Summary: Seeking to upgrade their critical power equipment to keep up with energy demands in nine separate locations, a major telecommunications company sought Prime Power Services to take charge of the project from start to completion. By skillfully coordinating the efforts of engineers, electricians, masons, local agencies, and delivery services, the Prime Power Project Team successfully furnished and installed nine Cummins 100kW Diesel generators and nine 400A Automatic Transfer Switches (ATS) at nine separate telecommunications hub sites during after-hours maintenance windows in accordance with all specifications and regulations required of the telecom service provider.

Challenge: Furnish and install nine (9) Cummins 100kW Diesel generators and nine (9) 400A Automatic Transfer Switches (ATS) at nine separate telecommunications hub sites according to the following specifications:

- 1) Upgrade the Utility Service Feed to 400Amp @ 120/240Vac/1P/3W;
- 2) Add a 400 Amp rated "Emergency" Gutter system;
- 3) Re-feed the 200Amp rated GE MPB Load center;
- 4) Add a 100Kw Generator with matching ATS and Manual Switch;
- 5) Add a TVSS (Transient Voltage Surge Suppressor). The TVSS is to be installed inside the Hub. All other equipment will mount to the exterior of the Southeast Hub wall and should be NEMA 3R rated.
- ➤ Note: Cutover to the new gear must be accomplished during a brief afterhours maintenance window and must not interfere with regular working hours or load times. All unused equipment is to be removed by contractor. All equipment must pass performance standards as tested by load banks. May require the establishment of new concrete foundations suitable for upgraded equipment.

Solution: The Prime Power Project Team recognized the challenges inherent to such a task and immediately set to investigating and analyzing the geographic circumstances unique to each of the nine telecom hub sites. After thorough site evaluations, Prime Power engineers designed upgraded specifications in accordance with the needs of the telecom service provider. Once the equipment was purchased, the Project Team coordinated the timely delivery, storage, and safeguarding of all equipment necessary to the upgrade, then set to finalizing the site preparation at each hub location. Finally, through the skillful integration of electrical contractors with the facility managers of each hub, the Prime Power Project Team successfully installed, tested, and completed the upgrades as specified by the telecom service provider during scheduled after-hours maintenance windows. The upgrades were successfully completed at each of the nine telecom hub sites in accordance with all directives and specifications required of the service provider.

