Exhibit No.: Issues: General Reliability Witness: Sarah Kliethermes Sponsoring Party: MO PSC Staff Type of Exhibit: Surrebuttal Testimony Case No.: EA-2014-0207 Date Testimony Prepared: October 14, 2014

# MISSOURI PUBLIC SERVICE COMMISSION

# **REGULATORY REVIEW DIVISION**

## SURREBUTTAL TESTIMONY

## OF

# SARAH KLIETHERMES

## **GRAIN BELT EXPRESS CLEAN LINE LLC**

## CASE NO. EA-2014-0207

Jefferson City, Missouri October 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, Operate, Control, Manage, and Maintain a Voltage, Direct High Current Transmission Line and an Associated Providing Converter Station an ) Interconnection on the Maywood ) Montgomery 345 kV Transmission Line )

Case No. EA-2014-0207

#### **AFFIDAVIT OF SARAH L. KLIETHERMES**

STATE OF MISSOURI ) ss **COUNTY OF COLE** 

Sarah L. Kliethermes, of lawful age, on her oath states: that she has participated in the preparation of the following Surrebuttal Testimony in question and answer form, consisting of 4 pages of Surrebuttal Testimony to be presented in the above case, that the answers in the following Surrebuttal Testimony were given by her; that she has knowledge of the matters set forth in such answers; and that such matters are true to the best of her knowledge and belief.

Smahl Gien Sarah L. Kliethermes

Subscribed and sworn to before me this 10th day of October, 2014.



1	SURREBUTTAL TESTIMONY		
2 3	OF		
4 5	SARAH KLIETHERMES		
6 7	GRAIN BELT EXPRESS CLEAN LINE LLC		
8 9 10	CASE NO. EA-2014-0207		
10 11 12	Q. Please state your name and business address.		
13	A. My name is Sarah L. Kliethermes and my business address is Missouri Public		
14	Service Commission, P. O. Box 360, Jefferson City, Missouri 65102.		
15	Q. Are you the same Sarah Kliethermes who submitted Rebuttal Testimony in this		
16	matter, including the replacement page filed September 26, 2014?		
17	A. Yes.		
18	<u>Overview</u>		
19	Q. Have you reviewed the rebuttal testimony of David Desmond on behalf of		
20	IBEW Unions, Frank Costanza on behalf of Tradewind Energy, Inc., and Matt Langley on		
21	behalf of Infinity Wind Power?		
22	A. Yes. I have reviewed these filed testimonies, among others.		
23	Response to Desmond		
24	Q. Are you familiar with the question and answer that follows from page 5 of Mr.		
25	Desmond's rebuttal testimony?		
26 27 28 29 30 31 32	<ul> <li>Q. Would Grain Belt's Application impact reliability of electric transmission in Missouri, and if so, how?</li> <li>A. Yes, approval of the Application would improve reliability of electric transmission. By interconnecting with the Ameren line, Grail Belt Express would provide another line in the State to transmit electricity. It would also provide another – cleaner and lower-cost – source of electricity to those areas.</li> </ul>		

# Surrebuttal Testimony of Sarah Kliethermes

1	А.	Yes. I reviewed this exchange, and requested further information from	
2	Mr. Desmon	d regarding it. Provided below is Staff Data Request 0172, and the Response	
3	provided by Sherrie Hall, on behalf of IBEW Local Union No. 53.		
4	<b>Description</b> Please refer to David Desmond rebuttal at Page 5, lines 5 –		
5	10. In this context, was the word "reliability" intended to refer to		
6	reliability pursuant to NERC standards? If not, in what sense is the word		
7	"reliability" intended? Please provide any analysis that was relied on by		
8	the witness to support their statement that the Grain Belt Express project		
9	will improve reliability.		
10	Response No, the word "reliability" was not intended to refer to		
11	reliability to NERC standards. In this context, the word "reliability" was		
12	intended to have its ordinary meaning. The witness's use of the word		
13	"reliability" was based on his forty years of experience working and		
14	training in the field of electricity.		
15	Q.	Is there a technical meaning of "reliability?"	
16	А.	Yes. As used in NERC standards, reliability consists of the following	
17	considerations:		
18	1)	Resource and Demand Balancing (BAL)	
19	2)	Communications (COM)	
20	3)	Critical Infrastructure Protection (CIP)	
21	4)	Emergency Preparedness and Operations (EOP)	
22	5)	Facilities Design, Connections, and Maintenance (FAC)	
23	6)	Interchange Scheduling and Coordination (INT)	
24	7)	Interconnection Reliability Operations and Coordination (IRO)	
25	8)	Modeling, Data, and Analysis (MOD)	
26	9)	Nuclear (NUC)	
27	10)	Personnel Performance, Training, and Qualifications (PER)	
28	11)	Protection and Control (PRC)	
29	12)	Transmission Operations (TOP)	
30	13)	Transmission Planning (TPL)	
31	14)	Voltage and Reactive (VAR)	
32	Q.	Has Staff indicated its concerns with the potential impact of the Grain Belt	
33	Express Proj	ect on reliability as that term is used in the NERC standards and also as generally	
34	understood?		

#### Surrebuttal Testimony of Sarah Kliethermes

A. Yes. The need for additional study of the impact on aspects of reliability is
 discussed in my rebuttal testimony, as well as in the additional studies and approvals
 discussed in the rebuttal of Staff witnesses Michael Stahlman, Shawn Lange, and Robert
 Leonberger.

## 5 **Response to Costanza**

- Q. Are you familiar with Mr. Costanza's assertion at pages 3 and 4 of his rebuttal
  testimony that wind facilities are "...best fit when matched with natural gas combustion
  turbine combined cycle and simple cycle plants...."?
- 9

A. Yes, I have reviewed his testimony involving this assertion.

10

Q. Is this assertion related to concerns you raised in your rebuttal testimony?

A. Yes, it is related to concerns I raised about the impact of the Project on the integrated energy market operation in MISO, specifically see my highly confidential rebuttal testimony beginning at page 22, line 13 through page 24, line 2, and page 28, line 2 through page 30, line 2.

#### 15 **Response to Langley**

A.

Q. Are you familiar with Mr. Langely's statement at page 8 of his rebuttal testimony that "...[o]ne trend that we are seeing in the renewable energy arena is the increasing number of large companies that are directly purchasing renewable power from developers like Infinity. These companies are doing this in part because they recognize the environmental benefits of doing so, but also because the [sic] see the value in purchasing energy at a very low and fixed price for a long period of time..."?

22

Yes, I have reviewed his testimony involving this assertion.

# Surrebuttal Testimony of Sarah Kliethermes

- Q. Is it reasonable to conclude that a potential benefit of the Project, if approved,
   is that it will enhance the ability of large companies in Missouri to directly purchase
   renewable power from developers like Infinity?
- A. No, it is not. I understand that there is only one retail customer in Missouri
  who can purchase electricity directly on the wholesale market—Noranda Aluminum.
  Noranda currently obtains its electricity from Ameren Missouri under a tariffed rate, and has
  done so for a number of years.
- 8

9

- Q. Does this conclude your Surrebuttal Testimony?
- A. Yes.