

TVA's Conversion of Wet Ash and Gypsum to Dry Storage



OVERVIEW

- TVA plans to eliminate all wet ash and gypsum storage in the TVA system and convert its 11 operating coal-fired power plants to dry storage.
- The conversion plan was developed following the December 22, 2008, ash spill at Kingston Fossil Plant.
- The goals are to install state-of-the-art equipment to ensure safety and regulatory compliance and to position TVA as an industry leader in the management of ash and gypsum.

PROGRAM DETAILS

- Six wet fly-ash and 11 wet bottom-ash storage processes will be converted to dry storage.
- Four gypsum dewatering processes will be installed.
- New ash disposal facilities will be developed to handle future plant operations.
- Eighteen existing ash and gypsum ponds will be closed and capped according to EPA guidelines.
- Storage facilities that would be considered a high risk in the highly unlikely event that they might fail will be converted first. (Independent evaluations have not shown any TVA storage facility in danger of failing.)
- TVA expects the conversion program to cost \$1.5 to \$2 billion and take eight to 10 years to complete.
- Additional disposal facilities will be developed to handle future plant operations.

CONVERSIONS PLANNED FOR EACH TVA FOSSIL PLANT

Allen (near Memphis, TN; 3 units; 990 MW)

- Wet fly ash to dry storage
- Wet bottom ash to dry storage

Bull Run (near Oak Ridge, TN; 1 unit; 950 MW)

- Gypsum dewatering
- Wet bottom ash to dry storage

Colbert (northwest of Muscle Shoals, AL; 5 units; 1,350 MW)

- Wet bottom ash to dry storage

Cumberland (northwest of Nashville, TN; 2 units; 2,600 MW)

- Wet bottom ash to dry storage

Gallatin (northeast of Nashville; 4 units; 1,255 MW)

- Wet fly ash to dry storage
- Wet bottom ash to dry storage

John Sevier (near Rogersville, TN; 4 units; 800 MW)

- Wet bottom ash to dry storage

Johnsonville (near Waverly, TN; 10 units; 1,485 MW)

- Wet fly ash to dry storage
- Wet bottom ash to dry storage

Kingston (near Kingston, TN; 9 units; 1,700 MW)

- Wet fly ash to dry storage
- Wet bottom ash to dry storage
- Gypsum dewatering

Paradise (northwest of Hopkinsville, KY; 3 units; 2,558 MW)

- Wet fly ash to dry storage
- Wet bottom ash to dry storage
- Gypsum dewatering

Shawnee (near Paducah, KY; 10 units; 1,750 MW)

- Wet bottom ash to dry storage

Widows Creek (near Stevenson, AL; 8 units; 1,969 MW)

- Wet fly ash to dry storage
- Wet bottom ash to dry storage
- Gypsum dewatering