



Insight

Examining the National Security Argument for Electricity Market Intervention

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The Trump Administration is considering whether to [intervene in electricity markets](#) by requiring grid operators to buy more electricity from nuclear and coal power plants. This proposal has numerous flaws, as outlined below.

- This policy is a solution to a “problem” that doesn’t exist.
- The policy would fail to address the security and reliability issues that do exist.
- The legal ground for this policy is dubious at best, as it sets the government down a slippery slope by using national security as a justification for unnecessary economic intervention.

A Solution in Search of a Problem

This proposed policy is a solution in search of a problem. The administration’s proposal fundamentally assumes that electricity is essential to our national security, and that threats to electrical supply are therefore threats to national security. It further assumes that increased natural gas consumption in the United States increases the vulnerability of the electrical grid because gas relies on pipelines, while nuclear and coal do not. Despite these assumptions, there are no forecasted threats to grid reliability that demand an immediate governmental intervention.

The administration’s policy intervenes in energy markets to preserve nuclear and coal plants, implying that these plants are on the cusp of large-scale retirements. Yet, the latest forecast from the Energy Information Administration (EIA) shows that coal and nuclear together are expected to make up [at least 38 percent](#) of the United States’ electricity supply for the next 20 years.

Furthermore, while the administration’s proposed policy emphasizes a need for diversity in available fuel sources, the diversity is arguably better now. In 2001, the United States got about half of its electricity from coal. In 2017, the United States’ fuel mix was [far more diverse](#) with less reliance on a single fuel source; coal powered 30 percent of electricity, natural gas 31 percent, and nuclear 20 percent. Real world observations show that fuel diversity is not threatened; America’s fuel supply is becoming more diverse, and the United States as a result is more secure, not less, against threats to any single supply chain.

When there is the potential for long-term reliability problems, the administration is not best positioned to determine a need for an intervention—grid operators are, and they see no such problem arising. Grid operators, which manage reliability by projecting capacity requirements and holding auctions for capacity to be available on the grid, have not signaled any need for an intervention. In fact, the grid operator that the proposed policy

would most immediately affect, PJM Interconnection, has said outright that there are [no threats to reliability](#)—refuting the administration’s claims.

Even the government agency tasked with overseeing energy markets has declined to address the supposed problems that this policy is addressing. Last November, Energy Secretary Rick Perry requested that the Federal Energy Regulatory Commission (FERC) intervene and rescue coal and nuclear plants, but all five commissioners (four of whom were appointed by President Trump) [unanimously refused](#) to act, declaring that there was no threat to reliability and that the term “resilience” was not adequately defined to justify such a policy. If not a single commissioner on FERC views the policy as necessary, it seems unlikely that there is a real issue here.

Failure to Address the Real Issues

While the administration’s policy doesn’t address a real problem, energy certainly is vital to national security, and threats to the U.S. electricity system could certainly be viewed as a security risk. The national electrical grid does have weaknesses, but the administration’s policy fails to address these issues.

The administration’s proposal implies that natural gas power plants are less reliable than nuclear or coal, but observations of recent extreme events indicate that coal and nuclear have significant issues of their own, and this policy does not address these problems. A review by the North American Electric Reliability Commission (NERC) of the 2014 Polar Vortex noted that frozen equipment and coal piles made [coal plants unreliable](#) in the cold. During Hurricane Harvey, coal piles in Texas became so saturated with water that [they were unusable](#). During Hurricane Irma, nuclear power plants in Florida were [forced to shut down](#). And during last winter’s bomb cyclone, a transmission problem forced the [only nuclear power plant](#) in Massachusetts to shut down. Even if one believes grid reliability is threatened, this policy does not address the reliability issues of coal and nuclear.

In addition, the idea that grid “resilience” or “reliability” is improved by maintaining more generation capacity seems at odds with the existing data on grid vulnerabilities. A Rhodium Group analysis determined that [only 0.00007 percent](#) of power disruptions occur due to a lack of fuel availability—demonstrating that this policy is not even seeking to address the causes of the vast majority of blackouts. Preserving capacity is an expensive solution that could only be helpful in an extremely narrow set of circumstances.

The most frequently cited threat to grid reliability today is cyberattacks, but this policy might actually make the United States more vulnerable to these. Older plants would seem to be more vulnerable to cyberattacks because they are more likely to have outdated and insecure infrastructure. Would these plants require upgrades to their systems to be more resilient? Wouldn’t these likely be the first plants to be disabled in the event of a cyberattack of the sort that could threaten grid reliability? The administration’s plan is thus far silent on these fundamental questions.

And finally, even if it is assumed that a threat to grid reliability exists, and further that the Department of Defense’s reliance on civilian electricity infrastructure creates national security vulnerabilities, then isn’t the problem essentially one of *concentration*, and shouldn’t the proposed solution be a *distributed* system of generation assets? The idea that power outages could harm the functionality of critical infrastructure (hospitals, military bases, airports, etc.) is not new, and such sites typically have their own local generation capacity to bring online in the event of a grid failure. A much more certain avenue to resilience, and likely a far less

expensive one, would place distributed generation or energy storage assets in the areas that are most important instead of forcing ratepayers to subsidize non-economic power plants indefinitely. Yet the proposal does not think in these terms—it merely seeks to preserve existing coal and nuclear plants.

An Illegal Power Grab

Perhaps most troubling, it is not clear that the administration’s proposal is legal. Fundamentally it relies on an extraordinarily broad interpretation of Section 202(c) of the Federal Power Act (which allows the Department of Energy to intervene in markets in the event of an emergency, wartime being the example given in the statute) and Section 101(a) of the Defense Production Act (which allows the President to prioritize production contracts he deems important to “national defense”). Both of these statutes are focused on imminent threats, with the legislators primarily concerned with militaristic threats. The courts likely would not agree that the president could use only vaguely defined threats to national security to justify exercising emergency powers.

The courts would likely not approve of the administration’s policy because such a broad interpretation of “national security” to justify market intervention sets the government down a slippery slope. If the courts upheld that the president could intervene in civilian markets during peacetime and in the absence of an emergency, then there would be nothing to prevent the president from interfering in any and all privatized transactions. There would ultimately be nothing to stop the president from effectively enacting a centrally planned economy, and it seems highly unlikely that Congress ever intended to grant such authority.

Furthermore, the policy proposal would fail under close scrutiny because it assumes that any interruption in the electricity supply is an intolerable threat to national security, but this manifestly is not the case, as minor outages occur with some regularity. Risk is the consequence of an event multiplied by its probability of occurrence, but the threat outlined by the administration simply ignores such a calculation and assumes infinite risk. National security policies always compete for scarce resources, yet under this policy, the “problem” is treated in such a manner that no policy is too costly. Such an approach that expends scarce resources pointlessly would be poor national-security policy that would waste money and leave Americans less secure.