# **BOONE COUNTY PLANNING & ZONING COMMISSION WORK SESSION**

BOONE COUNTY GOVERNMENT CENTER, CONFERENCE ROOM 301 801 E. WALNUT, COLUMBIA, MISSOURI (573) 886-4330

Minutes 5:00 P.M. Thursday, June 6, 2019

Commissioners present: Boyd Harris, Rhonda Proctor, Jeff McCann, Greg Martin, Fred Furlong, Bill Lloyd, Steve Koirtyohann (arrived 5:05), Carl Freiling (arrived 5:15)

Energy & Environment Members present: Joe LaRose, Jean Sax, Eric Lindholm

Staff: Stan Shawver, Bill Florea, Thad Yonke, Uriah Mach, Paula Evans

Stan Shawver stated that he received an email from Ken Midkiff who stated he is out of town and Eric Lindholm will present the Energy & Environment Commissions (EEC) recommendation.

Eric Lindholm stated in looking at the ordinances out there it seemed that most of them went by the height of the tower and rotor diameter for the setbacks. The Energy & Environment Commission recommends the following:

Setback from Occupied Structures: The minimum setback for any wind turbine of a wind energy facility from any occupied structure shall be equal to 2500 feet as measured from the nearest edge of the structure to the center of the turbine tower.

Setback from Critical Structures: The minimum setback for any wind turbine of a wind energy facility from any critical structure (roads, electric substations, pipelines, transmission lines, etc.) shall be equal to 2000 feet as measured from the nearest edge of the critical structure to the center of the turbine tower.

Setback from Property Lines: The minimum setback for any wind turbine of a wind energy facility from any non-participating landowner's property line be equal to 2500 feet as measured from the property line to the center of the turbine tower; except, that a non-participating landowner may elect to sign a waiver to allow any wind turbine or group of turbines of a wind energy facility to be placed up to 1000 feet as measured from the property line to the center of the turbine tower.

Sound Requirements: Except during the event of inclement weather that prevents the operator of a wind energy facility from controlling the noise level of one or more wind turbines that are part of the wind energy facility, any wind turbine or group of wind turbines of a wind energy facility does not exceed a limit at a non-participating landowner's dwelling of thirty A-weighted decibels (30 dBA) and thirty-five A-weighted decibels (35 dBA) at a non-participating landowner's property line as determined by a qualified, third-party acoustics expert according to the American National Standard Institute (ANSI) Standard 12.9 and other applicable ANSI standards; and prior to construction of a facility or expansion, a qualified, third-party acoustics expert, selected and paid for by the applicant, makes a baseline determination of preconstruction noise levels, including modeling and enforcement.

Bonding: Prior to the start of construction of a wind energy facility, the applicant for a permit for the construction, operation, or expansion of the wind energy facility, or wind energy facility expansion, establish financial security in the amount of one hundred percent of the estimate of the total cost to decommission and remove the wind energy facility, as determined by an independent consultant selected and paid for by the applicant.

Insurance: Insurance is required on all individual wind turbines and associated facilities and structures.

Mr. Lindholm stated these recommendations were made by the EEC sub-committee, they brought it to the full EEC committee who discussed and passed the recommendation.

Eric Lindholm stated there should also be a cap on wind turbine height.

Stan Shawver asked if a critical structure included roads. Mr. Lindholm stated yes; the County may have a better idea of what a critical structure is.

Eric Lindholm stated that with the recommended setbacks we won't be worried as much about the flicker; it will be there but not for 2 ½ hours a day.

Commissioner Martin stated the proposed setback from property lines will narrow down how many pieces of property can do this. Mr. Lindholm stated there is an option in the property setback that if the neighbor agrees to it then it can be shrunk down. Chairperson Harris stated the Commission discussed using the property line as the setback and not a structure. Mr. Lindholm stated this is from occupied structures and property lines. Commissioner Martin stated if we set the setback at 2500 feet are we eliminating the option of ever having a wind turbine? Can we do that? Mr. Lindholm stated there is new technology for wind turbines that don't have the blades, they are more like a barber shop pole; maybe we should be specific where it has a rotor type blade. Jean Sax stated the barber shop design is able to pull wind up the pole. Mr. Lindholm stated right now we are looking at the technology that is available today and we can't write an ordinance for every possible technology. Commissioner Martin stated he liked the setback but would rather use the property line because with that you can control how close it can be to a structure.

