



TVA's Nuclear Program

TVA's five operating nuclear units provide more than 5,700 megawatts of clean, safe, and affordable electricity into the TVA power system.

TVA's three nuclear plants—Browns Ferry, near Athens, Alabama; Sequoyah, in Soddy-Daisy, Tennessee; and Watts Bar, near Spring City, Tennessee—make enough electricity for more than three million homes in the Tennessee Valley.

TVA began building nuclear power plants in the 1960s, responding to the growing prosperity of the Tennessee Valley and the rising demand for power. Today TVA's three nuclear plants provide about 30 percent of TVA's power supply.

TVA has operated its nuclear fleet well following its extensive nuclear recovery program in the late 1980s and early 1990s. The safe operational performance of TVA's nuclear plants has consistently ranked among the nation's best as measured by the Nuclear Regulatory Commission, the industry, and industry observers.

Browns Ferry Nuclear Plant

Browns Ferry, located on the Wheeler Reservoir in North Alabama, was TVA's first nuclear plant. Construction began in 1967, with all three units online by 1977.

Browns Ferry Units 1, 2, and 3 operating licenses were renewed in May 2006, which will allow continued operation of the units until 2033, 2034, and 2036.

Work to restart Browns Ferry Unit 1 has been underway for the past five years and will make Unit 1 the nation's first nuclear unit to come online in the 21st century.

Unit 1, which will add 1,155 MW of emission-free, low-cost base-load power to the TVA system, has not operated since 1985.

TVA completed more than 4 million hours preparing the engineering and design and more than 15 million work hours modifying, replacing and refurbishing systems and components to ensure Browns Ferry Unit 1 is ready for restart.

More than 1,200 tests showed that Unit 1 meets the design and regulatory requirements for safe operation.

Sequoyah Nuclear Plant

Sequoyah Nuclear Plant is located beside TVA's Chickamauga Reservoir near Chattanooga, Tennessee. Groundbreaking took place in 1969, and last year Sequoyah marked its 25th anniversary of operation.

In 2006 the two units at Sequoyah produced almost 19 million megawatthours of electricity, the most ever by the site in a fiscal year, and a TVA record for nuclear two-unit operation.

Watts Bar Nuclear Plant

Watts Bar Nuclear Plant is located on Chickamauga Reservoir in Spring City, Tennessee. Unit 1 at Watts Bar began operating in 1996, the last commercial nuclear unit in the United States to begin operation.

To meet the Tennessee Valley's growing demand for power, TVA now has a detailed scoping, estimating, and planning study underway on the possible completion of Watts Bar Unit 2. This study is expected to be finished this summer and will be presented to the TVA Board for a decision.