

How the Department of Defense Block on Wind Projects Impacts the Grid

For questions about this analysis and the underlying data, please contact the ACP research team, research@cleanpower.org.

For almost a year, the Department of Defense (DoD) has effectively frozen new wind project approvals, bringing projects that have not started construction to a complete standstill across the United States. Wind and other clean energy resources are imperative to meet rising energy demand and critical for grid reliability and consumer cost protection. Adding wind to the grid reduces reliance on older, less efficient, and more expensive peaking units, reducing wholesale power prices throughout the year.

U.S. electricity demand is projected to grow 2–4% each year over the next decade. That means the country will need to add the equivalent of Florida and California's power consumption to the grid, at a minimum. Failing to add supply could mean higher prices, reduced reliability, and lost economic development. **The 155+ wind projects currently frozen by DoD represent \$84 billion in capital investment, and \$111 billion in GDP over their construction and operation lifetimes. The projects would support over 240,000 jobs, spanning manufacturers, construction workers, and technicians, supporting hundreds of local economies across the country.**

ACP modeled the cost of blocking new wind projects not already under construction, then translated results into retail rates nationwide. **An effective halt on new wind projects would cumulatively cost U.S. households \$3 billion by 2030 and nearly \$13 billion by 2035, with commercial and industrial customers absorbing an additional \$21 billion in costs by 2035.**

Not only will blocking wind projects cost consumers billions of dollars, but it is also contrary to our national goals of meeting rapidly growing demand.

Cost-effective resources are ready today, and in most cases, it's cheaper to build them than to prop up aging, retiring plants. Customers depend on utilities to meet their electricity needs affordably and reliably. Achieving both requires a diverse resource mix that deploys new wind, solar, storage, and gas alongside the existing generation fleet to meet hourly demand.

Background

Every new land-based wind project in the U.S. requires a routine safety clearance from the Federal Aviation Administration (FAA), since turbines exceed 200 feet and must be evaluated for hazards to air navigation. As part of that process, the FAA refers all wind projects to the DoD to assess potential radar or military operations impacts, negotiate mitigation if needed, and issue a final determination, including for projects that are unlikely to present any adverse impacts requiring mitigation.

For more than 15 years, this system worked: Concerns were raised and resolved through standard review. Many projects were determined to pose no material risk to military operations or radar systems and were promptly returned to the FAA for approval. For projects requiring mitigation, negotiated mitigation agreements resolved concerns in virtually every known case, allowing the FAA to issue its no hazard determination and projects to move forward.

Since mid-2025, that longstanding process has come to a complete standstill. Mitigation discussions have been canceled; mitigation agreements are no longer being finalized; preliminary reviews have stalled; and the DoD is no longer transmitting its findings to the FAA—even for projects that present no adverse impacts. Without the DoD's findings, the FAA cannot complete its review and issue a determination, leaving new land-based wind projects indefinitely stalled and unable to begin construction.

