



Overview of the Department of Energy's Proposed Grid Resiliency Pricing Rule

by Bill Peacock, Vice President of Research

On September 29, the U.S. Department of Energy (DOE) proposed a new rule for final action by the Federal Energy Regulatory Commission (FERC) that would require regional transmission operators to increase wholesale payments to coal and nuclear electricity generators for the well-intentioned purpose of securing the national electric grid. However, the proposed rule would increase the cost of electricity in the U.S. and exacerbate—rather than reduce—the growing reliability challenges the U.S. electric grid faces because of regulations and subsidies that favor renewable energy over traditional energy sources. This paper provides an overview of the reliability challenges the U.S. currently faces, the flaws of the DOE's proposed rule, and the path forward for improving the reliability and security of America's electric grid.

Summary

- The DOE's proposed grid resiliency pricing rule will force consumers to pay more for electricity to increase the profits of coal and nuclear electricity generators.
- The justification given by the DOE for these subsidies is to protect the “resiliency of the nation's electricity grid,” even though the U.S. has an adequate supply of electricity today.
- The DOE proposal discounts the fact that current subsidies to wind and solar generators—along with excessive environmental regulations on carbon dioxide and other emissions—are the primary reason for the reliability challenges we do face.
- Giving new subsidies to coal and nuclear generators will not solve the problems caused by current subsidies to wind and solar generators. In fact, several regional grid operators are already doing this through “capacity markets” and it isn't working.
- Despite the DOE's claim that energy markets don't work, they do—Texas' competitive electricity market with a reliable supply of affordable electricity for the next decade is the best example of this.
- Texas consumers faced a similar battle against electricity generators and regulators from 2012 to 2014 when they pushed for a \$4 billion a year electricity tax out of fears that Texas was running out of electricity. But the tax was defeated, and forecasts show that Texas has an adequate supply of electricity for at least the next decade.
- The path forward to ensure a reliable and affordable supply of electricity is to let markets work by eliminating subsidies for renewable energy and reducing excessive regulations like the EPA's Clean Power Plan that are pushing coal and nuclear generation off of the grid.

Key Points from the DOE's Proposed Grid Resiliency Pricing Rule

- Secretary of Energy Rick Perry on Sept. 29 proposed a rule for adoption by the FERC that would force independent system operators (ISO) and regional transmission operators (RTO) to adopt a tariff paying coal and nuclear generators “just and reasonable rates for wholesale electricity sales ... to ensure that certain reliability and resilience attributes of electric generation resources are fully valued” ([Department of Energy, 1](#)).
- The DOE claims the proposed rule is justified because “the resiliency of the nation’s electric grid is threatened by the premature retirements of power plants that can withstand major fuel supply disruptions caused by natural or man-made disasters” ([Department of Energy, 2](#)).
- The DOE blames markets for this problem, claiming that, “Short-run markets may not provide adequate price signals to ensure long-term investments in appropriately configured [generation] capacity” ([Department of Energy, 5](#)).
- Secretary Perry has directed FERC to act on this rule within 60 days of this notice and that the rule take effects within 30 days of its final publication, and he proposes that each ISO and RTO submit a compliance filing within 15 days of the rule’s effective date ([Department of Energy, 12](#)).

The Overall Reliability of the U.S. Electric Grid

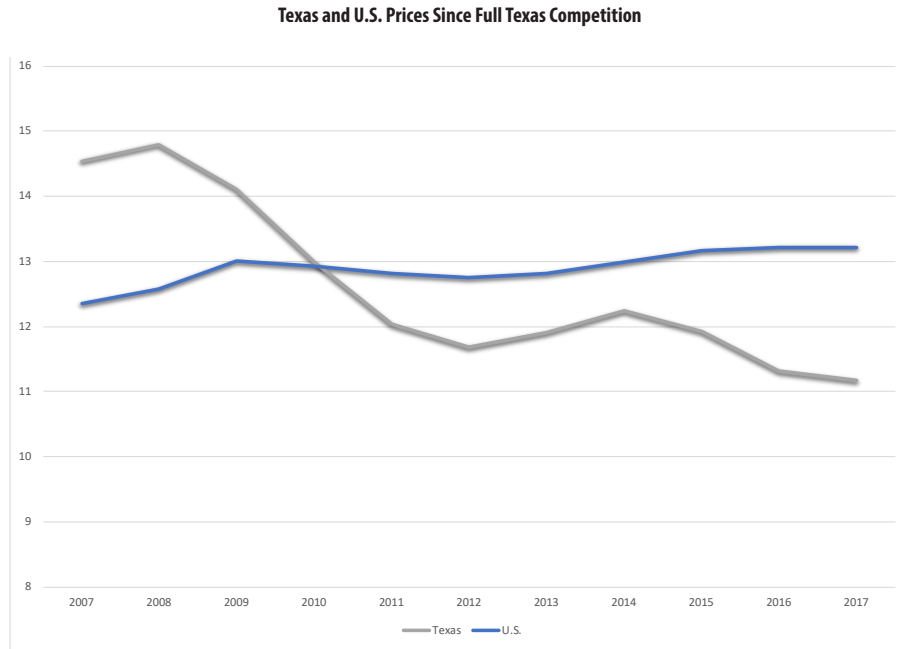
- The United States has an adequate supply of electricity today. Short of a war or major attack on American soil, any disruption in power would be temporary, and usually would be caused not by inadequate supplies, but by major natural disasters like Hurricanes Harvey and Irma, localized weather events, and poor maintenance.
- Texas, which has the most competitive electric market in the U.S., is one example of the adequacy of supplies in the U.S. and how well energy markets can work. Texas has a forecast reserve margin of at least 16.8 percent through 2022 and of almost 10 percent through 2027 ([ERCOT](#)).
- Generation from natural gas recently became the largest source of electricity in the U.S. Natural gas steam generation is as reliable, or more reliable, than coal or nuclear generation and so provides a positive outlook for the reliability of the national grid. Yet these generators would not be eligible for increased payments under the DOE proposal because they do not have “a 90-day fuel supply

on site enabling it to operate during an emergency, extreme weather conditions, or a natural or man-made disaster.”

