

# Combined-Cycle Natural Gas Turbines: U.S. Energy Information Administration Report Addressing Growth



**Walter Wright, Jr.**  
wwright@mwlaw.com  
(501) 688.8839

11/11/2022

The United States Energy Information Administration (“EIA”) issued a November 4th report titled:

*U.S. Electric-Generating Capacity for Combined-Cycle Natural Gas Turbines is Growing (“Report”)*

The *Report* addressed United States current and projected annual capacity additions from combined-cycle natural gas turbine plants from 1990 to 2026.

Natural gas-fired electric power facilities use either simple-cycle or combined-cycle energy conversion.

A simple-cycle system consumes natural gas in a single conversion system. This may include equipment such as:

- Combustion turbine
- Boiler with steam turbine
- Internal combustion engine

The energy from the primary conversion exhaust heat is not retained or sent to another turbine.

A combined-cycle generating plant utilizes combustion turbines, heat-recovery steam generators or boilers, and steam turbines to convert natural gas. For increased efficiency the hot gases resulting from the combustion process are routed to the boiler which produces steam and additional electricity. Therefore, they offer greater efficiency than traditional combustion turbines. Combined-cycle systems typically support base and intermediate energy loads. In contrast, single-cycle systems usually serve peak load.

The November 4th EIA *Report* states that eight new natural gas-fired combined-cycle gas turbine power plants either have come online or will come online in the United States in 2022. Such plants are projected to add 7,775 megawatts of electric-generating capacity to the United States electric grid. This data is taken from EIA’s Monthly Electric Generator Inventory.

The *Report* also states that the eight projects:

... reverse four years of decline in CCGT plant start-ups. We expect CCGT electric-generating capacity to reach almost 290 gigawatts (GW) by year-end, or 24% of total U.S. generating capacity.

Seven of the eight referenced plants are stated to be located either in the upper Midwest or Florida.

A copy of the EIA *Report* can be downloaded [here](#).