



The Senate Committee on Finance

Budget Bulletin

Prepared by Chris DeWitte and Ben Agsten, Budget Analysts

November 15th, 2019

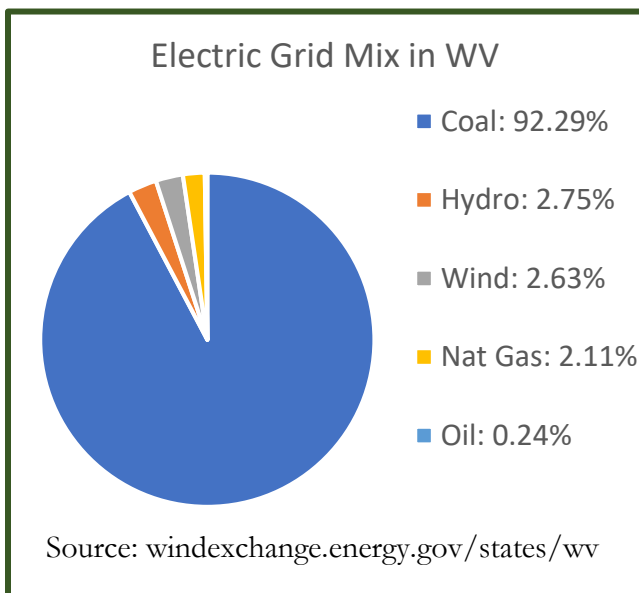


WIND POWER IN WEST VIRGINIA

West Virginia generates a large majority of its energy from coal-fired power facilities. The state, however, is generating an ever-increasing share of its power from wind turbines. West Virginia has six separate wind generation facilities, with a total capacity of 766.5 megawatts. Three new facilities have been approved by the Public Service Commission and are currently under construction.



ELECTRIC GRID MIX

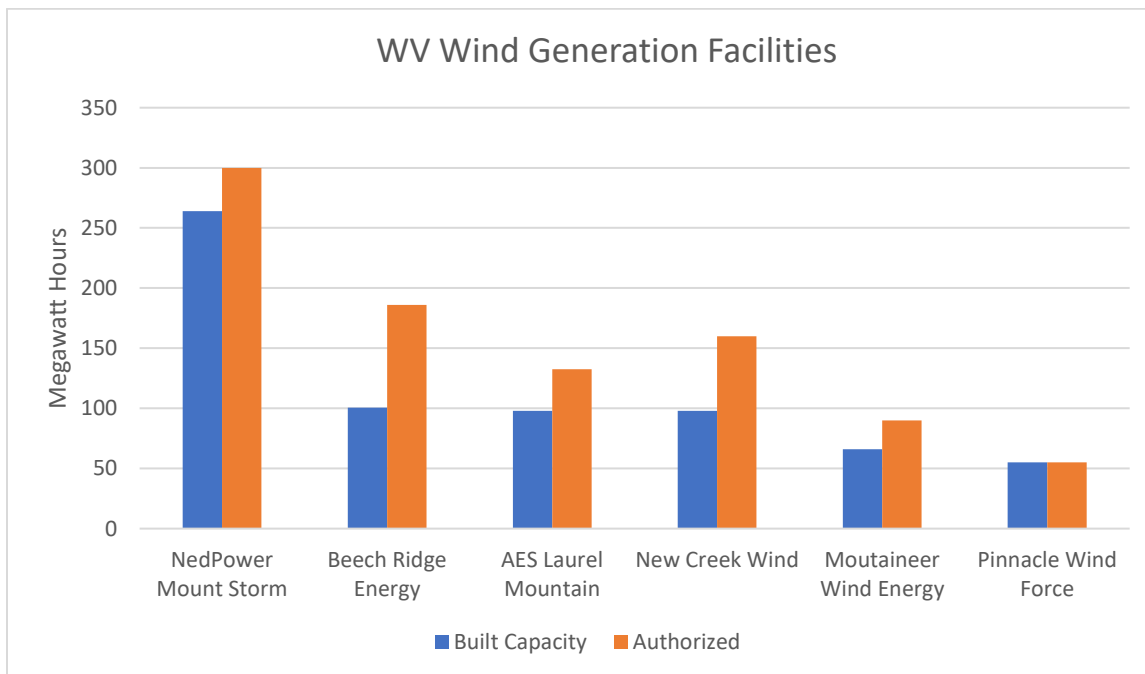


West Virginia depends on coal mined in the state for most of its power. The state has used hydroelectric power generation since around 1900 but hydroelectric power remains a small share of energy production and is unlikely to grow. Cloud cover makes solar photovoltaic power generation unfeasible. Less than 0.01% of power generation in the state is from solar panels. The fastest growing source of power generation is wind power, which has been steadily growing each year.

GROWTH OF WIND POWER IN STATE

Wind power has become more attractive to power generation developers in recent years. The cost of producing and installing wind turbines has dropped, and the turbines have become more efficient, making wind power competitive with other power generation sources. Federal tax subsidies make wind power even more attractive. Current subsidies, set by the Taxpayer Relief Act in 2015, provides a \$23 rebate per Megawatt hour.

The following chart shows the current power generation capacity of each of the six wind generation facilities in the state, as well as the total capacity authorized by the PSC.



PERMITTING PROCESS

The West Virginia Public Service Commission (PSC) oversees the permitting process for all new power generation in the state. The PSC holds public hearings to authorize any new power generation projects, taking into account the interests of private power companies, the government, public interest groups and individual citizens. The PSC's three Commissioners then render judgements on whether new facilities can be built and what their maximum capacity should be. Environmental advocacy groups frequently file letters with the PSC requesting studies of the affect of new wind turbines on bird and bat populations, which can significantly delay the process.

WIND POWER FACILITIES

The following six facilities are currently in operation in West Virginia. They are listed in order from largest power generation capacity to the smallest. Built capacity indicates the maximum amount of energy per hour, or megawatt hours (MW), the facilities can produce, given the current number of turbines installed. Authorized capacity indicates the maximum number of turbines and/or megawatt hours the facility has been authorized to produce by the PSC.

1. NedPower Mount Storm, LLC

County: Grant

Built capacity: 264 MW

Authorized capacity: 200 turbines, 300 MW

2. Beech Ridge Energy, LLC

County: Greenbrier and Nicholas

Built capacity: 67 turbines, 100.5 MW

Authorized capacity: 124 turbines, 186 MW

3. AES Laurel Mountain, LLC

County: Randolph and Barbour

Built capacity: 98 MW

Authorized capacity: 65 turbines, 125-132.5 MW

4. New Creek Wind, LLC

County: Grant

Built capacity: 49 turbines, 98 MW

Authorized capacity: 66 turbines, 160 MW

5. Moutaineer Wind Energy Center

County: Tucker

Built capacity: 44 turbines, 66 MW

Authorized capacity: 60-90 turbines, 71-90 MW

6. Pinnacle Wind Force

County: Mineral

Built capacity: 55 MW

Authorized capacity: 23 turbines, 55.2 MW

