FACT SHEET

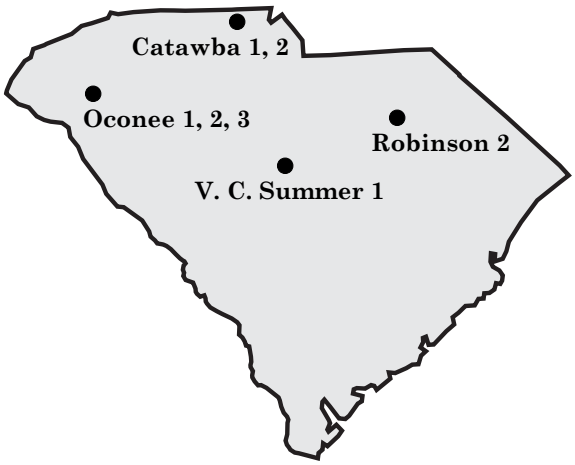
Nuclear Energy in South Carolina

July 2009

South Carolina's Electricity Generation

Nuclear	50.9%
Coal	41.1%
Oil	0.1%
Gas	5.8%
Hydro	0.2%
Renewable and Other	1.9%

Source: U.S. Energy Information Administration (EIA), 2008



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Nuclear Power Plants in the State

	City	Capacity (MW)	2008 Generation (MWh)	2006-2008 3-year Average Capacity Factor (%)
Catawba 1	**Clover**	1,129	8,773,296	90.8
Catawba 2	**Clover**	1,129	10,203,156	92.0
H. B. Robinson 2	**Hartsville**	710	5,427,296	94.4
Oconee 1	**Seneca**	846	6,215,426	87.0
Oconee 2	**Seneca**	846	6,390,567	92.4
Oconee 3	**Seneca**	846	7,575,108	93.2
V. C. Summer 1	**Jenkinsville**	966	7,178,101	91.2
Total		**6,472**	**51,762,950**	**91.6**

Source: EIA

Clean Air and Economic Benefits

Economic Growth and Emission-Free Electricity

South Carolina has experienced an average growth in gross state product of 1.2 percent per year over the past five years. To keep South Carolina's economy growing, the state will need new sources of power. At the same time, parts of South Carolina must deal with poor air quality. Emission-free sources, like nuclear power plants, supply safe, reliable and affordable power to meet the state's economic growth without polluting the air.

Status of the State's Air Quality

York County is in nonattainment for the U.S. Environmental Protection Agency's new eight-hour ozone standard. Ozone contributes to smog, which can lead to asthma attacks and respiratory impairment in young children and the elderly. South Carolina's nuclear power plants supply emission-free power to the whole state and help improve the air quality.

Nuclear Energy in South Carolina

Nuclear Energy Prevents Emissions
Generating electricity with nuclear energy prevents the emission of pollutants like sulfur dioxide (SO_2) and nitrogen oxides (NO_x) and greenhouse gases like CO_2 associated with burning fossil fuels. The nuclear power plants in South Carolina avoided the emission of 168,500 tons of SO_2, 50,200 tons of NO_x and 50.7 million metric tons of CO_2 in the year 2008 *(Source: NEI/EPA).* Emissions of SO_2 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, the 50,200 tons of NO_x avoided by the nuclear power plants in South Carolina is the amount of NO_x released in a year by 2.6 million passenger cars. There are nearly 2 million cars registered in the state of South Carolina.

Potential Uprates at Nuclear Plants
With additional capital investment, more emission-free power can be generated at most existing nuclear power plants. This process of increasing power output capacity is called an "uprate." According to an analysis performed for the U.S. Department of Energy, uprates at South Carolina's nuclear power plants could supply 5 percent more electricity and avoid annual emissions of 5,300 tons of SO_2, 1,500 tons of NO_x and 1.9 million metric tons of CO_2.

New Nuclear Plants
The U.S. Energy Information Administration predicts that demand for energy will grow 21 percent by the year 2030. To meet this growing electricity demand in a manner that is cost effective and protects our air quality, energy companies are planning to build nuclear power plants to provide affordable electricity to consumers and prevent greenhouse gases. In South Carolina, Duke Energy and South Carolina Electric and Gas have filed license applications with the U.S. Nuclear Regulatory Commission to build two reactors each in Cherokee County and Fairfield County respectively. Duke Energy is planning to build at least one additional reactor in Oconee County. Upon completion, the plants will provide enough electricity to serve 4.3 million homes annually.

Economic Growth & Job Creation
Nuclear energy is one of the few bright spots in the U.S. economy because it creates more high-paying jobs than other sources of electricity and helps stimulate the economy. On average, a nuclear power plant creates 1,400-1,800 high-paying jobs during construction, with peak employment estimated as high as 2,400 jobs during that period, and yields 400-700 jobs during the operation of the plant. Additionally, the average nuclear plant generates approximately $430 million a year in total output for the local community and nearly $40 million per year in total labor income.

In addition, one new nuclear project is in development in South Carolina. URS Corporation opened a new URS Nuclear Energy Center in Fort Mill, the headquarters for the company's nuclear energy engineering and construction business. It will provide licensing, design, engineering, procurement and construction services for new nuclear power plants as well as for critical stages in the development of nuclear fuel cycle facilities. The project will create approximately 400 new jobs over the next several years.

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