AGENCY STAFF
Thomas Breckel, Director
Susan Hertzmann, Admin Assistant

1850 Davids Drive, Suite 107
Wilmington, Ohio 45177
(937) 382-6673
cc-ema.org

Classification Note: UNCLASSIFIED // OPEN SOURCE // NO RESTRICTIONS ON DISTRIBUTION

This briefing is unclassified and based solely on publicly available information, including credible media reports, verified industry statements, and open federal and state documents. It is intended to provide Clinton County residents and partners with clear, easy-to-understand awareness about national and regional electrical grid conditions.

There is no emergency or immediate threat associated with this information. The purpose is simply to explain current national trends, outline how the grid operates in our region, and help residents understand what factors could influence power reliability in the years ahead. No new actions are required at this time—this material is meant to support routine preparedness planning and informed decision-making.

The document contains no classified, law-enforcement-sensitive, or restricted content. It may be shared freely with community members, local organizations, and partner agencies to support readiness, communication, and public awareness across Clinton County.

Clinton County Residents Briefing: Understanding Power Grid Reliability

Date: 10 November 2025

Why This Matters: Electricity keeps our homes, schools, and businesses running — and powers things we rely on every day, from phones to medical devices. The U.S. Department of Energy (DOE) recently shared a national report about future challenges to the power grid. https://www.energy.gov/articles/department-energy-releases-report-evaluating-us-grid-reliability-and-security

For Clinton County residents, **this is not an emergency**, but it's something worth knowing. The goal is simply to help you understand what's happening across the country and how it could affect our area in the years ahead. You don't need to take new action right now—just **keep this information in mind as part of your regular preparedness plan**.

What's Happening Nationally:

- Across the U.S., many older power plants are being shut down, but new ones aren't being built fast enough to replace them.
- By 2030, about 104 gigawatts (GW) of existing generation—mostly coal and natural gas—are expected to retire.
- Only about 22 gigawatts (GW) of new, firm replacement generation is currently planned.
- That means for every five megawatts being retired, only one megawatt of steady, replacement power is being added.
- Electricity use is going up, especially with new factories, computer data centers, and growing technology needs.
- The Department of Energy warns that if this trend continues, some regions could see more power shortages or outages by 2030.
- Weather extremes—like long heat waves or deep winter freezes—put extra stress on the grid.

Even with these challenges, experts say the grid is working fine today. The concern is mainly about the future if new energy sources and grid improvements don't keep pace.

Our Region's Situation:
- Clinton County is part of the PJM power grid, which connects electricity across much of the Midwest and Mid-Atlantic.
- PJM says the grid has enough power right now for normal conditions.
- However, under extreme weather or unexpected equipment failures, it could become strained.
- This is not unique to Clinton County—it's a shared issue across several states in our region.

What This Means Locally:
- Clinton County's power system has been reliable, but like all areas, it depends on weather and regional power supplies.
- Major storms, ice, or strong winds remain the most common causes of local outages—not grid failures.
- Our local utilities (AES Ohio, Duke Energy, and South-Central Power) have backup plans and mutual-aid systems to restore service quickly.
- There's no current threat that residents need to worry about, but power restoration could take longer if a large regional event affects multiple states at once.

What You Can Do:
You don't need to change your daily routine, but it helps to have a plan if the lights go out. Follow these steps to stay safe, protect your food, and make smart use of backup power.

Before an Outage:
- Keep flashlights, batteries, and a small power bank ready for your phone.
- Know how to safely use a generator, and store fuel in approved containers outside the home.
- Charge key items (phones, battery lights, medical devices) when storms are expected.
- Have at least three days of food and water that don't require cooking.
- Sign up for Clinton County Emergency Alerts (CCEA) for updates on power and weather conditions.

During an Outage:
- Keep refrigerators and freezers closed as much as possible.
    - A closed refrigerator will keep food safe for up to 4 hours; a full freezer for about 48 hours.
    - If you have two refrigerators or freezers, consolidate food into one and keep it packed tightly to hold the cold longer.
- Use wireless thermometers or simple fridge/freezer thermometers to track internal temperatures.
    - Food should stay below 40°F in the refrigerator and below 0°F in the freezer.
    - Only run a generator or inverter long enough to bring temps back down, then shut it off to save fuel.
- Use power wisely:
    - Run critical appliances (freezer, fridge, medical device, small heater) on rotation if you have limited generator capacity.
    - Avoid running high-draw items like electric stoves, dryers, or space heaters for long periods.
- Safety First:
    - Never use a generator indoors or in a garage—keep it at least 20 feet from your home.
    - Use battery-powered lights instead of candles to reduce fire risk.

