

## Fact Sheet

# **TVA Nuclear Energy**

As part of its continuing mission to power the economic prosperity of the Tennessee Valley, TVA currently operates six nuclear power units at three locations, providing enough low-cost, carbon-free electricity to serve one-third of its customers. Nuclear energy is an integral part of TVA's Vision to be a national leader in the production of low-cost, clean electricity.

### Background

TVA operates six nuclear units at three generating stations.

- Browns Ferry, near Decatur, Ala. Three boiling water reactors
- Sequoyah, near Soddy-Daisy, Tenn. Two pressurized water reactors
- Watts Bar, near Spring City, Tenn. One pressurized water reactor

In 2007, TVA's Board of Directors voted to proceed with the completion of a second pressurized water reactor at the Watts Bar facility. In 2011, the TVA Board approved completing engineering activities on a single pressurized water reactor at the Bellefonte site, near Hollywood, Ala., with construction to begin once the Watts Bar Unit 2 project is complete.

#### Key points

- In keeping with its Integrated Resource Plan, TVA is moving toward a more balanced mix of energy sources, including nuclear energy, renewable energy, natural gas and energy efficiency, in addition to coal and hydropower.
- As TVA adds capacity to meet future power needs, nuclear energy is the best available option for generating large amounts of electricity safely, cleanly and cost-effectively. Nuclear energy consistently produces the lowest cost, base-load electric power without the emissions of fossil fuels.
- TVA's top priority for its nuclear plants is safety, and we operate our nuclear plants with the latest safeguards and practices, with oversight by a number of internal and external agencies. The nuclear industry is among the most thoroughly tested and regulated industries in the world.
- By expanding its nuclear fleet at Watts Bar and Bellefonte, TVA is investing in the best use of existing resources, talent and technology to continue to provide low-cost, clean electricity for our customers.

#### Other information

- TVA's nuclear professionals recognize that nuclear technology is special and unique, leading to the highest commitments of safety and quality of work necessary to ensure the health of our workforce and the general public.
- Continuous improvement is a cornerstone of the nuclear industry, and TVA regularly reviews the latest information from successes and setbacks within the industry worldwide to update our equipment, procedures and training to the highest standards. Lessons learned from the Fukushima incident in Japan are being incorporated into TVA's existing operating facilities and those under construction.
- TVA's nuclear operations are regulated by licenses issued by the U.S. Nuclear Regulatory Commission, which provides direct oversight of operations, along with the Institute of Nuclear Power Operations, the Nuclear Safety Review Board and other independent internal and external agencies.