# CHAMPAIGN COUNTY ZONING BOARD OF APPEALS NOTICE OF REGULAR MEETING

Date: March 12, 2009

Time: 7:00 p.m.

Place: Lyle Shields Meeting Room

**Brookens Administrative Center** 

1776 E. Washington Street

Urbana, IL 61802

Note: NO ENTRANCE TO BUILDING FROM WASHINGTON STREET PARKING LOT AFTER 4:30 PM. Use Northeast parking lot via Lierman Ave.. and enter building through Northeast door.

If you require special accommodations please notify the Department of Planning & Zoning at (217) 384-3708

#### EVERYONE MUST SIGN THE ATTENDANCE SHEET - ANYONE GIVING TESTIMONY MUST SIGN THE WITNESS FORM

#### **AGENDA**

- Call to Order
- Roll Call and Declaration of Quorum
- Correspondence
- Approval of Minutes (February 26, 2009)
- 5. Continued Public Hearings

Case 634-AT-08 Petitioner: Zoning Administrator

> Request: Amend the Champaign County Zoning Ordinance as follows:

- A. Authorize the County Board to approve Special Use Permits (SUP) and to change the requirements for development of wind turbine developments (wind farms) to a County Board Special Use Permit (CBSUP) and a rezoning to the new Wind Farm Overlay Zoning District (WFO);
- B. Change the requirements for private wind turbines; and
- C. Add a requirement for a CBSUP for subdivisions in a Rural Residential Overlay District.
- New Public Hearings
- Staff Report
- Other Business
- Audience Participation with respect to matters other than cases pending before the Board
- 10. Adjournment
- \* Administrative Hearing. Cross Examination allowed.

# SUBJECT TO APPROVAL

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	Washington Stree	et		
Urbana,	IL 61801			
DATE: TIME:	February 20 6:30 p.m.	6, 2009	PLACE:	Lyle Shields Meeting Room 1776 East Washington Street Urbana, IL 61802
MEMBERS PRESENT:		Catherine Capel, Thomas Courson, Melvin Schroeder, Eric Thorsland, Pa Palmgren		
MEMBERS ABSENT :		Doug Bluhm, Roger Miller		
STAFF PRESENT :		Lori Busboom, Jamie Hitt, Leroy Holliday, J.R. Knight, Christi Papavasiliou (Assistant State's Attorney)		
OTHERS PRESENT :		Chris Doenitz, Al Kurtz, Shirley Schroeder, Brad Uken, Andrew Larse John Doster, Herb Schildt, Sherry Schildt, Tom Swierczewski, Steve Burdi Eric McKeever, Russ Taylor, Bruce Stikkers, Dwight Farber, Jamie Stever Kenn Davis, Birgit McCall, Rob Parker, Stephanie Holderfield, Jol Chandler, Kim Schertz, Vince Early, John Lannon, Barbara Gerdes, Marv Johnson, William Davidson, Bill Routh, Bud Parkhill, Gerald Henry, Ca Smith, Bill Fabian, Dean Rose, Dwight Farber, Brian Sullivan, Downstein, Vic Smith		
1. C	all to Order			
The meet	ing was called to or	rder at 6:30 p.m.		
Mr. Knigl	nt informed the Zor	ning Board that M	r. Doug Bluhm, Cha	air, is absent tonight therefore the Boa
	ppoint an interim (			-
Mr. Palm	ngren moved, seco	onded by Ms. Co	nel to annoint Fri	c Thorsland as interim Chair for t
February	26, 2009, Zoning	Board of Appea	ls meeting. The me	otion carried by voice vote.
2. Ro	oll Call and Decla	ration of Quorun	n	
The roll w	as called and a quo	orum declared pre	sent.	
3. Co	orrespondence			
None				

Approval of Minutes (February 12, 2009)

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Ms. Capel moved, seconded by Mr. Courson to approve the February 12, 2009, minutes as submitted. The motion carried by voice vote.

#### 5. <u>Continued Public Hearing</u>

Case 634-AT-08 Petitioner: Zoning Administrator Request: Amend the Champaign County Zoning Ordinance as follows: A. Authorize the County Board to approve Special Use Permits (SUP) and to change the requirements for development of wind turbine developments (wind farms) to a County Board Special Use Permit (CBSUP) and a rezoning to the new Wind Farm Overlay Zoning District (WFO); B. Change the requirements for private wind turbines; and C. Add a requirement for a CBSUP for subdivisions in a Rural Residential Overlay.

Mr. Thorsland requested that County Board members refrain from presenting testimony at tonight's public hearing.

Mr. Knight stated that due to staff illness there is no new information to present at tonight's meeting although staff intends to present a lot of information at the next meeting. He said that the biggest difference between a rezoning and a Special Use Permit is formal protest rights. He said that in a Special Use Permit the adjacent landowners, townships and municipalities do not have formal protest rights although they are welcome to attend the meeting and voice their concerns to the Board. He said that in a rezoning the landowners that own property which is adjacent to the subject property for rezoning and townships that have plan commissions have formal protest rights. He said that the landowners and plan commissions can file their protest with the County Clerk which will raise the requirement for a super-majority vote for approval by the County Board.

