BEYOND FUEL SECURITY: A MORE SUSTAINABLE FUTURE THROUGH GRID FLEXIBILITY

Why the focus on fuel security when improving grid flexibility could achieve the aims of fuel security more cost effectively while modernizing and decarbonizing our grid?

While the latest proposal from the Department of Energy (DOE) to bail out uneconomic coal and nuclear plants in the name of resilience has apparently stalled at the White House, this does not mean the end of some actors focusing on "fuel security" as the key to grid reliability and resilience. In fact, it puts pressure on federally regulated grid operators to move forward with developing market mechanisms to compensate for fuel security.

RELIABILITY includes the ability to withstand shocks to the electric systems, from storms to cyber attacks to keep the lights on.

RESILIENCE of the bulk power system is less-developed, but speaks to the grid's ability to ride-through, and bounce back after disruption.

The recent spotlight on "resilience" in the federally regulated sphere arises from increasingly intense weather and concerns about malicious attacks on power plants, gas pipelines and transmission infrastructure. Separately, falling demand, newer resources and lower gas prices are driving the retirement of coal and nuclear generation that transmission grid operators have long relied on. Concerned about these trends, DOE conducted a grid resilience study in 2017.The study did not find that the fleet transition threatens grid resilience or reliability or recommend improving fuel security. Nevertheless, DOE submitted a proposal for the Federal Energy Regulatory Commission (FERC) to help keep uneconomic power plants from retiring by compensating them for keeping 90 days' worth of fuel onsite.FERC rejected the proposal, but solicited input from grid operators and other stakeholders on the meaning of bulk grid resilience, how it should be differentiated from reliability and if action is needed.