- Despite the current adequate supply, there is a problem developing. The North American Electric Reliability Corporation (NAERC) has said that subsidies and regulations, such as the Clean Power Plan, have “accelerate[d] an ongoing shift in the generation mix, with retirements of baseload generators and additions of variable energy resources” like wind and solar. NAERC goes on to say that shift results in an increase of “energy limitations [that] can significantly change a resource adequacy assessment” ([North American Electric Reliability Corporation](#)).
- In addition to the direct costs of subsidies and regulations favoring renewable energy, the unreliability and intermittency of these fuels impose extensive costs to the operation of the electricity grid. Backup generation must always be available at a moment’s notice in case the wind stops blowing or the sun stops shining—and both occur frequently. Yet rather than requiring wind and solar generators to pay these costs, current operating rules allow the costs to be socialized, i.e., paid for by consumers. Because these costs aren’t assigned to those who cause them, it allows the reliability challenges of wind and solar generation to increase largely unchecked.

Problems with the “Capacity Payments” to Coal and Nuclear Generators Proposed under the DOE’s Grid Resiliency Pricing Rule

- While the problems caused by subsidies and regulations that favor renewable energy are increasingly real—reliable coal and nuclear generators are struggling to compete with heavily subsidized renewable energy, the solution is not more subsidies. The recommended solution to somehow compensate the reliable generators so they are “competitive” compounds the problem and further erodes the competitive operation of our electric market.
- Similar problems in the United Kingdom destroyed their once competitive market. U.S. energy policy needs to absorb the lessons of Europe: even with generous subsidies—especially in the United Kingdom and Germany, retail electric rates are two to three times higher than the average U.S. rate.
- Capacity payments are already being made to generators on the East Coast and in the Midwest, and they



Electricity markets work: government regulations and subsidies in most U.S. markets have caused U.S. electricity prices (not including Texas) to rise 6.5% since 2007, while in Texas' competitive market, prices are down 23.2% during the same period.

Source: EIA

don't work. Customers in capacity markets do not get more capacity or reliability for their money; for the most part, they just pay more for the same services they already receive.

- The DOE's proposal continues the current trend of government increasing the cost of energy. Residential electricity prices have steadily increased for years, up more than 15 percent in the United States (not including Texas) since 2004 ([EIA](#)).
- In Texas' market, Electric Reliability Council of Texas (ERCOT), which does not use capacity payments and instead relies on a competitive market, the price of electricity has dropped steadily since 2006 and the average price is now 12 percent below the U.S. average ([EIA](#)).
- While the costs of the DOE proposal are difficult to calculate, a proposal to provide capacity payments to traditional generators in Texas in 2013 would have cost Texans about \$4 billion annually. If that cost is projected on a national scale, it could be as high as \$48 billion annually. Alternatively, the PJM Interconnection covering parts of the Mid-Atlantic and Midwest currently manages a capacity market. If the average charges of the last two years for its capacity market were projected on a national scale, the cost would be about \$43 billion.
- The DOE costs will be added to the already high costs of renewable subsidies. A study by the Texas Public Policy Foundation estimated that the costs of renewable energy subsidies in Texas alone were more than \$13 billion from 2006 to 2015 ([Peacock and Neeley](#)). The cost of a proposed extension of the federal Production Tax Credit in 2014 was estimated at another \$13 billion ([U.S. Senate Committee on Finance, 3](#)).

The Solution to the Growing Reliability Challenge

The path forward for addressing current and potential reliability challenges:

- Eliminate environmental regulations—such as the Environmental Protection Agency's Clean Power Plan—and subsidies for renewable energy that make coal and nuclear generators less competitive.
- Require renewable energy generators to pay for the costs they impose on the grid because of their intermittency and unreliability. ★

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About the Author

Bill Peacock is the vice president of research at the Texas Public Policy Foundation and has been with the Foundation since February 2005. Bill has extensive experience in Texas government and policy on a variety of issues including, economic and regulatory policy, natural resources, public finance, and public education. His work has focused on identifying and reducing the harmful effects of regulations on the economy, businesses, and consumers.

Prior to joining the Foundation, Bill served as the deputy commissioner for Coastal Resources for Commissioner Jerry Patterson at the Texas General Land Office. Before he worked at the GLO, he was a legislative and media consultant, working with groups like Citizens for a Sound Economy and Putting Children First. Bill also served as the deputy assistant commissioner for intergovernmental affairs for Commissioner Rick Perry at the Texas Department of Agriculture, as a legislative aide to Rep. John Culberson in the Texas House of Representatives, and as an analyst for the Texas Senate Committee on Education.

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