Commissioner Martin stated if he has 500 acres and wants to put a turbine 100 feet from his own house; if there are ordinance that states the turbine has to be 2500 feet from an occupied structure, he wouldn't be able to do that. Commissioner Martin stated it should be his choice. Mr. Lindholm explained that in engineering we have to do things in consideration of future use, you may not own the house 20 years from now and when someone else buys it they may not be able to occupy the structure; we can only provide guidance and there are going to be exceptions, that is when they ask for a variance.

Joe LaRose stated setbacks from a residence might be more complicated, if it is a rental and the worst were to happen and someone got hurt who wasn't even the property owner the County might be liable. Commissioner Martin stated he understands that, but he doesn't want people telling him exactly what he can do with his property. Mr. Lindholm stated he has a problem with someone putting an industrial facility in an agricultural area. Commissioner Martin stated we should pass an ordinance in a controlled fashion without overreaching and without taking away someone's personal property rights. Stan Shawver stated if a property owner chooses to have a turbine 100 feet from their home that is one thing but the property next door needs to have that protection and have the turbine a minimum number of feet away from the property line. If the neighboring property owner chooses to build right next to the property line that is their decision but there should be protection for existing neighboring homes. Chairperson Harris stated if there are minimum distances from property lines as well as from existing homes you are never going to be able to accomplish anything. Mr. Lindholm stated he didn't see a problem with it never being able to take place because companies are trying to come in and put industrial wind turbines in a very populated county; maybe they can use smaller wind turbines. Mr. Lindholm stated his point when he wrote this was having a setback from any occupied structure. Chairperson Harris stated 2500 feet from a nonparticipating persons structure makes sense but if the property owner doesn't mind having it in their back yard that is up to them. Mr. Lindholm stated that even E.On had a minimum of 1000 feet from a home on their own property.

The Commission discussed the remaining recommendations without issue.

The Commission moved on to discuss the "Wind Energy Conversion Systems, Commercial (WECS-C) General Requirements" document handed out by Mr. Shawver at the last work session. The Commission went through the document line by line. Only the lines discussed are referenced below. Items not listed raised no issues or simple clarifications were made.

#### Page 1.

Item 2: Mr. Shawver stated there is already a regulation in place, Zoning Regulations 15.A.2 which requires additional notification for any structure more than 200 feet tall, there is an additional notification of 500 feet additional of additional notification added on for each 50 feet of extra height. For a 500-foot tower Resource Management would notify neighboring property owners within 3500 feet of the subject property boundaries.

# Page 2. Definitions:

Visual Dominance Zone: Commissioner Koirtyohann stated a wind turbine was going to dominate the landscape and asked if that definition needed to be in the regulations. Chairperson Harris stated he believed the use for that definition is referenced later in the regulations. Mr. Shawver agreed.

# Page 3.

Item 5: Commissioner Koirtyohann asked if that item needed to be in the regulations. Mr. Shawver stated they should explain for the record how it would impact them if it is not approved.

# Page 4.

Item 7.A: Mr. Lindholm asked the Commission to consider increasing that to whatever the residential structure setback is going to be. Mr. Shawver stated all of the distances and numbers are just a holding place until the Commission decides the particulars.

#### Page 5.

Item 8. E & F: Commissioner Koirtyohann stated he had a problem with those. That doesn't have anything to do with health and safety. Chairperson Harris stated in the context of what the Commission looks at in whether it is an appropriate use of the land in that place, what do these items get at? Mr. Shawver stated he believes they are going to provide that as part of their presentation, so we put it in the application as part of the required information so they are providing it. It also puts it on record if it is challenged.

