



Securing Advanced Metering System



Black River's new meters offer many advantages, including a stronger secure network and more reliability, more precise monitoring of outage data and improved response times. The Improved Response Time is a huge step for Black River, because in a lot of cases, they will know your electric power is out before you can even tell them. This means their crews can resolve the issues much more quickly!

CHALLENGES

Launching the effort in 2016, Black River's engineering team commenced reviewing and vetting vendors of compact industrial routers for harsh environments. Due to the geo-dispersed nature of the project, the routers needed to support LTE wireless connectivity. On electing Landis+GYR as their router of choice, Black River focused on choosing the provider for their cellular connectivity. A key aspect in choosing the LTE provider was the ability to secure the devices and have a reliable path in which to manage the 31,000+ meters.

Black River's engineering opted to go with Verizon Wireless and Asavie SD IoT, as it provided comprehensive coverage, with a secure private cellular network that the engineering team could self-manage, and provided the ease in which to establish bi-directional connectivity to the meters.

The less we spend working on the communications network, the more time we can spend working for the communities we serve.

Billy Hamlin,
Systems Engineer



SOLUTION DEPLOYED

BREC deployed Asavie SD-IoT on Verizon Wireless. Asavie SD IoT is a self-serve private mobile network for IoT that allows BREC to take their devices off the public internet and away from cyberthreats. Through the Asavie SD-IoT self-serve portal, BREC assigned private static IP addresses, configured routes, created IP access lists with secure remote access to the Landis+GYR devices. BREC utilizes the remote access agents of Asavie SD IoT to establish secure connectivity to the Landis+GYR. The result is that BREC could easily deploy at scale, as no additional software is required on the device. Furthermore, additional costs were saved as there was no need to configure a complex mesh of IPsec tunnels or manage private circuits in-house.



Black River Electric COOP (BREC) is a member owned, not-for-profit, electric cooperative dedicated to providing affordable, quality energy services to areas of Clarendon, Kershaw, Lee and Sumter counties in South Carolina. The Cooperative currently has 67 employees dedicated to the core belief of reliable service, quality customer service and democratic member ownership. With over 31,000 meters and 3,400 miles of energized line, the Cooperative continues to grow. Black River is committed to providing the membership with the most reliable, affordable service possible.

RESULTS

To date, BREC has secured some 31,000+ meters. The security and flexibility that BREC gets from Asavie SD IoT have allowed for further innovation in reliability across their electricity network. Some of the key reasons why BREC chose Asavie are:

- Ease of deployment, minimal effort to define and group meters into subnetworks.
- Reduced truck rolls, ability to access and manage the meter data remotely.
- Centralized view of meter status, with integrated network status and alert notifications.
- Rapid deployment, no up-front expense or CAPEX requirement to build a physically secure network.
- Scalable on-demand, ease of turning up new subnetworks per neighborhood.

We wanted a private cellular network without the overhead of building/maintaining one, Asavie allows us to accomplish this with SD-IoT.

Billy Hamlin,
Systems Engineer



NO CAPEX

No up-front expense required to build a physically secure network

SCALABLE

Easy grouping and segmentation of 31,000+ meters into subnetworks

FLEXIBLE

Self-serve custom IP subnets with an unconstrained range of private static IP addresses

Asavie makes secure connectivity simple for any size of mobility or IoT deployment in a hyper-connected world.

ASAVIE