

United States Senate

WASHINGTON, DC 20510

October 16, 2017

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, D.C. 20426

Reference: Grid Resiliency Pricing Rule
Docket No. RM18-1-000

Dear Secretary Bose:

Pursuant to the Commission's Notice Inviting Comments on the Grid Reliability and Resilience Pricing Rule, the undersigned Senators submit the following comments in opposition to Secretary Perry's ill-conceived proposed rule.

In so doing, we seek to remind the Commission that its authority to act on the Secretary's proposal derives from the Federal Power Act. The fundamental purpose of the Power Act is to ensure "an abundant supply of electric energy throughout the United States with the greatest possible economy," 16 U.S.C. 824a(a), and "to protect power consumers against excessive prices." *Pennsylvania Power Co. v. Federal Power Commission*, 343 U.S. 414, 418 (1952). It is not to favor one way of generating electricity over another, or to protect the market share of expensive forms of generation against competition from cheaper forms, or to subsidize uncompetitive generating plants at the expense of electric ratepayers. As the Supreme Court has said, "it is clear that the principal purpose" of the Power Act is "to encourage the orderly development of plentiful supplies of electricity ... at reasonable prices." *NAACP v. Federal Power Commission*, 425 U.S. 662, 669-670 (1976).

Lest there be any doubt about the continuing validity of the Power Act's traditional purpose to today's electricity markets as they have evolved, Congress amended the Power Act in 2005 to direct the Commission "to facilitate price transparency" in those markets with "due regard for the public interest, the integrity of those markets, fair competition, and the protection of consumers." 16 U.S.C. 824t(a)(1). We do not believe that Secretary Perry's proposed rule is consistent with these purposes. Guaranteeing cost recovery for some generators in competitive markets is likely to increase the cost of electricity to consumers.

We further seek to remind the Commission that while the Department of Energy Organization Act gives the Secretary of Energy the right to *propose* rules within the jurisdiction of the Commission, that Act gives the Commission the "*exclusive* jurisdiction with respect to any proposal" made by the Secretary, 42 U.S.C. 7173(b), and expressly provides that "[t]he decision

of the Commission involving any function within its jurisdiction ... shall not be subject to further review by the Secretary....” 42 U.S.C. 7172(g).

Finally, we remind the Commission of its procedural and substantive obligations under the Administrative Procedure Act and Executive Order 12866. Procedurally, the Administrative Procedure Act requires the Commission to “give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments....” 5 U.S.C. 553(c). While the Administrative Procedure Act does not prescribe a minimum number of days for public comment, Executive Order 12866 does. It states that to “afford the public a *meaningful* opportunity to comment on any proposed regulation,” the comment period should, “in most cases,” be “not less than 60 days.” And while the Department of Energy Organization Act requires the Commission to “consider and take final action on any proposal made by the Secretary ... in an expeditious manner in accordance with such reasonable time limits as may be set by the Secretary,” those time limits must be “*reasonable*.” We do not believe the 45-day deadline set by the Secretary is reasonable or that it affords the public a meaningful opportunity to comment on a matter of this importance and complexity. And we note that the Commission’s October 23, 2017, deadline for comments will afford the public considerably less than 45 days in which to comment.

Substantively, the Administrative Procedure Act requires the Commission to “articulate a satisfactory explanation for its action including a ‘rational connection between the facts found and the choice made.’” *Motor Vehicle Manufacturers Association v. State Farm Mutual Auto Insurance Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines, Inc. v. United States*, 371 U.S. 156, 168 (1962)). As explained further below, we do not believe such a rational connection exists between the facts before the Secretary and the rule he has proposed. His proposal “runs counter to the evidence before” the Department and “is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” *Id.* at 43.

