

TVA Emissions Control Installations from 1969–2007

Sulfur Dioxide Reduction

- Seven units have scrubbers; AFBC is a low emissions unit
- Twelve additional units will be scrubbed by 2012.
- Most other units burn low sulfur coal

Nitrogen Oxide Reduction

- Twenty-one units have selective catalytic reduction systems
- Four units have selective non-catalytic reduction
- All 59 units have some or all of the following: SCRs low-NOx burners, overfire air, or boiler optimization

1969-1977	Precipitators installed on Paradise, Shawnee, Gallatin, Widows Creek, Colbert, Allen, Cumberland, Johnsonville, John Sevier, Kingston, Bull Run
1977	Scrubber installed on Unit 8, Widows Creek
1981	Scrubber installed on Unit 7, Widows Creek Paradise installs coal washing facilities Shawnee baghouse filters added
1982	Precipitators installed at Cumberland
1983	Scrubbers installed on Paradise Units 1 and 2
1985	Atmospheric Fluidized Bed Combustion project started at Shawnee, becomes operational in 1988
1992	Nitrogen oxide reductions begin on Paradise Precipitators installed at Colbert and Johnsonville
1993	Low-NOx burners installed at Johnsonville and Colbert
1994	Scrubbers added at Cumberland Low-NOx burners added at Colbert, Gallatin, Johnsonville
1995	Low-NOx burners added at Colbert, Gallatin, Johnsonville, John Sevier
1996	Low-NOx burners added at John Sevier, Kingston
1997	Low-NOx burners added at Kingston

- 1998** Low-NOx burners added at Shawnee, Widows Creek
Overfire air (NOx control) added at Allen
- 1999** Overfire air added at Allen, Paradise
Low-NOx burners added at Cumberland, Shawnee, Widows Creek
Bull Run begins boiler optimization (NOx control)
Gallatin, Shawnee switch to low sulfur coal
- 2000** Allen, John Sevier, Johnsonville, switch to low sulfur coal
Paradise adds first selective catalytic reduction system for NOx control and begins switch to low sulfur coal
- 2001** Paradise adds second selective catalytic reduction system
- 2002** Kingston begins NOxTech demonstration to further reduce NOx emissions and test a new technology
Paradise Unit 3 switches to low sulfur coal
Allen adds selective catalytic reduction systems
- 2003** Cumberland, Widows Creek, Paradise add selective catalytic reduction
Widows Creek adds more low-NOx burners
- 2004** Bull Run, Colbert, Kingston, Widows Creek add selective catalytic reduction systems
Colbert switches to low sulfur coal
- 2005** Kingston adds selective catalytic reduction
Colbert adds NOxStar demonstration technology
Bull Run begins scrubber construction
John Sevier adds selective non-catalytic reduction systems
- 2006** Kingston adds selective catalytic reduction
Kingston begins construction of two scrubbers
Paradise Unit 3 scrubber operational
- 2007** Johnsonville and Shawnee add selective non-catalytic reduction
Johnsonville and Colbert begin switch to low sulfur coal
- 2008** Bull Run and Kingston - scrubber construction continues