

Application Solutions

Application Solutions is a tool from Majorpower featuring actual applications of existing projects.

Majorpower Provides DC Power Solution to State Private Network

A large state network was undergoing a needed power equipment retrofit. The dc standby power equipment had been deployed for many years and was becoming unable to provide the necessary level of reliability required. The network equipment at the sites was comprised of three main systems – public television microwave backbone, inter-hub data and a secure law-enforcement radio network. The problem was that each of these systems required different input voltages. We were able to provide more reliable power for each device by migrating the sites to switch-mode technology based equipment

Using a combination of power conversion equipment we implemented an efficient reliable solution. The backbone of the system would be a Majortel DC Power System. This would directly support the secure radio system, charge the batteries and feed the supplemental power conversion equipment. The hot-swap rectifier based design provided redundancy and required significantly less space than the existing transformer based charger. Additionally the equipment could be installed by a single technician once the old equipment was pneumatically lifted out of the site.

Since the microwave transmission equipment required a different input voltage this equipment was then powered by a Majorsine inverter which sourced input power from the DC plant. The integrated AC By-Pass circuit provides an additional level of redundancy for the transmission equipment.

Upgrading the power system to new technology benefited the state in several ways. The overall reliability of the network significantly increased with the redundant design and they were pleased with the dramatic decrease in man hours, as a single tech could be deployed for most installations and maintenance.

For additional *Application Solutions* and product information:

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Majorpower Corporation is Focused on High Reliability Feature Rich Power Conversion Products.