Mr. Thorsland asked the Board if there were any questions for Mr. Knight.

Ms. Capel asked if a Map Amendment would be required each time a wind farm is proposed.

Mr. Knight stated yes. He said that each time a wind farm is proposed a Wind Farm Overlay Zoning District (WFO) and a County Board Special Use Permit (CBSUP) would be required.

Mr. Thorsland asked the Board if there were any additional questions for Mr. Knight and there were none.

Mr. Andrew Larson, Superintendent for Heritage School District stated that Heritage Schools is a K-12 district located in the southeast corner of Champaign County. He said that the school district covers about 105 square miles, has 540 students and their existing assessed valuation is \$60 million. He said that he is attending the meeting tonight as an advocate not only for the school district but also as a community member of the Broadlands area and is in support of the proposed wind farm project. He said that it is often a struggle for rural school districts to generate dollars for continued funding of their projects and they do not have the luxury of some of the bigger districts that have the residential and commercial properties that generate property tax dollars for their districts. He said that he understands the importance of zoning regulations but he fears that if the process for approving the proposed project drags on the developers could move

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**ZBA** 

elsewhere. He said that the development of this project in Champaign County will put us on the map as a big time player regarding cutting edge eco-friendly technology that will produce energy courtesy of Mother Nature. He said that he has spoken with community members and everything that he has heard about the possibility of the wind farm has been positive. He distributed a handout similar to the handout distributed at the February 12, 2009, ZBA meeting by Mr. White, Superintendent for Prairieview-Ogden School District #197, regarding wind turbine-tax calculation for Heritage School District.

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Mr. Thorsland stated that Mr. White indicated that their school district would obtain approximately \$3240 per mega-watt. He asked Mr. Larson if his numbers were similar.

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Mr. Larson stated that since they are a K-12 school district their tax rate will be different than Prairieview-Ogden's, but \$6,046.00 would be generated per mega-watt for the district. He requested that the ZBA forward a recommendation for approval to the full County Board.

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Mr. Thorsland asked the Board if there were any questions for Mr. Larson and there were none.

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Mr. Thorsland asked if staff had any questions for Mr. Larson and there were none.

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Mr. John Doster, Representative for Invenergy stated that they are developing a project that is partially in Champaign County and Vermillion County. He said that as he has reviewed and discussed the proposed Ordinance with Mr. Hall. He said that he likes the use of the Model Ordinance but his biggest concern is the Map Amendment and County Board Special Use Permit. He said that as a developer they are trying to find the best way to put projects together without having to go through the same hoops multiple times and trying to fight an up-hill battle when right across the county line it is a much easier process. He said that as a developer he would be inclined to say that they will try to do a project in Champaign County but if it is going to be very cumbersome and very restrictive and difficult to get things permitted then they are more likely to move the project to a less restrictive county. He said that he wanted to be clear that he is not stating such as a threat but is being very honest about it because they have a project that is moving very rapidly and they are planning on applying for the County Board Special Use Permit and Map Amendment by the end of summer so that they can start construction within 12 to 18 months. He said that they need to move things quickly and efficiently while maintaining all of the safety standards, completing engineering studies, etc. and they need to understand what is the process and likelihood of getting things approved. He said that if they find that the likelihood of a project will be delayed and dragged out then they will move the project to a location where they can get it approved in an efficient manner. He said that he would rather not see the Map Amendment Requirement with the overlay and leave it up to the County Board for final approval of a Special Use Permit. He said that he is not excited, as a developer, about obtaining a Map Amendment each time a project is proposed because it would only drag out the project and make is difficult for them to meet their development and construction timelines at which point if there is a development delay they will move the project to a different county.

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Mr. Thorsland asked the Board if there were any questions for Mr. Doster.

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Ms. Capel asked Mr. Doster how many wind farm projects he was involved in currently.

Mr. Doster stated that currently he has three wind farm projects being developed. He said that he has not personally gone through the entire process but Invenergy has many project across the country and their biggest project in Illinois is the Grand Ridge Wind Farm in LaSalle County.

Ms. Capel asked Mr. Doster if he had personal knowledge of projects that have been moved due to difficulties or a drawn out permit process.

Mr. Doster stated that there have been situations where, if things had moved quicker, particular projects would have been built by now but due to delays in the permitting process the projects were not able to be at the right maturity when trying to sell the power and create the next step from development to construction and operation phase.

Ms. Capel asked Mr. Doster if those projects were abandoned.

Mr. Doster stated that the projects were not abandoned and they are trying to get them moving along but it is a lot more expensive therefore it is not as competitive when trying to sell the power to the utilities.

Ms. Capel asked Mr. Doster if he has an idea of how long Illinois will be a viable market for these projects.

Mr. Doster stated that he would not be a good judge but his personal guess would be that it will be viable for some time. He said that once the grids are used up it will become more expensive for the utilities to purchase the power because the grids will need to be upgraded. He said that the goal is not to create expensive power but to create renewable energy at a competitive price but development does cost and the timeline of the development all plays in to the overall cost.

