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Dear Planning and County Commissioners,

No matter how worthy you believe a cause, other people's lives should not be disregarded or their health, safety and welfare diminished in an effort to achieve your goal. Zoning is established on the premise that health, safety and welfare of others matters and that neighboring land uses MUST be compatible. Planning boards exist for the express purpose of protecting it's citizens and it's communities. A wind turbine developer does not have the right~ nor should the community, through the operation of the Planning board grant him the right ~ to impose adverse impacts upon any individual or the community. Wind turbines should not be allowed to disrupt the quality of life of a non-participating land owner. Wind turbines should not be allowed to cause any adverse health consequences for anyone. Wind turbines should not be allowed to cause any disruptive shadow flicker on any non-participating land owner. Wind turbines should not be allowed to cause any disruptive noise on any non-participating land owner. Wind turbines should not be placed so as to cause a decline in the property value of a non-participating land owner. Wind turbines should not be allowed to cause any degradation of the environment.

Wind turbines are industrial machines and need to be treated as such. There are known dangers in the industry and short comings the manufactures are still trying to work out. Wind turbines have a zone of danger starting at the stem radiating out a certain distance depending on the height of the turbine and the blade radius.

Placing any non-participating land owners property in that danger zone is completely ill responsible and unacceptable. I have two young girls who stand out by the road waiting on the school bus in the mornings. Currently, I have 12 near 500ft tall wind turbines proposed to be sited within one mile of my home by Volkswind. One turbine is sited a mere 800 feet from my home, not my property line, my home. It is your job to make sure my kids and our family is going to be safe. You see in this part of the country, we get a lot of ice. Wind Turbine blades do get ice build-up and throw ice. It is a known fact in the industry that there is NO reliable sensors for ice build-up. The only reliable way to keep ice from being thrown is to have a technician turn the wind turbine off manually. The sensors they do have fail all the time. I have a right to know that my kids are not going to be in danger from ice throw while they are waiting on their school bus out by the road. That wind turbine has to sited far enough away there is no question about their safety.

[http://www.windaction.org/posts/41039-cold-climate-operations-why-oems-must-avoid-icy-situations#.VC62F\\_1dV8E](http://www.windaction.org/posts/41039-cold-climate-operations-why-oems-must-avoid-icy-situations#.VC62F_1dV8E) 7-8-2014  
“No reliable method to detect ice buildup on blades”

It would seem to be only common sense that you can't rely on the advise of a wind farm developer. The developer has his company's profits foremost in any of his advise. It's a complete conflict of interest. Why then is Volkswind willing to site wind turbines 1000 feet and closer to a non-participating land owners home when their own company's website states a minimum setback for wind turbines is 500m (1,640 feet)? That means my kids are in that zone of danger every morning! We asked repeatedly at the meetings for Mr. Wood to provide setback recommendations by the different wind turbine companies he deals with. None were ever provided. Mr. Wood stated he has 10 years experience with developing wind farms but when asked for safety setbacks for fire, ice throw, noise, shadow flicker and blade failures he knew none. It's of my opinion



that he knows these setbacks but was reluctant to say because he knows he is trying to site the wind turbines in his project closer to homes and people than what is recommended by the turbine manufacturers. Wind turbines do get sited closer to homes than what is safe. It happens and it's happening now. People who have been taken advantage of do find ways to fight back. "Land owners file class action against Wind Farm company for doing just that. Siting turbines closer to peoples homes than what their own company's safety standards allowed."

<http://legalnewsline.com/issues/class-action/251528-land-owners-file-class-action-against-apex-to-prevent-wind-farm-construction>

<http://www.volkswind.us/wind-farm-development/planning.html>

In the new text amendment draft under (d), it addresses shadow flicker. It requests any wind turbine within ½ mile of a non-participating land owners property line to provide shadow flicker modeling. It needs to be changed to 1 mile from ½ mile. Like I said I have 12 wind turbines proposed within 1 mile of my home in every direction. I will be completely surrounded by wind turbines. It is documented that shadow flicker can travel father than ½ mile. I have the right to know if any of these wind turbines are going to cause shadow flicker on my property. Then in that draft it needs to be changed to NO shadow flicker allowed at all at any time on my property. Shadow flicker is well documented as causing health effects and any non-participating land owner should not be knowingly subjected to that!

