

Nuclear Energy in New York

July 2007

New York's Electricity Generation

Nuclear	30.1%
Coal	15.5%
Oil	4.5%
Gas	29.4%
Hydro	18.0%
Renewable and Other	2.4%



Source: EIA, 2006



Nuclear Power Plants in the State

	City	Capacity (MW)	2006 Generation (MWh)	2004-2006 3-year Average Capacity Factor (%)
Ginna	Rochester	498	4,119,674	94.9
Indian Point 2	Buchanan	1,020	7,987,132	92.0
Indian Point 3	Buchanan	1,025	8,974,490	96.7
James A. Fitzpatrick	Oswego	852	6,758,269	90.7
Nine Mile Point 1	Oswego	621	5,352,660	91.6
Nine Mile Point 2	Oswego	1,135	9,031,674	92.3
Total		5,150	42,223,899	93.0

Source: Energy Information Administration

Clean Air Benefits

Economic Growth and Emission-Free Electricity
New York has experienced an average growth in Gross State Product of 1.8 percent per year over the past 5 years. To keep New York's economy growing, the state will need new sources of power. At the same time, parts of New York 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

Counties in non-attainment for EPA's new 8-hour ozone standard surround the New York City area. Ozone contributes to smog, which can lead to asthma attacks and respiratory impairment in young children and the elderly. New York's nuclear power plants supply emission-free power to these cities and help improve the air quality.

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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. The nuclear power plants in New York avoided the emission of 75,600 tons of SO₂, 32,000 tons of NO_x and 30.1 million metric tons of CO₂ in the year 2006. (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, the 32,000 tons of NO_x prevented by nuclear power plants in New York is the amount of NO_x released in a year by 1.7 million passenger cars. There are 9.0

million cars registered in the state of New York.

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 New York's nuclear power plants could supply four percent more electricity and prevent 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.