Independent Statistics and Analysis
U.S. Energy Information Administration

Short-Term Energy Outlook

STEO

November 2024

hydropower generation, which grows by 23%. The large increase in forecast generation from hydropower next year reflects a return to more normal conditions following drought conditions this year.

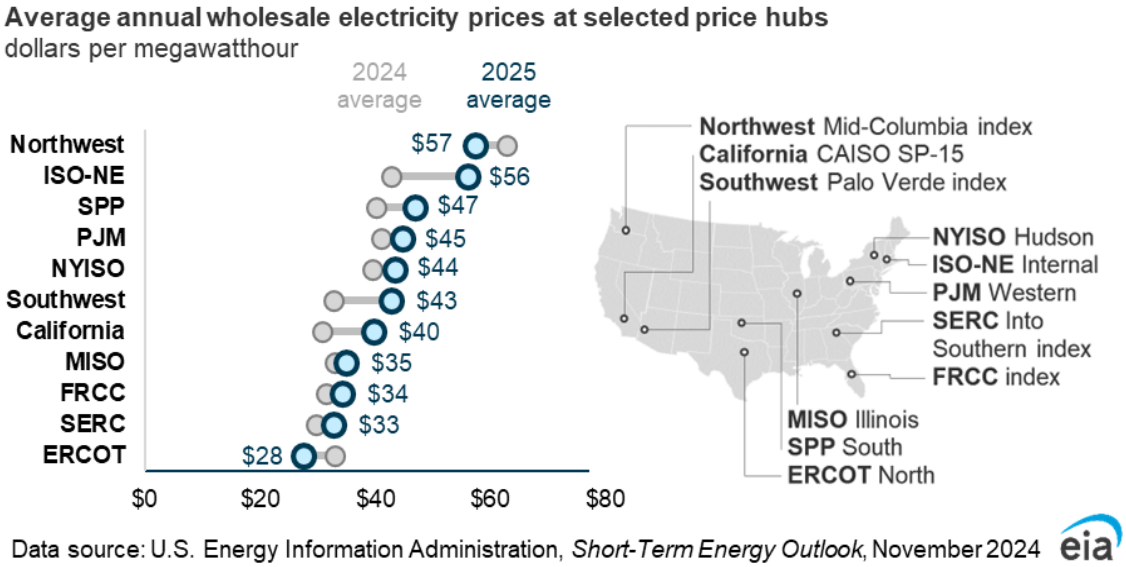
U.S. solar generation grows in the forecast by 34% in 2024 and 31% in 2025. Rising solar generation also cuts into natural gas generation next year. Solar generating capacity is growing fastest in Texas along with associated battery storage projects. The forecast regional increase in solar generation, which is growing faster than overall electricity demand, will require less electricity generation from natural gas in Texas.

Wholesale power prices

Prices for wholesale power are likely to trade higher next year in most regions of the United States as a result of higher natural gas prices. We forecast the price of natural gas delivered to electric generators will average almost $3.20 per million British thermal units in 2025, up 18% from 2024.

We expect wholesale electricity prices in the Northwest region to come down by 9% in 2025 because of an increase in hydropower generation. Despite the increase, hydropower generation in the Northwest remains below the historical average, which along with increased exports of power to Canada and high natural gas prices in the region keep prices in the region the highest in the country, averaging $57 per megawatthour (MWh) next year.

We expect that the wholesale market operated by the Electric Reliability Council of Texas (ERCOT) will have the lowest prices in the country in 2025, averaging $28/MWh, which would be down 17% from our forecast price in 2024. Increasing generation from solar power in that region helps to keep wholesale electricity prices low because that energy source does not incur fuel costs and receives tax incentives.