More specifically, we note the following inaccuracies and mischaracterizations in Secretary Perry’s letter and proposed rule:

1. “*The resilience of the electric grid is threatened by the premature retirements of [...] fuel-secure traditional baseload resources.*”

In fact, the Department of Energy (DOE) Staff Report that preceded this proposed rule points out that “baseload,” to the extent the concept remains useful, should be understood as an operational pattern rather than a fixed category of generator. The report also emphasizes the limited current understanding of how to appropriately define and value grid resilience: “More work is needed to define, quantify, and value resilience.” Beyond recommending further DOE research and development, the Staff Report’s most detailed recommendation to market operators

is to “further define criteria for resilience, identify how to include resilience in business practices, and examine resilience-related impacts of their resource mix.”

2. *“In the wake of the devastation wrought by the Polar Vortex, Superstorm Sandy, and Hurricanes Harvey, Irma, and Maria, much more work needs to be done to preserve these fuel-secure generation resources.”*

In fact, a review by the Rhodium Group released on October 3 found that in the last five years, fuel supply problems caused 0.0007 percent of major power disruptions nationwide. Of that 0.0007 percent, 83 percent was the result of a coal supply shortage at a single coal plant in Minnesota.

The actual course of the extreme weather events mentioned by the Secretary do not in fact suggest that coal and nuclear generating units can necessarily be counted on during a major hurricane, cold snap, heat wave, drought, earthquake, or other natural event. With respect to nuclear, during Hurricanes Katrina in 2005, Gustav in 2008, Irene in 2011, and Sandy in 2012, a total of 11 nuclear generators were shut down, some of them for weeks at a time. In 2011, a nuclear power plant in Virginia was shut down for more than 10 weeks following a magnitude 5.8 earthquake while the operator conducted necessary damage assessments.

With respect to coal, in 2014 alone, there were 11 coal fuel supply emergencies reported by electric generators, including six in the upper Midwest where competing commodity rail shipments restricted the supply of coal to power plants. In Minnesota, two utilities reduced or shut down generation from five coal-fired units to preserve their stockpiles. During the 2014 Polar Vortex, 34 percent of the total forced outage in PJM Interconnection was coal-fired units. PJM reported that these outages were due to the effects of extreme cold weather on coal handling and processing facilities: frozen coal, frozen limestone, frozen condensate lines, frozen fly ash transfer equipment, frozen cooling tower basins, and frozen pollution control injection systems. PJM found that wind turbines performed at a higher rate than coal or natural gas generators.

Changing climatic conditions driven in part by coal have also made coal and nuclear less reliable. During Hurricane Harvey this year, floodwater saturated coal piles outside Houston, leading to the shutdown of at least two coal-fired units and fuel switching to natural gas for two other units. In the last decade, drought and high water temperatures have led to forced outages at nuclear and coal-fired plants in the Southeast, Midwest, and Northeast. Drought-driven low water conditions have also disrupted coal barge traffic on the Mississippi River.

3. *“[...] a number of coal plants that were scheduled for retirement were dispatched to meet the need for electricity [...]. The 2014 Polar Vortex was a warning that the current and scheduled retirements of these fuel-secure units could threaten the reliability and resiliency of the grid.”*

In its briefing documents on the Staff Report shared with Senate staff recently, DOE emphasized that “Coal plants that retired recently did not operate as baseload.” The Staff Report points out that these plants “were smaller, older, had higher heat rates, and therefore were dispatched less often and ran at lower capacity factors.” Moreover, the proposed rule’s emphasis on the threat of retirements ignores the contemporary installation of offsetting new generation nationwide described in the Staff Report. Likewise, the proposed rule does not acknowledge that five-year average reserve margins, an important indicator of resource adequacy, are flush in nearly every region.

4. *“NERC warns that premature retirements of fuel-secure generation threaten the reliability and resiliency of the bulk power system”*

In fact, in June, NERC CEO Gerry Cauley testified before the Commission that “the state of reliability in North America remains strong, and the trend line shows continuing improvement year over year.”

