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Exhibit No. <u>122</u> Issues: Pre-Construction, Construction, and Post-Construction Process Witness: Thomas F. Shiflett Type: Surrebuttal Testimony Sponsoring Party: Grain Belt Express Clean Line LLC Case No.: EA-2016-0358 Date of Testimony: February 21, 2017

MISSOURI PUBLIC SERVICE COMMISSION

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CASE NO. EA-2016-0358

SURREBUTTAL TESTIMONY OF

THOMAS F. SHIFLETT

ON BEHALF OF

GRAIN BELT EXPRESS CLEAN LINE LLC

<u>GB</u> Exhibit No. 122 Date <u>3.21.17</u> Reporter KB File No. EA-2016-0358

February 21, 2017

TABLE OF CONTENTS

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I.	WITNESS INTRODUCTION AND PURPOSE OF TESTIMONY
II.	EQUIPMENT1
III.	MANPOWER
IV.	MATERIALS4

1

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I. WITNESS INTRODUCTION AND PURPOSE OF TESTIMONY

2	Q.	Please state your name, present position, and business address.
3	A.	My name is Thomas F. Shiflett. I am the Executive Vice President, Electric Power
4		Division for Quanta Services, Inc. ("Quanta"). My business address is 4770 N.
5		Belleview Avenue, Suite 300; Kansas City, Missouri 64116-2188.
6	Q.	Have you previously submitted prepared testimony in this proceeding?
7	А.	Yes, I have previously submitted direct testimony on August 29, 2016.
8	Q.	What is the subject matter of your surrebuttal tesitmony?
9	Α.	I am providing this testimony in order to respond to some of the concerns raised by Mr.
10		Shawn Lange in Staff's Rebuttal Report, on pages 51-53, regarding Emergency
11		Restoration Plans.
12		II. <u>EQUIPMENT</u>
13	Q.	Based on your experience, what is the typical lead time expected by Missouri
13 14	Q.	Based on your experience, what is the typical lead time expected by Missouri utilities for arrival on site of third-party equipment, such as helicopters, used in
	Q.	
14	Q. A.	utilities for arrival on site of third-party equipment, such as helicopters, used in
14 15		utilities for arrival on site of third-party equipment, such as helicopters, used in emergency restoration of high-voltage transmission lines?
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14 15 16 17 18		 utilities for arrival on site of third-party equipment, such as helicopters, used in emergency restoration of high-voltage transmission lines? Ground-based equipment such as cranes, aerial lifts, and dozers can be obtained locally from multiple sources of equipment rental firms. In addition, contractors utilized for emergency response maintain in-house the full complement of equipment required for
14 15 16 17 18 19		 utilities for arrival on site of third-party equipment, such as helicopters, used in emergency restoration of high-voltage transmission lines? Ground-based equipment such as cranes, aerial lifts, and dozers can be obtained locally from multiple sources of equipment rental firms. In addition, contractors utilized for emergency response maintain in-house the full complement of equipment required for any high-voltage transmission repair or construction. Lead times would run from hours

to several weeks. However, while the helicopter lift¹ was given as a restoration option, I
do not anticipate utilizing this approach. The right-of-way for the Missouri portion of the
Grain Belt Express Line at no point merits the use of heavy-lift helicopters because the
terrain is not that difficult. I am not aware of any utility that has utilized heavy-lift
helicopters in this portion of Missouri, for either routine construction or emergency
repairs to any high-voltage transmission line.

Q. The Draft Restoration Plan lists several potential helicopter contractors that may be
 used during a restoration event. Are these or similar vendors capable of providing
 equipment in Missouri or the surrounding region quickly enough to support
 transmission line restoration efforts for the Grain Belt Express Project?

A. Yes. As stated above, the smaller helicopters used in the initial assessment can be
procured from the vendors listed in the Draft Restoration Plan or from local vendors in
Kansas City, St. Joseph, or St. Louis on short notice. I am speaking of hours rather than
days. As for the heavy-lift helicopters, I do not anticipate utilizing this option.

Q. If lead times for certain types of equipment may vary from hours to a couple of
days, why would this not hamper the restoration effort?

