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Public Convenience, Necessity and Prudence of the Fountain Wind Project

Additional submitted attachment is included below.

10 November 2023

To: Drew Bohan, Executive Energy Director, California Energy Commission

Leonidas Payne, Project Manager, California Energy Commission

Mr. Eric Knight, Manager, Siting and Environmental Branch

Subj: Public Convenience, Necessity and Prudence of the Fountain Wind Project

Dear CEC Staff,

As stated in the CEC's recently docketed "Notice of Preparation of a Draft Environmental Impact Report," TN# 252898, the Fountain Wind Project is inconsistent with the Shasta County zoning prohibition against large scale wind, as such the CEC cannot approve the project unless the CEC determines the facility is: 1) required for public convenience and necessity, and 2) that there are no more prudent and feasible means of achieving such public convenience and necessity. (Pub. Resources Code § § 25525 and 25545.8). In making the determination regarding the lack of a more prudent and feasible means to achieve the convenience and necessity of the project, the CEC must consider the impacts of the facility on the environment, consumer benefits, and electric system reliability.

For public-convenience-and-necessity to be true the project would have to be **needed** by and be a **benefit to** the public.

The Fountain Wind Project is emphatically **not needed** by the citizens of Shasta County, particularly those in the Project area, and it will **not benefit** them in the least. There are numerous reasons why this is so, some of which are listed below:

1. **Clean Energy and General Power Needs** (Ref [1])**:** Shasta County already produces more than 3,500,000 MWh of renewable energy per year and ranks 4th in the State for renewable energy production. The County only uses 29.6% of the total electricity power produced within the County which is over 3,900,000 MWhs per year. Shasta County has a population of 181, 935 residents who use a little over 1,160,000 MWhs per year or about 6.42 MWhs/year/capita. Shasta County produces a little over 300% more renewable energy than the total energy the residents consume per year. Of the total power produced in Shasta County over 89% is from renewable sustainable source. Shasta County residents could easily add more biomass and other more suitable, less environmentally impactful generation to eliminate the little natural gas it uses. Shasta County is well ahead of most of the rest of the State in clean energy production.

2. **Historical, Cultural and Tribal Needs:** As indicated in the Pit River Tribes docketed response to the approval of the Fountain Wind Project's opt-in application. Shasta County's local indigenous peoples do not need this project which just further erases

their heritage and sacred cultural practices. They do not need to be further marginalized and to have their way-of-life sacrificed for the supposed benefit to the public, when in fact it's the multi-billion-dollar corporation proposing this project and its investors that are the ones who are truly benefitting.

