

McNary Exciters Upgrade

The existing excitation system at McNary Powerhouse was put in service in 1987-1988 for all 14 main units. The exciters are crucial to maintaining operational grid stability in the region. Replacing the exciters addresses two primary concerns:

- **Reliability** The exciters are no longer supported by the manufacturer as off the shelf products. Replacement parts are not readily available, requiring engineering and expensive special orders when parts are needed. The impact of outages at McNary is significant as McNary is the highest risk power plant with respect to Lost Generation Risk.
- **Compatibility with other upgrades** The Powertrain Modernization program at McNary involves a significant investment over many years. Included in the program is the replacement and upgrade of generator windings and the turbine runners. The added generation output of those upgrades will not be achieved without upgrading the exciters to increase their ampacity. The modernization plan identified the excitation system as the critical path for turbine replacement.

Replacement in a systematic program is the preferred alternative since this will alleviate operational problems and will also resolve the support and spare parts issues with the exciters.