

Sayreville Energy Center



About NextEra Energy Resources

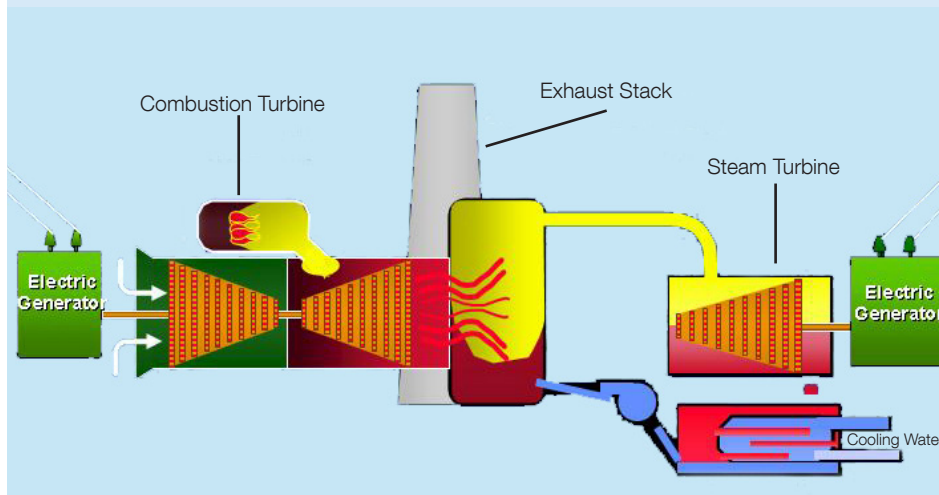
- » A leading clean energy provider operating wind, natural gas, solar and nuclear power plants
- » A portfolio of power generating facilities across the United States and in Canada
- » The largest wind generator in North America
- » A subsidiary of NextEra Energy, Inc., with headquarters in Juno Beach, Florida
- » More than 95 percent of our electricity comes from clean or renewable sources
- » Visit us at www.NextEraEnergyResources.com

How Combined-Cycle Combustion Turbines Work

Sayreville Energy Center generates electricity using both gas turbines and a steam turbine. First, natural gas is ignited inside a combustion chamber. The hot exhaust gases blow into a gas turbine, spinning the turbine blades.

The spinning turbine is connected by a shaft to a generator. The shaft turns the generator and the generator makes electricity. The hot exhaust gases are then used to heat water to steam, and the steam is piped into steam turbines, which turn generators making additional electricity. After passing through the steam turbine, the steam is condensed back into water, reheated to steam and used again in a continuous process.

This is called a combined-cycle plant because it uses the combination of a gas turbine and a steam turbine to extract maximum energy from the fuel used.



Overview

- » Located in the Borough of Sayreville, in central New Jersey
- » 315-megawatt combined cycle gas-fired power plant
- » A subsidiary of NextEra Energy Resources operates the plant and owns 157.5 megawatts of the facility
- » An intermediate plant, which means it is dispatched to operate approximately 16 hours a day based on seasonal demand
- » When operating at full power, the plant generates enough electricity for approximately 300,000
- » Began commercial operation in 1991
- » Acquired by NextEra Energy Resources in 1998

Benefits

- » Provides employment opportunities
- » Adds tax base to the county
- » Supports economy through purchases of regional goods and services
- » Supports various local community organizations