

Jared Phillips

Wind Turbines and Pollutants Energy Relation

In this experiment I tested to see if certain pollutants in the air can have a positive or negative effect on the energy output of a wind turbine. To research this I constructed a controlled environment in which I could control all the factors and constantly circulate the air and also pushes the air at a constant speed. To get better results I took multiple reading over a 2 minute testing period then averaged them all out. I recorded my results in DCA 200 μ (micro amps). Some problems I encountered were sporadic readings but I countered that by taking multiple readings. My results were very surprising to me as I found that the gassier pollutants increased the output by a significant amount and so did the ash but the only thing that made it perform worse was the dirt which was a direct contradiction of what my hypothesis stated. So all in all I found that air borne pollutants can help to increase the efficiency of the wind turbine.