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## **California Needs More Reliable Zero-Emission Electricity**

Climate policy should be technology-neutral. If the primary goal of any climate policy is to decarbonize by expanding zero-emission energy sources, then the specific type of zero-emission energy sources (whether renewables or nuclear) should not matter. To decarbonize a system as complex as an electric grid requires that we do so by any means necessary using a diverse mix of energy sources. There is no good reason for a fanatical devotion to any particular technology, nor is there to exclude any zero-emission source, so nuclear should not be excluded.

The State of California has among the highest electricity prices, as well as the country's highest population of 40 million, 5 million of which live below the poverty line. Crafting energy policy holistically for the long-term requires we examine all relevant problems (i.e. electric grid reliability, carbon emissions, land use, material resource depletion, & an over-reliance on imports). New renewable buildup not only requires the mass acquisition of land & rare earth materials for sprawling industrial solar & wind projects, but also for new transmission lines & new facilities for battery storage.

Nuclear power has the lowest land use & lowest material use of any zero-emission energy source which uses a fuel that the US already has a large supply of domestically. It is well known that when energy sources are measured by average capacity factor, solar & wind are the least reliable, whereas nuclear is (by far) the most reliable. A 2021 UN Economic Commission for Europe study showed that nuclear has the lowest long-term carbon emissions compared to any other source, including solar & wind.

Knowing these facts

100% Renewables advocates demand two nonsensical energy policies:  
- to strengthen *\*reliability\**: they say we should mostly *\*rely\** on the *\*least\* \*reliable\** energy sources (solar & wind)  
- to lower *\*carbon\** emissions: they say we should shut down the *\*lowest\* \*carbon\** emitting energy source (which also happens to be the most reliable): nuclear

Californians consume 280 TWh of electricity every year & by 2045, that number will likely rise to at least 420 TWh. If we want to meet that demand successfully with zero-emission sources, then we cannot afford to shut down any nuclear plants like Diablo Canyon.