



November 30, 2021

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

President Biden,

As winter approaches, I want to again stress the vital importance of flexible, dispatchable electricity-generating resources, including coal, in providing reliable, affordable energy for millions of homes and businesses across the nation. As I have detailed in previous letters, since summer 2020, both California and Texas have been dealt harsh lessons. During periods of extreme temperatures, millions in those states found themselves without electricity for heating and cooling. Many even lost their lives as a result. Clearly, retaining access to resilient, 24/7/365 resources is a matter of health and safety, perhaps even life and death under extreme circumstances.

As we enter the winter heating season, natural gas prices are rising in response to high demand in international markets along with the threat of regulatory pressure on hydraulic fracturing in the U.S. Natural gas accounts for about 33 percent of U.S. electric generation, as well as about half of U.S. household heating.¹ To hedge the price risk of a fuel or technology, EKPC, like most electricity suppliers, looks to our other generation sources, as well as other resources available in wholesale electricity markets like PJM. But there is reason for concern there, as well. EKPC's most reliable and fuel-secure baseload resource is our coal-fueled plants. While those plants remain in good working order and are compliant with all environmental regulations, market dynamics are beginning to raise questions about the continued availability of fuel.

Coal-fueled power plants are being decommissioned at an alarming rate, with 95 gigawatts of coal capacity closed or fuel-switched to natural gas over the past decade, and another 25 gigawatts slated to shut down by 2025.² This has two major impacts on U.S. energy markets. First, there is less coal capacity available in markets to hedge the price volatility of other fuels like natural gas. Plus, as

¹ U.S. Energy Information Administration, "Natural gas explained," updated 5/26/21, downloaded from <https://www.eia.gov/energyexplained/natural-gas/use-of-natural-gas.php>

² U.S. Energy Information Agency, *As U.S. coal-fired capacity and utilization decline, operators consider seasonal operation*, 9/1/20, downloaded from <https://www.eia.gov/todayinenergy/detail.php?id=44976>

a result of this declining demand for coal, the coal-mining industry is also shrinking at an alarming pace. The productive capacity of U.S. coal mines dropped 28 percent over the 10-year period from 2009 to 2019³, and then dipped another 7.6 percent in 2020.⁴ In the past, it has been reasonable to assume coal producers, facing the prospect of higher market prices for competing fuels like natural gas, would rapidly ramp up production to regain customers and market share. But given the headwinds coal producers face in regulation and financing, it is questionable if that continues to be a reasonable expectation.

Reduced U.S. coal-fired capacity, paired with rapidly rising gas prices, leaves the U.S. with limited options for dispatchable, low-cost alternatives. Sustained high natural gas prices will affect our nation's overall cost of energy, causing ripples throughout the U.S. economy. The increasingly urgent question is, where do we turn? This is not simply a question of how we get through the coming winter, although that is certainly a pressing matter and must be addressed; rather, as America shuts down, decommissions and hinders the further development of fossil fuel plants, and as we depend more and more on technologies that offer little flexibility under emergency circumstances, it is vital that our planning take into account and appropriately value these attributes.

Under existing circumstances, nuclear energy generation is extremely reliable but offers little flexibility or headroom for expansion. U.S. nuclear plants routinely run at or near capacity. Other than the Vogtle project in Georgia, which is years behind schedule and billions over budget, there currently is no serious effort to build new nuclear power plants in the U.S.; therefore, we cannot count on significant near-term ramp-up from nuclear to fill the need for reliable, reasonably priced electricity.

Wind and solar are not dispatchable, meaning we cannot control when they make energy; they produce electricity when the wind blows or the sun shines, and that may not be at the time when the grid most needs the power. As I have discussed in previous letters, pairing wind and solar with utility-scale batteries is an idea that certainly has merit, but the technology remains in its formative stages. Installing batteries along with wind and solar does not create dispatchable resources in the same way a coal or natural gas plant is available 24/7/365. The current generation of batteries typically discharge within four hours. Regardless, today the U.S. has just 1,650 megawatts of total installed utility-scale battery capacity⁵, enough to back up about 0.5 percent of installed renewables

³ U.S. Energy Information Agency, *The capacity of U.S. coal mines has fallen 28% since its 2009 peak*, 12/2/2020, downloaded from <https://www.eia.gov/todayinenergy/detail.php?id=46096#>

⁴ U.S. Energy Information Agency, *Annual Coal Report 2020*, page 17, 10/4/21.

