

Exhibit No. \_\_\_\_\_  
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**

**CASE NO. EA-2016-0358**

**SURREBUTTAL TESTIMONY OF**

**THOMAS F. SHIFLETT**

**ON BEHALF OF**

**GRAIN BELT EXPRESS CLEAN LINE LLC**

**February 21, 2017**

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1                   **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       Bellevue Avenue, Suite 300; Kansas City, Missouri 64116-2188.

6   **Q. Have you previously submitted prepared testimony in this proceeding?**

7   A. Yes, I have previously submitted direct testimony on August 29, 2016.

8   **Q. What is the subject matter of your surrebuttal testimony?**

9   A. 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. EQUIPMENT**

13   **Q. Based on your experience, what is the typical lead time expected by Missouri**  
14       **utilities for arrival on site of third-party equipment, such as helicopters, used in**  
15       **emergency restoration of high-voltage transmission lines?**

16   A. Ground-based equipment such as cranes, aerial lifts, and dozers can be obtained locally  
17       from multiple sources of equipment rental firms. In addition, contractors utilized for  
18       emergency response maintain in-house the full complement of equipment required for  
19       any high-voltage transmission repair or construction. Lead times would run from hours  
20       to a couple of days, and would not hamper the restoration effort.

21                   Smaller helicopters used for initial damage assessment can be procured locally  
22       and quickly. Larger mid-lift and heavy-lift ships could take anywhere from several days

1 to several weeks. However, while the helicopter lift<sup>1</sup> was given as a restoration option, I  
2 do not anticipate utilizing this approach. The right-of-way for the Missouri portion of the  
3 Grain Belt Express Line at no point merits the use of heavy-lift helicopters because the  
4 terrain is not that difficult. I am not aware of any utility that has utilized heavy-lift  
5 helicopters in this portion of Missouri, for either routine construction or emergency  
6 repairs to any high-voltage transmission line.

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

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

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

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

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<sup>1</sup> 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 A. 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. MANPOWER**

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. MATERIALS**

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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