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California Needs Nuclear Plants like Diablo Canyon

Nuclear power provides safe, reliable, clean electricity. Despite what some believe, nuclear power generation is much safer than coal, oil, and gas and has about 99% fewer deaths per TWh than these sources, which is comparable to wind and solar power generation (https://ourworldindata.org/nuclear-

energy#:~:text=The%20key%20insight%20is%20that,solar%20are%20just%20as%20s afe.). Furthermore, advanced nuclear plants are implementing passive safety features that further decrease the likelihood of malfunction, making an already safe technology even safer. Moreover, advanced nuclear technologies can even load follow on a regular basis, which is when electricity output fluctuates with demand. This quality makes nuclear power especially suitable for a grid with substantial renewable energy production because the output of these sources can vary depending on weather conditions or the time of day. As such, nuclear plants that can produce electricity no matter the weather or time in a variable manner are an effective supplement to a grid with renewable energy sources because they can provide additional electricity to meet current demand at any time. Since there is currently no viable, large-scale electricity storage mechanism, relying exclusively on renewable energy could result in blackouts in times of very high demand if conditions do not allow supply to meet this demand. Other technologies such as gas could provide supplemental electricity, but unlike for nuclear power, this results in carbon emissions. Thus, California will be unable to meet their clean energy goals and provide reliable electricity supply to the populace without nuclear power provided by plants like Diablo Canyon.