⁵ U.S. Energy Information Agency, "U.S. large-scale battery storage capacity up 35% in 2020, rapid growth set to continue," Aug. 20, 2021, downloaded from <https://www.eia.gov/todayinenergy/detail.php?id=49236>

in the U.S.⁶ Even under aggressive deployment scenarios, it will take a significant length of time before utility-scale batteries have a widespread positive impact.

In 2020, the U.S. added 27.6 gigawatts (GW) of solar and wind resources, compared to 6.6 GW of natural gas; virtually no coal resources were added.⁷ The rapid expansion of renewable capacity creates the façade that America has plenty of surplus energy for emergencies. However, the U.S. is rapidly painting itself into a corner where there are few options to provide reliable, affordable energy when extreme situations arise. The U.S. is not adding flexible, dispatchable resources at a sufficient pace to support existing resources, which are facing significant regulatory and economic pressures to shut down.

Coal plants demonstrated their value during the February 2021 extreme cold weather in the Midwest. The Midcontinent Independent System Operator (MISO) and the Southwest Power Pool (SPP) both confronted situations similar to Texas, but the availability of coal power plants with fuel stored and ready on-site made a huge difference. An analysis by America's Power found the coal generators in MISO and SPP, making up 29 and 26 percent of available resources respectively, responded well when called upon during the crisis, maintaining capacity factors far above natural gas and wind, and second only to nuclear.⁸

In my experience, America's energy industry has worked diligently and innovatively to supply energy that is reliable, affordable and, increasingly, sustainable. EKPC has made tremendous strides in improving sustainability by dramatically reducing emissions and incorporating renewables as their reliability and affordability has improved. We will continue doing so because we recognize the impact climate change is having on people around the world and in our communities. EKPC has developed a sustainability plan and incorporated targets for continuing to reduce carbon emissions and increase renewable resources in our portfolio.⁹ However, we continue to keep a very close eye on reliability and affordability. I urge America's policy-makers to share the same concern for reliability and affordability when making regulatory changes to the grid.

The recent debates in Washington, D.C., over the future of energy in the U.S. give little serious attention to fossil fuels' value as reliable, affordable fuel sources. Rather, administration officials and several Democratic Congressional leaders seem most focused on seeing how far and how fast they can limit fossil fuels with regulatory sticks or incentivizing carrots. Either way, America's energy

⁶ The U.S. had 284 GW of installed renewables at the end of 2020, according to data downloaded from <https://www.eia.gov/energyexplained/electricity/electricity-in-the-us-generation-capacity-and-sales.php>

⁷ U.S. Energy Information Agency, "Renewables account for most new U.S. electricity generating capacity in 2021," Jan. 11, 2021, downloaded from <https://www.eia.gov/todayinenergy/detail.php?id=46416>

⁸ America's Power, "The Coal Fleet Responded When Electricity Was Needed in MISO and SPP," March 7, 2021, downloaded from <https://www.americaspower.org/the-coal-fleet-responded-when-electricity-was-needed-in-miso-and-spp/>

⁹ EKPC Sustainability Plan, "Mapping the Road to EKPC's Future," <https://www.ekpc.coop/ekpc-planning-future>

industry will be left with limited options to meet consumers' needs at times when they most depend upon their electric utilities.

Please give careful consideration to the pace of America's transition to renewables that is under way, as well as the policies that impact the fuel needed to ensure reliability during the transition. Allow time for technologies, including utility-scale batteries, to develop and mature. The electricity EKPC generates is the primary source of comfort to 575,000 electric users, including the homes of some of our nation's poorest citizens. They depend upon their electric cooperative to provide energy at affordable prices and at all hours of the day and night; otherwise, they will be left in the cold and in the dark. Please be assured we, as cooperatives, will do everything in our power to prevent pain and suffering among our consumers due to loss of electricity reliability and affordability.

Sincerely,

A handwritten signature in black ink that reads "Anthony Campbell". The signature is written in a cursive, flowing style with a long horizontal line extending from the end of the name.

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 Vice Chairman Amy D. Cabbage
Kentucky PSC Commissioner Marianne Butler