

Natural Gas Is Vital for Electric Power Generation

Clean, Powerful, Easy to Site

Natural gas-fired generation provides 20 percent of America's electricity needs. But in some states, such as California and Texas, natural gas-fired power generation provides nearly 50 percent of the electricity consumed.



Los Angeles at night — Photo credit: Andy Z./Shutterstock

Natural gas-fired generation provides 20 percent of America's electricity needs. But in some states, such as California and Texas, natural gas-fired power generation provides nearly 50 percent of the electricity consumed.

Natural gas, clean burning and efficient, has become a popular fuel for the generation of electricity. In the 1970's and 80's, the choices for most electric utility generators were large coal or nuclear powered plants. But as environmental concerns and technological advances occurred, natural gas became the fuel of choice. In fact, in the last 10 years, over 90 percent of the new electric capacity built in the United States has been natural gas-fired generation.

Natural gas electricity generation plants cost less to construct and are generally more acceptable to the public, making them easier to site and permit by regulators.

Because it has the ability to "follow load," natural gas keeps America's electricity current at 60 Hertz (cycles per second), necessary to keep lights on and equipment running.

Natural gas is the cleanest-burning fossil fuel and a perfect complement to wind and solar generation.

The most advanced natural gas power plants are combined cycle units which capture heat that is normally wasted, and use it to spin turbines which generate electricity. Such facilities can reach energy efficiency levels of up to 60 percent, making them twice as efficient as older power plants. Many utilities use natural gas to generate electricity because it can be ramped up quickly to meet peak demands of consumers and maintain constant output levels to ensure electronic appliances function properly.

In 2007, for the first time in history, the amount of natural gas used to generate electricity in the U.S. exceeded the amount of natural gas used by industry. That trend is expected to continue as utilities increasingly choose natural gas-fired electric generation to meet America's clean air goals and cost efficient energy demands.