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The choice is between carbon-free and carbon-intensive power sources

I am a scientist, and I spent more than five years in alternative energy and climate solutions as an ARPA-E Program Director. There are other comments here that are going to be both "pro" and "anti" nuclear, but the fact is, we face a clear choice between carbon-free and carbon-intensive electric power in the State of California. Yes, we're on the long road to a fully renewable grid, leading the nation and the world, and we should take pride in that. But shutting Diablo Canyon in the foreseeable future will require utilities to invest in baseload power generation using natural gas, particularly as we accelerate the electrification of transportation.

From a practical perspective and at the scale needed, electrical energy cannot be stored or transmitted over long distances. That's just physics and economics, and requires only a high school comprehension of the associated calculations. If you immediately respond, "What about solar? What about wind?" then refer again to these limitations--both sources are often unavailable when needed and require land near our cities. And, for goodness sake, do the simple math with the knowledge that solar is available for 12 hours a day max, and power lines longer than 300 miles lose too much energy in transmission to be practical.

The uncomfortable fact is that the State of Illinois has less carbon-intensive power than the State of California. Look it up. Yes, some of that power is renewable, but Illinois has no hydroelectric to speak of. Its baseload is nuclear power, operating safely and always on.