



The Edison Foundation

INSTITUTE for  
ELECTRIC INNOVATION

## IEI Technology Partner Snapshot

# Anterix

Anterix empowers electricity grid modernization by enabling private broadband connectivity. Anterix's foundational spectrum enables private, dedicated Long-Term Evolution (LTE) networks, so electric companies can achieve greater levels of cyber security, resiliency, and control. Anterix is the largest holder of licensed spectrum in the 900 MHz band, with nationwide coverage throughout the contiguous United States, Hawaii, Alaska and Puerto Rico.



## How Anterix is Partnering with Electric Companies:

### Private LTE Broadband

The Anterix private 900 MHz spectrum provides a foundation for electric companies to deploy robust private LTE broadband networks that meet their performance and resilience needs, stay in their control and are standards based for future scalability and extensibility. With private LTE, electric companies benefit from secure and resilient broadband connectivity while maintaining full visibility and control of their field sensors and data flows.

### National Renewable Energy Laboratory

NREL and Anterix, alongside an Advisory Board of electric companies, successfully piloted private LTE networks for electric company control applications. The first phase of this DOE project confirmed the successful performance of Anterix's private LTE network to communicate control signals without delay, regardless of usage levels on the network, to distributed energy grid devices. The next phase of the project will test Anterix's LTE network to prioritize and communicate high impact communications, such as a substation trip signal, to an advanced distribution management system in a congested environment.

### Ameren Corporation

Ameren partnered with Anterix to demonstrate that private LTE network data speeds and capacity on 900 MHz spectrum are sufficient to replace numerous narrowband systems or legacy copper-based circuits with a standardized single network solution for advanced IoT grid applications. Anticipated benefits for Ameren include the cost-effective integration of distributed energy resources (DERs) at high penetration levels, improved reliability of real-time energy management, and increased resiliency of automated grid-edge infrastructure such as Advanced Meter Infrastructure, Intellirupters, and Substation Backhaul.