To date, utilities have been unable to acquire dedicated private licensed broadband spectrum assigned from the federal government. Spectrum required to help support their needs for dedicated high-performance wireless data communications networks. This has left utilities using public networks or even shared unlicensed spectrum to meet their data needs. The result? Operational inefficiencies, low performance, and increased expenses. As a consequence, many utilities have a multitude of purpose-built Field Area Networks (FANs) supporting their operations, with their own unique equipment, management tools, and life cycle support requirements.

New grid applications including distributed generation management, are driving critical grid communications

Potential Benefits

- Utilize the same LTE technology that powers the AT&T commercial network.
- Experience longevity; as AT&T networks evolve, so does the Private LTE network.
- The utility’s LTE network enables the deployment of multiple grid applications at each site according to operational and capital budgets.
- Leverage the investment that AT&T and the cellular industry have made into LTE technology.

Features

- AT&T commercial LTE service can be utilized for fallback to help ensure higher levels of reliability and business continuity.
- AT&T commercial LTE service levels can be selected to address specific operational requirements.
- Helps enable the utility to consolidate multiple disparate networks into the standards based Private LTE Network.
requirements for essential control, reliability, and security that current purpose built FANs typically cannot address. AT&T Private LTE Network for Utilities allows utilities to build, own, and operate their own private LTE Internet of Things (IoT) field area networks that can be used for multiple utility grid applications. This opens exciting possibilities for grid communications strategies by utilizing standards-based LTE technology that is ready for mission-critical applications duty.

This solution offers proven large network capabilities, scalability, and longevity to meet utilities’ operational needs, while allowing utilities to sunset their purpose built networks.

Utilities are a critical infrastructure industry and are challenged to improve service delivery and address ever-increasing security threats. Compounding these challenges are the pressures from investors and regulatory agencies to streamline operations and reduce costs. To overcome these challenges, utilities require greater remote monitoring and control into their operations. As a result, they are looking to leverage IoT communications technology to provide these insights to increase the automation of their operations. IoT communications technology enables connectivity to applications like demand response, distribution automation, load balancing, smart meters, and other smart grid applications.

With their own Private LTE network from AT&T, utilities are able to prioritize network usage and have a new level of visibility and control, enabling near real-time decisions about grid configurations, outage restoration, system maintenance, and more. Using purpose built networks and unlicensed wireless solutions can create vulnerabilities in applications and are susceptible to outages, congestion, and interference. The dream of utilities owning and operating a highly secure and highly reliable multipurpose IoT network is now a reality. AT&T Private LTE for Utilities brings spectrum, equipment, and services together into a single offering with seemingly unlimited opportunities.

AT&T Private LTE for Utilities provides

- Dedicated 2.3 GHz spectrum from AT&T which helps minimize interference by other sources such as, rapidly proliferating IoT devices operating on unlicensed spectrum.
- 6MHz of dedicated bandwidth capable of meeting most operational needs.
- Low latency to support utility distribution applications that require near real-time communications.
- Proven large network capabilities, scalability, and longevity which helps leverage future utility investments and road maps.
- A utility owned network management system that can monitor and control the private LTE network from end-to-end, including network performance, data prioritization, security, edge devices and their SIM cards.
- Carrier grade complete end-to-end security.
- AT&T consulting, network design, implementation, integration, network optimization, and network road maps.

AT&T technologies and expertise help in the deployment and management of high performance IoT networks, so you can optimize your business and bottom line. Our edge-to-edge technologies provide virtually seamless integration across endpoints, connectivity, data in the cloud, and cybersecurity, and we lead the industry in the use of our networks for IoT applications. We want to help you transform your utility with your own Private LTE wireless network from AT&T.

For more information visit: