

## **Additional Questions for the Record**

**The Honorable Bruce J. Walker, President & Chief Executive Officer, Alliance for Critical Infrastructure Security, Inc.**

### **The Honorable Richard Hudson**

Questions posed by The Honorable Richard Hudson:

1. What are the security gaps and challenges associated with delivering government aid and emergency services during a blackout, as opposed to during some other hazard or disaster? What changes to local, state, and federal authorities should Congress make to better support your mission?

Response: Presently, there are no unique impediments nor challenges to providing governmental aid and emergency services during localized blackouts as compared to other types of disasters. Of course, each type of event has unique characteristics and challenges - such as access limitations due to physical damage during flooding or hurricane events or lack of electricity at emergency service facilities that are not equipped with back-up generation.

However, if there were a sustained outage of a large portion of one of the Interconnects or a metropolitan city – there would be significant challenges providing emergency services because nearly every associated activity relies upon electricity. Moreover, the challenges would be exacerbated by the physical size of the outage because significant government support would require electricity and other resources at the command post likely necessitating it to be physically located outside of the area impacted by the blackout. Supply chain issues would also be exacerbated by the physical size of the outage in part due to logistical constraints as well as availability.

I do not believe that there are any issues with existing authorities.

2. One issue revealed following the Moore County grid attack was the length of time it takes to get parts necessary to repair a station. How do entities mitigate supply chain challenges that may keep communities in the dark after grid failures? What happens if the parts needed to replace critical energy transmission infrastructure are not available?

Response: Substations are a critical part of the electric grid. The concept of mitigating supply chain challenges has been the focus of utilities and governments for decades. In addition to many companies maintaining their own supply of spare assets there are various other mechanisms to mitigate supply chain risk such as the Spare Transformer Equipment Program, the Grid Assurance company, the SPAREconnect toolkit and the North American Transmission Forum's Regional Equipment Sharing for Transmission Outage Restoration program. Many utilities participate in these programs.

These programs and individual utility stockpiles were established before the United States highlighted through its Annual Intelligence Community Transparency Report the cyber and physical threats to the electric grid from nation-state adversaries and Domestic Violent Extremists. Hence, based upon our analysis at the Alliance for Critical Infrastructure Security Inc., some aspects of these programs should be revisited as they have not appropriately adapted to the risk. For instance, certain stockpiles of large power transformers across the U.S. are physically located in a single unprotected location - making them highly susceptible to physical attack.

Practically speaking, the lack of certain critical components could significantly impede repairs or maintenance of the critical energy transmission infrastructure. Such a delay during a crisis during war or natural disaster could be harmful to our citizens who may have to endure weeks, months or longer periods without power. Depending on the location and duration of such an outage, delayed repairs could also threaten some national security systems and thus undermine the national security of the country.