located within the Southwest Power Pool
- 23 Regional Transmission Organization ("SPP RTO") footprint, as well as, as utility

customers located in the southeast United States. TradeWind is one of the leading and most experienced exporters of wind energy from the wind rich Great Plains to the southeast United States today.

#### III. THE BENEFITS OF GRAIN BELT'S TRANSMISSION LINE

#### 5 Q. Where is wind energy primarily developed?

A

It is well documented that the best and most consistent wind resource in the United States exists in the Great Plains from the Dakota's to the Texas panhandle. The wind quality in many areas of this 6 state footprint, when combined with the latest wind turbine technology advancements, now yields annual capacity factors at or near 50 percent. The quality of this vast wind energy resource coupled with recent advances in wind turbine technology today yield the potential to deliver the lowest cost clean renewable wind energy available in the United States not only to the Great Plain's region electric customers, but also to electric energy customers in other regions of the United States where wind resources are not as robust.<sup>1</sup>

#### 16 Q. Are there any limitations on the development of wind energy?

- A. Yes, there is a limitation to this potential clean energy resource located in the
  Great Plains states. That limitation is the availability of transmission capacity
  from the Great Plains wind belt to the load centers located east of the Mississippi
  River using existing RTO capacity.
- 21 Q. How will Grain Belt's transmission line help with the limitation that you described?

<sup>&</sup>lt;sup>1</sup> Direct Testimony of David Berry on behalf of Grain Belt Express Clean Line LLC, Exh. \_\_ at 24-25 (March 26, 2014).

A. The Grain Belt transmission line presents an opportunity to deliver a substantial portion of this energy from the windiest areas of Kansas directly into locales where low cost clean energy options do not presently exist. The Grain Belt project will produce significant economic development benefits of its own to the states within which it would be constructed because it would allow the delivery of low cost energy into Missouri with the installation of a converter station, and it would enhance the delivery of low cost wind energy to locales outside the SPP RTO that do not have ability to build cost effective wind projects in their own regions.<sup>2</sup>

#### 10 Q. What are the benefits of the Grain Belt transmission line?

A.

Construction of the Grain Belt project and its ability to deliver electric energy with minimized electric loss is directly analogous to the construction of oil and gas pipelines that deliver these products from producing regions (e.g. the western United States and Gulf States) to consumers in the upper Midwest and eastern United States. The Grain Belt line, if built, would add competitive tension by a private company to a highly regulated and sometimes contentious SPP RTO system, that while making progress to add new lines, is often very slow to meet market demands due to the conflicting desires of its member utilities and the political constituencies they represent.<sup>3</sup>

## Q. What are some of the benefits of wind energy generally?

<sup>&</sup>lt;sup>2</sup> Direct Testimony of Michael P. Skelly on behalf of Grain Belt Express Clean Line LLC, Exh. \_\_ at 3-4, 8, and 11 (March 26, 2014).

<sup>&</sup>lt;sup>3</sup> Direct Testimony of Michael P. Skelly on behalf of Grain Belt Express Clean Line LLC, Exh. \_\_ at 16-17 (March 26, 2014).

Wind energy production does not require water to produce energy, unlike fossil plants. In addition, wind energy production produces no air emissions as its fuel is simply wind, not fossil or other fuels which must be combusted. Wind energy produces significant economic development in rural areas greatly in need of such activity, and these facilities are likely the best fit when matched with natural gas combustion turbine combined cycle and simple cycle plants to deliver both capacity and energy with the least environmental emissions footprint for a growing economy and to meet recently adopted EPA Reg. 111(d) requirements.<sup>4</sup>

### 9 Q. What role do taxes play in wind energy transmission?

Α.

A.

It is of course uncertain whether federal tax incentives will be extended in the future. These tax enhancements when combined with the high wind quality of places like western Kansas and, when combined with the recent advancements in wind turbine technology, allow wind energy developers to deliver busbar energy from most high quality Great Plains wind sites in the mid \$20 to very low \$30 per Mwh energy price. But should the federal government not extend the production tax credit, most utilities throughout the eastern grid are still faced with the substantial challenges to meet the requirements of EPA Reg. 111(d).<sup>5</sup>

## 18 Q. What is the significance of EPA Reg. 111(d)?

19 A. The inherent flexibility of 111(d) allows each state to craft solutions best suited to
20 its needs. Clearly, one alternative would make Great Plains wind plus gas fired
21 generation a very likely solution to meet both air emissions goals, while still

<sup>&</sup>lt;sup>4</sup> Direct Testimony of Michael P. Skelly on behalf of Grain Belt Express Clean Line LLC, Exh. \_\_ at 6 (March 26, 2014).

