

## **McNary 4160 – 480 Station Service**

The station service system at McNary Dam is largely the original installation, completed over fifty years ago. While only small modifications have been made to the original architecture over time, loads have increased significantly. The station service system is the critical power source for maintaining power generation and a multitude of vitally important operation and control systems within the powerhouse.

Due to age, functional design and operational limitations, the entire original 4160 V system needs to be upgraded to improve performance and reliability. Specifically, the objectives of this investment are to:

- Replace equipment that is beyond its service life and no longer has the capacity to serve new and future loads;
- Add redundancy and improve station service reliability, while utilizing commonly available industry equipment;
- Eliminate single modes of failure inherent in the existing system; and
- Provide a greater degree of automation for the operation of the station service equipment.

Taken together, these changes will provide additional power sources and reconfigure the distribution system to bring the station service in conformance with the current Regional Station Service Design Philosophy. That design philosophy is a standardized approach to station service improvements that ensures adequate redundancy and compliance with safety standards.