

John W. Turk Jr. Power Plant – Environmental Fact Sheet

Air Emissions

- AEP SWEPCO received a final air permit from the Arkansas Department of Environmental Quality (ADEQ) on Nov. 5, 2008. Emissions limits in this permit are based on the Best Available Control Technology (BACT) and Maximum Achievable Control Technology (MACT) standards of the Clean Air Act and are among the lowest emission rates in the country for this type of facility.
- Air Quality Control Systems included in the plant design consist of low nitrogen oxides (NOx) burners with close-coupled over-fire air and selective catalytic reduction system for control of NOx; a spray dryer absorber flue gas desulfurization (FGD) system and a pulse-jet fabric filter baghouse for sulfur dioxide and particulate control; and activated carbon injection to reduce mercury emissions.

Water and Wastewater

- The plant will require about 6,000 gpm of make-up water from the Little River.
- An intake structure will be constructed on the Little River to provide the necessary makeup water for plant operations.
- The plant will discharge about 500 gallons per minute (gpm) of wastewater consisting primarily of cooling tower blowdown.
- All wastewater discharges will be treated to meet the limits set by the ADEQ for discharge to the Little River.
- ADEQ issued a wastewater discharge (NPDES) permit in October 2011.
- A stormwater permit has been issued that covers construction activities, and a permit-to-install has been issued that covers construction of the plant's wastewater treatment facilities.
- Plant sanitary waste will be directed to the City of Fulton's existing sewer treatment system.

Solid Waste

- A solid waste landfill will be constructed to manage solid wastes from this project. ADEQ issued a landfill permit in July 2011. This landfill will be built in compliance with all ADEQ requirements. A synthetic liner will be installed in anticipation of proposed U.S. EPA rules regulating coal combustion residuals. The installation of the synthetic liner will provide an additional layer of protection beyond current protective standards established by ADEQ.
- Fly ash, FGD waste and bottom ash will be transported by truck for disposal in the on-site landfill. Adequate water mist will be applied to minimize dust during disposal activities.

Jurisdictional Waters

- SWEPCO received a Section 404 permit from the U.S. Army Corps of Engineers in December 2009. Section 404 of the Clean Water Act requires permits for the

discharge of dredged and fill material into waters of the United States, including wetlands.

- The wetlands delineation of the project site has been completed. The Corps of Engineers permit for the project required mitigation to compensate for small areas of wetland and intermittent streams impacted by ancillary components of the plant. SWEPCO has completed the purchase of all mitigation credits required by the Corps permit, and on-site mitigation is underway.

Ecological and Cultural Assessments

- The ecological assessment of the project area has been completed. No protected wildlife management areas will be impacted and no endangered plant or animal species were found on the site. A mussel survey of the Little River adjacent to the property has been performed that showed no endangered mussel species will be impacted by the plant intake and discharge structures.
- The cultural resources investigation of the plant site has been completed. One area of the site has been identified as eligible for listing on the National Register of Historic Places and this area has been protected from any impacts through a deed covenant.

Resolution of Legal Challenges

- Legal challenges to the Corps of Engineers, air and wastewater permits were resolved in settlements with the Hempstead Country Hunting Club and other local residents (announced July 25, 2011) and Sierra Club, National Audubon Society and Audubon Arkansas (announced Dec. 22, 2011).