After Power Returns:

- Check thermometer readings before eating perishable food.
    - If food has been above 40°F for more than 2 hours, throw it away.
- Refill fuel supplies and recharge backup batteries.
- Review what worked well and what you could improve for next time.

In Summary:

- Right now: The power grid is stable.
- In the future: The Mid-Atlantic and Midwest, including Ohio, may face tighter margins during extreme weather or heavy energy use.
- For Clinton Co.: Stay prepared for short-term power losses, especially during storms, but there is no cause for alarm.
- EMA's role: Clinton County EMA continues to work with utilities and the State Emergency Operations Center to monitor grid conditions and maintain readiness.

Keeping informed and prepared ensures our community stays strong—whatever the weather or circumstances.

Department of Energy Releases Report on Evaluating U.S. Grid Reliability and Security

The Department of Energy warns that blackouts could increase by 100 times in 2030 if the U.S. continues to shutter reliable power sources and fails to add additional firm capacity.

Energy.gov

July 7, 2025

4 min

The Department of Energy warns that blackouts could increase by 100 times in 2030 if the U.S. continues to shutter reliable power sources and fails to add additional firm capacity.

WASHINGTON— The U.S. Department of Energy (DOE) today released its Report on Evaluating U.S. Grid Reliability and Security. The report fulfills Section 3(b) of President Trump's Executive Order, *Strengthening The Reliability And Security Of The United States Electric Grid*, by delivering a uniform methodology to identify at-risk regions and guide Federal reliability interventions.

The analysis reveals that existing generation retirements and delays in adding new firm capacity, driven by the radical green agenda of past administrations, will lead to

a surge in power outages and a growing mismatch between electricity demand and supply, particularly from artificial intelligence (AI)-driven data center growth, threatening America's energy security.

"This report affirms what we already know: The United States cannot afford to continue down the unstable and dangerous path of energy subtraction previous leaders pursued, forcing the closure of baseload power sources like coal and natural gas," Secretary Wright said. "In the coming years, America's reindustrialization and the AI race will require a significantly larger supply of around-the-clock, reliable, and uninterrupted power. President Trump's administration is committed to advancing a strategy of energy addition, and supporting all forms of energy that are affordable, reliable, and secure. If we are going to keep the lights on, win the AI race, and keep electricity prices from skyrocketing, the United States must unleash American energy."

Highlights of the Report:

- **The status quo is unsustainable.** DOE's analysis shows that, if current retirement schedules and incremental additions remain unchanged, most regions will face unacceptable reliability risks within five years and the Nation's electrical power grid will be unable to meet expected demand for AI, data centers, manufacturing and industrialization while keeping the cost of living low for all Americans. Staying on the present course would undermine U.S. economic growth, national security, and leadership in emerging technologies.
- **Grid growth must match the pace of AI innovation.** Electricity demand from AI-driven data centers and advanced manufacturing is rising at a record pace. The magnitude and speed of projected load growth cannot be met with existing approaches to load addition and grid management. Radical change is needed to unleash the transformative potential of innovation.
- **With projected load growth, retirements increase the risk of power outages by 100 times in 2030.** Allowing 104 GW of firm generation to retire by 2030—without timely replacement—could lead to significant outages when weather conditions do not accommodate wind and solar generation. Modeling shows annual outage hours could increase from single digits today to more than 800 hours per year. Such a surge would leave millions of households and businesses vulnerable. We must renew a focus on firm generation and continue to reverse radical green ideology in order to address this risk.

