United States House of Representatives
Select Committee on the Climate Crisis

Hearing on February 15, 2022
"Keeping the Lights on:
Strategies for Grid Resilience and Reliability"

Questions for the Record

Mark Mills
Senior Fellow
Manhattan Institute

The Honorable Garret Graves

1. **You have stated in "Consider the implications just for California. If the rest of the nation switches to a solar/wind grid, California won't be able to count on neighboring power plants to make up for losses during regional dips in wind and sunlight availability."[1]**

    - **Can you explain what you mean and why this is important?**

California imports roughly 30% of its electricity from adjoining states. If there are wind/solar 'droughts' across the region, CA residents can (and have) counted on those (non-wind/solar) imports from conventional power plants in the neighboring states to keep the lights on. When, or if, all the neighboring states also have wind/solar as primary sources of electricity, the lights wil go out when there is a large regional wind/solar 'drought'—as happened in northern Europe this past fall, and as it did over the entire mid-West of the US for 10 days in July 2021, and as meteorological records show, happens frequently over entire continental areas.

2. **You have spoken about the scale and magnitude of the materials we need for a "green" power system.**

    - **Can you speak to our existing regulatory regime and the United States' ability to meet this increasing demand for critical minerals?**

The challenges with, and opposition to, opening new mines and mineral processing in America has been well documented by federal, state and private entities and frequently addressed by Congress over the decades. In general, new mines take more than two decades from concept to opening; if they can be opened at all. The current Administration, for example, recently cancelled new mines in both Minnesota and Alaska, even in the face of escalating mineral demands and imports, and prices.

[1] https://www.city-journal.org/california-switch-to-primarily-solar-and-wind-powered-grid-is-dead-end

3. **In order to have a true impact on global emissions, we need to work toward technology that is affordable and exportable. Developing nations need sources of inexpensive, secure, and reliable sources of energy to develop their economies – especially as global energy demand is expected to increase nearly 50% by 2050.**

    - **What technologies do you see that the U.S. has an advantage and can become exportable in the next 5-10 years?**

On the fuel supply side of the equation, the U.S. is the world's biggest natural gas and oil producer and could expand its "clean" capabilities to produce and export more of both. On the energy consumption side, many U.S. firms and entrepreneurs have developed radical improvements in combustion engine efficiency; facilitating and exporting such technologies would be a faster and lower cost means to reducing global fuel use and thus emissions.

    - **What challenges exist to the deployment of these technologies – within and outside of the United States?**

It is perhaps obvious that there is not a favorable political and policy environment to support, in any fashion, the development of technologies that lead to more efficient production and use of hydrocarbons.

4. **Do you think President Biden's Paris Climate Commitment to reduce GHG emissions by 50% by 2030 is achievable?**

No. It is both structurally—in engineering and science terms—and economically unachievable. The only path to such a radical reduction in emissions would be through a collapse in economic growth and prosperity.