DOCKETED	
Docket Number:	23-OPT-01
Project Title:	Fountain Wind Project
TN #:	253343
Document Title:	John Gable Comments - The Danger To Our Community
Description:	N/A
Filer:	System
Organization:	John Gable
Submitter Role:	Public
Submission Date:	11/28/2023 7:24:21 AM
Docketed Date:	11/28/2023

Comment Received From: John Gable Submitted On: 11/28/2023 Docket Number: 23-OPT-01

The Danger To Our Community

Additional submitted attachment is included below.

Moose Camp Background

- Small community of 50 cabins founded in 1929
- Residents enjoy natural beauty of 146 acre community for over 90 years
- Moose Camp lost 40 of 60 cabins when the Fountain fire burned through on August 21, 1992

Fountain Wind & Moose Camp

- Note map below (visual resources addendum pt2) with Moose Camp drawn in
- Moose Camp is the largest neighborhood with planned turbines approximately a mile away from our fence line.
- The main service road for the entire Fountain Wind project borders our fence line.
- Connect Gen/Fountain Wind does not identify Moose Camp on any of their maps
- Connect Gen/Fountain Wind does not provide KOP's (Key Observation Points) of the turbines we would see from Moose Camp.
- Connect Gen/Fountain Wind refuses to discuss using ADLS (Aircraft Detection Lighting Systems) to keep the intrusive red turbine lights off 97% of the time at night, keeping the night sky dark for all the humans in the area including Burney Falls State Park and Lassen National Park visitors.



Moose Camp, Fountain Wind & Wildfire Danger

- The FW project is planned for the worst possible land in the entire state for fire danger. Very High Fire Hazard Severity Zone." Fountain Wind "is also located within Tier 2 Fire Threat District i.e. an area with an elevated risk of wildfires associated with overhead utility power lines"
- PG&E turns our power off when the wind blows hard due to fire danger severity
 - <u>Over the last decade</u>, California has experienced increased, intense, and record-breaking wildfires in California. These wildfires have resulted in a devastating loss of life and billions of dollars in property and infrastructure damage. Historically, electric utility infrastructure has been responsible for less than 10% of reported wildfires. However, wildfires attributed to electrical infrastructure consist of roughly half of the most destructive wildfires in California history."
- <u>96.5 % of all wind turbines in America</u> are NOT located in a forest
- "You've heard me say this before: Every acre can and will burn someday in this state," said Cal Fire Director Thom Porter, the state's fire chief.
- "All but two of the Top 20 Largest Wildfires have occurred since 2000, with 9 of these large and damaging wildfires occurring just between 2020 and 2021."
- In 2021 4,257,863 acres burned in California compared with 451,969 when Hatchet Ridge was built in 2009. An increase of 942 percent in 12 years.
- <u>Approximately 95% of all wildfires in California</u> are caused by human activity
- <u>Careless use of trucks, chain saws or other equipment</u> starts nearly a quarter of the fires.
- <u>California wildfires blamed on humans</u> between 2012 and 2018 were on average 6.5 times larger than those caused by lightning strikes and killed three times as many trees.
- <u>Climate change makes wildfires in California more explosive</u> "Now a new study, published Wednesday in Nature, uses a machine-learning model to show that climate change has nudged the risk of fast-spreading fires up by about 25% on average in California."
- <u>Study Finds Climate Change to Blame For Record-Breaking California Wildfires</u> "Environmental observations indicate that summer burned areas in northern and central California have increased fivefold during 1996 to 2021 compared to 1971 to 1995"
- <u>17 million trees were planted after the Fountain Fire</u> so Fountain Wind turbines would be located in a tree plantation.
 - <u>"Tree plantations comprised of densely-stocked, even-aged stands of young conifers are</u> <u>extremely flammable</u> and vulnerable to catastrophic fire effects. When plantations burn they normally result in 100% mortality of trees, and have no native seed sources to naturally regenerate stands."
 - <u>Tree Plantations Burn More Severely</u>-"Several studies now show pretty conclusively that tree plantations burn more severely than native forests"
 - o 2022 Study of 150 California Wildfires -