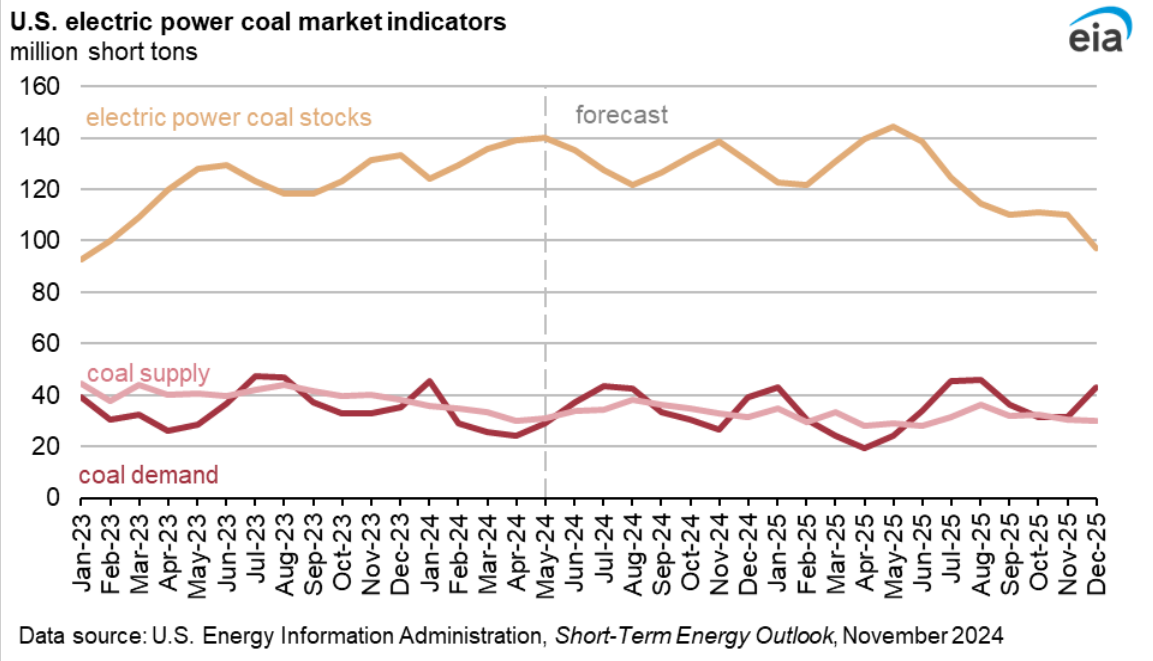


Coal markets

Heading into early winter, we expect U.S. coal production will decline slightly at the same time electricity generators consume more coal to service increasing electricity loads, pushing coal stocks held by U.S. power plants down from 139 million short tons (MMst) in November to 131 MMst in December.

We expect coal inventories will be a key source of U.S. supply next year. We forecast that about 370 MMst of coal will be consumed in the U.S. electric power sector in both 2024 and 2025. Power sector coal consumption remains flat as we expect that more overall demand for power next year and higher natural gas prices, which encourage coal dispatch at the margin, will be offset by more renewables generation and some coal plant retirements. However, we expect coal production will drop as electricity generators work down inventories. U.S. coal production in our forecast declines from 505 MMst in 2024 to 469 MMst in 2025. As production falls and consumption remains steady, we expect coal stocks to fall to 101 MMst by the end of 2025.

The September report on exports from the U.S. Census Bureau showed more coal exports than we had forecast. As a result, we increased our expectation of U.S. coal exports. We now forecast coal exports to total 108 MMst in 2024 and then to fall to 104 MMst in 2025. Stronger-than-expected exports in September were driven by an increase in metallurgical exports and likely reflects in part a recovery from a mechanical failure at the Curtis Bay coal terminal in Maryland that disrupted operations in August. We expect U.S. steam and metallurgical coal exports to fall slightly in 2025, but recent fiscal stimulus measures by the Chinese government and continued economic development in India should otherwise limit any major declines in U.S. coal exports. Considerable uncertainty around trade policies and geopolitical developments could affect demand for U.S. metallurgical coal.



Data source: U.S. Energy Information Administration, *Short-Term Energy Outlook*, November 2024