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.