

Mid-Atlantic Power Utility Replaces Leased Lines with Multi-Service Ethernet Solution

Case Study

The Challenge: Telco Support for Leased Lines Comes to an End

With the availability of Telco leased lines facing an uncertain future, Power Utility network managers are looking at alternative tools and transmission mediums for communications transport.

One Mid-Atlantic Power Utility faced a host of requirements. At the top of their list was to find a hardened, future-proof alternative to leased lines that would support 4-wire 600 ohm analog, and run over existing Ethernet Microwave and planned fiber networks. They also wanted the flexibility of adding RS-232 and telephone down the road.

Solution: Modularity, Flexibility, and “Future Proof”

After an extensive search, the Utility chose TC Communication’s JumboSwitch® Multi-Service Ethernet Platform, largely for its modularity and flexibility, as the Utility expected to deploy 80-100 nodes over the next two to three years. The JumboSwitch also fit their definition of “future proof” due to its inherent support for new applications, interfaces and transmission mediums.

Four different JumboSwitch chassis sizes with hot-swappable analog cards were installed. Eventually, telephone (virtual PBX) and data cards will be added. For example, a 4U with 12 channels of 4-wire 600 ohm analog will be used at one central site and – depending on whether 2, 4 or 8 channels care required at each remote site – 1S, 1U and 2U chassis options will be used.

Objective

Connect analog modems/RTUs and SCADA communications between a central office, remote substations and gas gates

Products Used

- [JumboSwitch®](#)
- [TC3846-6: 4ch 600 ohm Analog and Dry Contact over IP Gateway](#)

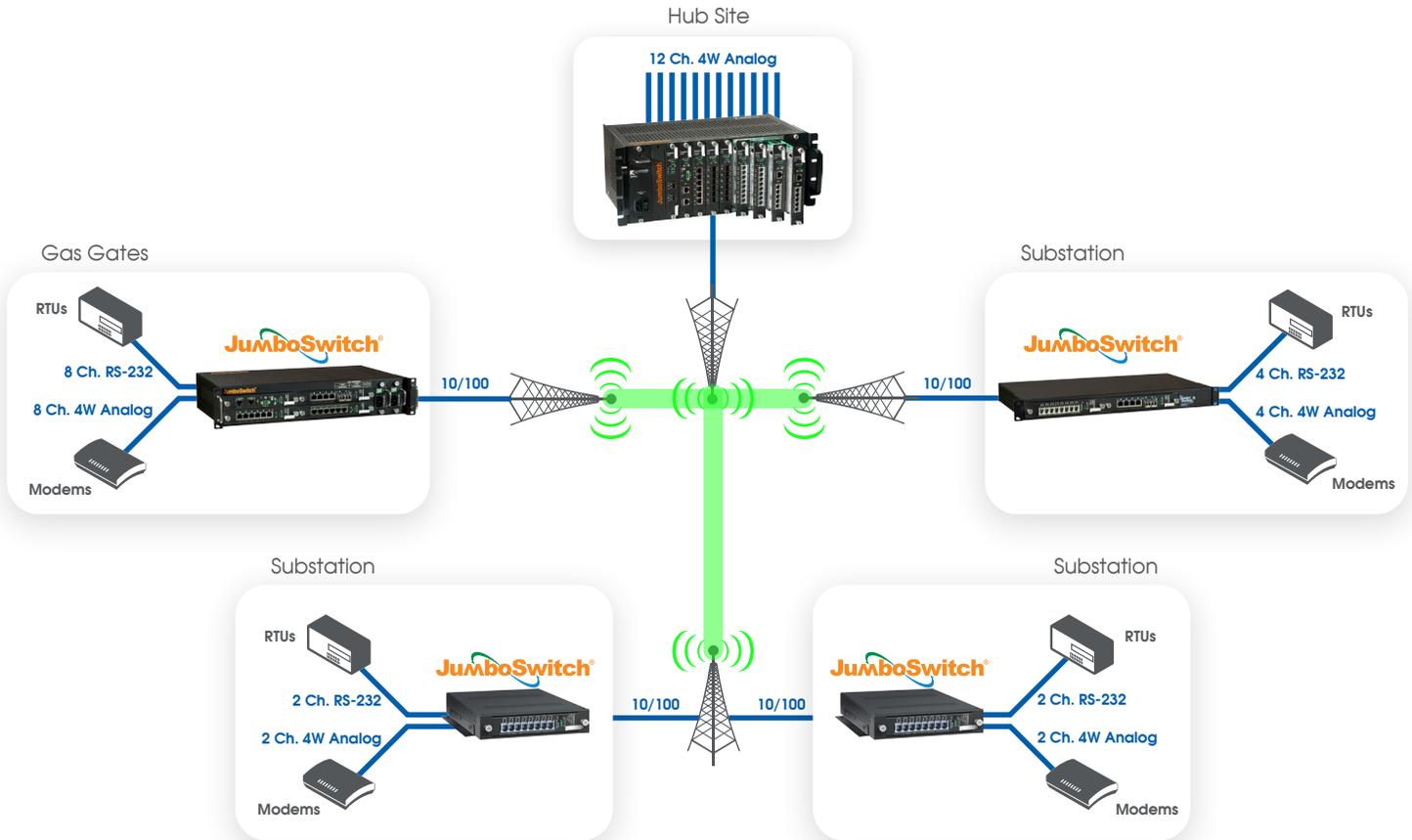
Key Benefits

- Eliminated recurring telecom leased line costs
- Increased overall network reliability
- Expanded network scalability for future growth
- Enabled latency adjustments on demand
- Eliminated dependence on bandwidth providers

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Results: Value for Years to Come

The transition to IP/fiber and away from leased lines and PSTN services across the telecommunications industry is good news in the long run for Power Utility network managers. Alternative Ethernet/IP transport methods for analog services like the JumboSwitch offer a host of important benefits, including reduced overhead cost, future scalability, network flexibility, and eliminating Telco dependency.



Power Utility uses JumboSwitch® MSEP Solution with Existing Ethernet Microwave Network to Replace Expiring Leased Lines

About TC Communications

TC Communications specializes in TDM over IP network solutions including Analog Radio, Voice, Serial and T1 products. Applications include Leased Line Replacement, Voter Comparator over IP and Multi-Service communication networks. Focused on mission-critical applications, TC products are designed to help Public Safety networks transition to IP/Ethernet without replacing existing analog equipment. All services including engineering, manufacturing, and support located in Irvine, California, USA since 1991.



Designed and made in

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LT170131 rev010224