Mr. Thorsland asked Mr. Doster if the process becomes too cumbersome in Champaign County will he move to Ford, Piatt or Vermillion County.

Mr. Doster stated that when doing development there is a specific location where you are connected and in this particular case, under the new rules, they have been fast tracked through the study process and normally there are 18 months of study. He said that under the new rules they went straight to a definitive planning phase which means no general upgrades for transmission are required just a matter of here is your timeline, get your inter-connection signed and you can go straight into construction as soon as permitting is approved. He said that they are looking at an extremely compressed timeline compared to the normal situation therefore in their particular case they need to find locations where they know the project will be allowable without delays. He said that if they do have significant delays they will miss their inter-connection requirement and thus the whole project goes away. He said that they are not going to just throw millions of dollars away if the locations in Champaign County are too much of a risk and they will locate the turbines in Vermillion County. He said that he does not want to move the project because there are a significant number of landowners that are already signed up hoping to get turbines.

Mr. Thorsland asked Mr. Doster if he had more than 50% of the landowners signed up.

Mr. Knight noted that the Map Amendment and the County Board Special Use Permit cases would be run at

Mr. Doster stated that he did not attend the last meeting therefore he did not have that information before

Mr. Thorsland asked the Board if there were any additional questions for Mr. Doster and there were none.

Mr. Dwight Farber, Representative for Horizon Wind Energy stated that they are in the process of

developing a project in Champaign, Douglas, Edgar and Vermillion County and one of the things that they feel is important is that an Ordinance is put together that is not only fair for the landowners who want to be a

part of the project but is fair for everyone in the community. He said that as they build a wind farm in a

community they want to make sure that those community members are protected and also that it is flexible

enough that it will encourage developers like Invenergy and Horizon and other developers to come to the

county. He said that he appreciates the process that Champaign County is using and he better understands

the Map Amendment process than he did a couple of weeks ago although he is concerned that it is an extra

the same time therefore there should be no reason why the rezoning would cause any significant delay.

Mr. Thorsland asked if staff had any questions for Mr. Doster and there were none.

Mr. Thorsland asked if staff had any questions for Mr. Doster and there were none.

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step although he does see how it can work in concert. He said that he sent comments to Mr. Hall regarding the tile proposal and he feels that the Ordinance should indicate what depth the developer should have to remove things to and not get into the detail of how a company implements that and deals with the repair of tile, etc. He said that as they look at the depth of cable placement or the depth of removal that most of the ordinances that he has seen or has worked with the deepest requirement was 48 inches. He encouraged that the Ordinance not go deeper than 48 inches because an extreme amount of cost is incurred by the developers

when they have to go deeper than that which can cause profits to go out and force developers to look at other

areas. He said that Illinois ranks #16 in the nation in terms of wind resource but #8 in the nation in terms of electricity from wind energy and the reason why Illinois is #8 is because Illinois has very good transmission lines and those transmission lines generally will take the power to a place where the companies can obtain a

good market for the product. He said that Illinois has a renewable portfolio standard that says that by 2025, 25% of the electricity in the state must come from renewable resources and 75% of that from wind therefore

there is demand created in Illinois for wind energy and as long as there are good sites available that will continue to drive the market. He said that there is plenty of wind in the western states but they do not have the transmission to get it to the populated areas.

Mr. Thorsland asked if staff had any questions for Mr. Farber and there were none.

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Mr. Herb Schildt, who resides at 398 CR 2500N, Mahomet distributed his written comments to the Board for review. He stated that he had several comments at the previous hearing on the 12<sup>th</sup> and tonight he has some follow-up information relating to those comments. He said that at the hearing on February 12, 2009, he expressed concern about having commercial wind turbines within the Manlove Gas Storage Field and later in the meeting, after the witness register had been closed, there were some questions about whether this risk could be certified. He said that prior to the February 12<sup>th</sup> hearing he had spoken with John Jay, Chief of the Combelt Fire Protection District, about the issue. He said that the Combelt Fire Protection District is the district in which he and his wife live and it includes a substantial portion of the Manlove Gas Storage Field. He said that after the meeting on February 12<sup>th</sup>, he asked Chief Jay if he could write a letter that expressed his concerns. Mr. Jay did write such a letter and a copy has been provided to the Board for review.

Mr. Schildt stated that Mr. Jay's letter states that the Cornbelt Fire Protection District can only fight fires to a height of 110 feet and any turbine located higher than that, which in the case with all modern commercial wind turbines, will be unreachable and therefore uncontrollable. Mr. Jay stated in the letter that, "Having an uncontrolled fire within the Manlove Gas Storage Field will pose an increased risk to the surrounding area." Mr. Schildt stated that although this is only one of several reasons why he believes that it is necessary to prohibit the placement of commercial wind turbines in the Manlove Gas Storage Field, it is an important one and in light of this documentation he urged the Board to prohibit commercial wind turbines in the Manlove Gas Storage Field.

