

Siemens Powers Communications with Tachyon Broadband Satellite

The building and maintenance of large power plant turbines requires flawless execution and teams of engineers combing through and altering reams of engineering documents. However, especially during initial power plant construction, landline broadband access is nearly non-existent, requiring mechanical, electrical, construction and nuclear engineers to rely on traditional modes of communication – snail mail, express packages and telephones.

Without broadband access to electronic data files, power plant owners and maintenance providers spend much of their time waiting for updated documents to arrive *via* overnight express packages, increasing power plant downtime, reducing revenues and ultimately, increasing electric and other utility costs for the consumer.

Three years ago, Siemens Power Generation, which manufactures, installs and maintains turbine generators for gas, steam and nuclear power plants, realized that it needed to reengineer several key processes in order to more effectively and efficiently serve its customer base. The company placed a major focus on communications and more specifically on the ways to deliver high-speed network access to construction and maintenance sites, thus reducing installation times and trimming operating expenses.



Tachyon Fixed Access Unit provides broadband communications for Siemens Westinghouse Naco Nogales Project in Agua Prieta, Sonora, Mexico.

After reviewing several options from building and installing T1 lines to ISDN, Siemens decided to utilize Tachyon Networks Incorporated (“Tachyon”) for its broadband satellite network needs. With data speeds that rival T1 lines, Siemens was able to set up local area networks with dozens of users at power plant sites in all regions, including the remote areas of the Rocky Mountains and Mexico. Today, Siemens utilizes both fixed (for turbine plant installation) and transportable (for maintenance) satellite units from Tachyon.

Through connections to the Siemens corporate network based in Orlando, Fla., Siemens site engineers can access mission critical information *via* a secure virtual private network (VPN). Myriad applications from AutoCAD to Lotus Notes to Microsoft Outlook are now available at every project location that has a Tachyon satellite dish.

Utilizing Tachyon's Quick Deploys, portable satellite units for rapid deployment and take down at temporary sites, Siemens cut maintenance times by nearly 15 percent. Every turbine serviced by Siemens requires periodic maintenance checks with each inspection taking from two weeks for a routine review to up to 10 weeks for a major inspection. Leveraging Tachyon has reduced the time to conduct major maintenance checks by more than one week. In addition,



engineers in the home office are receiving more accurate information more quickly, as they can request new pictures or data in real-time instead of having to wait days for the mail or express packages to arrive.

The average Siemens site has hundreds of electronic transactions per day.

"The use of Tachyon broadband satellite technology has become a critical piece of our overall strategy," said a Siemens IT analyst. "In areas where the terrain is rugged, the use of Tachyon has significantly reduced the installation time that had been associated with the installation of high-speed landlines, which means we can get operational much more quickly than in the past."

Moving Ahead

With additional geographic expansion into under-developed areas of Canada, Mexico and the U.S., Siemens plans to implement Tachyon's broadband satellite capabilities to enhance customer service.