

August 22, 2022

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

President Biden,

As evidence continues to grow indicating the reliability of our nation's electric grid is being seriously undermined by ongoing trends, I am again writing to you.

I have written to you repeatedly about my concerns. Previous letters have focused on a number of aspects of these concerns, including:

- The ongoing closure of reliable, around-the-clock electric-generating resources, especially coal and nuclear plants;
- America's increasing reliance on natural gas as the primary fuel for reliable 24/7/365 electricity, and the risks of over-reliance as dependence grows rapidly for both domestic needs and export markets;
- The surge of grid inflexibility as the U.S. swiftly replaces reliable, dispatchable resources with intermittent solar and wind resources that depend on the real-time availability of sunshine and wind;
- The deceptively enticing temptation to gamble on battery technology being sufficiently mature with a robust supply chain to support wide deployment in the next few years of utility-scale batteries to address some of the intermittency issues of solar and wind that are plaguing the industry;
- The alarming events of the February 2021 Texas energy crisis, which aimed a spotlight at the very reliability issues I had previously articulated; and
- The genuine national security considerations of transitioning America's energy production to sources that can be—and are being—readily manipulated by unfriendly foreign powers.

These challenges, each individually and taken all together, are formidable. I wish I could say my concerns are diminishing. But events since my last letter of March, which I hand-delivered to



Secretary Granholm when she visited EKPC, have offered little comfort. To the contrary, evidence continues to mount of the validity of my concerns.

In May, the North American Electric Reliability Corp. (NERC) released an extraordinarily troubling summer assessment. NERC found that a wide swath of the U.S., including much of the Midwest, is at serious risk for electric-generating capacity shortfalls this summer, and they raised alarms of energy emergencies and possible load shedding throughout the Western states and Texas. Among the issues noted by NERC were transmission constraints; supply chain challenges not only for fuel, but also for transmission and power plant maintenance; and ongoing national security concerns related to foreign actors targeting critical infrastructure.

NERC also pointed to another challenge that should give us pause in increasing America's dependence on solar resources for our nation's energy production. The report noted that Texas and California experienced unexpected "tripping" of solar photovoltaic resources during grid disturbances at key periods during the summer of 2021, and called for improvements to NERC's reliability standards to address the possible causes.

Meanwhile, as NERC's report was released, Texas was again struggling to keep the lights on. Just over a year after that state's devastating winter energy crisis that caused nearly 250 deaths, the Electric Reliability Council of Texas again found itself scrambling to ensure sufficient electricity supply to meet the needs of homes and businesses. ERCOT called for residents to conserve electricity while market prices soared to \$4,000 per megawatt hour (MWh) across the state, nearly 1,000 times more than normal. NERC is well aware of the risks Texas faces; its summer assessment sounded ominous alarms: "A combination of extreme peak demand, low wind, and high outage rates from thermal generators could require system operators to use emergency procedures, up to and including temporary manual load shedding."

During the August 2020 heat wave California was forced to resort to rotating blackouts to prevent more widespread uncontrolled outages and potential damage to electric grid equipment. Therefore, it is unsettling to note that California's grid operator in May issued what was described by Reuters as a "sober forecast" indicating that it "lacks sufficient capacity to keep the lights on this summer and beyond if heatwaves, wildfires or other extreme events take their toll."

The Midcontinent Independent System Operator's (MISO) summer projection warned that even normal demand for electricity in the Midwest could force the grid operator to implement emergency operations. In its assessment of preparedness for the summer cooling load, the grid operator projected the need for energy imports and emergency resources to meet high loads for forecasted warm weather. It is especially notable that MISO expected to depend upon "non-firm" imports, which raises troubling questions about the availability and price of imported energy, should it be needed.

Although the PJM region, where EKPC is located, is not projecting reliability concerns in the near future, it has released analysis highlighting a variety of concerns that will need to be addressed in order to ensure reliable grid operations. Importantly, PJM highlighted the need for generation resources that are "flexible" such that they may be dispatched in a manner that fills in the gap of energy supply needs when renewable resources may not have the necessary sun and wind to fuel their operation.

FERC Commissioner Mark Christie has said the U.S. is "heading for a reliability crisis" as utilities transition quickly from baseload energy resources to intermittent renewables. I agree. That is why I have been persistent in sounding the alarm. I hope I have provided you and other policy-makers and regulators with sufficient warning of the risks I see to the reliable 24/7/365 electricity our nation's homes and industries depend on, especially during times of extreme weather.

These summer assessments and grid transaction analyses are clear indicators of growing urgency to pay more attention to grid reliability before tragedy strikes again. I understand the importance of reducing carbon emissions to address the effects of climate change. But make no mistake, there will be disastrous consequences if we do so in a manner that continues to make the electric grid vulnerable to widespread outages during extreme temperatures and inflates the price of electricity, making it unaffordable for our most vulnerable populations—the poor and the elderly. Quite simply, if government policies force the poor and elderly to make difficult choices between food, medicine or electricity during extreme temperatures, it will result in unprecedented deaths among people who are utterly dependent on electricity.

As I have previously stated, I am confident the U.S. can transition to low- and no-carbon energy resources without jeopardizing reliability or affordability, as long as we take the time to develop, test and commercialize appropriate technology at a reasonable pace. I strongly caution against aggressive goals that depend on hopes that unproven technologies work when needed. Until that technology is ready, it is imprudent to decommission baseload resources that have proven their ability to serve America's energy needs affordably and reliably. Going too far, too fast with the transition to renewables will result in expensive electricity that is much less reliable than America is accustomed to.

Finally, on behalf of the 16 owner-member electric cooperatives served by EKPC and the 1.1 million Kentucky residents served by those co-ops, I respectfully request that you respond to this letter. This is the sixth letter I have written to you. I have identified trends and developments that pose real risks to the reliability of the electric grid for those people and their homes and businesses.

Sincerely,

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Anthony "Tony" Campbell President & CEO

CC: U.S. Energy Cabinet Secretary Jennifer Granholm FERC Chairman Richard Glick Senate Minority Leader Mitch McConnell U.S. Senator Rand Paul U.S. Senator Joseph Manchin Congressman Andy Barr Congressman Hal Rogers Congressman Brett Guthrie Congressman Thomas Massie Congressman James Comer Congressman John Yarmuth Governor Andy Beshear Kentucky Senate President Robert Stivers Kentucky Attorney General Daniel Cameron Kentucky Energy and Environment Secretary Rebecca Goodman Kentucky PSC Chairman Kent Chandler Kentucky PSC Commissioner Mary Pat Regan