

Renewables Now Account For More Than 20% Of U.S. Generating Capacity

By Ken Bossong, *SUN DAY Campaign*



According to the latest issue of the Federal Energy Regulatory Commission's (FERC) "Energy Infrastructure Update" (with data through December 31, 2017), renewable sources (i.e., biomass, geothermal, hydropower, solar, wind) accounted for half (49.85%) of the 24,614 megawatts (MW) of new U.S. electrical generating capacity placed into service in 2017. New natural gas capacity accounted for 48.67%, with the balance coming from waste heat (0.89%), nuclear (0.41%), and oil (0.16%). There was no new coal capacity added during 2017.

Based on a review by the SUN DAY Campaign of corresponding FERC year-end reports issued for December 2016, December 2015, and December 2014, this is the fourth year in a row that new capacity from renewable energy sources exceeded that from natural gas.

Growth in new solar capacity has been most dramatic. By the end of 2017, installed generating capacity at utility-scale (i.e., 1-MW or larger) solar facilities totaled 30.30 GW - roughly eight times (7.77%) greater than that FERC reported five years ago in its December 2012 "Energy Infrastructure Update." Solar is now 2.55% of total U.S. installed utility-scale generating capacity. Moreover, inasmuch as FERC data do not include distributed solar (e.g., rooftop PV), actual U.S. solar capacity is significantly higher - perhaps 30% or more.



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In addition to solar, the generating capacity of each of the other renewable energy sources also increased during the past five years: wind by 53.88%, biomass by 11.20%, geothermal by 3.51%, and hydropower by 2.79%. Combined, the generating capacity of non-hydro renewables is 73.89% greater than that reported five years ago. Hydropower and non-hydro renewables combined now account for more than a fifth (20.21%) of the nation's installed generating capacity. A half-decade ago, they were just 15.40% of the total. Wind alone is now 7.45% of total capacity, up from 4.97% in December 2012.

By comparison, the generating capacities of natural gas and oil plants have increased only modestly during the past five years: natural gas by 5.14% and oil by 5.35%. Meanwhile, while its generating capacity inched up by 1.09%, nuclear power's share of total generating capacity actually declined

by 1.52%. Most dramatically, though, generating capacity attributable to coal has declined by almost a fifth (17.83%) with its share of total U.S. generating capacity declining from 29.17% in December 2012 to 23.35% in December 2017.

"Notwithstanding a year-long effort by the Trump Administration and its congressional allies to prop up coal, nuclear, and natural gas at the expense of renewable energy sources, clean energy technologies have proven themselves to be amazingly resilient," noted Ken Bossong, Executive Director of the SUN DAY Campaign. "The unmistakable lesson to be drawn from the past five or more years of FERC data is that solar, wind, and the other renewable energy sources are carving out a large and rapidly-expanding share of the nation's electrical generation." ■