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MISSOURI PUBLIC SERVICE COMMISSION

FILE NO.

EA-2023-0017

SURREBUTTAL TESTIMONY

OF

JONATHON MONKEN

ON

BEHALF OF

GRAIN BELT EXPRESS LLC

MAY 15, 2023

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| 1 | | I. INTRODUCTION | |
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| 2 | Q. | Please state your name, present position, and business address. | |
| 3 | А. | My name is Jonathon Monken. I am a Principal at Converge Strategies, LLC | |
| 4 | ("Converge") | at 1301 K St NW, Washington, DC 20005. | |
| 5 | Q. | Have you previously submitted testimony in this proceeding? | |
| 6 | Yes, | I submitted direct testimony on August 24, 2022 and accompanying | |
| 7 | exhibits/schedules identified as Schedules JM-1 through JM-2. | | |
| 8 | Q. | What is the purpose of your surrebuttal testimony? | |
| 9 | А. | I am responding to testimony filed by Staff Witness Michael L. Rush, PE. | |
| 10 | | II. RESPONSE TO STAFF WITNESS MICHAEL RUSH | |
| 10 | Q. | Have you had an opportunity to review Staff Witness Michael Rush's | |
| | _ | | |
| 12 | comments re | egarding national security in his Rebuttal Testimony? | |
| 13 | А. | Yes, I have. | |
| 14 | Q. | Can you summarize his statements? | |
| 15 | А. | Yes, I can. Mr. Rush acknowledged that "a functioning, efficient and secure | |
| 16 | transmission system is definitely a matter of national security" and acknowledged the direct | | |
| 17 | connection between continued access to energy resources and the ability of the Department of | | |
| 18 | Defense to execute essential National Defense missions. However, he asserted that this linkage | | |
| 19 | does not directly support the Grain Belt Express Project. Additionally, Mr. Rush acknowledged | | |
| 20 | the benefits of a DC transmission bridge between balancing authorities to improve access to | | |
| 21 | geographically disparate energy resources and stated, "additional infrastructure will be required to | | |
| 22 | move distantly generated power to major load centers" but he indicated that other, unnamed | | |
| 23 | projects can accomplish this as well. Mr. Rush also agreed that "a reduction in dependence on any | | |

foreign nation for any infrastructure related material is definitely in the interest of national
security," also indicating that there are still other components manufactured overseas.

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Q. How can we measure the impact of energy outages on National Security?

4 Grid operational capability is of particular importance to the U.S. Department of A. 5 Defense ("DoD"), an organization that represents the largest single ratepayer in the U.S. with more 6 than 100 installations within the 23 states connected by the Grain Belt Express Project, all with a 7 near total dependence of essential missions on continued access to electricity provided by private 8 companies and utilities. DoD has explicit requirements for energy resilience outlined in a 2021 9 memorandum from the Undersecretary of Defense titled, "Metrics and Standards for Energy 10 Resilience at Military Installations." This memo requires that, "100 percent of the energy load 11 required to maintain the critical mission of each DoD installation has a minimum level of availability of 99.9 percent per fiscal year."¹ Additionally, installations must have 7-14 days of 12 uninterrupted electric service for critical defense missions, and the current reliability ratings are 13 insufficient to meet these requirements.² 14

According to the DoD Annual Energy Management and Resilience Report, "In FY 2021, DoD Components reported 6,288 unplanned utility outages, and a financial impact of approximately \$128M."³ The number and length of outages far exceeded those experienced in any of the previous 10 years. Timely action is necessary to address this issue and the pursuit of the CCN amendment to the Grain Belt Express Project will provide direct support to the overall resilience of the grid to more than 100 DoD installations.

¹https://www.acq.osd.mil/eie/Downloads/IE/Metrics%20and%20Standards%20for%20Energy%20Resilience%2020 %20May%202021.pdf ²https://www.secnav.navy.mil/eie/Documents/DON-Installation-Energy-Resilience-Strategy.pdf; https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN21689_AD2020_03_FINAL_Revised.pdf; https://static.e-publishing.af.mil/production/1/saf_ie/publication/afpd90-17/afpd90-17.pdf ³ https://www.acq.osd.mil/eie/Downloads/IE/FY%202021%20AEMRR.pdf, Page 18

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Q. How does the presence of the Grain Belt Express Project and CCN amendment directly support National Security?