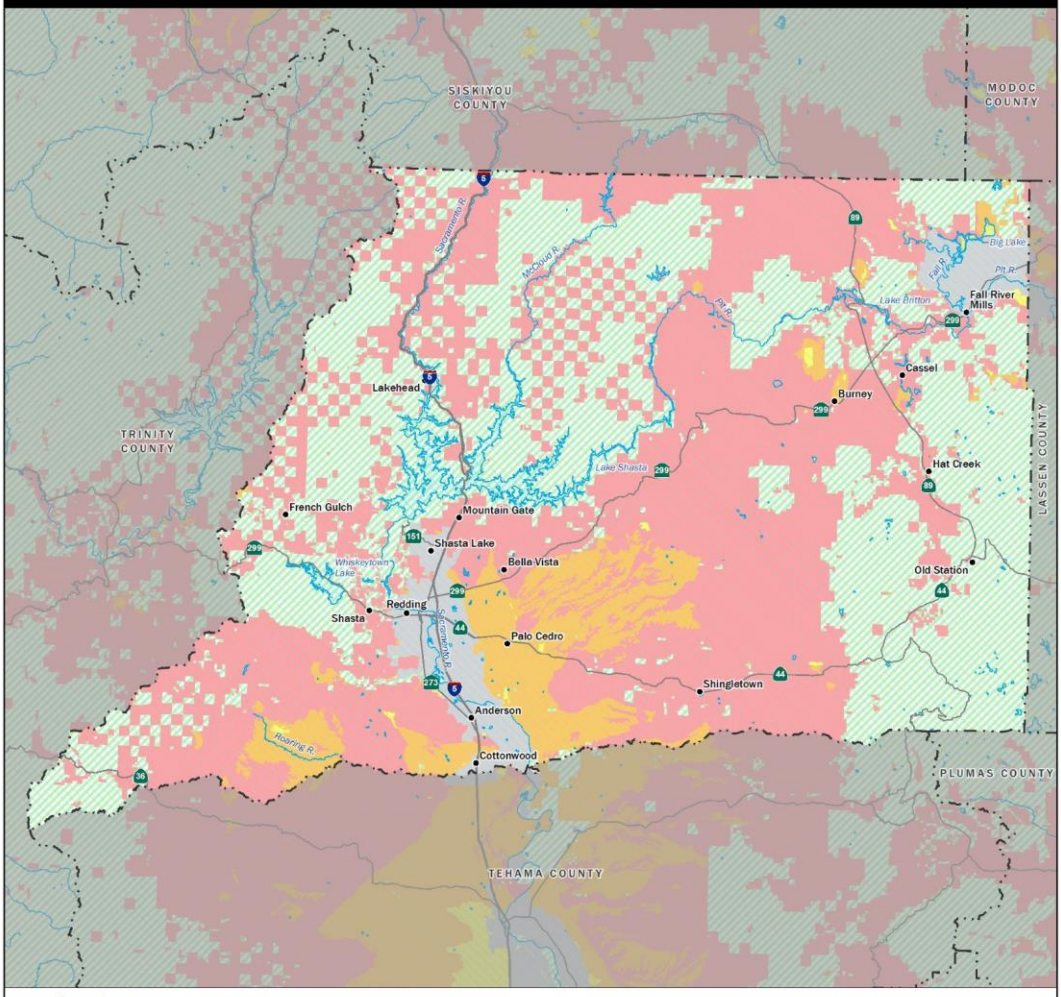
3. **Biological Needs:** Per the CEC's docketed letter mentioned above, we know that the United States Fish and Wildlife Service has advised ConnectGen to obtain a take permit for the bald and golden eagles that the project is likely to kill. Shasta County does not need for the few cherished bald and golden eagles in our area to be sacrificed for this project when there are more suitable and appropriate means of generating clean energy within the area and the State. Shasta County does not need the illegal take of migratory waterfowl, bats, and other raptors by placing large killing obstructions on the highest ridge tops within the Pacific Flyway that transverses the project area.

4. **Wildfire Safety Needs:** Shasta County does not need a project that further increases the wildfire risk in an area that is already rated the highest fire hazard zones in the State (see below). Neither the County nor the local communities need the miles of overhead electrical lines which further adds to the fire risk throughout the project area. The County, State, and especially the local communities do not need anything that restricts the use of any of the available firefighting resources normally used to fight wildfires, such as aerial firefighting. Shasta County willingly supports clean energy projects that contribute to the State's clean energy goals such as solar and hydroelectric and are especially enthused by those that help to reduce the wildfire threat in our area while improving forest health and resiliency as biomass does. Shasta County needs the forest fuel reduction and defensive space hardening opportunities afforded by biomass recycling and generation facilities. Shasta County also needs the State to enforce regulations to preserve ridgelines from commercial or residential developments as required by SB 901 Sec. 9. Section 4290 subsection (b) for the purpose of reducing wildfire risk.

SHASTA COUNTY

State Responsibility Area Fire Hazard Severity Zones

June 15, 2023



Fire Hazard Severity Zones in State Responsibility Area (SRA)

FHSZ Label	Acres (SRA)
Very High	1,170,037 Acres
High	189,176 Acres
Moderate	6,084 Acres

Fire Protection Responsibility Areas (non-SRA)

- Federal Responsibility Area (FRA)
- Local Responsibility Area (LRA)
- Waterbody

0 5 10 15 20 Miles

0 5 10 15 20 25 30 Kilometers

Projection: NAD 83 California Teale Albers
Scale: 1:595,000 at 11" x 17"

Public Resources Code 4201-4204 directs the California Department of Forestry and Fire Protection (CAL FIRE) to map fire hazard within State Responsibility Areas (SRA) based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread. These zones, referred to as Fire Hazard Severity Zones (FHSZ), classify a wildland zone as Moderate, High, or Very High fire hazard based on the average hazard across the area included in the zone.