<sup>&</sup>lt;sup>5</sup> Direct Testimony of Gary Moland on behalf of Grain Belt Express Clean Line LLC, Exh. \_\_ at 10-11 (March 26, 2014); Direct Testimony of David Berry on behalf of Grain Belt Express Clean Line LLC, Exh. \_\_ at 34-35 (March 26, 2014).

delivering a very cost effective energy supply solution. This solution preserves the utility's desire to replace old generation plants with new cleaner gas fired generation that they may rate base, and supplement these rate based options with energy from low cost wind plants located in the Great Plains and in particular Kansas.<sup>6</sup>

# Q. How would Grain Belt's transmission line impact TradeWind and other wind energy providers?

A.

TradeWind has built part of its business model around the concept of delivering wind energy to regions outside the SPP RTO. TradeWind intends to actively develop projects in western Kansas, where today there exist limited export potential on the SPP RTO system. If the Grain Belt CNN is approved it would present an alternative electric conveyance system capable of moving bulk energy to markets east of the Mississippi River. TradeWind is experienced at delivering energy to eastern markets already using the existing RTO transmission systems and we see continued demand for clean energy in the eastern grid in the future. The high voltage direct current Grain Belt line would provide three major benefits including (1) eliminating the significant electric energy loss that is attendant to alternating current lines, (2) eliminating the significant congestion pricing risk that is posing issues for energy delivery from the western areas of the existing RTO grids where the wind energy production is best situated, and (3) accommodating

<sup>&</sup>lt;sup>6</sup> Direct Testimony of Gary Moland on behalf of Grain Belt Express Clean Line LLC, Exh. \_\_ at 10-11 (March 26, 2014); Direct Testimony of David Berry on behalf of Grain Belt Express Clean Line LLC, Exh. \_\_ at 34-35 (March 26, 2014).

future demand growth in the eastern markets and presenting a solution relative to
the requirements that will be attendant to EPA Reg. 111(d).

#### 3 Q. What is TradeWind's position on Grain Belt's proposed transmission line?

A. TradeWind Energy supports the Grain Belt direct current transmission line concept based upon the operational characteristics currently identified by Grain Belt. Subject to reasonable future market conditions, TradeWind believes that a market exists for wind energy sales from Kansas wind projects to locales east of the Mississippi River utilizing the Grain Belt transmission concept, and the underlying project cost of service assumptions that Grain Belt has represented to TradeWind can present a viable cost competitive alternative to using the SPP RTO for energy transport.

12 Q. Does this conclude your testimony?

13 A. Yes.

4

5

6

7

8

9

10

11

<sup>&</sup>lt;sup>7</sup> Direct Testimony of David Berry on behalf of Grain Belt Express Clean Line LLC, Exh. \_\_ at 27-28 (March 26, 2014).

# 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,	Case No. EA-2014-0207
Manage, Operate and Maintain a High Voltage, Direct	
Current Transmission Line and an Associated Converter	)
Station Providing an Interconnection on the Maywood	)
345 kV Transmission Line	)

#### AFFIDAVIT OF FRANK COSTANZA

STATE OF	KANSAS	)
COUNTY O	F JOHNSON	) s: )

Frank Costanza, being first duly sworn on his oath, states:

- 1. My name is Frank B. Costanza. I am Executive Vice President Legislative and Regulatory Affairs for TradeWind Energy, Inc.
- 3. I have knowledge of the matters set forth therein. 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.

Frank B. Costanza

Subscribed and sworn before me this 15 day of September , 2014.

