



April 9, 2024

President Joseph R. Biden
The White House
1600 Pennsylvania Avenue, N.W.
Washington, DC 20500

President Biden,

In previous letters, I have expressed growing alarm at the deteriorating reliability of America's power grid due to government policies driving the rapid closure of reliable, resilient power plants that have served our nation well for decades. As the undeniable impacts of these policies come into sharper focus, and as the nation's economy gains momentum, it is clear U.S. economic growth will be unsustainable. Energy policies are constraining the nation's energy supply, while other policies are driving up electricity demand by incentivizing the shift to electric vehicles and forcing a transition in heating from fossil fuels to electricity.

"Electricity peak demand and net energy growth rates in North America are increasing more rapidly than at any point in the past three decades,"¹ according to the North American Electric Reliability Corp. (NERC). In fact, NERC's latest Long-Term Reliability Assessment, released in December, indicated "... [s]ome of the sharpest peak demand forecast increases and growth rates can be seen in winter seasons as electrification in heating systems and transportation influence forecasts."² Meanwhile, over the coming decade, PJM forecasts that its 13-state region will see energy demand rise by more than 25 percent, while peak winter demand increases more than 21 percent.³ PJM forecasts plug-in electric vehicles will add more than 58,000 gigawatt hours in additional annual energy demand.⁴

NERC notes the increasing challenges this poses in planning for sufficient electric-generating resources during extreme-temperature events: "Electrification of the heating sector is increasing temperature-sensitive load components while increasing levels of variable-output solar photovoltaic (PV) distributed energy resources (DER) add to the load forecast uncertainty. Underestimating electricity demand prior to the arrival of extreme temperatures can lead to ineffective operations planning and insufficient resources being scheduled."⁵

¹ NERC, 2023 Long-Term Reliability Assessment (LTRA), published 12/13/23, <https://www.nerc.com/pa/RAPA/ra/Pages/default.aspx>

² NERC, page 33.

³ PJM Interconnection, "PJM Load Forecast Report, January 2024," revised 2/1/24, p. 2. Downloaded from <https://www.pjm.com/-/media/library/reports-notice/load-forecast/2024-load-report.ashx>

⁴ PJM, page 78.

⁵ NERC, page 7.

In addition to demand growth from EVs and heating electrification, we are also seeing growth of investment in new business and industry, which also will increase electricity demand. A recent analysis of data filed at FERC by the electric industry's grid balancing authorities found the rate of growth in forecasted demand for electricity over the next five years has nearly doubled, propelled by an estimated \$481 billion in planned investment in U.S. manufacturing and industry, along with \$150 billion in planned data center investments.⁶ But the authors questioned the viability of these planned investments given the current state of the power grid. "It is worrisome that a resurgent American manufacturing sector may face headwinds from the limited ability of the nation's electricity systems to respond," the authors write.

This is especially worrisome for Kentucky, which finally is seeing positive developments in attracting jobs and business investment, as evidenced by the recent announcement that Kentucky ranks third in the nation in economic projects per capita.⁷ For decades, Kentucky has toiled under some of the highest poverty and unemployment rates in the U.S., so this truly is exciting news. EKPC and our owner-member electric cooperatives have worked hard to promote new jobs and investment in order to sustain the rural communities we serve.

Our cooperatives understand the importance of ramping down the nation's greenhouse gas emissions to curb the effects of climate change, and EKPC has targets for cutting carbon dioxide emissions and adding renewables. But current policies are going too far too fast in shutting down reliable resources. Any policy "safety valve" to keep power plant capacity available for emergencies must take into account the high cost of maintaining equipment and facilities in operational condition for quick startup; as it is, many plants are demolished soon after they are shut down due to these costs.

NERC's analysis found that nearly three quarters of the contiguous U.S. is at risk of electricity supply shortfalls in the next five years. A large swath of America's heartland, from the upper Midwest to the Gulf of Mexico, is at high risk. NERC reports more than 83 gigawatts of reliable fossil and nuclear generators will retire in the coming decade, with another 30 gigawatts of fossil generators announced for retirement. What is driving those retirements? According to NERC:

Environmental regulations and energy policies that are overly rigid and lack provisions for electric grid reliability have the potential to influence generators to seek deactivation despite a projected resource adequacy or operating reliability risk; this can potentially jeopardize the orderly transition of the resource mix. For this reason, regulators and policymakers need to consider effects on the electric grid in their rules and policies and design provisions that safeguard grid reliability.⁸

MISO, which serves most of the region identified by NERC as high-risk, released its own reliability report in February highlighting what CEO John Bear calls "immediate and serious challenges to the reliability of

⁶ Grid Strategies, "The Era of Flat Power Demand is Over," December 2023. <https://gridstrategiesllc.com/wp-content/uploads/2023/12/National-Load-Growth-Report-2023.pdf>

⁷ Kentucky Governor's office press release, "Gov. Beshear: Kentucky Ranks 3rd Nationally in Economic Projects Per Capita, 1st in South Central Region for 2023 Governor's Cup," March 1, 2024. <https://kentucky.gov/Pages/Activity-stream.aspx?n=GovernorBeshear&prId=2113>

⁸ NERC, page 10.

our region's electric grid."⁹ MISO reports, "Over the last 10-plus years, surplus reserve margins in MISO have been exhausted through load growth and unit retirements. Since 2022, MISO has been operating near the level of minimum reserve margin requirements."¹⁰

According to Bear, "A key risk is that many existing 'dispatchable' resources that can be turned on and off and adjusted as needed are being replaced with weather-dependent resources such as wind and solar that have materially different characteristics and capabilities. ... Until new technologies become viable, we will continue to need dispatchable resources for reliability purposes."¹¹

NERC singles out six federal regulations in particular driving dependable fossil power plants to retirement: Coal Combustion Residuals, revised Effluent Limitations Guidelines, revised Mercury and Air Toxics Standards, Good Neighbor Rule, Carbon Rule, and Regional Haze.¹² Each of these rules sets limits on emissions and places requirements on generating units that effectively reduce their efficiency and/or increase their per-kilowatt-hour cost to produce electricity. As more and more fossil-fueled power plants reach a point where they can no longer generate electricity cost-effectively, they are being retired and torn down.

