

Dear CalEPA, regarding Carbon Neutrality Studies: Vehicle Emissions and Fossil Fuel Demand and Supply:

With its green dreams of an emission free state, California has not even been able to generate enough of its own electricity in-state and imported 29% of its needs in 2018. The bad news is that imported electricity comes at higher costs and those costs are being borne by residents and businesses alike. California households are already paying 50% more, and industrial users are paying more than double the national average for electricity.

The future of electricity in California does not bode well as the State has chosen to not challenge the closure of the States' last nuclear zero emission generating plant at Diablo Canyon, and 3 natural gas generating plants in Southern California.

The four upcoming losses of continuous generating electricity are:

- PG&E's Nuclear 2,160 megawatt Generating Plant at Diablo Canyon to be shuttered in 2024.
- The 823 mw Natural Gas Power Plant at Scattergood in Playa Del Rey, to be shuttered in 2024.
- The 575 mw Natural Gas Power Plant at Haynes in Long Beach, to be shuttered in 2029.
- The 472 mw Natural Gas Power Plant at Wilmington, to be shuttered in 2029.

With NO plans for industrial wind or solar renewable intermittent electricity projects to generate "replacement" electricity in-state, especially with the huge land requirements for those renewables, there will be a need to import from other states greater percentages of California's electricity needs in the years ahead. And as you guessed it, more costs to the consumers and businesses who are already infuriated with high costs.

Could it be that our legislatures are also unaware that those unstoppable costs of more regulations, taxes and increased minimum wages targeted toward businesses are just passed through to the consumers of the services and products from those businesses? Those higher costs roll directly into housing, utilities, food, and entertainment if there's any money left, and may be very contributory to California's growing homelessness and poverty populations.

I know our legislatures want to sunset the oil industry. BUT imagine how life was without those fossil fuels before 1900 when we had NO militaries, NO vehicles, NO airlines that now move 4 billion people around the world, NO cruise ships that now move 25 million passengers around the world, NO merchant ships that are now moving \$50 Billion dollars of products monthly through California ports, NO space program, NO medications and medical equipment, NO vaccines, NO fertilizers to help feed billions, NO tires for vehicles, and NO asphalt for roads.

Most importantly, before the 1900's we had NONE of the 6,000 products that are manufactured from the chemicals and by-products from fossil fuels. Interestingly from each 42-gallon barrel of crude oil, half is for those thousands of products and the other half for the fuels to run commerce.

We've had more than 100 years to find alternative or generic methods to manufacture the thousands of products we get from those deep earth minerals, and to manufacture the fuels for commerce and the military. By nearly every quantifiable measure, we are better off than our pioneer predecessors because of fossil fuels. In more than a century, we've only come up with electricity that can be generated intermittently from sunshine and wind.

When we look at what intermittent electricity from wind turbines or solar panels CANNOT do, we see they are blatant failures to qualify as replacements for the fossil fuels that produce those 6,000 products that are the basis of our lifestyles and of our numerous infrastructures, and manufacture more than 60 million gallons of fuels every day to meet the demands of the states' commerce and nearly 40 million residents.

I believe it's easy to understand that wind and solar alone are obviously incapable of supporting the military, airlines, cruise ship, and merchant ships. As a reminder just in case you're still living in the pre-1900s, without transportation and the leisure and entertainment industries, we have no commerce.

As California's electrical systems continues to be less capable of providing Californians with in-state generated electricity, the current legislative direction to CalEPA pre-determines the outcome of the CalEPA efforts to document ways to decrease the size of the other in-state energy source, the oil industry. The decline of both energy infrastructures, electricity and oil, will sunset the California economy.

Ronald Stein