Access PDF versions of the maps at **https://osfm.fire.ca.gov/fhsz-maps**. For more information, please visit the Frequently Asked Questions document for the 2023 Fire Hazard Severity Zones at **https://osfm.fire.ca.gov/fhsz** or scan the QR code at right. If you have further questions, please call 916-633-7655 or email **FHSZcomments@fire.ca.gov**.

Scan or click the QR code for more information and to visit the interactive FHSZ viewer.

Obtain FRAP maps, data, metadata, and publications at https://frap.fire.ca.gov.
For more information, please call 916-633-7655 or email FHSZcomments@fire.ca.gov.

Gavin Newsom, Governor, State of California
Wade Crowfoot, Secretary for Natural Resources, California Natural Resources Agency
Daniel Berlant, Acting State Fire Marshal, California Department of Forestry and Fire Protection

Data Sources:
CAL FIRE Fire Hazard Severity Zones (FHSZSRA_23_2)
CAL FIRE State Responsibility Areas (SRA22_2)

The State does not have a need for this project that's worth sacrificing the health, safety, peace, and general welfare of the peoples of Shasta County and the local Native American Tribes? The state does needs more renewable energy to meet its clean energy goals, but Shasta County is already at the fore front of this effort and will continue to be so, but in a more suitable and appropriate manner than this project affords, such as the recent County approved Biomass Electrical Generation facility near Burney or other solar projects considered in the area. This project could be built in a more appropriate place within the State without many of the significant negative impacts that come with building in wildfire prone forested lands. What the State really needs is more dispatchable clean energy to better support varying load demands and improve grid stability. Additional biomass facilities like those already operating in Shasta County are a more appropriate technology for this area. There are other wind resource areas with greater wind energy potential within the State that could be developed.

Benefits:

The Fountain Wind Project does not provide a net benefit to Shasta County. As the record of the exhaustive reviews previously conducted by Shasta County, and the most recent information docketed at the CEC, indicate, this project has serious significant and unmitigable harmful impacts to the County and the State if located in this area. This project will irreparably harm the residents of Shasta County, particularly the local communities near the project area, including the Pit River Tribe and will negate any hoped-for carbon savings when a catastrophic wildfire, that can't be fought from the air, burns the forested lands and communities in the project area and possibly spreads into eastern Redding and/or into Burney and elsewhere. Shasta County previously denied this project exactly because it would not benefit the County or its residents.

The Fountain Wind Project will not provide a net benefit to the State? This project does not benefit the State or its clean energy goals when homes and lives are lost because of it. It does not benefit the State when forests and communities are destroyed by fire and millions of dollars are spent in fighting it. When tribal heritage and culture are further destroyed. When eagles, raptors, bats, and other important and protected wildlife are killed. When tourists no longer want to visit the area due to the visual blight.

Any supposed benefits of this project for either Shasta County or the State are eliminated by the irreparable harm this project will cause and the extraordinary expense of an uncontrolled wildfire and the inevitable loss of lives, loss of tourism, diminished property values and loss of associated tax revenues, biological destruction of sensitive species, and further tribal exploitation and marginalization.