As the National Rural Electric Cooperative Association (NRECA) wrote in its comments on the U.S. EPA's proposed greenhouse gas rule: "In addition to the Proposed Rules, a series of EPA regulations are being issued in rapid succession with the outcome of making it too costly and difficult to operate always-available, fossil fuel-fired power plants, threatening the stability of America's electric grid."¹³

U.S. EPA's May 2023 proposed greenhouse gas rule would force coal and natural gas power plant owners to quickly implement carbon capture/storage technologies or rapidly develop hydrogen-fueled power plants. As U.S. EPA was well-aware when the rule was proposed, both of these technologies presently are in the early stages of development and will not be widely available on the rule's rapid implementation schedule. Of course, the pipeline transportation network necessary to deliver hydrogen fuel and carry away carbon emissions is practically nonexistent today anywhere in the U.S., and the prospect of building such a network of new pipelines over the next decade to support more than a small fraction of America's fossil fleet is impractical and unrealistic.

In November, I addressed FERC's technical conference on grid reliability, much of which focused on the U.S. EPA's proposed regulation of greenhouse gas emissions from power plants.¹⁴ I informed the commissioners that EPA's proposal is unlawful and unworkable. It exceeds EPA's authority under the Clean Air Act. It hinges on widespread adoption of technologies that have not been adequately demonstrated to work at commercial scale while achieving EPA's requirements. It contains unrealistic

⁹ MISO, "MISO's Response to the Reliability Imperative," updated February 2024, page 1.

https://www.misoenergy.org/meet-miso/MISO_Strategy/reliability-imperative/

¹⁰ MISO, page 6.

¹¹ MISO, page 1.

¹² NERC, page 10.

¹³ National Rural Electric Cooperative Association (NRECA), Comments on New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units, page 4; <https://www.electric.coop/wp-content/uploads/2024/01/NRECA-111-SNPRM-Comments.pdf>

¹⁴ Federal Energy Regulatory Commission, 2023 Annual Reliability Technical Conference, Nov. 9, 2023; <https://www.ferc.gov/news-events/events/2023-annual-reliability-technical-conference-11092023>

and unachievable time frames. It will cause the disorderly retirement of dispatchable generation resources.

Quite simply, U.S. EPA's proposed greenhouse gas rule is a recipe for chaos on America's power grid. It took our nation 100 years to build the most reliable, affordable electric grid in the world. If the grid is run to failure, it could take decades to rebuild a power grid of similar capability.

In August, PJM joined MISO, ERCOT and SPP in submitting comments to the U.S. EPA regarding the proposed greenhouse gas rules. Together, these RTOs/ISOs encompass all or part of 30 states and the District of Columbia, providing electricity to 154 million Americans. In part, they commented:

As the penetration of renewable resources continues to increase, the grid will need to rely even more on generation capable of providing critical reliability attributes. With continued and potentially accelerated retirements of dispatchable generation, supply of these reliability attributes will dwindle to concerning levels.... New technologies and industry practices are developing to enable the integration of significant inverter-based generation that provide needed essential reliability services, but the Joint ISO/RTOs are concerned about a scenario in which, similar to that stated above, needed technologies are not widely commercialized in time to balance out large amounts of retirements.¹⁵

The message is loud and clear. Now is the time for government regulators and policy-makers to pause the rapid transition away from reliable, always-available power plants, ensuring that the U.S. economy is not hamstrung by chronic reliability challenges and high energy costs. I again appeal to you and your administration to take the lead in making this happen.

Sincerely,



Anthony "Tony" Campbell
President & CEO

CC: Governor Andy Beshear
U.S. Energy Cabinet Secretary Jennifer Granholm
FERC Chairman Willie L. Phillips
Senate Minority Leader Mitch McConnell
U.S. Senator Rand Paul

¹⁵ Joint comments of Electricity Reliability Council of Texas, Inc; Midcontinent Independent System Operator, Inc.; PJM Interconnection, LLC; and Southwest Power Pool, Inc.; on New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule, EPA-HQ-OAR-2023-0072. Pages 2, 5. Downloaded at <https://www.pjm.com/-/media/documents/other-fed-state/20230808-comments-of-joint-isos-rtos-docket-epa-hq-oar-2023-0072.ashx>

U.S. Senator Joseph Manchin

Congressman Andy Barr

Congressman Hal Rogers

Congressman Brett Guthrie

Congressman James Comer

Congressman Thomas Massie

Congressman Morgan McGarvey

Kentucky Senate President Robert Stivers

Kentucky House Speaker David Osborne

Kentucky Attorney General Russell Coleman

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Kentucky PSC Chairman Kent A. Chandler

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