Mr. Schildt stated that he wanted to emphasize that the concerns associated with locating commercial wind turbines within the Manlove Gas Storage Field involves more than just fire. He said that as he explained at the previous hearing, it involved potential damage to well-heads, pipelines, and tanks caused by a turbine failure. He said that the core of the problem, as he sees it, is that the gas company has expertise in gas storage fields, not wind turbines and the wind energy company knows about wind turbines, but not gas storage fields. He said that the problem is not gas storage fields or wind turbines rather it is gas storage fields and wind turbines and the unknowns that this combination presents. He said that until this combination is understood and can be certified as safe by an accredited, independent authority, commercial wind turbines should not be located in the Manlove Gas Storage Field even if the risks of an uncontrolled turbine fire could somehow be eliminated. He said that on a related point, and again after the close of the witness register. there seemed to be some question about the seriousness of the turbine failure in Denmark in February, 2008 that is shown on the video from which he provided still shots. He said that he has included a news story from the Copenhagen Post that reports that this turbine failure was, in fact, taken very seriously by the Danish government. He read a sentence from the news story as follows: "The climate minister, Connie Hedegaard, is calling for an investigation to determine the cause of two violent wind turbine collapses in Denmark in the past week." He said that as the story reports one of these collapses was the turbine in the video and mentions that two turbines actually failed not just the one caught on the tape. He said that clearly these events were not taken lightly by the authorities.

 Mr. Schildt stated that although turbine collapses are not common events they are not extremely rare either and he has enclosed a number of photos taken from the internet that show several examples. He said that he has also included several examples of turbines burning and provided a copy of an article form *Business Week* that describes some of the dangers of wind power.

Mr. Schildt stated that it is his view that 1,200 feet is far too short because of fundamental safety concerns and as he showed last time the debris field of a turbine failure can reach at least 1,600 feet therefore, based strictly on health and safety concerns, the setback must be increased. He said that he has some additional pieces of information that relate specifically to this issue that might prove helpful. He said that he has included the results of a survey done at the January 19, 2009, Champaign County Farm Bureau Annual Meeting which were printed in their February 2009 newsletter. He said that Question #13 asks, "Would you lease farmland for a wind turbine(s) if it was profitable and reasonably risk free?" He said that 166 answered yes and 42 answered no to this question and what is interesting about this question is that about 20% of the respondents don't want turbines at all, and their property rights must be protected. He said that about 80% would lease land for a turbine if it was both profitable and reasonably risk free. He said that a wind farm ordinance can't ensure profitability it can ensure that the risks are mitigated.

Mr. Schildt stated that Question #14 follows-up with "If yes, what minimum setback would you prefer for a wind turbine near your home?" He said that 16 answered less than 1,000 feet and 92 answered 1/4 mile to 1/2 mile, 38 answered ½ mile to 1 mile, 25 answered 1 to 2 miles and 22 wanted an even larger setback. He said that 48% of all respondents wanted between a ¼ mile and ½ mile setback, approximately 44% wanted ½ mile or more which means that about 92% of all respondents wanted a setback or ¼ mile (1,320 feet) or more. He said that given the way that the survey questions were framed it is difficult to pin down a specific distance that represents the average setback desired but the results clearly cluster around the ½ mile mark which is 2,640 feet. He said that 2,640 feet is more than twice the 1,200 feet specified by the current draft amendment. He said that interestingly, ½ mile is the setback used by some other jurisdictions. He said that he included a news story from the Tomah Journal which is in Tomah, Wisconsin. It reports that the Township of Wilton, in Monroe County Wisconsin, chose to use a 2,640 foot (½ mile) setback from any dwelling or occupied building and the Supervisor's quote explicitly mentions the health and safety of the residents. He said that the story also reports that Wilton requires a 1,300 foot setback from a property line and the Supervisor stated that, "We did some research and a wind farm manufacturer thought that no one should be working within 1,300 feet of a wind tower." Mr. Schildt stated that this statement is consistent with the Vestas V90 safety instructions that he presented last time. He said that the article reports that a ½ mile setback was also adopted by the Township of Ridgeville, Wisconsin, again in the interest of safety. He said that apparently townships in Wisconsin have more power than they do here in Illinois and in Champaign County they must rely on the County to get the setbacks right.

Mr. Schildt stated that although two townships specified a minimum of ½ mile, some jurisdictions require a higher standard, for example, the Trempealeau County, Wisconsin Ordinance that John Hall included in the first packet specifies a minimum of one mile setback from dwellings and other occupied buildings. He said that it also requires a minimum setback of ½ mile from property lines and these setbacks help ensure that all property owners are guaranteed at least a minimum of protection and he strongly recommends that Champaign County follow their lead.

Mr. Schildt stated that although one mile might be sufficient for safety it might not be sufficient for other reasons, such as quality of life, environmental risks, and property values. He said that Champaign County has invested a significant amount of money and effort in establishing several parks and preserves and has

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also established a CR district. He said that placing wind turbines too close to these will lessen the benefits that they provide, for example, a primary benefit of areas like the Middle Fork River Preserve and the Sangamon River Preserve is that they give the residents of the County places that reflect the original environment of the prairie, including its quiet solitude and vistas. At one mile, the presence of the turbines will simply overwhelm the natural setting of the preserves with the turbines being visible from essentially all locations with in the preserve. He said that a setback of at least five miles is required if there is to be significant area within the preserve from which the turbines are not visible and the ambiance of the natural environment is maintained.