- "Land managed by private industrial timber companies is associated with a higher probability of high- severity fire than public land or land owned by individuals or entities other than industrial timber interests and the federal government, indicating that prevailing forest management practices on private industrial timberland are associated with increased occurrence of high- severity fire"
- "We found that where fires occurred, the odds of high- severity fire on "private industrial" lands were 1.8 times greater than on "public" lands"

Aerial Attack of Wildfires

- <u>CAL FIRE's fleet of more than 60 fixed and rotary wing aircraft make it the largest civil aerial firefighting</u> <u>fleet in the world.</u> - "Aircraft can reach the most remote State Responsibility Area (SRA) fires in approximately 20 minutes, with the goal of keeping 95% of fires at 10 acres or less."
- Shasta County turned down Fountain Wind and banned future industrial turbine farms "When considering the Fountain Wind project, the county Planning Commission and the Board of Supervisors heard testimony from CDF air attack specialists and air tanker pilots stating that they cannot fly or drop retardant within a windfarm or the immediate surrounding area, thus taking away the most effective initial attack and fire suppression tool available."
- Fawn Fire September 2021 East of Redding, <u>Map below</u> is 4:45 PM · Sep 23, 2021 Flight Radar 24 website screenshot.
 - Large number of air resources were assigned to this fire including approx 13-15 air tankers.
 - "We dropped 53,000 gallons of retardant in an hour-and-a-half," said Gouvea.
- The residents of Moose Camp, Montgomery Creek, Round Mountain and Burney would not get the kind of aerial response Redding residents received during the <u>Fawn fire</u> due to Fountain Wind turbines.



Alternatives to Fountain Wind

- Repowering Existing Old Turbines "<u>Repowering a wind farm</u> means replacing the old turbines by more
 powerful and efficient models that use the latest technology. On average repowering more than doubles
 the generation capacity (in MW) of a wind farm and triples the electricity output because the new
 turbines produce more power per unit of capacity. And it achieves this while reducing the number of
 turbines on average by 27%."
 - <u>California adopted wind energy early compared to other states and now has many more</u> <u>turbines than states that produce far more wind energy than we do.</u>
 - Most states produce twice the energy with half as many wind turbines than California.
 - As of 2019 wind turbines in California were on average 16 years old
 - As of 2022 California had 2542 operating wind turbines 17 years or older with an average hub height of 140 feet.
 - New turbines installed in 2022 averaged 322 feet in hub height.
- California Offshore Wind Farms -
 - <u>"The National Renewable Energy Laboratory estimates the state's offshore winds "have the technical potential to produce ... approximately 150 percent of California's annual electricity load."</u>
 - <u>"Floating wind turbines in the Pacific could be especially valuable because California's ocean</u> breezes blow more consistently than onshore winds. They also stay strong into the evening, after sundown, making them a good complement to solar power."
 - New research from Energy Innovation, GridLab and UC Berkeley shows smart state and federal policies could help install over 100 gigawatts' worth of offshore wind farms along the West Coast by 2050, primarily off California's shores. Thanks to Inflation Reduction Act tax incentives and falling technology prices, electricity costs from offshore wind turbines would be roughly the same as building onshore wind turbines and solar farms.
 - Ideal spot for wind turbines is 30 miles off the Pacific coast "The air blowing off the North Coast is considered one of the best wind resources in the world, and probably the best in the continental United States, according to Dr. Arne Jacobson, director of the Schatz Energy Research Center at Humboldt State University."
- Increasing Amounts of Wind Energy imported from other western states
 - California ISO Capacity 43,290 MW, Fountain Wind would add 205 MW = to one half of one percent of ISO capacity.
 - California doesn't import electricity powered by coal so the surrounding states have developed massive wind farms to sell us wind powered electricity.
 - New Mexico, Western Spirit Wind, <u>377 turbines producing 1050 megawatts</u> with transmission line to carry power to California, online now