- **Planned supply falls short, reliability at risk.** The 104 GW of plant retirements are replaced by 209 GW of new generation by 2030; however, only 22 GW comes from firm baseload generation sources. Even assuming no retirements, the model found outage risk in several regions rises more than 30-fold, proving the queue alone cannot close the dependable-capacity deficit.
- **Old tools won't solve new problems.** Traditional peak-hour tests to evaluate resource adequacy do not sufficiently account for growing dependence on neighboring grids. At a minimum, modern methods of evaluating resource adequacy need to incorporate frequency, magnitude, and duration of power outages, move beyond exclusively analyzing peak load time periods, and develop integrated models to enable proper analysis of increasing reliance on neighboring grids.

DOE's report identifies regions most vulnerable to outages under various weather and retirement scenarios and offers capacity targets needed to restore acceptable reliability. The methodology also informs the potential use of DOE's emergency authority under Section 202(c) of the Federal Power Act.

Click here for a fact sheet on the report.

###

View Previous

Energy Department Issues Final Rule Delaying Compliance Deadline for Manufactured Housing Standards

July 1, 2025

View Next

Energy Department Expands Commitment to Collaboration with Norway on Water Power Research and Development

July 7, 2025

Tags:

STRENGTHEN GRID RELIABILITY AND SECURITY

Media Inquiries:
(202) 586-4940 or DOENews@hq.doe.gov

Read more at the energy.gov Newsroom

U.S. DEPARTMENT of ENERGY

Committed to Restoring America's Energy Dominance.

Quick Links

Leadership & Offices
Mission
Newsroom
Contact Us
Careers

Resources

Budget & Performance
Directives, Delegations, & Requirements
Freedom of Information Act (FOIA)
Inspector General
Privacy Program

Federal Government

USA.gov
The White House

Follow Us

The Department Of Energy's Resource Adequacy Report Affirms The Energy Emergency Facing The U.S. Power Grid

THE NEW REPORT REVEALS, PLANT CLOSURES AND OVERRELIANCE ON INTERMITTENT ENERGY SOURCES DRIVEN BY A RADICAL GREEN AGENDA, AND INCREASING ARTIFICIAL INTELLIGENCE DEMAND, COULD LEAD TO A SIGNIFICANT INCREASE IN U.S. POWER OUTAGES

- On July 7, 2025, the Department of Energy (DOE) released its Resource Adequacy Report, in fulfillment of a directive under President Trump's Executive Order 14262 of April 8, 2025, "Strengthening the Reliability and Security of the United States Electric Grid."
- According to DOE's findings, which are based on similar work completed by the North American Electric Reliability Corporation (NERC), the U.S. energy grid will not be able to sustain the combined impact of coal and other plant closures, an overreliance on intermittent energy sources like wind and solar, and data center growth, highlighting the urgency of increasing dispatchable energy output, which the Trump Administration has already taken steps to accomplish.
- The analysis clearly demonstrates that in the absence of robust and rapid energy policy reform that prioritizes use of America's abundant natural resources and fast infrastructure buildout, resource inadequacy will prevent development of new manufacturing in America, prohibit the re-industrialization of the US economy, drive up the cost of living for all Americans, and eliminate the potential to sustain enough data centers to win the artificial intelligence (AI) arms race.
- According to the report, the Nation's power grid is not prepared to meet the energy demand of AI, putting U.S. national security at risk by compromising both our grid stability and our ability to innovate.
    - The report estimates an additional 100 GW of new peak hour supply is needed by 2030. Of this, 50 GW of this is directly attributable to data centers.
    - Data centers can be built in 18 months, but it takes more than three times as long to add new generation required to service those data centers to the grid.
    - Load growth is accelerating at a rate not seen in decades. The energy infrastructure industry, which is accustomed to moderate to zero load growth, needs to innovate to keep up with the demand.
    - Intermittent energy sources like wind and solar will not meet reliability demands, and the planned closures of firm, reliable power sources like coal are dramatically greater than expected additions.
    - The DOE report assumes 104 GW of announced plant closures by 2030 will be met with 210 GW of new generation; however, only 22 GW of that new generation will be firm, reliable, dispatchable generation that is available 24/7.
    - According to the report, capacity is not being replaced on a one-to-one basis and this loss of capacity will lead to shortfalls during periods of low intermittent renewable power generation.
    - With current projections of generation retirements and additions, grid reliability deteriorates in all regions.