VICKI SCHUMACHER
NOTARY PUBLIC
STATE OF KANSAS
My App. Exp. 4-8-2017

Notary Public

My commission expires: 9-8-2017

# 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	) Case No. EA-2014-0207
Current Transmission Line and an Associated Converter	)
Station Providing an interconnection on the Maywood-	)
Montgomery 345 kV Transmission Line	)

# MR. FRANK B. COSTANZA'S, TRADEWIND ENERGY, INC., SUPPLEMENTAL OBJECTIONS AND RESPONSES TO MISSOURI LANDOWNERS ALLIANCE'S SECOND SET OF DATA REQUESTS

Frank B. Costanza ("Mr. Costanza"), TradeWind Energy, Inc. ("TradeWind"), supplements his response to Missouri Landowners Alliance's Second Set of Data Requests, served October 1, 2014, as follows:

- 2.1 With respect to the over 1,000 MW of operating wind projects referred to in your testimony at page 1, lines 18-19, please provide the following information for each separate project or wind farm:
- (a) the location of each such project (closest city, and state).
- (b) the total nameplate capacity of the turbines at that site.
- (c) dates on which the first and last turbines were installed.
- (d) locations (by state) of all customers purchasing energy from the project over the past 12 months.
- (e) the contractual transmission path(s) used to deliver the energy to each customer buying energy from the project over the past 12 months.

OBJECTIONS: Mr. Costanza and TradeWind object because this data request is overbroad in scope because it seeks information regarding projects that have no relation to the proposed Grain Belt transmission line. Therefore, the data request seeks information that is not relevant to the proceeding and that is not reasonably calculated to lead to the discovery of admissible evidence. Moreover, Mr. Costanza and TradeWind object because this data request seeks highly confidential and proprietary information that should not be produced. The information sought in this data request potentially includes trade secrets and confidential and proprietary technical, financial, business, research, and development information. In addition, this data request seeks information that was the subject of Missouri Landowners Alliance's Motion to Compel, which was denied on September 24, 2014, and TradeWind's Motions for Protective Order, which were granted

on September 24, 2014. As such, the information sought in this data request is protected from disclosure by the Public Service Commission's September 24, 2014 rulings.

Without waiving the objection,

Project	County	State	Project Size (MW)	Date of Operation	First Turbine Installed	Customer Location	Transmission - Path
Smoky Hills I	Lincoln & Ellsworth	Kansas	100.8	Dec-08	Jul-07	KS	Busbar
Smoky Hills II	Lincoln & Ellsworth	Kansas	148.5	Dec-09	Jun-08	ks/MO	Busbar
Chisholm View	Grant & Garfield	Oklahoma	235.2	Dec-12	Jul-12	AL	Busbar
Caney River	Elk	Kansas	199.8	Dec-11	Jun-11	TN	Busbar
Rocky Ridge	Kiowa & Washita	Oklahoma	148.8	Jun-12	Feb-12	OK	Busbar
<b>Buffalo Dunes</b>	Grant & Haskell	Kansas	249.75	Dec 2013	Jun 2013	AL	Busbar

Dated: October 31, 2014

Respectfully Submitted,

DOUTHIT FRETS ROUSE GENTILE & RHODES, LLC

By: /s/ Christopher L. Kurtz, Esq.
Steve Willman # 30675
Darren Neil # 52245
Christopher L. Kurtz # 61654
5250 W. 116<sup>th</sup> Place, Suite 400
Leawood, Kansas 66211
Telephone: (913) 387-1600
Facsimile: (913) 928-6739

Email: <a href="mailto:dneil@dfrglaw.com">dneil@dfrglaw.com</a>
Email: <a href="mailto:ckurtz@dfrglaw.com">ckurtz@dfrglaw.com</a>

Email: swillman@dfrglaw.com

# **CERTIFICATE OF SERVICE**

I hereby certify that a copy of the foregoing was served upon all parties of record by email or U.S. mail, postage prepaid this 31<sup>st</sup> day of October 2014.

<u>/s/ Christopher L. Kurtz, Esq.</u> Christopher L. Kurtz

### **VERIFICATION OF RESPONSE**

	owners Alliance's Second Set of Data Requests
to Mr. Frank Costanza are true and accurate to the	ne best of my knowledge and belief.
	Signed Land Do ton
	Position Exec. VICE PRESSIONAL
	TradeWind Energy, Inc.
	Date: 0.4 3/ 2014