

DOCKETED

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Closing Diablo Canyon would be a climate crime

Additional submitted attachment is included below.

Closing Diablo Canyon would be a climate crime.

There are two viewpoints represented in the comments that will be submitted on this matter. One viewpoint is based on sound science and good energy/climate policy. The other viewpoint is based on total misinformation, paranoia, science-denial and lies. The science-based viewpoint is to keep the beautiful Diablo Canyon nuclear power plant operating for at least twenty more years. The science-denying viewpoint is to let a perfectly good source of clean electricity shut down.

The science is actually clear on nuclear power, despite decades of effective misinformation by fossil-fuel funded environmental NGOs. Here are some of the facts:

Nuclear power is clean, and in fact total lifecycle emissions of nuclear power plants are shown to be some of the lowest of all energy technology. They are as low-carbon as wind and solar energy, despite claims to the contrary. Effectively, nuclear power emits no particulate matter or greenhouse gasses.

<https://energyindustryreview.com/power/unece-nuclear-is-the-lowest-carbon-electricity-source/>

Nuclear power is safe. If you look at total deaths associated with energy technologies, nuclear power clocks in as one, if not the safest form of power known to man. Besides causing no deaths in the entirety of the nuclear power sector ever, nuclear power does not kill or sicken people with air pollution.

- Diablo Canyon is *not* at risk from any major seismic event. The elevation above the sea makes the plant impervious to even the biggest tsunamis. The plants are built with such structural integrity, they can withstand the largest of earthquakes.
- Diablo Canyon's spent nuclear fuel represents no harm to anyone. The assemblies are kept in reinforced steel and concrete casks, on site. The federal government will be responsible for taking the spent fuel to a repository in the future. Nobody has ever been harmed or sickened by spent nuclear fuel in the United States.

<https://ourworldindata.org/nuclear-energy#what-are-the-safest-sources-of-energy>

<https://www.nrc.gov/waste/spent-fuel-storage.html>

Nuclear power provides clean electricity at a constant rate, known as baseload, that stabilizes and strengthens the grid. This type of power is probably the most important in keeping an electric grid stable. It produces electricity 24/7 unless refueling or undergoing maintenance. Wind and solar *cannot* provide such energy. Energy storage for wind and solar is *very* limited. California already suffers from blackouts that are an embarrassment to the fifth largest economy in the world. Nuclear power is also very powerful. This single

plant represents a whopping ten percent of California's electricity. The amount of wind and solar needed to produce the same amount of electricity is staggering.

<https://cna.ca/advantages/energy-reliability/>

Nuclear power has some of the least negative environmental impacts of all sources of energy. The land footprint of a nuclear power plant is the smallest in the energy sector, given the amount of clean electricity it produces. This puts wind and solar to shame. It also requires minimal mining. Given the energy density of uranium fuel, very little mining is associated with procuring it, compared to fossil fuels. Nuclear energy needs mostly concrete and steel in its construction, and needs much smaller amounts of valuable metals and minerals compared to wind and solar systems.

- People may point to the very small issue of warmer water produced from cooling the plant. The fact of the matter is that all thermal power plants have waste heat. Yes, the extra heating of the ocean directly outside the plant (very localized) does cause changes in the ecosystem. If anything, it makes the sea life more vibrant because plants and animals like the warmer water.

<https://world-nuclear.org/information-library/energy-and-the-environment/mineral-requirements-for-electricity-generation.aspx>

These are just a few of the many beneficial scientific facts surrounding nuclear power. But let us not forget the real issue here, and that is the existential threat of climate change. We see the world burning around us, and it is all because of carbon emissions from the combustion of fossil fuel. We need as much carbon-free energy as we can get our hands on. People will say we can just replace Diablo Canyon with wind and solar. Nowhere in the United States has a closed nuclear power plant been replaced by renewables. It's always gas replacement. And even if we did replace Diablo Canyon with wind and solar, that would essentially be replacing existing clean energy with other inferior clean energy. Our enemy is the fossil fuel industry. Let's focus on putting them out of business. Renewables need to work with nuclear to put clean energy on the grid.

<https://www.lohud.com/story/news/2022/07/22/new-york-fossil-fuels-increase-after-indian-point-nuclear-plant-shutdown/65379172007/>

The naysayers that are advocating closing down this essential source of carbon-free electricity are actually doing the bidding of the fossil fuel industry. Especially the natural gas industry. Whether they know it or not, they have been fed and have perpetuated anti-scientific lies about nuclear power, which has soured public acceptance of the technology, letting the fossil fuel industry pick up the slack where nuclear is shunned. They should know better and they should stop getting in the way of climate change mitigation. Future generations will curse them for refusing to use a miraculous technology that can very well replace fossil fuels wholesale. Please be on the right side of history, and that is the side of science and nuclear power. Keep Diablo Canyon Open.

Thank you.

Phil Ord
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