

Seemingly overnight, artificial intelligence is now built into everything from iPhones and Google searches to online services like Amazon. As entire industries work to adapt to the sweeping change of AI, data centers — the buildings that serve as the engines of AI and cloud computing — pose explosive demands on Colorado’s energy and water.

KEY FINDINGS

- The collective annual energy demands of the utilities in WRA’s region are projected to be **55% higher in 2035**. This equates to an annual growth rate of 4.5% over the next decade.
- The growth projected in just the **next five years** surpasses the current system of electricity production – that took a century or more to build.
- If projections of data center load growth become reality, these new facilities in the Interior West could have an annual on-site water use of **21,600 acre-feet (7 billion gallons) in 2035**. This amount of water can serve the annual needs of up to 194,400 individuals.



PUBLIC SERVICE COMPANY OF NEW MEXICO (PNM)

In February 2025, PNM reported that it had 4,197 megawatts of interconnection requests by large loads, 87% of which it attributed to data centers. While all these energy demands will not materialize, they are a driving factor behind the higher load forecast PNM reported in late 2024, in an update to the Integrated Resource Plan (IRP) it filed the year before. Relative to the 2023 IRP, PNM now projects:

- Annual energy demands will be **11% higher in 2030 and 12% higher in 2035**.
- Peak demands will be 10% to 11% higher than previously forecast. Under one model, peak demands would be almost 30% higher in 2030 and 40% higher in 2035, relative to PNM’s 2023 Current Trends and Policy forecast.

- Using an estimate of the national average on-site water intensity of data centers and PNM’s energy demand projections, WRA estimates the incremental, new water demands associated with cooling data centers in New Mexico could be 387 acre-feet per year in 2030 and 427 acre-feet per year in 2035.

As a result of this new load forecast, PNM states that it has an increased resource need in the 2028-2032 period and is therefore proposing to acquire an additional 1,000 megawatts of carbon-free resources, and 700 megawatts of other resources.

12%*
higher in
2030

40%*
higher in
2035

Annual Energy Demands

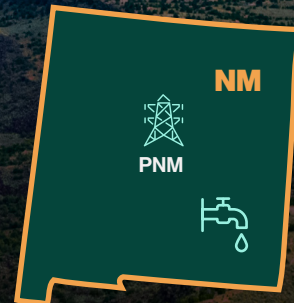
*PNM's annual energy demands compared to the projection in its 2023 IRP.

Peak Demands

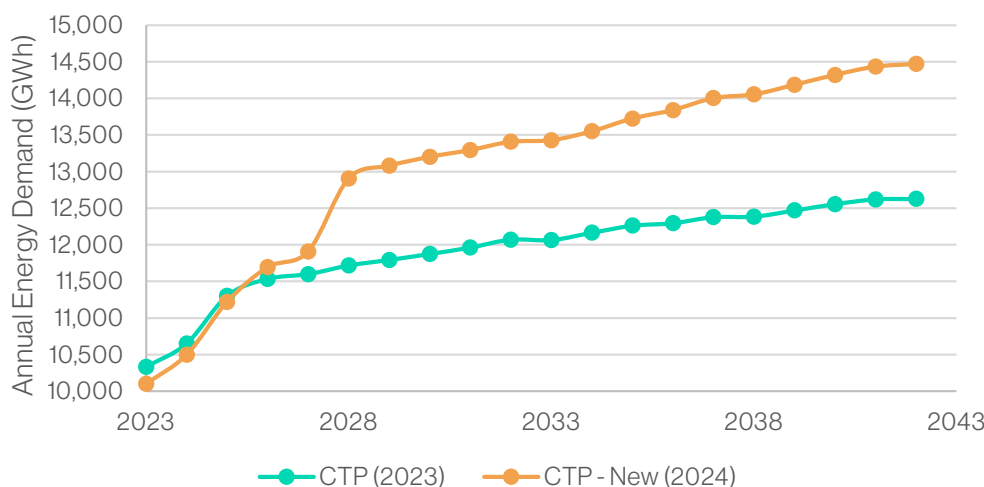
*Relative to PNM's 2023 Current Trends and Policy forecast. Peak demand is the time when electricity or other energy consumption is at its highest.

**427 acre-feet per year
(138 million gallons)**

in new water demands, or enough water to support up to 3,316 individuals.



PNM - Annual Energy Demands



PNM's annual energy demands under the Current Trends and Policy (CTP) forecast in the 2023 IRP and under the 2024 Supplemental Update to the 2023 IRP.

Under New Mexico's Energy Transition Act, PNM must meet an emissions rate standard of no more than 400 pounds per megawatt hour between now and 2031, and no more than 200 pounds per megawatt hour after 2032.

Starting in 2045, PNM's generation must be zero-carbon. In addition, PNM has a stated corporate goal of being carbon-free by 2040.

As AI usage increases and data centers expand, we must meet new energy demands with clean energy and rapidly decarbonize the rest of our energy infrastructure, while also understanding the impact these centers have on our already stretched water supplies in New Mexico.

We need policies that advance clean energy, preserve scarce water resources, and protect electricity customers. With the right policies in place, data centers can catalyze investments in innovative clean energy resources while driving broader system transformation.

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