

June 13, 2023

Via Electronic Filing National Telecommunications and Information Administration U.S. Department of Commerce 1401 Constitution Avenue, NW Washington, DC 20230

Re: Docket No. NTIA-2023-0003, In the Matter of Development of a National Spectrum Strategy

To Whom It May Concern:

Ameren Transmission Company of Illinois, Ameren Illinois Company, and Union Electric Company d/b/a Ameren Missouri, by and through their agent and affiliate Ameren Services Company (hereinafter collectively referred to as "Ameren") hereby submits to the National Telecommunications and Information Agency (NTIA) their collective response to NTIA's Request for Comments released *In the Matter of Development of a National Spectrum Strategy*, released March 16, 2023.¹

Ameren supports comments filed in this proceeding by the Edison Electric Institute² (EEI) & Utilities Technology Council³ (UTC). Ameren supports the goal of increasing spectrum availability for all users. Ameren recommends, in particular, that a national spectrum strategy recognize the needs of critical infrastructure industries such as electric utilities for access to secure spectrum to operate and maintain their networks and provide reliable clean energy.

A transparent spectrum management framework is needed as the electric industry pursues clean energy goals and integrates smart energy infrastructure and renewable energy sources. A well-coordinated pipeline of future spectrum availability, a mix of spectrum access models (licensed, unlicensed, shared or hybrid), and predictable policies will maximize the productive use of American spectrum assets by electric utilities and other sectors.

The electric grid is critical infrastructure that must operate with high reliability and resiliency. Timely restoration of service to customers is essential to achieving these reliability goals. To facilitate these processes and manage the grid, devices across the grid communicate and interact to provide vital data. Fault current indicators (FCI's), sectionalizers and reclosers are devices that provide early fault

¹ Development of a National Spectrum Strategy, National Telecommunications and Information Administration, Notice, Request for Comment, 88 Fed. Reg. 16244 (March 16, 2023) (hereinafter "Request for Comment").

² Comments of the Edison Electric Institute, in response to Development of a National Spectrum Strategy, National Telecommunications and Information Administration, Request for Comments, Docket No NTIA-2023-0003. (April17, 2023).

³ Comments of Utilities Technology Council, in response to Development of a National Spectrum Strategy, National Telecommunications and Information Administration, Request for Comments, Docket No NTIA-2023-0003. (April17, 2023).

detection and enable automated safety and restoration capabilities. These various communications devices rely on broadband and wireless communications infrastructure.

Unmanned aerial systems, also known as drones, which require spectrum, are another vital tool to maintain the grid, especially in remote areas. Ameren expects to increase its use of such technology in the future. This network of communications infrastructure and devices speeds up system service restoration and grid resiliency as well as increases worker and customer safety. The foundation of a safe, secure, and reliable electric grid is this broadband communications network.

Ameren also relies on communications via microwave links operating in the 6 GHz and 11 GHz bands. Currently, in the 6 GHz band, these communications links are at risk of harmful interference as the Federal Communications Commission (FCC) has permitted unlicensed devices to operate in this band. Ameren will likely need to migrate to alternative bands which are free from unlicensed devices at this time, such as the 11 GHz in which we currently operate. The NTIA's National Spectrum Strategy must ensure that critical infrastructure industries, such as electric utilities, have access to spectrum which is free from harmful interference created by unlicensed devices.

Ameren's communications infrastructure is as extensive as our electric infrastructure that requires maintenance, remote control, and monitoring. Ameren must be prepared to offer safe, reliable and ubiquitous electric service at reasonable costs even in the most rugged and remote areas, many of which are not adequately served by telecommunications providers. The lack of telecommunications service across remote areas of our 64,000 square mile service territory has prompted Ameren to build our own Private LTE (PLTE) network using the 900 MHz band dedicated to critical infrastructure by the FCC in 2020.

The demands for increased security, monitoring, and control over the electric grid, as well as safety and enablement of remote workers, puts a strain on the limited spectrum which is available today to electric utilities. Access to additional spectrum will allow Ameren to augment the services provided over PLTE networks to keep up with the proliferation of distributed energy resources (DERs) and provide enhanced security at substations, near-real-time supervisory control and data acquisition (SCADA) monitoring, and automated service restoration.

Finally, Ameren agrees with UTC's recommendation that the U.S. coordinate with other nations to dedicate spectrum in the 400-450 MHz range for utility use to manage critical infrastructure so that equipment already in use around the world can be readily deployed in the U.S.⁴

⁴ Comments of Utilities Technology Council at 6.

June 13, 2023

Ameren appreciates this opportunity to comment on the NTIA's National Spectrum Strategy Request for Comments and looks forward to the unfolding of NTIA's National Strategy.

Sincerely, Ameren Transmission Company of Illinois, Ameren Illinois Company, Union Electric Company d/b/a Ameren Missouri

By: Christopher Vana hristopher Vana (Jun 12, 202

Christopher Vana Ameren Services Company, as agent Title: Sr. Director, Network Engineering & Operations