

LAKE TOWNSHIP PLANNING COMMISSION

Unapproved Minutes
Wednesday, April 23, 2008

The meeting of the Lake Township Planning Commission was called to order at 7:10 PM by Chairman Colletta. Members Gerry Geppert, Rich Ehrlich, Tim Lalley and Valerie McCallum also present along with approximately 50 guests including Richard James of E-Coustic Solutions.

After calling the roll, Chairman Colletta introduced the guest speaker, Richard James, and turned the meeting over to him for a power point presentation on wind turbine noise and guidelines for siting of wind turbines.

Mr. James began his presentation by explaining his background and experience and some background on the State of Michigan's recommended siting guidelines. He discussed the difference between audible noise and non-audible low frequency and infrasound, and explained how the current level of a 55dB(A) sound level being recommended as the maximum allowable at the property line for wind turbine noise is within the range of a normal conversation or 50-65dB(A). According to Mr. James, this sound level is acceptable during daytime hours when ambient or background noise levels are higher, but during the evening when a level of 25dB(A) is the normal ambient sound level in the agricultural/rural areas, this would be similar to someone having a conversation outside someone's bedroom window.

Mr. James' presentation was rather technical and focused on the importance of a proper pre-construction background sound study and follow-up post construction studies and testing. He referenced guidelines from the World Health Organization and stated that setbacks should be based on these sound studies with suggested levels not to exceed the background L90+3dB(A) or dB(C) when measured during the pre-construction noise study for the quietest time of evening or night. The township could adopt a more lenient limit of +5dB(A) rather than the +3, if desired.

The slides of Mr. James power point presentation are attached and incorporated into these minutes. This meeting was also recorded and a DVD of the recorded video is also retained and on file by the township.

At the conclusion of the presentation, the planning commission members took the opportunity to question Mr. James. Geppert asked whether there was any ground vibration from these turbines. Mr. James was not aware of any studies that show significant ground

vibration, however, he suggested that turbines with foundations in areas of bedrock might be different.

In response to questions asked by McCallum, Mr. James discussed the background in the development of the Michigan Siting Guidelines for Wind Energy and the Wind Energy Task Force, including a study done by Lawrence Tech for the State of Michigan Department of Labor and Economic Growth, health studies currently being done by Dr. Nina Pierpont; and how the township would establish a noise level requirement in an ordinance and the responsibility of the wind developer in meeting that requirement. According to Mr. James, there is no correlation between the siting guidelines recommended by the DLEG and the recommendations made by Lawrence Tech.

In response to questions by Lalley, Mr. James discussed the differences between using setbacks for physical protection purposes from ice throw or other hazards and those for noise and health issues being based on the turbine being used, meteorological conditions in the area and the existing ambient background sound. If pushed to use a specific setback that is safe, the medical community, including Dr. Pierpont, is recommending 1 ½ mile, not based on noise, but on medical pathology. Mr. James stated he would recommend nothing less than ½ mile. Mr. James also discussed the difference in noise impact when dealing with one turbine versus many turbines and lack of coordination between neighboring communities and noise impacts when adjacent communities are hosting wind turbines under separate ordinance requirements.

In response to questions by Colletta relating to an ordinance for Lake Township, Mr. James stated that he would send copies of noise ordinances used in other communities he has worked with.

There was also discussion regarding wind ratings throughout Michigan including offshore, ranging from class 1 to 3 on land in Michigan and class 6 and 7 offshore.

Following questions by the planning commission members, Chairman Colletta opened the questioning session to the people in attendance.

Kathleen Bolton referred to the wind ratings and the efficiency of wind turbines being significantly higher with offshore turbines and asked whether offshore turbines would have less potential for noise complaints due to a higher ambient noise level along the shoreline as mentioned in the presentation. Mr. James acknowledged that it would be easier to site turbines offshore and that there is nothing in

the Michigan Siting Guidelines that says turbines have to be on land and the reality of offshore will become more feasible as time goes on. According to Mr. James, in Europe once they had built wind farms right up to the rural areas, when the next push came it was offshore and there was nothing to stop it. Mr. James mentioned attending a Huron County zoning meeting a few years ago where a zoning board member stated that he didn't want to talk about offshore wind turbines because he had a house on the shoreline and didn't intend on looking at them. Mr. James stated that if we're asking people in a rural community to sacrifice their view, we should spread it around. Even if it is not viable now, it may be viable in ten years and we are talking about wind energy for the long haul.

Bolton expressed to the planning commission her concerns that DTE is not the only company who may be interested in developing commercial wind facilities in Lake Township and the planning commission should keep that in mind when formulating an ordinance which would apply to any and all developers, on land as well as off shore.

DTE officials and Lou Bushey reminded the planning commission that they cannot regulate beyond the shoreline in the waters of the state, that it will be up to the state to regulate any offshore wind facilities. Planning commission members agreed that off shore developments would be out of their hands, but it was acknowledged that such developments are being looked into at the state level and other states, including Wisconsin.

