

JumboSwitch® Provides G.703-to-Ethernet Link For Teleprotection Communication in MPLS Network

Case Study

Situation

A large Power Transmission Utility in Alberta, Canada needed a G.703 to Ethernet interface for substation-to-substation teleprotection communications within its MPLS network.

Specifically, it needed to link Siemens Relays between substations with a delay of less than 10 msec. (end-to-end). Other requirements included -48V power and an extreme temperature (-40°C to +80°C) options to withstand harsh winter conditions.

Solution

After extensive testing, the G.703/64K-to-Ethernet card offered on TC Communications' JumboSwitch Multi-Service Ethernet Platform emerged as the solid choice.

The JumboSwitch's TC3846-1 interface card met all of the Power Utility's latency, power and environmental requirements. End-to-end latency was less than 8 msec. and temperature specifications were -40°C to +80°C degrees. The TC3846-1 also provided built-in management capability (web GUI).

In addition, TC LateView, a software program which works in conjunction with the TC3846-1 card, enabled the Power Utility to monitor real time latency on its Ethernet network. With TC LateView, the Power Utility has the confidence of immediately accessing current and historic network delay readings on the TC3846-1.

