

**DOCKETED**

<b>Docket Number:</b>	21-ESR-01
<b>Project Title:</b>	Energy System Reliability
<b>TN #:</b>	244687
<b>Document Title:</b>	Gary Kahanak Comments - Nuclear Energy is an Essential Technology
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Gary Kahanak
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	8/11/2022 8:47:26 PM
<b>Docketed Date:</b>	8/12/2022

*Comment Received From: Gary Kahanak  
Submitted On: 8/11/2022  
Docket Number: 21-ESR-01*

## **Nuclear Energy is an Essential Technology**

Diablo Canyon Power Plant must continue to operate for at least another 20 years.

California's grid is in dire shape. The megadrought means hydropower is reduced and unreliable. Without Diablo's large dispatchable capacity, firm peak capacity would be in doubt, and we know that blackouts are deadly as well as extremely costly to businesses and citizens. More solar and wind will not solve the problem, as there is not enough suitable land area in the state, and sufficient grid-scale energy storage is nowhere on the horizon. It has been estimated that enough battery capacity to provide 24 hours of California's energy demand would cost twice the state's total budget, and have to be replaced every decade.

This should not be a political decision. California needs to have confidence and follow the science. The global scientific consensus is that nuclear power plants are essential if we are to decarbonize our entire energy economy in a time frame that matters for climate mitigation, while reliably powering our electricity supply as well as industrial process, transportation and building heating sectors.

There is much more at stake than the integrity of California's electricity supply. Advanced nuclear technology is on the cusp of commercialization, and the continued operation of existing nuclear plants gives critical support and continuity to nuclear supply chains and human capital. There are important geopolitical implications. Russia dominates the nuclear power export market, but their continued dominance may be in question. China is building far more reactors than any other country, and intends to dominate this market. The U.S. is poised to commercialize by 2030 multiple excellent designs adapted for diverse electric and non-electric applications. A commitment to save Diablo Canyon would send a powerful signal to the U.S. nuclear industry—and the world—that we are serious about meeting the challenge of providing plentiful carbon-free energy both at home and abroad.

Remember that advanced nuclear power is one of the very few items that has received significant, sustained and increasing support for the last several presidential administrations, including very strong support from the Biden Administration. I ask that California stand firm against the anti-nuclear rhetoric and fearmongering of some mainstream environmental groups and the members of the public that have been misled.

My background is environmental science, public health and energy policy. I have done a deep dive on energy policy and climate change for the last twelve years, and I can say that the purported problems with nuclear are, for the most part, vastly exaggerated, and all solvable. If you disagree, please take the time to consult subject matter experts on

the common complaints of safety, spent fuel and cost. Our National Laboratories and universities have phenomenal experts that are a phone call away.