U.S. Data Centers May Need Even More Power

Data centers in the U.S. may require 36% more power in the next decade than estimated just a few months ago, new findings from BloombergNEF indicate (POLITICO's ENERGYWIRE, subscription).

What's going on: "According to the report, [artificial intelligence] power demand is slated to surge by 106 gigawatts by 2035, up from 78 GW estimated in April."

- "The updated numbers reflect more than 140 newly announced projects over the past few months and indicate that the nation's largest grid operator, PJM, is facing a power squeeze by the end of the decade."
- The report also forecast data center power demand to be 21% higher by 2030 than predicted in April.

Why it's happening: The revised projections were driven higher by data center technology that is more energy-intensive than current infrastructure.

- Though only about 10% of current data centers exceed 50 megawatts of capacity, most planned facilities are more than 100 megawatts.
- Also, "[s]trong fiber networks in Virginia, increasing sophistication of AI technology and state policy are fueling the PJM expansion. In Pennsylvania, there's a sales tax exemption on data center equipment to woo AI development to the state."

Where it's happening: Approximately half the predicted power demand is in PJM territory, which includes the world's data center capital, Virginia, and 12 other states in the mid-Atlantic and Midwest, such as Ohio, Pennsylvania and Illinois.

Yes, but when? "While the number of committed projects doubled between the first quarter of 2024 and 2025, many of those facilities are not yet under construction, according to BNEF. It takes roughly seven years for the average data center to become operational."

The NAM's AI roadmap: In October, the NAM released its own blueprint for policymakers to follow to address rising challenges and strengthen U.S. energy and AI dominance.