<http://betterplan.squarespace.com/todays-special/2009/2/14/11408-s-is-for-setbacks-why-1000-feet-is-just-too-close.html> This article states a setback from a wind energy handbook at 10 rotor diameters for shadow flicker. A Siemens rotor is 108m. 108m x 10 = 1080m (3543 feet).

In the new text amendment draft under (h) setbacks, it addresses lots of 10 acres or less and 20 acres or less separately. This completely discriminates against property owners. The way it is written it would be allowing a wind turbine to be sited closer to a non-participating land owners home on 20 acres or less than a non-participating land owners home on 10 acres or less. This discrimination is completely unacceptable. It should be stated from a non-participating land owners PROPERTY LINE (and not dwelling) regardless of the amount of land that land owner owns. The way it is stated it would be allowing a larger acreage owner to be taken more advantage of than a smaller acreage owner. That has to be changed!

On the county's board website, I provided a link to the Vestas safety manual. In this manual the company recommends an area of 400m (1312 feet) to be cordoned off for all fires. With the planning commissioners recommendation of keeping the setback for non-participation land owners at the current 1,000 feet, that again places my home, my property, my kids on that road in the danger zone. The fact that this was brought to the planning commissioners attention and was not considered at all in their recommendations on setbacks is completely unacceptable. I also find it quite disturbing that the planning commissioners provided a handout of 24 different counties in Nebraska and what their setbacks were for wind turbines, when only 7 of those counties even had wind farms. There are 14 counties in Nebraska that currently have wind farms. It would have been more informational to have a handout with the counties that have wind farms not ones that just have a base line zone in place. In 2010, Nebraska legislators passed LB997 requiring all municipalities and counties, with the exception of villages, to adopt an energy element into their comprehensive plan. So there are many counties that



have adopted the same base line zone for wind turbines, but don't have any wind turbines in their county. 17 of the counties provided on the handout have no wind farms and have the 1,000 ft setback from a non-participating land owner. The real question should be is what are the setbacks in the counties that have wind farms? What are the heights of the wind turbines and blade diameters of the wind turbines they took in consideration when they decided the setback? Also, what is that counties population density? You see, Boone county has the Larado ridge wind farm. That wind farm is located 3 miles from town. That counties setback is 1,000 ft from a non-participating land owner. They did not need to change the setback or worry about it because the wind farm is 3 miles away from anybody. Boone county has a population density of 8 people per square mile. Holt county has 1/2 mile setback for a wind turbine from a non-participating land owner. Holt county has a population density of 4 people per square mile. Holt county is currently dealing with a proposed wind farm that will have wind turbines near the height of 500 feet.

Lancaster county has a population density of 357 people per square mile! Southern Lancaster may be an AG district, but it is a heavily populated AG district that continues to grow every year! Lancaster county is the most populated county in the state that is dealing with a proposed wind farm. Many of us in this area feel we are way too populated to be subjected to any wind farm. The way this county is platted out in the rural areas you have a road every mile. So you have sections of one square mile. The minimum setback for a 500 ft wind turbine for fire and throw risk is at least 1/2 mile. For noise the setback minimum should be a mile. Many of the lease holders in the current proposed Volkswind project own a lot of acres, but they don't own a whole section. It would be one thing if a land owner owned continuous sections after sections, but they don't. The most any one of the lease holders owns in a square mile section is a half section. That means

his property or his land base is too small to house a 500 foot turbine. If he owned the whole section, he might could put a turbine right in the middle. Mr. Wood made the statement that these farmers have the right to earn income off their land, that they have high taxes to pay. Most of the land in this part of the county is very flat and very farmable. Most of it is pivoted. The reason these farmers want to encroach on their neighbors is because the only place left on their planted and pivoted acres is the corners. The reason they have high taxes to pay is because they make a lot of money! It's just like the old saying "They want their cake and to eat it too!" They want their crops, they want their pivots and now they want wind turbines too! If they would be willing to take out a pivot or two, some might have enough land base to house a wind turbine. That is why when you look at the propose wind farm map for Hallam and look at the turbine sitings, they are in the corners of their sections or right on neighbors property line. They are trying to avoid their pivots. It's not as if their land is unusable or barren. It's not as if they are unable to make an income from their land already. Taxes and monetary gain to the land owner or to the county should not be a deciding factor in this in fact, it is illegal. The safety of the people living on the land is the most important thing we are dealing with here and allowing this type of encroachment and putting people at risk is completely unacceptable!