Jeff Szymanski of Black & Veatch acoustical consultant for DTE, expressed some concerns over using the L90+5 in a rural community since noise levels can be very low at times and if the lowest level is used as the L90, that could essentially prohibit wind turbines in many sites DTE may be considering. Mr. James agreed that there could be such a problem, but suggested that it would be at that point that DTE and the township would begin negotiations on acceptable noise levels. Mr. James referenced the Pedersen study on noise and the findings based on that study that only one in ten people would complain about noise at a level of 35 dBA,

Bolton asked how the township would enforce any noise standards considering that once turbines are constructed, if they are in violation it is not likely they will be removed.

Mr. James stated that negotiations on acceptable noise levels need to be done before the turbines are constructed and what will be acceptable noise levels based on the pre-construction studies.

In follow up to a question by Steve Vaughan, Mr. James discussed how people react differently to noise and it depends on the circumstances as to how much they will be affected.

Another person in attendance stated he had attended Monday's meeting of the Michigan Wind Working Group where offshore wind farms were discussed with Saginaw Bay and five miles off Pte. Aux Barques being mentioned as desirable locations.

Bolton suggested the planning commission send a letter to Governor Granholm encouraging offshore wind development since it would not only be more efficient, but noise concerns and other negative impacts from neighboring dwellings would not be as much of an issue. Yvonne Bushey took issue with Bolton's comments and stressed that the petition signed by 135 property owners was for a wind overlay zone in the agricultural district, not in the residential area.

Pam Fischer commented that we need new sources of energy and related that there can be side affects to anything. She stated she doesn't want a nuclear or coal burning plant anywhere near her home and sometimes we have to take the lesser of two evils. She has signed a lease with DTE but she would not want to put something on her property that might hurt her or her neighbors.

Mr. James explained in response that the problem with wind turbines is we don't have the history or we're not looking at the history for setting the standards. We need to look at what has been learned about wind turbines, community compatibility, health issues, etc from places that have had wind turbines and learn from them so that as we move forward, we do it properly and don't put people at risk. In Wisconsin where the turbines are 1000' from the residences, one of the families who is a non-participating landowner with an autistic child, when their home is downwind from the turbine, their child sits in the living room rocking to the rhythm of the sound and will not come out of it. When planning for these types of projects, it must be done properly to take into account those people who are more vulnerable as well as the more healthy people using engineering and health input. There are a lot of unknowns about wind turbines.

McCallum asked DTE whether they were doing any studies on health affects. Mr. Nance stated that they have not done any health studies as of this time and are concentrating right now on the studies that take a longer time period, such as wildlife studies and wind speeds.

Lalley stated that the planning commission is trying to come up with an ordinance that is good for the community. He stated further that wind energy has become a very divisive issue and the planning commission is not doing this as fast as some people may want, or like other townships, but when the planning commission is done, it will be done correctly. He stated the planning commission is trying to do the research and studies to ensure they write a good ordinance.

Yvonne Bushey mentioned there are other states that have wind farms and there are most likely studies already done, which may be available through the American Wind Energy Association and asked whether anyone has gone to that site to find that information.

Mr. James said he has been looking for them and the one area where there seems to be a huge gap is regarding the health affects. Many western states where wind farms have been operating have low populations. There are some special considerations in this area to look at.

Yvonne Bushey also stated that the Netherlands is a small country with a large population and they don't have the land area for turbines and that's why they have them in the water.

Mr. James commented that there is lot of political turmoil in the Netherlands and other European countries, similar to what we are seeing here. What needs to be looked at is what communities are living well with the turbines and what communities aren't and study the issues.

Yvonne Bushey stated the reason for the petition was to show community support and that it is not just a few farmers who want the turbines in Lake Township. She read the petition language, "We the undersigned taxpayers and/or residents of Lake Township are in favor of having an overlay ordinance for wind turbines for the agricultural area of Lake Township similar to the one Huron County has adopted."

Bob Siver asked Mrs. Bushey how many people who signed the petition know what the county's ordinance is. He stated, if approached, he probably would have signed it, too, out of ignorance,

and stated he is in favor of wind energy but maybe we have a chance to set the bar higher.

Lalley said that from the beginning the planning commission has been pro-wind and their concern is proper siting. He further stated that he takes issue with the petition language and suggested a more appropriate petition would have just stated, "we the citizens of Lake Township are in favor of wind energy, period" without any reference to the county's ordinance.

Yvonne Bushey stated that the language of the petition was for wind turbines to be located in the agricultural area, not in the residential area. I don't think anyone wants them in the residential area.

Alfred Kelterborn stated he lives in the agricultural area and doesn't think they look good, but in talking about noise he would like to know if Gene Champagne, who lives in the middle of the Harvest Wind turbines, would like to say something about the noise.

