

McNary Powerhouse Controls Upgrade

The purpose of this project is to replace obsolete equipment and provide improvements to the generator controls in the McNary powerhouse. Most of the equipment and wiring in the control system is original and has been in service for more than 60 years. Wiring is asbestos or rubber insulated, presenting health and operational risks. Many of the subsystems have compromised performance associated with their age, are unreliable due to a lack of available replacement parts, are no longer supported from the manufacturer and are difficult to troubleshoot and maintain. Both the exciters and governors are moving to digital control and share a significant amount of common wiring interconnections and physical real estate. It is prudent and timely to integrate the powerhouse controls with the replacement and upgrade of the governors and exciters to minimize the number and cost of unit outages at McNary.

This investment will reduce operation and maintenance costs, improve system reliability and improve NERC/CIP cyber security. This investment will consolidate several discrete functions into one modern integrated holistic control system, incorporating control functions into a common user interface utilizing linked programmable logic controllers and touch screens/alarm panels.