
INTEROFFICE MEMORANDUM

TO: ELIZABETH ESCHENBACH
FROM: SPENCER BABCOCK
SUBJECT: SOLID WASTE MEMO
DATE: 13 NOVEMBER

Purpose: The purpose of this Terragen Windfarm memo is to discuss the potential benefits and hazards from the proposed Terragen windfarm in Humboldt County.

Discussion: For my campus event memo I attended a panel discussion and debate about the local Terragen windfarm project. Hosted by Arne Jacobson, with Lori Biondini, Adam Canter, Nathen Vajdos, Tom Wheeler, and donna Wright as panelists. The possible windfarm was a lot more controversial than I first anticipated. This \$250-350 million dollar project on Monument and Bear River ridges could potentially generate 400 GWh annually, approximately 40% of Humboldt county energy use. California is currently powered by 34% renewable energy and has plans to meet 100% renewable energy by the year 2045. This wind farm could help California meet this goal. One thing that I took away from this discussion is that in order to have 100% renewable energy it is essential to diversify the energy system ie, wind, solar, natural gas, due to energy storage problems.

Although this windfarm could produce immense amounts of energy for Humboldt county, but it has many challenges. The two proposed ridges are classified as a cite 4 from the fish and wildlife, which they specifically say is "unfit for wind energy" due to environmental consequences. One concern is the local Hory bat population. These solitary bats population that live in trees could potentially decrease by 90% over 30 years due to the windmills. Although this can be prevented by stopping the turbines during a specific migration time during night. It could reduce the death toll to only 10% while only reducing the amount of energy produced by 1-3%. This problem can be prevented but there are other problems that solutions have not be found for, such as other environmental effects, local plant devastation and local Wiyot tribal sites. For this reason the wind farm is unbelievably controversial.

Action: I would highly recommend for future ENGR 280 students attend other discussion panels that are about this potential project and look deeper into the proposed Terragen wind farm.