What apparently a lot of people for the wind turbines don't understand is that when a power plant can not run at 100%, it pollutes more! By placing a wind farm on the same transmission lines as Sheldon station, they compete with each other. When the wind blows and the wind farm is able to put power on the lines, the power plant has to back off the lines and idle or even shut down. Then when the wind stops blowing and the wind farm can no longer put power on the lines, the power plant has to be ready to



come back online. All this bringing the power plant up and then bringing it down, actually creates more pollution than just letting it run at 100% all the time. It's hard on the equipment at the power plant and causes more wear and tear which in turn makes it less efficient and more polluting. The idea that putting a wind farm in this area is going to make the air cleaner is a complete misunderstanding of how the whole thing works.

From the Planning Commission meeting notes on Wed, June 11, 2014: Sara Hartzell asked Mr. Joe Wood from Volkswind about the structural failure of wind turbines. Mr. Woods response was "There is not a lot of data at this time. It seems very rare. Only about a dozen structures have failed". Apparently Mr. Woods definition of "rare" is not even in the Webster's dictionary! In 2014 there are over 33 reports in the USA alone of wind turbine failures ranging from multiple blade failures, to fire and structural damage. There are a total of 163 pages of reported failures that can be viewed at the Caithness wind farms website. Unfortunately, this is just one more cover-up seen from wind farm developers.

<http://www.caithnesswindfarms.co.uk/fullaccidents.pdf>.

There were many issues of concern raised at the meetings. I myself spoke on my research of studies done and information found concerning many of these issues. Many of these issues have been completely ignored by the planning commission. I find myself very disheartened at the planning boards willingness to ignore these issues and not change any of the setbacks in the face of so much evidence to the contrary. I would recommend everyone do their homework and research these issues yourself. Here are some links for your research.

<http://www.windaction.org/posts/38556-wind-turbine-truths-blow-in-the-wind#.VZd6uz9Y5GV> “Destructive consequences that may go with a wind farm” 9/2013

<http://www.gcube-insurance.com/en/uncategorized/top-10-causes-for-turbine-failure/> “Top causes for turbine failure by an international wind farm insurer” 2015

[http://docs.wind-watch.org/vestasv90-100\\_safetymanual.pdf](http://docs.wind-watch.org/vestasv90-100_safetymanual.pdf)  
“Vestas wind turbine safety manual”

<http://www.maclester.edu/understandingwind/CategorizedQuestions.pdf> “Understanding Wind Energy Questions posed to the experts”

<http://www.awea.org/Issues/Content.aspx?ItemNumber=5726>  
“AWEA, The wind energy siting handbook

<http://www.windsystemsmag.com/article/detail/136/turbine-fire-protection> “Turbine Fire Protection”

<http://wildfire.blog.nfpa.org/2015/03/mitigating-wildfire-risk-at-wind-farms.html> “National Fire Protection Agency: Fire Break”

<http://www.elginreview.com/?p=8482> Prairie Breeze wind farm, NE blade failure account



<http://www.albionnewsline.com/2014/04/27/tower-blade-comes-down-at-wind-farm/> Nebraska blade failure account

<http://www.elginreview.com/?p=9091> Prairie Breeze wind farm, NE blade failure account

<http://www.newsweek.com/wind-turbines-are-killing-lesser-prairie-chicken-328288> Wind turbines are killing the Lesser Prairie chicken. 2015

In closing I want to thank Scott Holmes at the Lancaster Health Department for bringing in the noise experts and taking that information to create a landmark noise level for wind turbines. Lancaster County is already known statewide for having the cleanest air acts in the state. Which makes it only fitting that we should also have the most informed and researched noise limits for the public's safety in regards to wind turbines.

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