Mr. Schildt stated that having a turbine on farm ground does not provide a "second crop" as one person said at a previous hearing. He said that a commercial wind turbine is an industrial scale power plant located hundreds of feet in the air. He said that it is not agriculture and is certainly not "farming."

Mr. Thorsland asked the Board if there were any questions for Mr. Schildt.

Ms. Capel asked Mr. Schildt if there were any wind farms located in Trempealeau County, Wisconsin.

Mr. Schildt stated that he does not know. He said that he was doing research on ordinances not whether wind farms had been built.

Mr. Courson asked Mr. Schildt if he was aware of any laws that indicate that the fire protection district would be required to put out a fire on a 500 foot tower.

Mr. Schildt stated that he is not aware of such a law and relies on Chief Jay to answer such questions.

 Mr. Thorsland stated that according to the Farm Bureau Survey 80% of the people were in some agreement with locating wind farms on their property and we heard from one of the wind farm developers that 75% of the landowners have been contacted so far. He said that wind turbines will not be placed on landowners who do not wish to participate and have adequate setbacks to assure their safety. He said that the Manlove Gas Storage Field is not all owned by Manlove but by private landowners who have leases for the injection wells therefore is it fair to deny that larger percentage of participating landowners' potential income. He said that testimony has been received from school districts that money will be generated for the schools.

Mr. Schildt asked Mr. Thorsland if the County should disregard safety.

Mr. Thorsland stated no.

Mr. Schildt stated that his comments are centered on health and safety. He said that he has made his opinion very clear and is supported by the Cornbelt Fire Protection District that there is a unique situation in the Manlove Gas Storage Field which has a known risk and releasing an unknown element into that situation is adding to that risk. He said that the Cornbelt Fire Protection District cannot fight a fire that is 268 feet in the air which is the height of the turbines in McLean County. He said that when a turbine fire occurs there is burning oil and fiberglass dropping all over place which is a very dangerous situation in the Manlove Gas

Storage Field because of the various locations of the injection wells. He said that he does not want this project to increase the risk and if the County can not prove that it is safe then he is asking that the County take it off the table. He said that he does not want to be the guinea pig to find out whether a project like this makes sense in a gas storage field and as far as he can determine it has not been done before.

Mr. Thorsland stated that at the last meeting Mr. Schildt spoke as the Chairman of the Newcomb Township Plan Commission and as an individual landowner and tonight he is speaking as a private citizen. He asked Mr. Schildt if, as Chairman of the Newcomb Township Plan Commission, the Newcomb Township Comprehensive Plan has any sections that deal with power production of any kind.

Mr. Schildt stated that Newcomb Township Plan Commission does not have a comprehensive plan at this time.

Ms. Sherry Schildt, who resides at 398 CR 2500N, Mahomet stated that she agrees with her husband's comments. She said that the Supplemental Memorandum dated February 20, 2009, indicates that the new turbines would probably be 492 feet tall. She said that the Empire State Building is 1,250 feet therefore a wind turbine would be almost half the height of the Empire State Building. She said that if a wind turbine is one mile away from a preserve district it will look like it is right next to it therefore if it were that close to a forest preserve district or even a CR district it would defeat the purpose of having those districts because it would make it look more like a city than like the country. She said that it has been said that that the wind turbines turn very slowly but because of the size of the rotors the average tip speed could average between 130 and 200 miles per hour. She said that it is her firm conviction that the setbacks need to be set at the property line and not the residence. She said that if the 1,200 foot setback is adopted and a non-participating person's house is 1,300 feet they will have 1,200 feet that they cannot build on which would take away their ability to build on their own land.

Mr. Thorsland asked if staff had any questions for Ms. Schildt.

Mr. Knight stated that if the setback to the dwelling eliminates a non-participating landowner's ability to build they can sign a waiver with the wind turbine company to build closer to the turbine as long as it is not closer than 1.1 times the height.

Ms. Schildt stated that if you are a landowner that does not want to be any closer then it should not be a burden on that non-participating landowner.

Ms. Thorsland stated that he believes that the *Ordinance* only addresses participating landowners and the ability to sign a waiver.

Ms. Schildt stated that if she lived across the road from a neighbor who had wind turbines on their property she would not feel comfortable if 1,200 feet of her property was within the impact radius that the wind turbine manufacturer's determined unsafe. She said that the setback should be from the property line so that all of her land would be safe especially since she would not be gaining any benefit from the wind turbine.

 Mr. Thorsland asked the Board if there were any questions for Ms. Schildt and there were none.