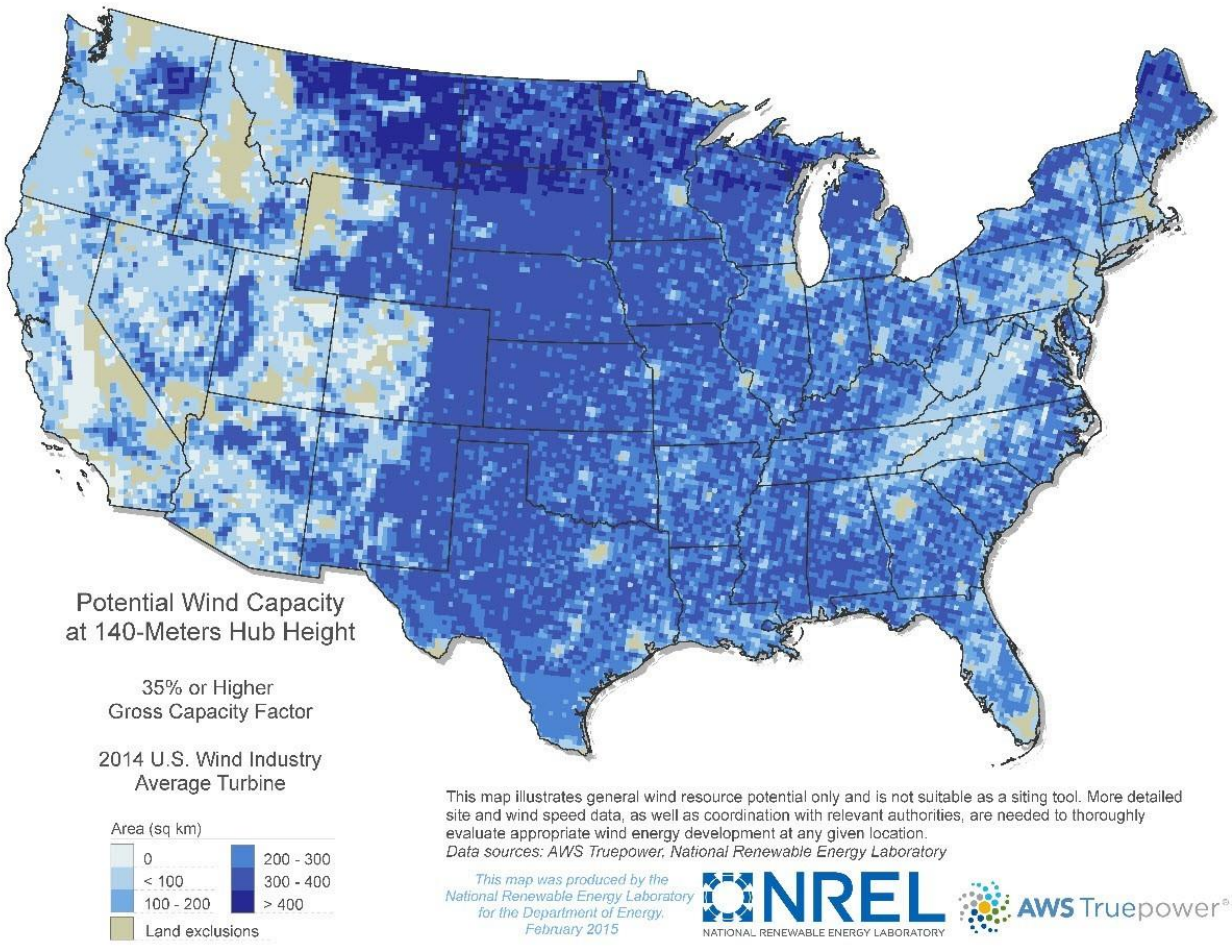
The second finding that the CEC must make to approve this project is that there are no more prudent and feasible means of achieving such public convenience and necessity.

However, there are other less negatively impactful and more suitable means of meeting the State's clean energy goals while also benefiting the citizens of Shasta County. The following are several ways to do so:

1. The same project could be located elsewhere within the State. There are Wind Resource Areas within the State, as shown below, that offer even greater wind energy potential without the same significant and unavoidable environmental impacts or life-threatening concerns.

There is also significantly greater offshore wind energy potential that could be developed to meet the State's clean energy goals without risking the lives and general welfare of the citizens of Shasta County or the State. The project could be built out of State and transmitted to California per Power Purchase Agreements with local Investor-Owned Utilities (IOUs) or other energy providers. Other locations within the U.S.

provide much greater Wind Resource Areas but with much fewer environmental impacts as shown below.



2. Additional Biomass facilities could be built within Shasta County or elsewhere within the State. Biomass is especially attractive to Shasta County because of the reduction of forest fuel and the aid in defensive hardening of properties afforded by a Biomass facility. Shasta County currently has three Biomass Electrical Generation Plants (counting the newly approved Hat Creek Biomass Facility) which provide up to 88 MW of power. The power from a Biomass Plant is also more predictable and dispatchable which leads to greater grid stability and less waste as the power is much less likely to be curtailed as it is with wind energy, which often produces power when it isn't needed or doesn't produce power when it is.

