Dear Lancaster County Planning and County Commissioners,

My name is Larry Chapman, and my address is 1850 Gage Road, Firth. My home is located one mile north of Cortland, and about a half mile east of US Highway 77.

I have attended all of the meetings recently held to discuss zoning for wind turbines. I have made comments at these meetings outlining my many concerns about safety, noise that can cause health problems, and loss of property rights and value. Over the past several months, I have provided the County with copies of peer reviewed scientific studies to back up these concerns. I got little in the way of positive feedback. At the committee meetings, the big majority of time, the only information the Planning Department provided at these meetings was information promoted by wind developers. It was up to my wife and me to find the scientific evidence to contradict this wind developer information, provide alternative model zoning, and provide it to the Planning Department. This experience left me feeling that my efforts were not appreciated and my input was not being seriously considered.

At the committee meeting where the topic of property value loss was briefly 'discussed', it appeared that the position of the Planning Department staff was to refuse to admit the possibility of property value loss. Their presentation relied on one, out-of-date, flawed study prepared largely by wind developers, and they did not look at any other input. I can understand from a legal perspective that the County may not want to consider the possibility that property value loss exists. You do not need a study to know that a property with a wind turbine 1,000 feet away is much less appealing to buyers than the same property without the turbine. The proof that proximity to a wind farm negatively affects property sales is out there for anyone who looks for it. If the county does not mitigate this issue now through zoning protections, like in other parts of the country, this will lead to costly law suits or require out of court settlements.

On the topic of wind turbine noise, as previously mentioned, I provided several studies that examined the negative health effects of turbines located too close to people's homes. While I am not an acoustician or audiologist, the peer reviewed studies about noise, sleep deprivation, and infrasound that I provided was created by well known and respected scientists. These are world renowned scientists whose knowledge on these topics should not be ignored. Fortunately, the Planning and Health Department invited guest speakers to one of the committee meetings that basically backed up my earlier positions and concerns, and used several of the same references I had provided. While the draft zoning does little or nothing to protect citizens from the health effects of infrasound, it does include reasonable sound limits for audible noise.

I am disappointed with the proposed draft wind energy amendment. I do not feel the committee process itself was done properly. It appeared that all but 4 or 5 of the committee members were overwhelming pro-wind, some of whom stood to profit from these projects. I do not think it fairly represented the makeup of those affected by the zoning being proposed. Given all of this, it is not surprising that the draft zoning would be inadequate. The draft zoning provided by the Planning Department staff fails on these points, which MUST be addressed.

• The current proposed zoning does meet the World Health Organization (WHO) guidelines for safety. For that, I am very grateful that the County is doing the right thing. It is critical for the health and safety of the people living near a wind turbine not exceed 40 dB. According to the WHO, with noise above 40 dB, "adverse health effects are observed among the exposed population. Many people have to adapt their lives to cope with the noise at night. Vulnerable

groups are more severely affected. "Above 55 dB, "the situation is considered increasingly dangerous for public health. Adverse health effects occur frequently, a sizeable proportion of the population is highly annoyed and sleep-disturbed. There is evidence that the risk of cardiovascular disease increases." For these reasons, the zoning must never exceed 40 dB at any time, and the zoning must contain very heavy fines and consequences (such as decommissioning offending sites) if these sound limits are exceeded at any timepost construction. The zoning should address who, how, and when testing will be done, and ensure it is done fairly. Wind developers will argue loudly against any penalties because that is their plan – to dupe communities into believing they will not exceed the limits when they fully know they will. Without real enforcement and severe penalties, the County's zoning for sound limits is worthless.

- The proposed zoning measures the distance of a wind turbine to a non-participant's dwelling. This is dangerous, and likely illegal because impinges upon the property rights of the non-participant by limiting their land use options. Landowners will not be able to place new dwellings on, or subdivide their properties with a wind turbine right next to their property line. If this stands, it will most certainly be legally challenged. The draft zoning must absolutely be changed to be measured from the property line in all cases.
- The proposed draft zoning continues to rely on a setback of 1,000 feet. There is abundant evidence that 1,000 feet does not provide necessary protections for people living near large industrial wind turbines. Other than increasing the profits of the wind developers and leaseholders, there is no logical, reasonable reason for a 1,000 foot setback. It does not protect citizens at all. It does not even meet the wind turbine manufacturer's safety recommendations. The developer for the Hallam project says on their own website that the setback should be at least 500 meters 1,640 feet. It is difficult to know what setback distance is truly safe, but 1,000 feet is outrageous and irresponsible. Participants can do what they want, but the zoning setback should be changed to be no less than a half mile from the property line for all non-participants. This draft zoning must be changed!
- Finally, the citizens of Lancaster County have a right to expect that when county law changes, that County government will apply the most current, comprehensive and protective features of the law, and will seek out and apply best practices from around the world to apply to these statutory changes. There are many details about basic things such as liability, decommissioning, and government oversight that are missing and should be included in this zoning. As is, this draft zoning is legally questionable, incomplete, and ineffectual due to its weak enforcement. These deficiencies need to be corrected before going forward.

In conclusion; the draft zoning as it now exists is incomplete in that it is missing critical protections for landowners and taxpayers. It is also inadequate and needs to be modified to provide sufficient setback distances. Much needs to be added to and some things changed in this zoning. The proposed sound limits are acceptable, but only if properly enforced. Lancaster County needs to get this zoning done right.

In the right location, a wind farm can be a good thing for energy production and community tax support. This is not true for Lancaster County. We do not *need* one here, and clearly they are not good for this type of community. Whether the farming community likes it or not, Lancaster County is becoming more urban all the time. Lincoln has grown 40% since 1993. There are more acreages and

housing developments being planned all the time. Hickman is the fastest growing community in the state. Lancaster County needs to have wind turbine zoning that protects everyone in the county. We, the many rural residents of this county, demand protection. There are simply too many people living here to allow huge parts of it to become industrial parks where people cannot live safely. It is time for our Planning Commissioners and County Commissioners to stand up and do the right thing for the citizens of this county. Make sure our zoning works! Wind farms need to be located well away from populated areas. NOT IN ANYONE'S BACK YARD!

Larry L. Chapman