



# Out-of-Market Subsidies

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# OUT-OF-MARKET SUBSIDIES

## Statement of Preferred Public Policy

Vistra Energy believes in the power of competition to spark innovation and unleash customer benefits and value. As such, we believe that markets should be allowed to function freely with minimal oversight and regulated only to the extent needed to ensure a fair and equitable treatment of market participants and customers.

## Markets Function Best with Minimal Interference

Vistra Energy believes that the competitive market works best without outside interference. As stated in an open letter to policymakers by eight leading economists:

*Among economists, it is almost universally accepted that well-functioning competitive electricity markets yield the greatest benefits to consumers in terms of price, investment and innovation especially when regulated alternatives are no longer warranted.<sup>1</sup>*

As such, Vistra opposes direct out-of-market subsidies as they run counter to a well-functioning competitive electricity market. Out-of-market subsidies, no matter how well intentioned, tend to have market distortive effects and unintended consequences. Vistra recognizes, however, that it is not always possible to avoid implementing subsidies for various policy or political reasons. Therefore, should subsidies be implemented, Vistra believes that such subsidies should be targeted, technology neutral, time limited and phased out as the rationale for the subsidized item becomes obsolete.

## The Changing Nature of Generation Economics

As has occurred with many other industries, the electric generation industry is undergoing a seismic market change. For decades, electric generation was based on a centralized model focused on a few large electric generation facilities that ran continuously and were powered mostly by fossil fuels. These plants provided a “baseload” level of electric generation and were supplemented by generation facilities that could quickly ramp up and down as the need for electricity fluctuated. Economically, the baseload plants were often the cheapest sources of electricity, and thus dispatched to serve load continuously. The supplemental facilities were generally more expensive and were dispatched only as needed. Since the supplemental facilities were dispatched only as needed, they often set the cost of electricity in a market.

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# OUT-OF-MARKET SUBSIDIES

In the mid-2000s, this model of electric generation began to change. The cost-effective ability to “frack” natural gas resources significantly lowered natural gas prices, which in turn significantly lowered wholesale electric prices. Baseload coal and nuclear generation facilities were no longer necessarily the cheapest fuel to produce electricity in a region. Additionally, increasing deployment of renewables also impacted prices. With almost no marginal costs and the benefit of state renewable portfolio targets as well as federal subsidies, renewables also put downward pressure on electric wholesale prices.

The resulting lower generation costs for natural gas and renewable facilities coupled with lower wholesale electric market prices resulted in two key changes to electric markets. First, using economic dispatch models, renewable energy and natural gas generation facilities became the most cost-effective means to generate electricity in many regions. This shifted the dispatch curve, meaning many previous baseload generation facilities were no longer as cost-effective to dispatch and, therefore, ran less often, impacting their revenues. Secondly, lower overall wholesale market prices for electricity meant that those facilities that were dispatched were paid less for each unit of electricity they produced. While this has created situations where new build is not cost-effective in many regions, it has also created a situation where many existing legacy baseload generation facilities (mainly coal and nuclear facilities) are no longer economic to operate. Indeed, these economics have led to the closing of certain “baseload” resources that were no longer able to compete in such a low-priced market, as would be expected in a well-functioning competitive market.

## **Proposed Federal Coal & Nuclear Subsidies: Background**

Despite these economic realities, there has been an effort at the federal level to provide “support” (i.e., out-of-market subsidies) to uneconomic coal and nuclear generation facilities. The rationale for this support has shifted over time, initially being the need for “fuel secure” resources to ensure grid resiliency and then moving to a national security rationale to protect the grid against disruptions due to natural gas pipeline cybersecurity concerns.

The grid resiliency rationale was outlined in a Notice of Proposed Rulemaking (NOPR) request to the Federal Energy Regulatory Commission (FERC) by Department of Energy Secretary Rick Perry made in September 2017. The NOPR raised the concern that for electric generation that did not have fuel stored on-site (e.g., natural gas facilities fed by pipeline, solar, wind, etc.) any disruption in fuel supply could harm grid resiliency. Therefore, it was necessary to ensure that certain fuel

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# OUT-OF-MARKET SUBSIDIES

secure resources (namely coal and nuclear) that could store fuel on-site should be subsidized to prevent their departure from the market. In January 2018, the FERC rejected the DOE's NOPR request and remanded the grid resiliency topic to independent system operators (ISOs).

In March 2018, FirstEnergy Solutions (FES) sent a letter to DOE requesting that DOE explore using the Federal Power Act to support their failing coal and nuclear facilities. This letter came just days after FES announced the intent to close multiple nuclear power plant facilities and just a couple weeks before FES's declaration of Chapter 11 bankruptcy in April 2018. Subsequently, in April 2018, the White House was reported to be exploring using the Defense Production Act as a justification for supporting ailing coal and nuclear plants. Then a draft DOE memo, leaked in June 2018, outlined the use of both the Federal Power Act and the Defense Production Act as means to provide support to these struggling baseload facilities. The memo outlined a plan to support failing coal and nuclear facilities for a 24-month period to allow time to develop a more permanent solution.

That same month, Energy Secretary Rick Perry and other DOE personnel began to speak publicly about the risk of cyber-attack on U.S. natural gas pipeline infrastructure. While not outlining the immediacy of any cyber-threat to the U.S. pipeline infrastructure, Perry posited that if there was a successful cyber-attack that incapacitated U.S. pipelines and their ability to deliver natural gas to electric generation facilities, it is then a national security imperative to have "fuel secure" resources like coal and nuclear to counterbalance such risk.