Item 8.I: Chairperson Harris stated under Missouri Statute it should probably say "general certified". Commissioner Lloyd asked if there was any data that tells us what effect on land values a wind farm has had? Chairperson Harris stated the argument has always been that it will destroy property values even if it is 40 acres of woods in the middle of nowhere and that is not accurate. With regard to power lines, appraisers can't find evidence that says it negatively impacts property values. Mr. Lindholm stated he was aware of people who were going to build a house in Harrisburg and they found about the proposed wind farm and backed out of the sale because in their words they had planned to build their dream house and that didn't include a 500 foot wind turbine in the back yard. Mr. Shawver stated you have to be careful of how you use the term "property value"; because one potential buyer backed out it doesn't mean that the next potential buyer will care if there is a wind turbine. Chairperson Harris stated that puts the burden on the applicant to bring the evidence, it also puts the burden on those who might oppose to bring corresponding evidence.

### Page 6.

Item 9.I: Commissioner Koirtyohann stated he believes the FAA deals with that; the county won't be able to supersede their requirements. Chairperson Harris stated no, but we need to know they've met that requirement, it will part of their application.

# Page 7.

Regarding the Natural and Biological Resources, Chairperson Harris asked the Energy & Environment Commission if they had looked into any of the environmental conditions. Joe LaRose stated he hasn't been able to contact Fish & Wildlife.

# Page 8.

Item 5: Commissioner Koirtyohann asked what is considered objectionable density. Commissioner Furlong stated he had read somewhere that they wanted 1000 feet between turbines so one doesn't interfere with the other. Commissioner Koirtyohann believes it should be a set number rather than stating "adequate". Commissioner Martin asked if anything was found as to how many turbines were placed per square mile? Chairperson Harris stated there is some reference to that stating how close they can be and believes they are self-regulating on how close they want them. Commissioner Martin stated if the criteria are set at 2500 from property lines how many turbines could be contained on the property? Mr. Shawver explained that if you have a 2500' setback from property lines it would require about 573 acres per structure.

Item 6: Commissioner Koirtyohann stated he believes the electric lines should have to be buried and leave the rest of the section out. Mr. Shawver stated "violate other guidelines/standards, violate applicable law" should be left in just in case there is a law or standard that says they can't be buried. Chairperson Harris stated we could strike the economically feasible one. Mr. Shawver stated the wording can be changed to "shall be buried".

Items 2, 3, 4 Soil Erosion & Water Quality: Commissioner Koirtyohann asked how item 2 is defined and on item 3 are they talking about roads in the work site? Mr. Shawver stated they are talking about the access drives and roads internal to the property. Commissioner Koirtyohann asked how item 4 is defined. Mr. Lindholm stated they are going to have to have a crane pad at every tower site; the cost of that will be self-regulating. Chairperson Harris asked if item 3 needed better specificity regarding access roads and roads internal to the project. Mr. Shawver stated yes. Thinking in terms of subdivisions and private roads we want to make sure they are wide enough that emergency vehicles can get past if there is a vehicle broken down. Mr. Lindholm stated those are construction roads. Commissioner Martin asked about staging areas where the company stores their equipment and turbines before they are constructed; is there a time frame or will a permit be required to do that? Chairperson Harris stated they will probably rent some piece of land to store everything until the project is complete. Commissioner Martin stated he is concerned about storing these items for however long it takes to complete the project; the neighboring property owner may not like looking at all of that and having the construction vehicles coming in and out. Mr. Shawver stated the zoning regulations do provide for construction related activities but we should tighten that down for this because we are talking 20,000 acres so logically they will want to store things around, we should make sure they provide screening and have reasonable access hours; in theory they could have a staging location on property where there won't be a tower.

# Page 9.

Item 1.2: Commissioner Koirtyohann stated noise can be an issue but I don't see how that section will be enforced. Mr. Lindholm stated decibel meters are cheap and there is equipment where you can do long-term sound studies. Commissioner Freiling stated when you are talking about industrial use in a residential zoning, the Commission should err on the side of residential use. Commissioner Koirtyohann stated with complaints you get into the issue of the wind blowing in one direction and it is noisy and the next day the wind is blowing a different direction and it isn't noisy; how many trips will you have to make out there? It states an acoustical study will have to be performed by an independent acoustical consultant; that will not work with a neighbor who will call Resource Management to complain and it will be a nightmare for staff. Mr. Shawver stated that does become a concern, but you can't just require a study every time there is a complaint. Mr. Shawver stated staff doesn't like to go out to check noise complaints. There are some uses approved in the past where staff has had to investigate noise; most of the

