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Humboldt Wind Project Planner
County of Humboldt
Planning and Building Department, Planning Division
3015 H Street, Eureka 95501
CEQAResponses@co.humboldt.ca.us

Dear Humboldt Wind Project Planner,

I am writing to express my support for the Humboldt Wind Energy Project that has been proposed by Humboldt Wind, LLC for parts of Bear River and Monument Ridges. I think that the benefits of this project will greatly outweigh the costs. This project makes sense for Humboldt County.

I am submitting these comments as an individual Humboldt County resident; however, I have substantial expertise in this topic area. I am an energy research engineer who has worked in the renewable energy field for the last 29 years. I have lived in Humboldt County for the last 24 years and have been intimately involved in local sustainable energy planning efforts for our region. I was the lead researcher and author for both the *Humboldt County Energy Element Appendices: Technical Report* (2005), as well as *RePower Humboldt – A Strategic Plan for Renewable Energy Security and Prosperity* (2013). These reports, in part, informed the goals and strategies currently being pursued by the Redwood Coast Energy Authority (RCEA), our local community choice aggregator. These reports made it clear that the development of wind energy in the Cape Mendocino area is one of Humboldt County’s best opportunities for renewable energy development. If an onshore wind resource is to be developed in Humboldt County, this is where it should happen.

The Humboldt Wind Project offers many benefits to the County of Humboldt. It will provide a clean, renewable energy resource to help meet Humboldt County’s electrical power needs. While some or even all of the power may contractually be sold to an out-of-the-area entity (some may be sold to the Redwood Coast Energy Authority), virtually all of the power generated will physically be consumed in Humboldt County. It is important to note that Humboldt County must generate the majority of its electrical power locally. The major transmission lines coming from the Central Valley and serving Humboldt County cannot meet our average electricity demand, let alone our peak demand. The local power plants that serve Humboldt County are critical to our energy security and the proposed Humboldt Wind Project will improve this situation.



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The current mix of power that physically serves Humboldt County comes from the natural gas fired PG&E Humboldt Bay Generating Station (50%) and two biomass power plants - Humboldt Sawmill Co. and DG Fairhaven (20%), with the remainder primarily being imported. Contractually the power mix is different and depends on the power purchase contracts that have been negotiated by RCEA.

In order to mitigate climate change, RCEA's goals and the State of California's goals are to reach a level of 100% renewable electricity. In order to meet its goals for local renewable energy procurement, RCEA is currently working to purchase 80 MW of power from the Humboldt Wind Project. This wind resource will be an important component of RCEA's cost-effective, local, carbon-free renewable energy portfolio.

Some people who oppose the Humboldt Wind Project suggest that we should instead put solar panels on every rooftop in Humboldt County. While installing solar power on many of Humboldt's rooftops is a laudable goal, this alternate plan is not feasible nor advisable. This would require a 5 kW rooftop solar electric system on every home in Humboldt County at an astronomical cost of about \$1.25 billion, far more than the cost to install the Humboldt Wind Project. In addition, not every home in Humboldt County is suitable for solar panels, and not everyone can afford nor wants solar panels on their home.

In addition, solar energy is only available during the day. In order to make solar power available at night battery energy storage is necessary, and this substantially increases the cost. On average, the wind power resource is available over a much broader portion of the day, and in this wind power way nicely compliments solar power production. In addition, to put solar panels on every rooftop would also require substantial upgrades to the electrical distribution system (transformers, power lines, substation components, etc.), again at a substantial cost increase. Rooftop solar systems make good sense, but not in lieu of utility scale wind energy development.

The proposed wind project will not be without local impacts. There will be impacts to birds and bats, and there will be impacts to the viewshed. However, I have reviewed the Environmental Impact Report for the Humboldt Wind Project and in my opinion Humboldt Wind, LLC has done a good job of identifying impacts and identifying mitigations where feasible. I think significant impacts have been adequately mitigated. For the impacts that cannot be mitigated, I think they are far outweighed by the benefits the County will receive. This includes substantial tax revenues and job creation, increased energy security, a cost-effective supply of local renewable energy, and climate change mitigation.

The do nothing option will also have significant impacts. Our climate is rapidly changing and the impacts to our planet will be devastating. We need to act as quickly as we can to move to 100% renewable power. The Humboldt Wind Energy Project will help Humboldt County meet its climate mitigation goals, and the benefits will far outweigh the modest negative impacts the project will impose.

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(Cont.)

I ask you to support the development of the Humboldt Wind Energy Project.

Sincerely,

A handwritten signature in black ink, appearing to read "James I. Zoellick". The signature is fluid and cursive, with the first name "James" being the most prominent.

James I. Zoellick
Managing Research Engineer – Renewable Energy