

## Nuclear Energy in Florida

July 2007

### Florida's Electricity Generation

Nuclear	14.1%
Coal	32.3%
Oil	7.1%
Gas	43.1%
Hydro	0.1%
Renewable and Other	3.4%

Source: EIA, 2006



### Nuclear Power Plants in the State

	City	Capacity (MW)	2006 Generation (MWh)	2004-2006 3-year Average Capacity Factor (%)
Crystal River 3	Crystal River	838	6,953,730	93.5
St. Lucie 1	Hutchinson Island	839	7,463,287	90.1
St. Lucie 2	Hutchinson Island	839	6,045,934	86.6
Turkey Point 3	Florida City	693	5,581,939	88.4
Turkey Point 4	Florida City	693	5,381,459	86.1
<b>Total</b>		<b>3,902</b>	<b>31,426,349</b>	<b>88.9</b>

Source: Energy Information Administration

### Clean Air Benefits

#### *Economic Growth and Emission-Free Electricity*

Florida has experienced an average growth in Gross State Product of 4.6 percent per year over the past 5 years. To keep Florida's economy growing, the state will need new sources of power. Emission-free sources, like nuclear power plants, supply safe, reliable and affordable power to meet the state's economic growth without polluting the air.

#### *Nuclear Energy Prevents Emissions*

Generating electricity with nuclear energy prevents the emission of pollutants like sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>) and greenhouse gases like CO<sub>2</sub> associated with burning fossil fuels. The nuclear power plants in Florida avoided the emission of 54,800 tons of SO<sub>2</sub>, 39,000 tons of NO<sub>x</sub> and 22.0 million metric tons of CO<sub>2</sub> in the year 2006. (Source: NEI/EPA) Emissions of SO<sub>2</sub> lead to the formation of acid rain. NO<sub>x</sub> is a key precursor of both ground level ozone and smog. Greenhouse gases, like CO<sub>2</sub>, contribute to global warming.

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For perspective, the 39,000 tons of NO<sub>x</sub> avoided by the nuclear power plants in Florida is the amount of NO<sub>x</sub> released in a year by 2.0 million passenger cars. There are 8.3 million cars registered in the state of Florida.

### ***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 Florida’s nuclear power plants could supply eight percent more electricity and avoid annual emissions of 3,500 tons of SO<sub>2</sub>, 2,000 tons of NO<sub>x</sub> and 1.6 million metric tons of CO<sub>2</sub>.

*This fact sheet is also available at [www.nei.org](http://www.nei.org), where it is updated periodically.*