A. Any disruption to electricity service to a DoD installation comes with a mission impact. DoD personnel and resources must be reallocated to ensure ongoing mission assurance to replace the capability lost due to a power outage. Resilience vulnerabilities were exposed recently during Winter Storm Elliot in December of 2022, which impacted multiple ISOs simultaneously and resulted in rolling blackouts in the service territories of Duke Energy and the Tennessee Valley Authority, among others. Grid instability in these service territories presents a direct impact to Missouri and the ISOs that will be connected and supported by the Grain Belt Express Project.

10 Additionally, Mr. Rush acknowledged the unique capabilities of HVDC transmission (as 11 detailed in the Converge Strategies Report, Schedule JM-2 of my Direct Testimony) but did not 12 acknowledge the link to the unique energy requirements of DoD. The electricity service 13 requirements of national defense missions based on the installations located in the service 14 territories connected by the Grain Belt Express Project vary widely. Load fluctuation, the size and 15 location of critical loads, the speed and duration of energy availability, and the distributed nature 16 of essential facilities all require substantial operation flexibility from the grid. Bidirectional flows, 17 enabled through the enhanced controllability of HVDC as outlined in the CCN amendment, are 18 essential to support the dynamic nature of DoD energy demand. Given the extent of DoD presence 19 in this geographic region, there is a time imperative to approving the CCN amendment to ensure 20 this energy resilience vulnerability is addressed in the timeliest manner possible.

It would be imprudent to ignore the benefits offered by the Grain Belt Express Project in favor of hypothetical other projects that may never come to fruition. There are no other multiregional, HVDC transmission lines under development in Missouri, so the Grain Belt Express Project *is* uniquely important because of the timing of its development and its distinctive
capabilities.

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Q. Mr. Rush asserts that your testimony does not address the CCN amendment as opposed to the currently certificated Project. How do you respond?

A. My Direct Testimony addresses the benefits provided by the Project's ability to connect energy resources in four balancing authorities covering 23 states, which are home to more than a quarter of the DoD footprint. A greater and more balanced capability to inject and withdraw from those regions—as offered by the CCN amendment enhances those benefits. Specifically, the increase in total capacity from 4000 MW to 5000 MW, and the increase in the capacity of the Missouri converter station from 500 MW to 2500 MW increases the national security benefits discussed throughout my Direct Testimony and Schedule JM-2.

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III. CONCLUSION

13 Q. Why is action on the CCN amendment necessary for National Security?

A. The energy security of DoD installations in the balancing territories connected by the Grain Belt Express Project are at risk. Concrete action is needed to systematically address this risk and provide the predictability needed by DoD to conduct long-term planning of critical missions and their associated energy requirements. Approving the amendment will allow for increased access to energy resources that can mitigate this risk in the near term, while adding much-needed flexibility in bi-directional power flows to support the unique energy needs of DoD.

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Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

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In the Matter of the Application of Grain Belt Express LLC for an Amendment to its Certificate of Convenience and Necessity Authorizing it to Construct, Own, Operate, Control, Manage, and Maintain a High Voltage, Direct Current Transmission Line and Associated Converter Station

File No. EA-2023-0017

AFFIDAVIT OF JONATHON MONKEN

1. My name is Jonathon Monken. I am a Principal at Converge Strategies, LLC ("Converge") at 1301 K St NW, Washington, DC 20005.

2. I have read the above and foregoing Rebuttal Testimony and the statements contained therein are true and correct to the best of my information, knowledge, and belief.

3. Under penalty of perjury, I declare that the foregoing is true and correct to the best

of my knowledge and belief.

Jonathon Monken

Principal Converge Strategies, LLC

Date: ___5/12/23_____