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Opposition to Central Coast OSW with Better Alternatives

Document attached

Additional submitted attachment is included below.

Date: April 20, 2024
To: California Energy Commission
RE: California Offshore Wind Proposal

This letter is regarding the proposed offshore wind project off Cambria on the Central Coast; listed below are my reasons for opposing this project. There are hundreds, if not thousands of citizens in Cambria and Morro Bay, along with the Chumash Nation, that agree this is a bad project proposal.

I do want to profile myself as a progressive who has been following global climate change for over fifty years. It is the greatest existential crisis humanity faces and we are far behind with the required responses to avoid the 2C degree heat level for catastrophic consequences. The IPCC report informs us we have at most ten years to respond on a massive scale to avoid permanent damage to the planet.

This plan will clearly have negative environmental consequences:

- these floating turbines will be located in migratory zones of sea life
- turbines permanently stationed will present tens of thousands of acres of toxic anti-fouling bottom-coating paint containing arsenic and other poisons
- the upwelling and magnetic field issues are also alarming considerations
- should the ecological studies fall short, the result would be severe harm to species of all varieties

But there is also the economic impact; since this project will cost billions of tax dollars, it should be a strong value for all Californians:

- each turbine will require hundreds of gallons of gear oil and other fossil products, changed out every six months
- this will require daily rotational servicing with thousands of gallons of diesel fuel being used to ferry those fluids over the 30-mile one-way voyage with idling at each location all day
- dependence on fossil fuels, to get us off fossil fuels, is contradictory and expensive
- since the proposed turbines and relay stations have never been built, it will take years to discover how or if they can be produced
- we also have no idea yet how to anchor the platforms
- these turbines will be built in Norway and Germany and will require trans-global transport and, in combination with manufacture, will create a massive C02 footprint

Creating service centers at Port San Luis and in Morro Bay will create local transformations costing millions, and the one in Morro Bay will be located where the still unstable population of California sea otters struggles to recover. There are only 3500 of them in existence, disturbing the range for animals that require

localized habitat is unthinkable (I am a long time volunteer for The Marine Mammal Center and am aware of the human-caused damage to marine life).

The battery center proposed for Morro Bay is to be located where the old mothballed natural gas generators are located. This area is at sea level and is a terrible use of prime revenue-generating tourist real estate; in fact, Morro Bay just relocated their water treatment facility for sea rise concerns.

Over the past weeks the wind has been far too strong to run these 1000' high turbines with stadium-size blades without damage making generation unstable. In addition, the blades themselves wear out and they're not currently easily recycled.

The grid itself isn't up to the task of receiving the power output of all these turbines, which means more time and cost for those upgrades.

Some argue that this project creates hundreds of new jobs. However, it's Norwegians that do the construction and installation and the reality is more jobs will impact ROI and cost per KW. The folks in the British Isles have found that they pay considerably more per KW than their European neighbors.

The problems I have seen going on in Britain are staggering. All turbines of a large recent floating system installation had to be towed in to replace defective gears. The entire retrofit is projected to take ten years! My mechanic used to tell to me that the definition of trouble is two pieces of metal rubbing on each other.

So with all these problems what should we be doing?

I propose moving forward with all due haste on the floating solar panel project over the aqueducts since we already own the land. Why wouldn't we want to keep the tax money at home purchasing sixth generation panels produced by the new billion-dollar First Solar Plant right here in the U.S.? The Carrizo Plain solar and other fields have been great successes, and permitting should be considerably simpler than those projects. In addition, these structures would reduce evaporation, and cooler panels are also more efficient.

On that note, there are some remarkable discoveries to create panels with multiple times the current efficiency. As panels age out in twenty years they can be replaced with newer versions. These systems would create distributed power throughout the state immediately, not ten years from now. There is no fossil fuel requirement or maintenance, thus improving ROI. This solution would also create more flexibility for PGE to have greater grid stability. The icing on the cake would be to install Vertical Oriented Rotational Turbines on top of these structures. Built in the US these units create power at wind speeds up to 180 mph; Harmony Systems is one of many breakthrough wind generation products. In fact, new roof mounted wind systems, currently being tested, could allow for independent power installations on variously sized buildings.

Our problem in California isn't generation as much as it is storage. Thousands of gigawatts of passive power cannot be connected to the grid because it simply cannot handle it. In fact many wind projects have been cancelled because the ROI is so slow in coming. That's why large wind investors like Shell and BP have pulled out. Line loss alone is running at 34% of generation. This is an area where these billions should be spent.

New Gravity batteries and Thermal Batteries are cheaper than lithium and much more adept for passive energy capture. Thermal batteries are terrific for developing power for high heat industrial applications. Battery technology continues to advance quickly, and again, this is an area for tax dollars to create low cost and low maintenance systems.

Large solar gets us a real edge on the narrow timeline while also creating American jobs throughout the state to build and install them. Let's create jobs here, keep the money here, and build our own stability.

Additionally, let's not overlook nuclear power. Why not retrofit Diablo with Liquid Thorium Modular Reactors (LFTR). Never thought I'd be saying that, but then I never knew that we invented and created the first one 50 years ago still in test use at Oakridge TN.

While all the solar development is going on, we should be forging ahead with these safer, cheaper, non-nuclear weapons proliferating reactors. LFTR reactors can go anywhere, water-cooling isn't required, and they can reuse old fuel rods costing us a fortune to store. Fuel rod reuse will create many times the original power while reducing their half-life from 10,000 to 300 years. India, China and Indonesia are forging ahead with theirs. China is starting up their first one very soon and have 450 more planned. Why are we letting them "eat our lunch" on tech we invented?

There are so many better ways to spend these billions. Let's not do this untested, massively slow and inefficient floating wind farm here. Let's keep the manufacturing and the jobs here at home.

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