- Wyoming, The \$3 billion, 732-mile long TransWest Express transmission line will transport electricity from Power Company of Wyoming's Chokecherry and Sierra Madre Wind Energy Project in south-central Wyoming, as well as other potential new wind energy facilities. Situated in Carbon County, the project's 900 wind turbines with a total capacity of 3,000 megawatts will be the largest onshore wind energy facility in the United States. Under construction now.
- Fix Power Curtailments
 - <u>Renewable energy growth in California</u> is outpacing the ability to move the power from where it is produced to where it is needed.
 - <u>Analysis of the state's Total System Electric Generation</u> report shows how California's power mix has changed over the last decade. Since 2012:
 - Solar generation increased nearly twentyfold from 2,609 gigawatt-hours (GWh) to 48,950 GWh.
 - Wind generation grew by 63 percent.
 - Natural gas generation decreased 20 percent.
 - Coal has been nearly phased-out of the power mix.
 - In 2019 63% of electricity in California came from non-fossil fuel sources
 - <u>"In 2022, CAISO curtailed 2.4 million megawatt hours</u> (MWh) of utility-scale wind and solar output, a 63% increase from the amount of electricity curtailed in 2021. As of September, CAISO has curtailed more than 2.3 million MWh of wind and solar output so far this year."
 - California needs to build transmission lines now, not more renewable energy projects

Shasta County already contributes enormous amounts of renewable energy to the grid

- <u>"Shasta County is 4th</u> in the state rankings for total megawatt hours produced from renewable energy, with 3,989,814 megawatt hours produced from sustainable sources."
- Shasta County population is less than one half of one percent of California 184,000 ÷ 39 million
- <u>"Shasta County uses only 25.74%</u> of the electricity produced in the county."
- <u>90% of electricity produced in Shasta County is renewable</u>

Summary

I can understand why Fountain Wind would appear to be an easy "slam-dunk" project.

- 1. Proposed location already has industrial wind turbine farm with Hatchet Ridge
- 2. No need to build an expensive transmission line, it's already there
- 3. State of California needs renewable energy to meet future renewable energy goals

What's missing from the Fountain Ridge project at this point is any support at all from area residents or the government of Shasta County. We have been fighting this project since the first official scoping meeting occurred almost 5 years ago in January 2019.

The residents of Moose Camp, Montgomery Creek, Round Mountain and Burney along with Shasta county officials know that much has changed since the nearby Hatchet Ridge wind farm was installed in 2009.

- 1. Recent wildfires in California have burned as many acres as entire fire seasons did in past years
- 2. The Fountain Wind project is located in a plantation pine farm which is far more fire prone than an old growth forest.
- 3. We have testimony from wildfire tanker pilots that they can not fly through a wind turbine farm which means the risk of a large catastrophic wildfire killing us and burning down our communities is greatly increased.
- 4. The vast majority of wind turbines in America are not located in a forest.
- 5. There are clear alternatives to building Fountain Wind including
 - a. Replacing old existing turbines in California with new ones that produce far more energy
 - b. Building offshore wind turbines where the wind blows stronger and longer than onshore
 - c. Importing more wind power from nearby states with much better wind than we have
 - d. Adding transmission lines to lower the ever increasing wasted renewable energy we throw away each year due to an inability to get power to where it is used in the state.
- 6. Shasta County already contributes enormous amounts of renewable energy to the California power grid
- 7. A November 2023 article in <u>Scientific American</u> on California wildfires and their human causes ended with this quote: With forests volatile and weather increasingly erratic, public responsibility is critical. "Don't be doing stupid stuff in the woods," Thomas says. "These forests can't tolerate human recklessness."
- 8. A California Energy Commission approval of the Fountain Wind Project would be reckless, stupid and dangerous to all who live nearby.