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Mr. Tom Swierczewski, Project Coordinator with Midwest Wind Energy, stated that he is standing in for his associate Tim Polz who was not able to attend tonight's meeting. He said that the question was raised as to the appropriate setback for health and safety issues to all the above ground equipment located within the gas storage area. He said that their position is that 1,200 feet is an adequate setback to address health and safety issues to those facilities and this is their standard setback. He said that they have approximately 200+ wind turbines located at least that close to houses and as a professional wind developer and as a professional planner he is not interested in being involved in a project where they would be endangering the lives and well being of their participating landowners which are essentially their partners in these projects. He said that they are comfortable with the 1,200 foot setback because it was chosen due to noise issues not safety issues. He said that blade throws and ice throws typically happen inside the radius of the blades themselves although there are certainly videos that indicate differently. He said that the reason why your county is contemplating a certification standard for turbines developed in the county is so that old technology does not get developed in your county which should not have those extreme blade throws and with modern equipment it is unlikely to have anything thrown beyond 1,200 feet. He said that if the 1,200 foot setback is established you will find that it is adequate for houses and the above ground parts of the gas storage facility and developing inside the gas storage facility becomes irrelevant although they are certainly willing to avoid that area but there shouldn't be any reason why they couldn't develop in the areas that are left over inside the setbacks from houses and above-ground gas line parts. He said that they are willing to stipulate on that issue and they are not going to be progressing through their development efforts inside that storage facility. He said that they are on their fifth wind farm in Illinois, two are up and running, one is under construction and his project in Bureau County will be under construction in the spring. He said that they have five underground gas pipelines running through those projects and they are much closer, in some circumstances, than 1,200 feet to those underground facilities and in some of those cases they do not have a setback. He said that they agreed to separate agreements with the pipeline companies and they have a 50 or 100 foot easement and his company agreed that the sweep of their blades could not go inside their easements and they were perfectly comfortable with that agreement.

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Mr. Swierczewski stated that his company has projects in Wisconsin and they are trying to develop additional projects in Wisconsin. He said that another developer was asked if he had experience in dealing with a county where they have gone elsewhere and he would basically submit that the entire state of Wisconsin falls into that category. He said that basically the counties have gone out of control because there is a specific Wisconsin State Statute which limits what they can do in terms of regulation and they have essentially ignored it. He said that, in regard to the ordinances that were found on the internet, someone asked if there were wind farms located in those counties in Wisconsin and the answer is no. He said that it has gone so far that at the state level in Wisconsin that the State is considering uniform siting standards on a state level which would basically take away the authority from the counties and townships and provide them with a set of setbacks and development standards that they would have to implement because it has gotten so out of hand.

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Mr. Thorsland asked the Board if they had any questions for Mr. Swierczewski and there were none.

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Mr. Thorsland asked if staff had any questions for Mr. Swierczewski and there were none.

Mr. Steve Burdin, who resides at 2527 N CR 450E, Mahomet stated that he appreciates the opportunity to address this hearing. He said that his message is positive in general and sees no reason why everyone's concerns can't be addressed to make this project a reality. He said that last September he had the opportunity to visit the Twin Groves Wind Farm with a small group. He said that he met a landowner at the visitor site in Ellsworth, north of Leroy and after a while the group went to what the landowner called "her" turbine, since it was the one on her farmland. He said that they stood approximately 500 feet from the base of the wind tower and being it was a very calm September evening everything was completely still and the turbine was not turning. He said that most of the group were engineers so the questions were different than what the landowner was use to, more technical and detailed, although some of the questions were just about what it is like to have a turbine on her property. He said that she couldn't answer the technical questions very well but she answered all of the questions about living with the turbine quite enthusiastically and he didn't sense any negative sentiments from her and she seemed very happy with "her" turbine.

Mr. Burdin stated that after the last ZBA meeting that he attended he decided to send the landowner an email to ask a few more questions that mainly focused on safety. He said that he asked her how far the wind turbine was from her home and from the nearest public road. He also asked her if she had witnessed the turbine feather its blades or stop in response to high winds and what that was like. He said that she indicated that the wind turbine on her land is ½ mile from her home and the county's setback requires less than the guideline set by the developer which was 1,500 feet from any occupied building and from any road. She indicated that this showed that they were concerned about the safety of the home on their farm. She explained that she can see about 100 of the 240 turbines from her home and how she has watched the turbines in at least two storms with winds over 50 mph shut down rather quickly when the wind reaches that speed. He said that interestingly, she stated that she can watch the progression of the storm front by watching the windmills shut down in succession.

Mr. Burdin stated that in his area he is concerned about the potential siting of turbines among the high pressure gas storage lines that are located in Newcomb Township. He said that he paid a visit to the Zoning office this past Tuesday to get a better handle on the situation and to find out where all these pipelines and wells that are being talked about are located. He said that the question in his mind was: Is there a way we can distribute some wind turbines among all these things while keeping them all a safe distance from each other. He said that it isn't just in case something happens to the turbine but also in case something happens to the pipeline or to a well because after all the wind turbine folks have just as much to worry about in terms of damage as the gas pipeline folks. He said that he wasn't looking for specific locations but just wanted to find out where they are in general and as it turns out the majority of them run along the roads and some along quarter section lines. He said if we're going to design setbacks from roads these will automatically become setbacks from the pipelines as well and all we have to do is add a few feet. He said that this should be entirely do-able and his feeling now is that we have a lot less to worry about regarding this issue than the feeling he left with the last time. He said that right now he is more concerned about the fact that some of the well-heads in Newcomb Township are literally just a few feet from the road where typically a really strong chain link fence protects them from the possibility of a vehicle running into them resulting in a predictably dire event. He said that just because it has not happened does not make it impossible or any less likely, that

is not how probability works.