The Sustainable Resource Management (SRM) biomass plant in Anderson has a generation capacity of 55 MW. Their website's statement describes the benefit their plant provides as follows: ***The Shasta facility is one of northern California's largest wood-fired power plants. The facility provides dependable, environmentally safe disposal of***

wood waste and forest residue from Shasta County and surrounding areas, while generating clean electricity for sale to the local utility. Processing up to 1,250 tons per day, Shasta has the electric-generating capacity of 55 MW, the equivalent of supplying the electrical needs of thousands of California homes and businesses as well as its own operations.

Non-merchantable waste wood from Shasta-Trinity and Lassen National Forests, as well as from private lands, are selectively removed and processed in the facility to enhance remaining standing timber.

Shasta plays a key role in the State of California's effort to safely manage forest residue in high hazard areas to reduce the risk of forest fires. Shasta also operates a Wood Waste Recycling Program year-round, which is offered to members of the community at no charge.

The biomass plant recently approved by the Board of Supervisors in Shasta County is the Hat Creek Bioenergy plant. The plants developer hopes to replicate it in other rural communities around the state where there is an abundance of biofuels such as in Shasta County.

Burney Forest Power biomass plant is a 30 MW plant that's been operating since 1990. There's also one in Lassen County called the Greenleaf Honey Lake Power plant which can produce 30 MW of electricity.

These are the type of clean energy projects needed by Shasta County, not that of the Fountain Wind Project, with all its negative environmental impacts including direct conflict with SB901 by developing along ridgetops and thus increasing the overall wildfire risk.

There are other important points to consider when comparing biomass plants, existing or new, to the Fountain Wind Project. One is that they produce dispatchable electrical power (i.e., you can generate power as needed). They are also not reliant on unpredictable wind conditions and can produce power as needed during peak load demands. They can also generate to their rated capacity as needed. The existing Hatchet Ridge industrial Wind Development only produced between 30-33% of nameplate capacity from 11/2019 - 11/2021 (Ref [1]). The Fountain Wind Project has a nameplate capacity of 205 MW but will likely generate on average no more than 30-35% of that, or 60-70 MW of power. This capacity factor is a reasonable estimate when compared to Hatchet Ridge considering that the Hatchet Ridge Wind project, has the more optimal ridge top site, and does not regularly produce more than 33% of nameplate capacity. Also, the Fountain Wind Project is likely to reduce the overall Capacity Factor of the Hatchet Ridge Project due to the well-known wake effect. In a comment letter submitted by Pattern Energy, on October 21, 2020, to the Draft Enviromental Impact Report, during the previous Shasta County CEQA review, they stated that the wake effect would reduce the power output of the Hatchet Ridge Facility by

between 3,400 MWh - 7,000 MWh per year per year. That's enough power to meet the annual need of 530 - 1090 Shasta County residents. A biomass plant or other more suitable plant would not have this same negative impact. Shasta County does not need a project that reduces what clean energy it already produces. Also, as mentioned earlier what power the Fountain Wind Project could generate would not be reliable or predictable. It won't be able to reliably generate as needed during peak load demands, it won't be readily dispatchable. Much of the wind and solar power generated in California is curtailed because its often produced when it isn't needed. According to information reported on the California Independent System Operator (CAISO) website, California curtailed more than 2,400,000 MWh of utility scale wind and solar electrical energy in 2022, largely because of the unpredictability of wind energy or the limited production times of solar. Biomass facilities on the other hand operate more like a conventional gas or coal fired plant except with renewable and sustainable fuel.

The above data and the many docketed submissions opposing this project, as well as the record of former reviews and denials by Shasta County officials, clearly demonstrate that this project is not needed by, nor will it benefit, the peoples of Shasta County or the State and that there other more suitable and environmentally beneficial means to meet our States clean energy goals. Therefore, please deny this project as required by (Pub. Resources Code § § 25525 and 25545.8) and consider other more appropriate alternatives.

Sincerely,

Mr. Joseph Osa

Space and Naval Warfare Systems Center, Global Positioning System and Navigation Systems Division, Branch Head (Retired)

References:

1. Shasta County, California Electrical Rates & Statistics, Electrical Rates, Plans & Statistics. Shasta County, CA: Electric Rates, Bills & Providers (findenergy.com)Department o
2. https://osfm.fire.ca.gov/fire-hazard-severity-zone-maps-2022/ Shasta County
3. https://www.nrel.gov/gis/wind-resource-maps.html Wind Resource Maps and Data