5. *“[...] the IHS Markit study also concludes, preservation of traditional baseload resources benefits consumers”*

Without endorsing the economic analysis of the IHS Markit study, which was funded in part by the Nuclear Energy Institute, we note that this report used baseline years of 2014 through 2016 to compare a future scenario with no significant nuclear or coal generation. The baseline itself captures the dramatic recent decline of coal, particularly in 2016 after the compliance deadline of the Mercury and Air Toxics Standard under the Clean Air Act. IHS Markit’s own analysis shows a constant ratio (between 2.1 and 2.2) of electricity value versus cost. In other words, “the current diversified US electric supply portfolio” praised by the study and relied upon by the Secretary is a portfolio that already reflects the shift away from coal.

6. *“[...] energy outages expected to result from the loss of this fuel-secure generation capacity”*

Nowhere does the Secretary’s proposal cite an independent source of this alarming expectation nor describe the large offsetting buildout of new generation capacity detailed in the Staff Report.

7. *“Congress is concerned about the potential loss of valuable generation resources”*

The proposal cites one letter by three members out of the 535 members of Congress. Many other members of Congress hold different views.

8. *“The DOE proposes this rule to improve competitive wholesale electric markets in the RTO and ISO regions.”*

We respectfully suggest that improving market competition is not the objective of the Secretary’s proposal. It is likely to lead to higher prices for tens of millions of consumers, producing the opposite result of what consumers expect in competitive markets. At the heart of the proposal is the Secretary’s selection and elevation of a single attribute (on-site fuel storage) of some generators. PJM, for example, has developed a useful matrix of generator reliability attributes that compares 11 types of resources. On-site fuel storage is one of 13 key reliability attributes analyzed by PJM. In PJM’s analysis, no resource type exhibits every attribute. Coal exhibits only seven and nuclear only four.

In response to questioning on October 3 before the Energy Subcommittee of the Senate Energy and Natural Resources Committee, the Deputy General Counsel at DOE sidestepped defending the Secretary’s reliability claims and instead emphasized the difference between reliability and resilience as a driving force behind the Secretary’s proposal. This was a puzzling assertion given the proposal’s silence on what it means by reliability and resilience and its occasional conflation of the two.

With respect to resilience, we commend to the Commission a National Academies report released in July, “Enhancing the Resilience of the Nation’s Electricity System,” that Congress ordered prepared several years ago. It contains detailed policy recommendations. We note that nowhere in this comprehensive document do the independent experts convened by the Academies focus on a particular amount of on-site physical fuel supply as a key gap in grid resilience. Among the dozens of specific recommendations, the Academies identified several often overlooked ways to improve resilience, such as more systematic testing of backup power supplies at critical facilities to improve the failure rate of diesel generators. Data shows 1 percent of these generators at nuclear plants fail to start upon demand, 15 percent of them fail after 24 hours of continuous operation, and hospital generators fail at 10 times these rates.

Other promising ways to improve resilience include installing more grid-scale storage and microgrids, increasing research and development of inverter-based synthetic inertia and demand response-based frequency response, and further harmonizing natural gas and electric energy delivery systems.

The substance of the Secretary's proposed rule leaves many key questions unanswered. The long list issued by FERC staff on October 4 appropriately poses many of these outstanding questions.

We urge the Commission to reject this ill-conceived proposed rule and return, in a deliberative manner and with the benefit of a full Commission, to reviewing and building upon the record developed in existing proceedings related to the organized markets in a way that truly benefits consumers.

Sincerely,



Maria Cantwell
United States Senator



Tammy Duckworth
United States Senator



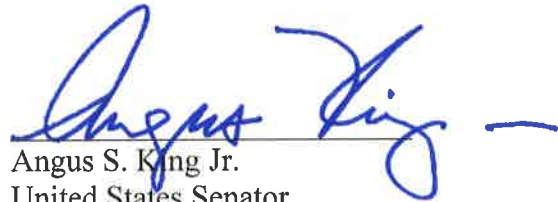
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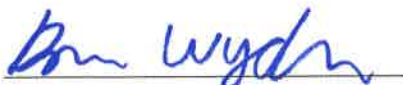
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