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Mr. Burdin stated that the second thing that he would like to address is the issue of sound. He said that the possibility exists that this may have more weight in determining a setback than the possibility of wind turbine destruction does. He said that instead of an occasional or rare event this deals with prolonged exposure during all times that the turbines are in operation and to make a comparison with occupational exposure limits for noise there's a big difference between the limits imposed for impulse or transient exposure versus limits that are imposed where there is continuous, regular exposure and rightly so. He said that there's no doubt that wind turbines will make some audible noise but they will also make some sound that's less audible and possibly inaudible, namely in the low frequency regime. He said that people are widely varied in their ability to sense these sounds but they can be affected by them whether they hear them or not. We can't ignore the possibility that this could cause discomfort to folks who are close to this source of disturbance and this is one area where care should be exercised, as sound emission especially low frequency emissions could cause harm to homeowners. He said that the most common harm mentioned seems to manifest itself in the form of disturbed sleep. He said that the practice of using A-weighted SPL measurements could be seen as a way to mask these effects. A-weighted measurements are tuned to the response of human hearing which isn't all that efficient in the low frequencies so predictably A-weighting de-emphasizes these low frequencies. He said that measurements known as C-weighted use a flat response across the frequency range that the microphone can sense so there's no attenuation at the low end. This is a more effective way to measure the low frequency emissions from a source and could be used to better judge how much of this sound energy reaches a place of concern, like someone's home.

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27 28 Mr. Burdin stated that it seems prudent to exercise caution and to be informed of the findings of multiple sources on this issue. He said that if, after more study, these concerns have merit in the opinion of the body drafting the *Ordinance* his feeling is that it would seem favorable to public safety if the County were to adopt a policy that requires C-weighted data be used to determine if the developer will meet the SPL limits imposed by the *Ordinance*. His main point is that this is not a deal breaker, but that as with any major project it's better to have good data. He said that people will feel better when there's confidence in the data and folks in proximity to the turbines will certainly be happier with a good night's sleep. The wind turbines will be there for a long time and it's important to get this one right.

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Mr. Burdin stated that his next topic is a specific thing that he discovered while reading the materials that were made available during the last meeting. He said that it is found in the document excerpt called *Wind Generator and Wind Generating Facility Ordinance for Trempealeau County*. He said that what is numbered as page 230 of the document, item J the paragraph talks about what happens should the noise levels exceed the limits in the *Ordinance* and if a waiver is arranged what happens should the property change ownership. The *Ordinance* states that subsequent owners must be informed and he believes that we should do better than this in Champaign County. He said that should our *Ordinance* allow this type of waiver arrangement, if affected land were to be up for sale, he would hope that the County would require this disclosure be made to prospective buyers and not allow "springing the trap" as it were, after they have become the new owners.

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Mr. Burdin stated that the final thing that he would like to address is simply a point that he feels requires

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clarification. He said that with all due respect to the Newcomb Township Plan Commission and to what is no doubt well intentioned testimony he must point out for the record that their views and concerns do not necessarily represent a consensus among Newcomb Township's residents. He said that he would hate to see this project hindered by the impression that this group speaks for the entire township and he urged the residents of Newcomb Township and others in Champaign County to take advantage of these opportunities to make their voices heard. Mr. Burdin submitted his written statement as a Document of Record.

Mr. Thorsland asked the Board if there were any questions for Mr. Burdin and there were none.

Mr. Thorsland asked if staff had any questions for Mr. Burdin and there were none.

Mr. Eric McKeever, Wind Specialist/Project Manager for Arends Brothers stated that they are more interested in the private wind turbine section of the *Ordinance*. He said that his only comment is one to the public in terms of landowners. He said that Arends Brothers would like the private landowners to be aware that when they sign the land lease agreements make sure that there is a clause included that states they are allowed to have their own private wind energy device. He said that many of the leases have a clause which states that if a private wind turbine is a certain height it will not be allowed without going through the proper channels. He said that the landowners have the power to include this agreement before they sign the land lease and not lose the opportunity to have their own private wind device.

Mr. Thorsland asked the Board if there were any questions for Mr. McKeever and there were none.

Mr. Thorsland asked staff if there were any questions for Mr. McKeever and there were none.

 Mr. Russ Taylor, who resides at 1301 W. Hickory, Mahomet stated that he has been involved in real estate for a long time. He said that obviously there are people attending this meeting who are all for the wind turbines, some who are against them and some who are not sure. He said that his question to staff would be why we have zoning in the County.

Mr. Knight stated that zoning is to protect an individual's property rights from everyone else's property rights.

