

Restoring Power Faster with Real-Time Remote Collaboration

How a regional utility company used Telepresenz® Smart Ops™ to connect linemen in remote regions, cut outage response times by 80%, and improve field safety.



80%

Faster fault diagnosis — from 4–6 hours to under 1 hour



65%

Reduction in outage duration — minimizing customer disruption



70%

Fewer repeat site visits — through guided fault verification

Client: Confidential Regional Power Utility

Industry: Utilities / Power Distribution

Scale: Large rural electricity network spanning thousands of square miles

Worker Environment: Linemen and maintenance crews operating in low-coverage and remote regions

IT Environment: Secure public cloud with mobile LTE and satellite backup for redundancy

Devices: RealWear HMT-1 headsets, tablets, handhelds, and vehicle-mounted dual-SIM LTE modems

The client operates a vast electricity distribution network across remote and rural areas, where linemen often travel long distances under harsh weather conditions to restore power and perform repairs. Despite having mobile connectivity in place, communication blackouts and spotty LTE coverage made it difficult for control rooms to maintain situational awareness of field operations. When faults occurred—especially during storms—dispatchers had limited visibility into what crews were encountering. Without visual confirmation, experts struggled to diagnose problems remotely, resulting in delayed repairs, repeated site visits, and extended outage durations for customers.

“We needed a way to see what our crews were seeing — live — and make informed decisions instantly, not hours later.”

Inspections & Remote Assistance

Solution: Telepresenz® Smart Ops™ for Digital Inventory Management and Remote Inspections

To overcome these operational challenges, the utility deployed Telepresenz® Smart Ops™ Remote Video Assistance, integrating directly with existing mobile infrastructure and RealWear HMT-1 headsets.

Each field vehicle was equipped with a dual-SIM LTE modem and satellite backup, creating a local Wi-Fi network that allowed linemen to stay connected wherever they were. Using Smart Ops™, field workers could stream live video feeds directly from the fault site to dispatch centers, giving remote experts a real-time view of the problem.

Supervisors could zoom in, annotate, and guide the linemen step-by-step using live video — all without requiring the worker to remove their gloves or handle a mobile device. When communication dropped momentarily, Smart Ops™ seamlessly reconnected, ensuring continuity in guidance and data capture.

Document sharing, inspection workflows, and procedural checklists appeared directly within the worker's headset display, keeping both hands free for safe, compliant fieldwork. Fault assignments were automatically routed to nearby crews based on GPS data, enabling faster response and optimal resource allocation.

"With Smart Ops, our control room has eyes on the field at all times. We can diagnose and guide repairs in real time—even in blackout zones."

The impact was immediate and measurable. Fault diagnosis time dropped by 80%, reducing the average from 4–6 hours to under 1 hour. Outage duration decreased by 65%, as experts could now guide crews in real time and ensure first-time resolution.

The platform's GPS-based routing and centralized dashboards eliminated duplicate dispatches, cutting repeat site visits by 70%. Beyond operational gains, worker safety improved significantly, as linemen could receive live oversight during high-risk repairs and emergency responses.

Key Outcomes:

- 80% faster fault diagnosis through live visual collaboration
- 65% shorter outage durations for customers
- 70% fewer repeat site visits and travel inefficiencies
- Improved worker safety via hands-free, real-time support
- Higher SLA compliance and customer satisfaction

"Telepresenz allows us to assist linemen remotely, even in blackout zones. It's like having an expert in every truck."



About Telepresenz®

Telepresenz® — AI-Powered. Frontline-Focused. Future-Ready. Telepresenz connects inspectors, engineers, and administrators through real-time collaboration and AI-powered operational workflows. With Smart Ops™, aerospace teams gain digital control over inspections, inventory, and compliance — turning complex maintenance programs into seamless, transparent, and efficient operations.