
TVA Project Overview

BAA 3605 Topic Area 2: DOE Kick-off Meeting

DOE National Energy Technology Laboratory
Morgantown, WV

October 7, 2026

This presentation is based upon work supported by the Department of Energy under Award Number DE-3605-1525.

Project Overview

Location: Stewart County, TN

Performance Period: Approx. 3-year window within 2026-2030

Goal: Execute a portfolio of projects at Cumberland Fossil Plant to help ensure operation of the two-unit generation plant

Intended Impact: Reliability of affordable electric generation for Valley ratepayers

DOE Award Share: \$46,287,600

TVA Cost Share: \$69,431,400

Total Cost: \$115,719,000



Plant Background

Gross summer capacity: 2,550 MW across two units

Age: Began commercial operation in 1973

Coal type: Bituminous

Pollution controls: Wet limestone scrubbers for sulfur dioxide reduction, Selective catalytic reduction systems for nitrogen oxide reduction

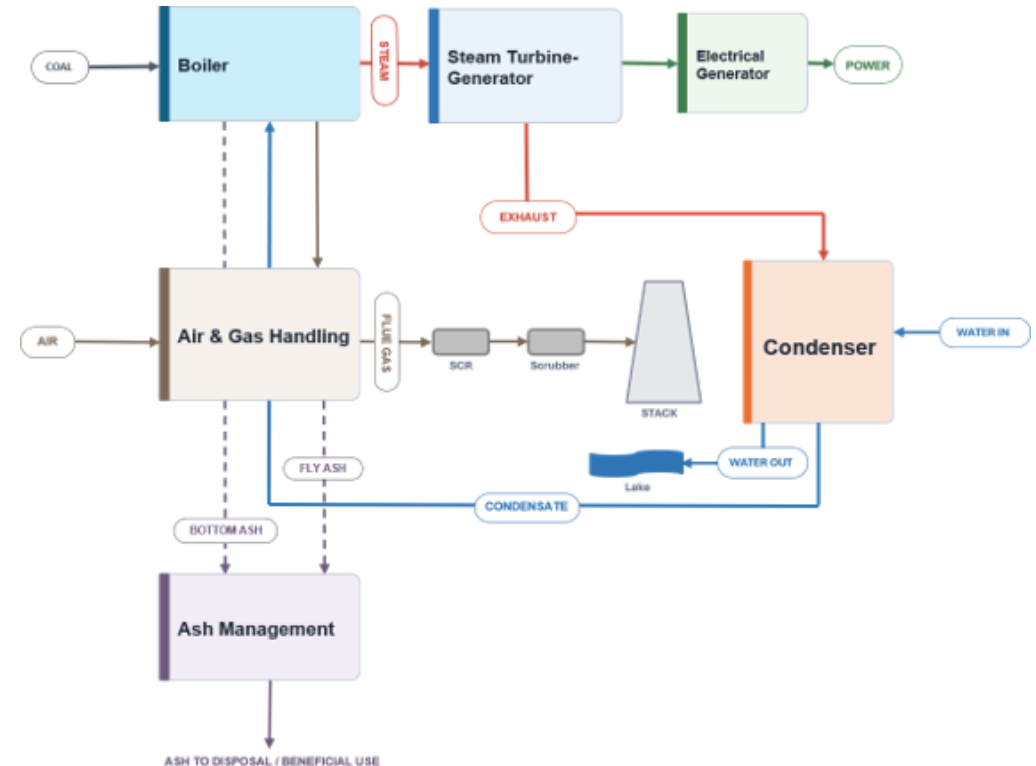
Other Info:

Largest generating asset in the TVA coal fleet

Generates approximately 16 billion kWh of electricity annually and employs about 245 workers

Plant is active in byproduct sales of gypsum and fly ash used as raw manufacturing material

Plant Block Flow Diagram



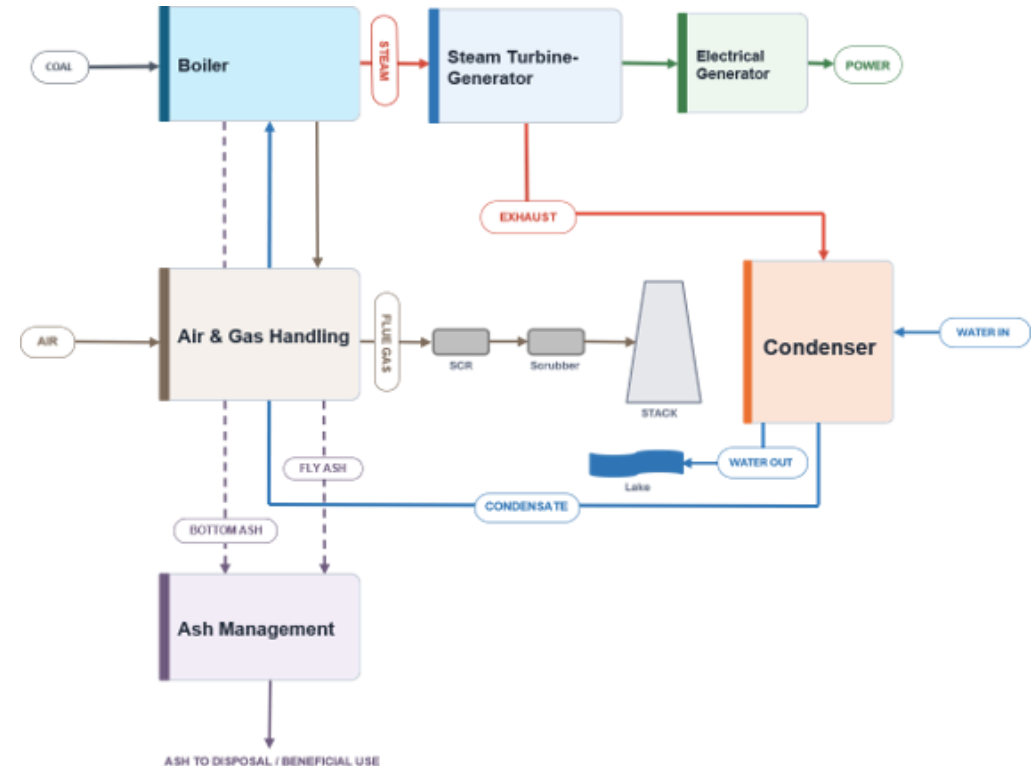
Technical Scope and Execution

Scope: Several projects entailing maintenance to turbine/generators, boilers, and scrubber module

Plan: Projects would be generally staggered and completed over an approximate 3-year window and include planning, design, and implementation activities. Projects will also involve continual risk monitoring and mitigation.

Performance: Projects would include inspections and testing to ensure equipment are operating as expected to ensure generation reliability.

Plant Block Flow Diagram





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