complaints are regarding weekends and evenings because that is when neighboring property owners are home. You can't expect a sound investigator to get out to the site every time a complaint is made. Commissioner Freiling asked about monitors being set on the sites to measure sound. Mr. Lindholm stated when he read about sound ordinances the studies done to establish a base sound before a wind turbine is placed, they would do three-month studies; the sound ordinance put on the turbines wouldn't be quieter than what already existed at the site. Mr. Lindholm stated he is sure there is something available for monitoring noise. Commissioner Koirtyohann asked how you determine if it is feasible? Chairperson Harris stated the EEC came up with 35 decibels and the draft recommends 65 and 50, we have to be careful that we don't set a number that is blatantly unachievable. Mr. Lindholm stated 65 decibels is a vacuum cleaner; that is loud. Chairperson Harris stated item 2 states "upon receipt .... of a complaint", that is saying every time there is a complaint; that section will need to be reworded. Commissioner Koirtyohann suggested "the department determines to be a reasonable complaint". Chairperson Harris stated we may need to revisit this item later.

Commissioner Lloyd left the work session at 6:05 PM.

Page 9.

No items discussed.

Page 10.

Item 3. Chairperson Harris stated item 3 is what was discussed earlier regarding how close the towers can be to each other. Mr. Lindholm stated E.On had proposed one at least every 100 acres. Mr. Shawver stated if we require 2500 feet from a property line, we are talking 573 acres of ground for one turbine. Chairperson Harris stated they are going to argue that it is too restrictive. Mr. Lindholm stated their complaint would fall flat because this is a safety issue. Chairperson Harris stated if your regulations only allow one turbine for every 573 acres that may get challenged. Mr. Lindholm stated the wind farm is proposing to come to Boone County; Boone County is already the way it is so they have to change for us, and we are trying to be accommodating but it is not our job to make sure they can come to Boone County.

Item 11 Chairperson Harris asked about the maximum height. Mr. Shawver stated that number is a place holder until the Commission determines the maximum height.

Page 11.

Chairperson Harris stated item 1 should go on page 8 for consistency with the rest of that subject.

Mr. Lindholm stated under safety there should be a number 3 for occupied structures. That should be the primary one because they will be there all the time.

Page 12.

Under decommissioning Chairperson Harris stated the last sentence indicates 3 feet. Commissioner Koirtyohann stated it should be at least 4 or 5 feet. Chairperson Harris stated it should be increased.

Page 13.

Item 2: A single permit for constructing the entire project won't work because we are looking at individual conditional use permits for each turbine.

Review Complete.

Mr. Shawver stated the next work session is scheduled for June 13, 2019, that is the regular work session to discuss the items on the Planning and Zoning Commission agenda, there are nine plats on the agenda, in addition staff will need time to create the new draft for wind farm regulations.

Chairperson Harris stated it makes sense to wait for staff to create a draft and then have a work session dedicated to that review.

Mr. Shawver stated we are proceeding in a timely manner, but we also want to be efficient and fair. Items brought up tonight such as 573 acres, is that significant or not? As Mr. Lindholm stated, they are coming here. Chairperson Harris stated you also don't want to create a regulation that sets you up for a court challenge that you know you can't win; you have to balance both sides. Commissioner Furlong stated regarding the 573 acres, what if the landowner behind him is participating in the project, should that setback still be 2500 feet from the property line? Mr. Lindholm stated the EEC recommended adding a variance process for that. Mr. Shawver stated the EEC suggested if you can get a neighboring property to give a waiver from the setback then you can infringe on them. Mr. Shawver stated his discomfort with that is that you are allowing private deals between property owners and the County doesn't want to be involved with private deals, it is better for the County to have a particular setback number.

The next work session is scheduled for Thursday, June 13, 2019 at 4:30 pm. Per the Commission, proposed wind farm regulations will not be discussed. The next work session to discuss Wind Farm Regulations will be Tuesday, June 25, 2019 at 5:00 PM.

The work session adjourned at 6:23 pm

Meeting notes prepared by Paula Evans, Administrative Coordinator, Boone County Resource Management