

Responses by Michael Shellenberger to the Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce on Wednesday, March 24, 2021, at 11:30 a.m. (EDT) to testify at the hearing entitled, "Power Struggle: Examining the 2021 Texas Grid Failure."

1. How do federal incentives impact the deployment of weather dependent, intermittent sources of electricity throughout the United States and specifically within the Electric Reliability Council of Texas?

The wind production tax credit and solar investment tax credit both incentivize the adoption of weather-dependent wind and solar energies in Texas and the rest of the U.S.

2. Energy investors generally prefer to finance smaller energy projects that are quicker to construct such as wind, solar, and occasionally natural gas plants. How can federal policy ensure this trend does not result in less reliability or higher prices for energy consumers?

We need a national plan to raise nuclear energy from 19 to 50 percent of America's electricity mix by 2050, a "Green Nuclear Deal," if you will. The federal government should standardize and incentive utilities to scale up the AP-1000 which Southern and Bechtel created a workforce to build in Georgia, and which could be built on existing nuclear plant sites across the U.S.

3. Nuclear power is both clean and reliable, yet its share of the fuel mix has been shrinking in recent years. What challenges have led to nuclear energy's retreat?

Cheap natural gas, heavily subsidized renewables, and deregulated electricity markets all play a role, but the underlying problem is public fears of nuclear energy, which have been stoked by opponents of nuclear energy since the 1960s, for ideological, financial, and political reasons.

4. What role does energy storage play when considering the reliability of the electric grid?

All else being equal we should want to rely less on storage than other ways of balancing supply and demand for the simple reason that every time we have to add or extract energy from storage, whether lithium batteries or pumped storage, we add two energy conversions that bring high environmental and economic costs. The reason electricity is such a cheap and useful source of energy is precisely because we don't have to store large quantities of it and can instead balance supply and demand efficiently. We should aim for as much storage as we need to have reliability and no more.