

McNary Governor Replacement

This project will upgrade the 14 governors in the McNary powerhouse with digital controls along with replacement of associated components. Governor upgrades are a regional priority for the Corps of Engineers, arising from a 2000 study that recommended a comprehensive upgrade program. The Capital Work Group has approved a series of governor upgrade projects and a regional contract has been negotiated for supply and installation of the upgrades.

The governors being upgraded are the original Allis-Chalmers and Woodward designs. While they are functional and meet minimum operating standards, the aging systems are becoming more difficult to maintain due to lack of availability of parts. The governor upgrades will improve reliability and will counteract the increasing potential for governor failure that could cause forced outages. New digital governors will allow more stable and fine control of the turbine/generator units. The installation of digital controls will allow for smoother synchronization of the generators and reduce instantaneous torque changes to the rotor when the unit is placed online. Benefits of the digital governor installation also include more precise load delivery ramping.

The governor replacements are being made under a regional governor contract. By grouping multiple regional projects into one contract, cost savings accrue as individual upgrade projects realize the value of the collectively negotiated contract. The regional contract also allows for standardization of governor equipment across the region.