

Future-Proofing Power: Transforming MTE's Control Room for Unparalleled Efficiency.

Challenge

Middle Tennessee Electric (MTE), the largest electric cooperative in the Tennessee Valley Authority (TVA) region, faced challenges with antiquated technology. Although a new video wall and control system was installed in 2016, rapid technology advancements were quickly rendering the equipment outdated by 2017, setting the stage for a next upgrade.

Serving 750,000 residents across 2,200 square miles in Middle Tennessee, MTE primarily operates in four rapidly growing counties—Cannon, Rutherford, Williamson and Wilson. Their biggest challenge is maintaining reliable power during severe weather events like tornadoes, thunderstorms, and flooding. With a growing customer base, they required a solution that could ensure consistent operation, especially during extreme conditions, and enable a quick response to outages.

Solution

Shawn Futrell, the Systems Control Supervisor at MTE, began his search for a state-of-the-art video wall system by attending multiple conferences and investigating all the options available to MTE. At one of these events, Shawn visited Activu's exhibit, where he first experienced vis|ability, Activu's powerful software platform for critical operations. While initially focused on the physical video walls and screens, the capabilities of vis|ability transformed his vision, and opened new possibilities for MTE.

Activu's combination of top-tier control room design and implementation services, coupled with the vis|ability software, became the standout solution. The Activu system integrates critical tools available in the secure network (SCADA), equipment and process control, cameras, GIS sources, and more—into a single platform. Shawn realized that this could enable seamless collaboration for rapid, coordinated responses across the entire MTE service area.

Since deploying vis|ability, MTE's team can now:

Gain actionable insights from massive amounts of diverse data.

Instantly assemble a virtual common operating picture that can be shared securely, in real-time.

Recognize and respond faster to provide safe and reliable delivery of power to Middle Tennessee.

As Shawn puts it, "The video wall was just a vehicle to deliver the content." After consulting with Activu, he realized what MTE truly needed was a robust software platform like vis|ability, unmatched in its ability to increase operations and ensure superior grid management.

Result

MTE now operates a robust, meticulously planned control room, featuring high-definition direct-view LED displays and Activu's vis|ability software. vis|ability seamlessly integrates content from MTE's monitoring systems, delivering a flexible, real-time common operating picture, tailored to the control room team's specific needs. To support its growing customer base and respond to increasing power demands, vis|ability empowers the team to recognize and respond to outages and incidents in record time.

Engineered to future-proof operations, vis|ability is fully scalable and adapts effortlessly to evolving monitoring needs. MTE has expanded by building new substations which are immediately incorporated into vis|ability's operational view. Vis|ability software is flexible, commercially available, and supports an off-the-shelf hardware architecture. This empowers operators to manage critical information instantly and collaboratively while reducing reliance on costly hardware upgrades. Whether displayed on current screens or integrated into future control room systems, vis|ability ensures teams are always equipped to respond to incidents with unmatched speed and precision.