Scenarios

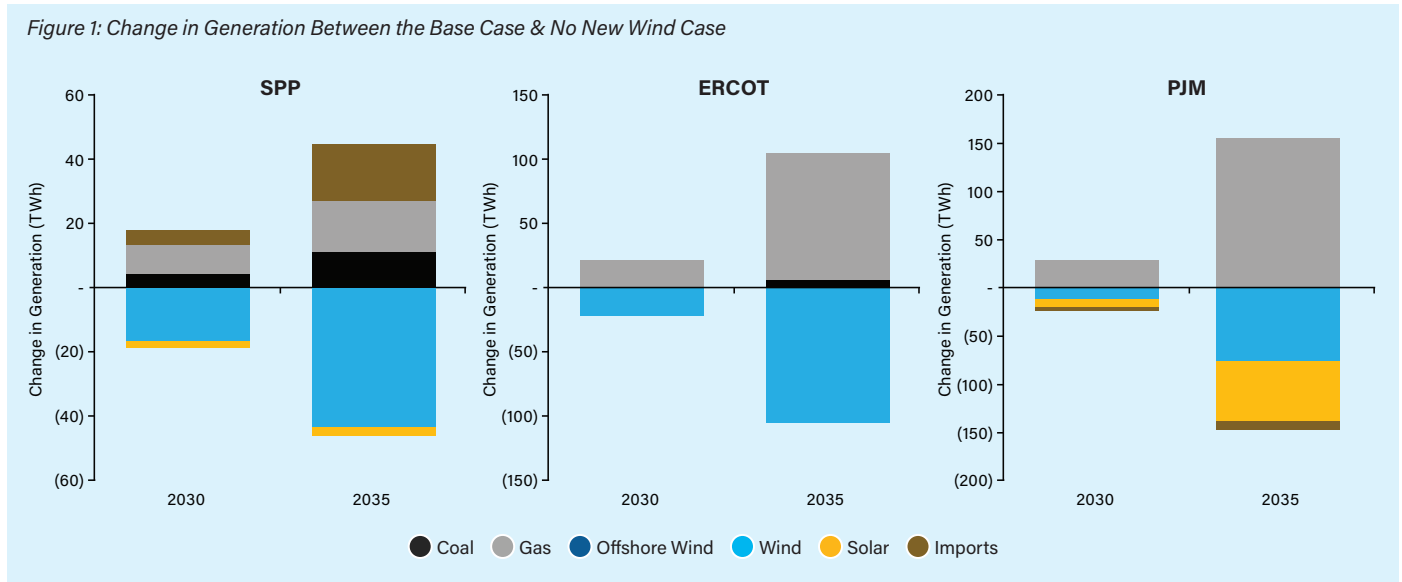
To assess the impacts of the DoD’s freeze on land-based wind, ACP modeled the entire U.S. grid under two scenarios:

- **Base Case:** ACP’s in-house view of an optimized future where all eligible generation technologies, including renewables, storage, and gas, are available to meet forecasted load growth. This represents a business-as-usual trajectory.
- **No New Wind Case:** All wind projects except those already under construction are unable to be built to meet future electricity load.

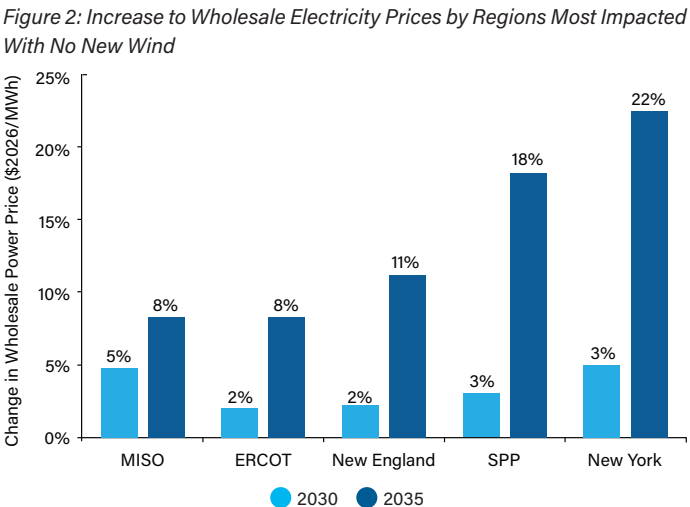
The “No New Wind Case” illustrates the consequences of the DoD’s effective halt on new wind development, at a time of rapid load growth and for an industry with a large domestic manufacturing footprint. By limiting one of the cheapest available energy resources, the Administration is increasing costs for consumers already facing rising energy bills.

Impacts of No New Wind Scenario on Grid Dynamics

Regions with high wind deployment—which cover most of middle America—would see increased dependence on imported power and greater reliance on high-cost peaking units. By 2035, the Southwest Power Pool (SPP), which serves much of the central U.S., would dispatch its thermal fleet over 15% more often, while increasing its power imports by more than 50%. In Texas, the Electric Reliability Council of Texas (ERCOT) would generate 136% more electricity from combustion turbine peaking units in 2035 to compensate for the loss of new wind. In the Mid-Atlantic, reduced wind generation in PJM would drive gas consumption up nearly 25% while also discouraging additional solar investment.