A. The most time-sensitive aspect of restoration is securing the area to protect public safety.
Securing the area can be achieved without needing to wait for heavy equipment, and thus
lead times associated with securing this equipment do not hamper this effort. Once the
area is secured, work can begin on putting facilities back in operation. For high-voltage
transmission lines, it is typical for renewed operation, even utilizing temporary structures,
to take several days. For this reason, the entities responsible for ensuring reliability of the

¹ See page 10 of Schedule TSF-5 to my direct testimony.

1		electric system, including Regional Transmission Organizations ("RTO") and utilities,
2		plan both the transmission system and their generation mix such that the loss of a facility
3		or facilities will not threaten overall reliability of the electric system. These planning
4		requirements are codified in North American Electric Reliability Corporation ("NERC")
5		standards and can be supplemented by individual utility practice.
6	Q.	In your experience, is it necessary for a transmission project to have executed
7		contracts with third-party equipment suppliers for support during a restoration
8		event, prior to that transmission project receiving regulatory approval or doing
9		final engineering?
10	А.	No. Given the lack of certainty prior to regulatory approval or final engineering, third-
11		party equipment suppliers would not execute contracts to provide service for a project
12		that has not achieved those two milestones. Staff witness Mr. Lange, in his response to
13		Grain Belt Express Data Request 10 to Staff, confirms this by stating: "Staff is not aware
14		of a transmission project that had 'contracts for spare parts or other restoration equipment
15		that had been executed and were in existence for a transmission line that had yet to
16		receive its CCN or achieve its final engineering and design."
17		III. <u>MANPOWER</u>
18	Q.	What is the availability of skilled, experienced workers capable of restoring high-
19		voltage transmission lines in an emergency situation?
20	A.	Two of the largest high-voltage transmission contractors in the United States, PAR
21		Electrical Contractors and Capital Line Builders, maintain their headquarters in the
22		Kansas City area. Both firms currently provide the majority of high-voltage transmission
23		restoration for the electric utilities operating in the area of the proposed Grain Belt

1		Express Project. Further, at any given time, additional high-voltage contractors are
2		actively pursuing transmission projects in this area.
3		There are over 5,000 Skilled Journeyman Linemen who work out of the Missouri
4		IBEW Local Unions and those of adjacent states from whom these contractors would
5		draw their labor resources.
6	Q.	Are these workers capable of restoring high-voltage direct current transmission
7		lines like the Grain Belt Express?
8	A.	Yes. When I use the term Journeyman Linemen, I am referring to individuals who have
9		successfully completed the rigorous 4-year IBEW/NECA Joint Apprenticeship Training
10		Program for Outside Electrical Workers. These individuals are fully qualified to perform
11		all repairs on high-voltage direct current transmission lines.
12		IV. <u>MATERIALS</u>
13	Q.	In your experience, is it necessary for a transmission project to have specific
14		inventories and storage locations for spares or other restoration materials prior to
15		regulatory approval or final engineering?
16	A.	No, as is the case with contracts with third-party equipment suppliers, identifying specific
17		inventories and storage locations would come after regulatory approval and final
18		engineering.
19	Q.	Does it conclude your testimony?
20	A.	Yes.
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BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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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

Case No. EA-2016-0358

AFFIDAVIT OF THOMAS F. SHIFLETT

STATE OF	Missouri)
) ss
COUNTY OI	Jackson)

Thomas F. Shiflett, being first duly sworn on his oath, states:

1. My name is Thomas F. Shiflett. I am the Executive Vice President, Electric Power Division for the Quanta Services, Inc.

2. Attached hereto and made a part hereof for all purposes is my Surrebuttal Testimony on behalf of Grain Belt Express Clean Line LLC consisting of 4 pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

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.

Thomas F. Shiflett

Subscribed and sworn before me this 17th day of February, 2017.

ra hollman

Notary Public

My commission expires: April 18, 2020

Dena A. Crossman	
Notary Public - Notary Seal	
STATE OF MISSOURI	
Jackson County	
My Commission Expires: April 18, 2020	
Gommission #16802901	

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