Watt's the limit? Ohio needs new ways to meet AI energy demands, new report says

By Anna Staver Cleveland.com

COLUMBUS, Ohio -- Ohio's energy needs could jump 50% over the next decade because of a data center and tech industry explosion, not population growth.

A new report released Wednesday by the Ohio Business Roundtable warns that artificial intelligence and cloud computing have flung the state into a new frontier for energy demand. How we meet that challenge will shape the state's economic competitiveness and energy reliability for decades.

"The demand is not simply incremental," One Columbus CEO Kenny McDonald said. "The demand is now exponential."

The Buckeye State is a magnet for data centers, and officials are actively courting power intensive tech manufacturers. That's good for business, according to the report. But bringing billions into Ohio won't matter if the power grid can't hold up.

"In central Ohio, there's a freeze on new projects after 2027," Roundtable President Pat Tiberi said. "That alone should be a sign to policy makers."

The report makes this point clear: If we get this wrong, Ohio could miss out on billions. And everyone could pay higher energy bills or face power shortages.

Power Hungry

To understand these new energy demands, imagine what would happen if every Ohio home doubled its energy needs overnight.

In Central Ohio, where data centers are largely proliferating, peak energy use totals less than 4,000 megawatts of power a year. State regulators say American Electric Power has <u>already signed deals</u> to add 5,000 additional megawatts to that demand.

And developers have floated adding 30,000 more.

On top of those demands, everything from water heaters and furnaces to cars and smart homes use more electricity--meaning our power demands are about to explode.

Gridlock on the power highway

Ohio can't go it alone. We're part of a regional power sharing organization called the PJM Interconnection. It works like an interstate highway that connects 13 states and Washington D.C.

PJM coordinates how power flows across those highways and the price consumers pay.

One problem the report highlights is states taking aging power plants offline faster than they can replace them.

"Ohio has deactivated 41% of its PJM capacity since 2013—the largest share of any state—with much of that retirement coming from coal plants," according to the report.

Another problem is gridlock.

Since 2014, only 7% of projects entering the PJM interconnection queue have come online, according to the report. About 160 gigawatts remain under review--the majority of which would come from solar, wind and storage projects.

"It's a challenging fix," Tiberi said. "(PJM) will admit that probably half of those will never be built."

PJM is so far behind, Tiberi added, that they're telling states with aging coal plants not to retire them.

Ohio has been largely antagonistic toward renewable energy efforts that could pump power into the grid. In 2021, state lawmakers gave local governments <u>new powers to kill wind and solar projects</u>, but didn't extend the same oversight of coal, oil and natural gas projects. The GOP-dominated Ohio Supreme Court is <u>weighing at least four cases of pending solar projects</u>.

How we meet the moment

The report had a laundry list of ways Ohio could meet its upcoming energy demands:

Cut regulatory tape: Tiberi told reporters it can take 600 days for a new powerplant to move through Ohio's siting and permitting processes.

"To build a pipeline or transmission line in Indiana takes half the time and therefore half the cost," he said.

The Roundtable wants Ohio to create a "shock clock" that would automatically approve any plan after 90 days of deliberation.

Energy zones: Let local governments use tax incentives and other sweeteners to lure development to their regions.

"This is a great opportunity to take advantage of our existing infrastructure and bring investment to communities that have been lacking," Greater Cleveland Partnership CEO Baiju Shah said.

Behind the meter: Make it easier for companies to build their own powerplants that do or don't connect to the grid. Developers already are <u>proposing similar</u> <u>arrangements</u> for gas-fired power plants and data centers.

Reform the PJM: Advocate for proportional representation rather than having the same single vote as much smaller states within the organization.

"This report is a starting point to a much bigger conversation we need to have," McDonald said.

Ohio Republican energy plan

Statehouse Republicans have their own plan to <u>end subsidies for two coal power</u> <u>plants</u> and stop electric companies from adding extra charges to customer bills for certain construction/grid improvement projects.

"Any subsidy distorts the market," said Rep. Roy Klopfenstein, a Paulding County Republican, while introducing <u>House Bill 15</u>.