## **Proposed Federal Coal & Nuclear Subsidies: Criticism**

While the energy industry is greatly concerned about grid security and has applauded efforts at both the state and federal level to ensure grid resiliency and to value the longer-term capacity benefits of baseload generation, the industry and industry watchers have provided considerable criticism of the administration's proposal to provide out-of-market support for coal and nuclear assets.

Vistra Energy's CEO Curt Morgan had this to say about the DOE's June 2018 memo justifying the use of the Federal Power Act and Defense Production Act to support failing coal and nuclear facilities:

*[Vistra Energy is] against [the solution proposed by the DOE memo] even though we have coal. We think it's wrong for markets. We understand it's picking winners and losers. It's ill conceived. It's not even touching on the most*

continued >>

# OUT-OF-MARKET SUBSIDIES

*fundamental national security issue around the energy infrastructure which is transmission. ... [I]f you're going to take something out you want to take out the electric markets and not so much the gas infrastructure. So, the whole premise of the thing is not well-founded, and then the implementation of it, I've been thinking about how you do this. I think it's almost impossible to do this. It's going to be incredibly messy.<sup>2</sup>*

In a statement by PJM<sup>3</sup> regarding the proposal put forth in the DoE memo, they stated:

*Markets have helped to establish a reliable grid with historically low prices. Any federal intervention in the market to order customers to buy electricity from specific power plants would be damaging to the markets and therefore costly to consumers. There is no need for any such drastic action... We have acknowledged the concerns raised by officials and regulators about the long-term resilience of the grid and we are embarking on a fuel security initiative that we announced just a few weeks ago. Our goal with that initiative is to ensure that the already reliable electric grid will continue to remain both reliable and resilient for years into the future without the need for government intervention in the marketplace.<sup>4</sup>*

In a July 2018 study released by the Brattle Group (commissioned by a cross-section of energy focused interest groups) costs to consumers were estimated to increase \$10-35 billion annually over the two-year time horizon envisioned by the memo. In remarks regarding the release of the study, the American Petroleum Institute (one of the commissioners of the study) stated:

*[B]ailouts of coal and nuclear plants around the country could raise costs on American consumers and fundamentally hurt the administration's goal of American energy dominance throughout the world. Affordable, reliable natural gas has earned its share of the electricity markets which is why it has become our nation's top source of U.S. electricity. The natural gas and oil industry is committed to strengthening national security and is playing a leading role in reducing our decades long dependence on foreign energy but government mandates forcing consumers to buy coal and nuclear power does nothing to advance the security of our nation's electric grid.*

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# OUT-OF-MARKET SUBSIDIES

The group Advanced Energy Economy (also a commissioner of the study) stated in remarks related to the study's release:

*Giving aging power plants that are not needed to keep the lights on \$34 billion just to exist – that's money for nothing. It's too high a price to pay when advanced energy resources and competitive markets can provide the necessary services to keep our grid affordable, reliable, and secure. Independent assessments confirm that these power plants – most of which are decades old – are not needed to ensure reliability or security. We urge the Trump Administration to abandon, and Congress to resist, this exercise in crony capitalism, which comes at the expense of American businesses, families, and economy.*

Even the wind industry trade group, American Wind Energy Association (another commissioner of the study), had this to say about the study's release:

*The \$10 to \$35 billion this policy would take from American taxpayers to keep failing businesses open each year for the next two years is just the down payment – this misguided bailout would also completely upend the competitive electricity markets that are delivering billions in consumer savings. That's a steep price to pay in an era of U.S. energy abundance, when independent regulators and grid operators agree that orderly power plant retirements do not constitute an emergency.*

Market watchers are also confused by the DOE's approach. Guggenheim Partners, an investing firm, in a June 2018 note to investors stated:

***Playing a game of politics: Outside of Texas, New England, and potentially Southern California we do not see any real reliability concerns driving this...***  
*We simply do not see any immediate reliability concerns that would warrant a program of this magnitude... which will very likely be highly anti-competitive in several de-regulated markets. NERC's recent summer assessment highlighted tightness in the **ERCOT** market and Aliso Canyon-driven concerns in **CAISO**, but neither of these would require a national solution - especially in TX. **PJM**, which in our opinion is the genesis for much of the coal retirement-angst inside the beltway and is the largest RTO in the country, has a 23% reserve margin and recently secured adequate capacity through 2022. **ISO-NE**, which will face its own unique issues in the next few years, has few coal resources the DOE could declare 'critical' and only one nuclear unit currently slated to retire (Pilgrim) as*

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# OUT-OF-MARKET SUBSIDIES

*Millstone in CT is already on its way to receiving a subsidy for producing carbon free generation and will likely remain a viable operating asset. MISO remains relatively oversupplied with anticipated reserve margins breaching 19% this summer. Finally we highlight that key energy policy stakeholders within DC do not appear to be on the same page as the administration - only 4 weeks ago Senate ENR Chairman Lisa Murkowski told Politico that “we’re not at national emergencies levels.”<sup>5</sup>*

At the end of the day, policy makers should allow the competitive wholesale markets to work and allow uneconomic assets to retire. The Federal government’s attempt to pick “winners and losers”, without a solid factually driven policy rationale, runs counter to the competitive nature of today’s markets.

1) Joskow, Paul L.; Kahn, Alfred E.; et al., “An Open Letter to Policymakers”, June 26, 2006 (last accessed 8/23/18).

2) Curt Morgan, CEO of Vistra Energy, Analyst Day Remarks, June 12, 2018.

3) PJM Interconnection coordinates the movement of electricity through all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

4) PJM Statement on Potential Department of Energy Market Intervention, June 1, 2018 (last accessed 8/23/18)

5) Pourreza, Shahriar, “Power and Utilities: Coal/Nuclear: Will Politics ‘Trump’ Reality”, Guggenheim, June 4, 2018, p 1. (emphasis in original)