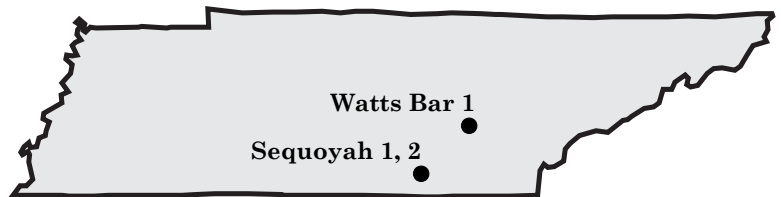


Nuclear Energy in Tennessee

July 2007

Tennessee's Electricity Generation

Nuclear	26.3%
Coal	64.8%
Oil	0.2%
Gas	0.7%
Hydro	7.6%
Other	0.5%



Source: EIA, 2006



Nuclear Power Plants in the State

	City	Capacity (MW)	2006 Generation (MWh)	2004-2006 3-year Average Capacity Factor (%)
Sequoyah 1	Soddy Daisy	1,150	9,086,029	94.1
Sequoyah 2	Soddy Daisy	1,127	8,914,650	92.1
Watts Bar 1	Spring City	1,121	6,678,098	85.9
Total		3,398	24,678,777	90.7

Source: Energy Information Administration

Clean Air Benefits

Economic Growth and Emission-Free Electricity

Tennessee has experienced average growth in Gross State Product of 3.1 percent per year over the past 5 years. To keep Tennessee's economy growing, the state will need new sources of power. At the same time, parts of Tennessee must deal with poor air quality. Electricity from emission-free sources, like nuclear power plants, supplies safe, reliable and affordable power to meet the state's economic growth without polluting the air.

Status of the State's Air Quality

Counties surrounding Chattanooga and Knoxville are classified as non-attainment for EPA's new 8-hour ozone standard. Ozone contributes to smog, which can lead to asthma attacks and respiratory impairment in young children and the elderly. Smog also reduces visibility in cities and in rural landmarks like Center Hill Lake and the Great Smokey Mountains National Park. Tennessee's nuclear power plants supply emission-free power to the state and help improve air quality.

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Nuclear Energy in Tennessee

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Nuclear Energy Prevents Emissions

Generating electricity with nuclear energy prevents the emission of pollutants like sulfur dioxide (SO₂) and nitrogen oxides (NO_x) and greenhouse gases like CO₂ associated with burning fossil fuels. In 2006, the nuclear power plants in Tennessee avoided the emissions of 100,100 tons of SO₂, 45,100 tons of NO_x and 23.3 million metric tons of CO₂ into the air. (*Source: NEI/EPA*) Emissions of SO₂ lead to the formation of acid rain. NO_x is a key precursor of both ground level ozone and smog. Greenhouse gases, like CO₂, contribute to global warming.

For perspective, 45,100 tons of NO_x, which is a precursor to ground level ozone, is the amount released every year into the air by 2.4

million passenger cars. There are about 2.8 million cars registered in the state of Tennessee.

Potential Uprates at Nuclear Plants

With additional capital investment, more power can be generated at most existing nuclear power plants. This process of increasing power output is called an “uprate.” According to analysis performed for the U.S. Department of Energy, uprates at Tennessee’s nuclear power plants could supply five percent more electricity, and avoid annual emissions of 3,800 tons of SO₂, 900 tons of NO_x and 1.0 million metric tons of CO₂.

This fact sheet is also available at www.nei.org, where it is updated periodically.