



Dominion, Virginia Power, US

Radius deploys high power digital data radios to manage Dominion Virginia Powers communication requirements.

Radius US has provided a wireless data communication solution to one of the largest producers of electric power and gas in the US. With over 50 million homes and businesses to provide 26500 megawatts of power generation, 6,000 miles of electrical transmission and 54,000 miles of distribution lines, Dominion needed a secure, reliable data communication solution to cope with the high demands of their network. Radius was a clear winner for Dominion.

TOPOGRAPHICAL CHALLENGES

Dominion has deployed Radius' digital data radios in the toughest sites imaginable, where reliable communication is critical and where other means of communication are unreliable. The system utilizes master sites at Dominion Service Centers where they can transfer the SCADA data to their Intranet that inturn brings data back to the host Network Operations Center. These multiple master sites cover all Dominion's remote devices in a large radial area in Virginia.

IMPROVED COMMUNICATIONS

Dominion had issues where their cellular IXRTTs and CDMA where in certain areas and circumstances both forms of communication were found to be unreliable. The project needed a communications system which would reliably controlling, monitoring and configuring Dominion's HV electrical reclosers. This was a great concern for a quality provider like Dominion so

they turned to the reliability of Radius PDR 221 data radios. The PDR 221 also provided versatility for Dominion allowing them to handle both the Modbus and DNP 3.0 protocols the company requires for remote monitoring and control.

PROPAGATION SOLUTIONS

Covering a large geographic area with a reliable multiple master sites system with an array of data back haul methods (i.e. fibre, microwave etc.) was a major problem for Dominion. This was not helped by the topology of Virgina with its abundance of folage and large hills. Radius' PDRs provided a long-range solution that was able to handle the various network requirements so that Dominion could restore their customers' confidence in being able to provide a reliable service.

"Radius' expertise has been first rate. They implicitly understood our requirements in the most challenging areas of our business, keeping our customers happy".

High reciever sensitivity, data collision management, over-the-air error correction, which are standard features of the PDR data radios, all help to provide Dominion with a system able to cope with the demands they placed on it.

CUSTOMER COMMENTS

"Radius' expertise has been first rate. They implicitly understood our requirements in the most challenging areas of our business, keeping our customers happy. Installation was seamless and everything worked from the word 'go'".

