

MEMORANDUM

TO: PROFESSOR ESCHENBACH
FROM: TAYLOR BELL
SUBJECT: TERRA GEN WINDPOWER DISCUSSION PANEL
DATE: NOVEMBER 13, 2019

Introduction

Humboldt county has the potential to replace half of the communities energy source with wind power through the Terra-Gen Wind Generation Project. The event began with facts about wind power and wind turbines both in general and specific to the project in Humboldt county. After the audience was given general facts regarding wind power and wind turbines, we were then introduced to the specialists that would be on the discussion panel where the audience was able to hear both the pros and the cons in regards to this project.

Discussion

Some of the initial facts that were discussed included energy usage within Humboldt County and why Humboldt County is interested in wind power; Humboldt County currently uses about 800 gigawatt hours per year, and half of that is from natural gases which could be entirely replaced with the wind power project. Comparisons were made between wind power and every other power source, and it was established that wind power releases the least amount of carbon dioxide emissions, even less than solar panels. We were also informed about the specifics of the project such as the wind turbines will be placed along Monument Ridge and Bear River Ridge, there will be 47 turbines that will produce 400 gigawatt hours per year, and the turbine height will be about 440 feet. We were then introduced to the pros and cons of the project. Of course the most important pro was the use of clean and renewable energy within Humboldt County, but the representative for the Eureka Chamber of Commerce announced that it would also allow Humboldt County to produce half of its own local energy which the community has been striving for. One of the biggest concerns mentioned in the discussion was the concerns from the Wiyot Tribe. The land in which the wind turbines would be placed on represents cultural diversity, is home to archeological artifacts that the Wiyot Tribe holds significant, and the ridges are also a high prayer site for the tribe. Not only are there impacts in regards to the Wiyot Tribe, but there are also impacts to animal life within the sites, and one of the species most largely impacted will be a species of bat local to Humboldt County. Some birds that will face complications are birds like the Golden Eagle and the Bald Eagle which are both sacred to the Wiyot Tribe as well. The placement of wind turbines in Humboldt County is something that everyone needs to be discussing.

Conclusion

The placement of wind turbines in Humboldt County will help the community to reach independency through local energy, and Humboldt County will make movements towards the usage of solely clean energy. The movement towards clean energy is something every community should

be striving to achieve; however, there will be large setbacks with the production of wind turbines towards the Wiyot Tribe and animals local to the sites for the wind turbines. Deciding whether or not those impacts are worth it for the community to rely on clean energy is something the community itself will come to conclude. I personally believe that wind power is incredibly important and is something that needs to become larger all over; although, I do believe that Native American tribes deserve to have a say in the location of such things, and wildlife should be another high priority when considering the location as well. I think events like this are incredibly important for future engineering students to attend. Not only does it show what some complications for a project like this could be, but it gives students a sense of their community and the effort put into trying to better the community.