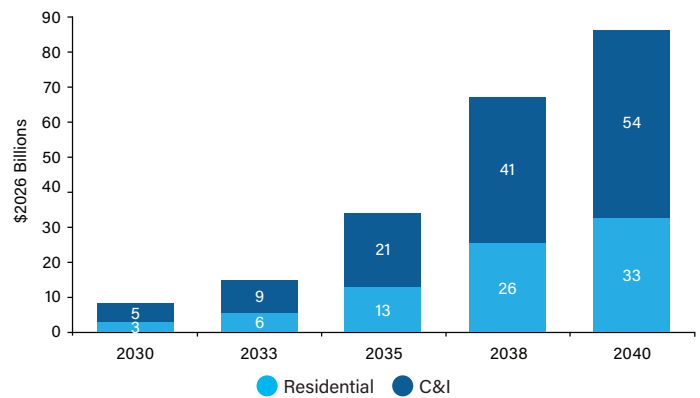
Because wind and solar use renewable natural resources, their fuel costs are very close to zero. As a result, these resources can bid lowest into the marketplace. The effect is to push out the more expensive power plants, which reduces wholesale power prices. No new wind generation connecting to the grid would increase the usage of thermal units with volatile prices and ultimately cause wholesale electricity prices to rise. The average wholesale power price across the U.S. would increase by over 5% by 2035 and over 15% in places like SPP and New York.



Impacts of No New Wind to Consumer Costs

Due to increased wholesale power prices, the final rate customers see on their electricity bill will increase. **Residential customers in the U.S. would pay an additional \$3 billion toward their electricity bills by 2030 due to the delays in wind projects.** Assuming the freeze on wind projects holds, that estimated cost is over \$30 billion by 2040. Commercial and industrial (C&I) customers like retailers, manufacturers, and restaurants would see an additional \$5 billion in costs by the end of the decade and over \$20 billion by 2035.

Figure 3: Cumulative Cost to Ratepayers Without New Wind



Impacts Extend Beyond the Grid

An indefinite freeze on new wind projects in the U.S. not only impacts everyday Americans' wallets but also the welfare of our economy. Wind accounts for over 10% of our country's capacity and generation mix. With [over 300 American wind manufacturing facilities](#), wind energy has supported domestic energy security and economic stimulus. Nearly 20 facilities produce the nacelles, towers, and blades that make up the wind farms, but hundreds more make and assemble the drivetrains, bearings, cables, hubs, steel, lubricant, and thousands of other components.

As a result, this de facto moratorium on new wind construction hurts our manufacturers, the workers that construct the facilities, the thousands of technicians maintaining the wind projects, and the tens of thousands of jobs supported in rural economies from the upstream and downstream spending. **The 155+ DoD-frozen projects represent \$84 billion in investment, \$111 billion in GDP, and 240,000 supported jobs.**

Methodology

ACP uses the EnCompass software model to conduct capacity expansion and production simulations, generating 8,760 hourly prices and system dynamics for the Eastern, Western, and ERCOT Interconnect over the next 25 years. EnCompass relies on a unit commitment and economic dispatch algorithm to determine the least-cost solution to meet energy demand. Unit-commitment optimization determines when generators will be online or offline, whereas the economic dispatches determine how much energy is dispatched from online or available resources.

ACP's Base Case was designed in January 2026. The No New Wind Case takes the same underlying assumptions and reruns the capacity expansion and production simulation models without wind as an eligible resource option for the model to choose. The hourly price in this model represents the wholesale cost of electricity. These changes in wholesale zonal energy prices are then modeled into retail rates. The cost of generation component of their retail rate can be modeled as a function of wholesale energy price, capacity price, reserve margin, and load factor.

The delta in retail rates between the cases is applied to the electricity usage in the states, per the U.S. Energy Information Administration data, to get final cost results.

The American Clean Power Association (ACP) is the leading voice of today's multi-tech clean energy industry, representing energy storage, wind, utility-scale solar, and transmission companies. ACP is committed to meeting America's energy and national security goals and building our economy with fast-growing, low-cost, and reliable domestic power.

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