Gene Champagne stated he would prefer not to, but since asked, he does live in the center of a wind farm and when he and his wife get tired of watching television or want some piece and quiet they can no longer go sit outside, those days are over. He stated he has invited DTE and Russ Lundberg from Huron County Zoning and welcomes anyone else to come sit in his yard and listen to the windmills and then decide from that. He stated he finds them annoying and he doesn't know whether 25, 30 or 35 is annoying to different people, but it's too late now. He said it is important to do the work on the front end because once they are up, they're up. He also stated this isn't a good time to sell a home with the real estate market down, but he's stuck with it, they're not going to shut them off or tear them down. He said he's not sure whether the turbines are 1000' or 1300' feet away from his house, but he is totally surrounded. He said that a lot of things discussed tonight are correct. If you're downwind, you will hear the noise. He said he is surrounded and always downwind so there is no getting away from the noise and can even hear them with a low wind. He said that so much of the stuff in the presentation is right, including the reference to the Van den Berg study on peak noise being at four o'clock when you have the whoosh as the blade passes the tower, or if the wind is in a different direction and he doesn't hear that noise, he hears a high pitched whining noise.

Alex Gleissner asked Mr. Champagne whether he thinks he may have a problem selling his house in the future. Mr. Champagne stated it is hard to say, but if he was going to buy a house in the country looking for quiet, he would not buy it.

Yvonne Bushey mentioned to Mr. Champagne that he lives in a farm area and has to listen to farm machinery anyway from April to November. Mr. Champagne stated, in response, that farming activity is for short durations but the wind turbine noise is 365 days a year.

Mr. Champagne also mentioned the wind shear that was discussed during Mr. James' presentation. He stated that often when he gets up early in the morning to go fishing there is no wind at ground level but he can tell which way the wind is coming from by looking at the turbine blades. Mr. Champagne also mentioned the blade flash, stating that when he and his wife sit down to dinner in the dining room, the shadows going around the room are very annoying. He stated this lasts maybe three weeks a year when the sun is dropping behind that tower. There is also TV interference and that is another thing the planning commission should look into. He said that John Deere did fix that problem but he didn't hear anyone mention that.

Grady Nance of DTE stated that Mr. Champagne is surrounded by turbines and that relates to the importance of proper siting.

Alex Gleissner asked about the pre-studies and post-studies and whether those studies will be replicated two or three times to verify the results. Mr. James responded that there should be multiple tests. He went on to say that pre-study tests are easier because conditions are stable with only seasonal variations or day/night variations to take into account. Once a system is in place, testing becomes more complicated due to more variabilities.

Mr. Gleissner also asked about research information and sources of such information and whether it is wise to go to only one source, such as the AWEA, who might have a vested interest in only providing studies that are favorable to wind energy, or would Mr. James recommend using multiple sources for information.

Mr. James' response was that the AWEA is an industry trade firm association whose job is to advocate the business.

Gene Champagne wanted to make it very clear that he is pro-wind energy, he is not trying to start any anti-wind group and doesn't want to join any anti-wind group. He further stated that he thinks it is great that Lake Township is going about it as they are. He stated he went to some meetings in Oliver Township but feels they pushed it through really quick. He stated this was a wonderful meeting with a lot of information and thoughts brought up and shared. He thinks the Oliver Township Board rushed it through and the Oliver Township residents

really didn't have that many questions. He stated by doing the work up front he thinks Lake Township is going about it the right way.

Jeannie Williams also wanted to thank the board for going slowly and cautiously. She stated that Lake Township is a wonderful community and agrees that this issue should be looked at very carefully. She said there are different types of noises, you can have loud noises that won't bother you or you can have a faucet dripping at night that can drive you out of your mind and a loud tractor will not bother you at all. The planning commission has to look at everything. Many things were brought up that she never thought about, not only the noise but also the shadow from the blades. She stated that it affects her when she drives through the wind farm area, she is sensitive to the motion of the blades.

Bob Siver stated that Mr. Champagne's story is heartbreaking and asked whether it is possible to write something into an ordinance that would have protected Mr. Champagne or other residents from this type of situation, it being not only a quality of life issue but also some tangible loss of property.

Colletta acknowledged that the planning commission will want to consider that aspect in an ordinance, also. Colletta said the board has the responsibility to look at all the issues and all the people, those on the shoreline, farmers, and those living within the agricultural area. Colletta wants the planning commission to do the work up front and to see the residents attend the meetings and learn about the issues as the planning commission learns about them before adopting any ordinance.

(Chairman Colletta called for a brief recess before resuming with the remainder of the agenda)

Site Plan Reviews:

Kurt Joss/Dan McIlhargie – 3583 Port Austin Road. Application is to add a covered front porch across the entire front of the existing house with a 16' setback on one side and a two foot setback on the other side. The planning commission discussed the provisions of Chapter 12 and the 15' rule for extension of nonconforming structures. If the applicant wishes to bring in the porch to three feet, then it could be approved. Otherwise it will need to go before the zoning board of appeals.

Mark Voss, 5290 Port Austin Road. Application is for an addition to the front of the house and a deck. Meets the setback from the OHWM and lot coverage. Approval recommended.

Minutes of March 26, 2008 meeting approved upon motion by Geppert, seconded by Colletta. Motion carried.

Motion to adjourn by McCallum, seconded by Lalley. Meeting adjourned at 10:50 P.M.

Valerie McCallum, Secretary