AI INNOVATION IS ACCELERATING ENERGY DEMANDS AND THE NEED FOR RELIABLE, FIRM GENERATION SOURCES

- U.S. grid operators have raised a unified alarm about an impending capacity crunch, warning about the pace and scale of explosive energy demand from data centers, increased manufacturing, and electrification.
    - At a March 25th hearing before the House Energy and Commerce Subcommittee on Energy, the Nation's top grid officials testified that the U.S. power system is under mounting strain—and without urgent reform, their ability to maintain reliable electric service will fail.
    - At the June 5th FERC technical conference on resource adequacy, NERC leadership testified that mounting resource adequacy challenges are elevating the outage risk profile across a broad swath of North America, leaving few areas untouched.
- Renewables have been subsidized while dispatchable energy sources such as coal, oil and gas, and nuclear have been minimized by environmental activism that hinders American energy production, and renewables cannot power a 24/7 AI infrastructure.
    - These sources are intermittent and cannot always match real-time demand, especially when split-second latency and uptime are critical.
    - Baseload, dispatchable power, such as from coal, oil and gas, and nuclear, is essential in grid planning.
    - According to these operators, without urgent structural reforms such as those underway under the Trump Administration, the ability to maintain reliable electric service could falter.
    - Several utilities have fast-tracked proposals for new natural gas peaker plants, while others are evaluating small modular nuclear reactors as potential solutions for delivering steady, baseload power.
    - Firm, reliable energy sources like coal, oil and gas, which the Trump Administration has already taken decisive action to support, and a rapid energy infrastructure buildout, for which the Trump Administration has already undertaken historic permitting reform to enable, are needed to ensure we can continue to supply adequate energy to meet the demands of our re-industrialization, manufacturing centers, and innovators while keeping the cost of living low for all Americans.

PRESIDENT TRUMP AND THE DEPARTMENT OF ENERGY ARE WORKING TO SECURE GRID RELIABILITY

- In April 2025, President Trump issued Executive Order 14262, "Strengthening the Reliability and Security of the United States Electric Grid," in order to address the surge in electricity demand.
    - The order called on the Secretary of Energy to expedite the DOE's processes for issuing 202(c) orders of the Federal Power Act, during periods of emergency grid operations.
    - The order called on the Secretary of Energy to develop a uniform methodology within 30 days, analyzing current and anticipated reserve margins for all regions of bulk power

regulated by the Federal Energy Regulatory Commission (FERC) and publish the methodology, along with any analysis it produces, on the DOE's website.

  - The order called on the Secretary of Energy to use this methodology to identify which generation resources within a region are critical to system reliability and prevent those identified generation resources from leaving the bulk-power system

- The Trump administration has already issued several 202(c) emergency orders in order to secure the U.S. power grid and prevent unnecessary power outages.
  - In May 2025, the DOE issued an emergency 202(c) order of the Federal Power Act, to the Midcontinent Independent System Operator (MISO).
    - The emergency order directed MISO, in coordination with Consumers Energy, to keep the J.H. Campbell Power Plant in West Olive, Michigan, active for operation to prevent potential power outages.
    - In June, MISO issued an Energy Emergency Alert1 (EEA1) as a result of high expected load and low wind conditions. It was able to avoid black-outs but only after running the J.H. Campell unit and after significant imports from other RTOs.
  - In May 2025, the DOE issued a 202(c) emergency order of the Federal Power Act, to the Puerto Rico Electric Power Authority (PREPA).
    - The order directed PREPA to dispatch generation units necessary to expand baseload generation on the island to maintain grid reliability and avoid a gap in generation shortfall.
  - In May 2025, the DOE issued an emergency 202(c) order of the Federal Power Act, ordering PJM Interconnection (PJM) to operate specified generation units at the Eddystone, Pennsylvania Generation Station past their planned retirement.
    - The order followed statements from PJM warming that their systems faced a "growing resource adequacy concern" due to load growth," the retirement of dispatchable resources, and other factors.
    - In June issued an Energy Emergency Alert 1 (EEA1) alert and called on the Eddystone units to run.
  - In June 2025, the DOE issued an emergency 202(c) order of the Federal Power Act to address potential power grid shortages in the Southeast U.S.
    - The order authorized Duke Energy Carolina to use specific electric generating units within the Duke Energy Carolina area to operate at their maximum generating capacity, in response to ongoing extreme weather conditions.