Wyman Energy Center

Overview
» Located in Yarmouth, Maine, on Cousins Island in Casco Bay along the coast of Maine
» Wyman 4 is 620-megawatts and began operation in 1978
» A subsidiary of NextEra Energy Resources acquired 522.9 megawatts of the facility in 1999 and operates the facility
» When operating at full power, the plant generates enough electricity for about 620,000 homes
» Wyman is a peaking plant, which means it is dispatched to operate during times of high electricity demand in the region

Benefits
» Employees 53 full-time employees
» Pays more than $2.2 million annually in property taxes
» Supports community activities such as the Yarmouth Rotary Club, Yarmouth Chamber of Commerce, Ambassador Programs, Cousins Island Chapel Association, North Yarmouth Academy and Yarmouth Fire Department

How It Works
Wyman station is a conventional steam powered plant, meaning it burns fuel, in the case of Wyman, oil – to boil water to make steam to turn a turbine generator.

Heat from burning oil in a combustion chamber or boiler heats steel tubes surrounding the boiler, turning water circulating through the tubes to steam. The steam is then superheated to remove moisture.

The superheated steam is piped to turbines, where it blows over the turbine blades, turning the turbines. (All power plants have a turbine with blades that are either spun by the wind, by water, by steam or by hot gases.)

The spinning turbines in each of the 4 units are connected by a shaft to a generator. The shaft turns the generator and the generator makes electricity.

The steam is then condensed back to water, reheated in the boiler, and the process is repeated in a continuous cycle.