Mr. Taylor stated that Mr. Knight's explanation is what he assumed and he appreciates the amount of time that staff and the Board puts in to assuring this protection. He said that he believes that zoning not only protects property rights but also property values. He said that he mostly sells houses although he has sold some farms and different properties in the Mahomet area, but he sells lots of homes to people who are transferred and work with relocation companies. He said that with the relocation companies a lot of times there will be a "red flag" checklist and wind turbine farms are not on that checklist yet but perhaps it is because they are so new that they haven't been added yet. He said that high-tension lines, steep driveways, etc. are used to check to see if the home needs a "red flag" in the value to hold it down some in case anything would inadvertently affect it. He requested that when the Board is considering this *Ordinance* that they keep land values in mind because these relocation companies that move so many people from the university, hospital staff, agricultural industries, etc. use it to value property. He said that he spoke to a real estate

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broker in Texas and is obtaining a copy of a study on values of agricultural land with wind turbines located on them and perhaps at a future hearing he will be able to submit this study to the Board for review. He said that currently it is tough to obtain loans for homes because people must have better credit and more money down. He said that FHA is one of the main financers of homes and they continuously change their guidelines. He said that one of the guidelines that have changed recently is the distance from high-tension lines and power sub-stations therefore it is unknown if wind turbines will be added to these guidelines in the future but it may be something that the Board should consider as they study this matter.

Mr. Thorsland asked the Board if there were any questions for Mr. Taylor and there were none.

Mr. Thorsland asked if staff had any questions for Mr. Taylor and there were none.

Mr. Bruce Stikkers, Resource Conservationist for the Champaign County Soil and Water Conservation District stated that if someone desires to develop a subdivision and do any type of major construction they have to obtain a Natural Resource Report from his office. He said that once the report is completed the County is supplied a copy which covers drainage and any natural resource history that might have taken place on that property. He said that obviously wind turbines would have a huge effect on our natural resources therefore he is trying to get up to speed on wind turbines and wind farms. He said that recently he met with his counter-parts throughout the State of Illinois that either had wind farms or proposed wind farms and LaSalle County indicated that they expect up to 1,000 wind turbines in their county. He said that his office is very well prepared to work with the County on this issue and are convinced that wind turbines could be sited in the County with all natural resource concerns being answered.

Mr. Thorsland asked the Board if there were any questions for Mr. Stikkers and there were none.

Mr. Thorsland asked if staff had any questions for Mr. Stikkers and there were none.

Ms. Jamie Stevens, who resides at 809 S. First St, Fisher stated that she also lives in Newcomb Township. She said that she supports the wind farm project because it will be an excellent alternative energy source and it needs to be tapped in to. She said that it has been said that a wind farm will cause an environmental hazard and ruin the ambiance of some of the preserves although she lives right next to one of the preserves and she does not see how a wind farm could ruin the ambiance and even if it did it would not constitute an environmental hazard. She said that we need to look into the statistics of how many wind turbine failures occur each year in comparison to how many wind turbines are operating each year in the United States. She said that she wanted to make sure that all of Newcomb Township's citizens were represented and all of their opinions were represented to the Board.

Mr. Thorsland asked the Board if there were any questions for Ms. Stevens and there were none.

Mr. Thorsland asked if staff had any questions for Ms. Stevens and there were none.

Mr. Kenn Davis, Special Projects Manager for White Construction, Inc. stated that they are located in Clinton, Indiana and have been building wind farms for the last five years. He said that he was born and

raised in Vermillion County and they just went through a similar proceeding because they were concerned about being shut out of the project. He said that alternative power sources are in the limelight currently but we have ethanol, coal, nuclear and wind although we also have a thing called natural gas or peaker power plants. He said that of all of those potential sources of additional power that people are going to want in two years when the flip they switch is wind because it does not require more water resources from your community as opposed to ethanol and coal. He said that people do not think about water currently because they have it even though they are paying \$1 dollar a bottle for it but when you are using one million gallons a day it is another issue. He said that he has heard testimony at tonight's meeting regarding health and safety on wind and concerns about property values. He said that in some of the counties that he has constructed towers he has been told by the county assessors that the public schools have put themselves in a position where they have some funds that are not allocated because of the new tax base revenue. He said that from a public road standpoint, wind farms are the single most important things that are influencing township road building programs than anything that he has been in contact with in the construction business. He said as the Special Projects Manager for the Twin Groves Wind Farm, a Horizon Wind Energy Project, over 60 miles of county and township roads were rebuilt at no cost to the county. He said that a yearly retainer was included which commits the company to put additional money back into the roads that they completely rebuilt. He said that Illinois has been alot smarter in solving this problem than the State of Indiana.

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Mr. Davis stated that if the Board elects to set the wind turbines back one-half mile in their geographic area, that is set up by section, with the road setback and resident setback you will essentially lock Champaign County out of business. He said that no developer, in his opinion, would take a look at a county with a onehalf mile setback because that is only one wind turbine per square mile and not one of the three developers in this room tonight would entertain a density of one turbine per square mile for their wind farm. He said that wind is a very unique resource because not everyone has it and you are blessed if you do. He said that the whole southern half of the State of Indiana does not have the resources to support a commercial wind farm therefore take advantage of what you have. He said that the wind farm will take approximately one to onehalf acres out of production and the revenue generated from that wind turbine will be two to three times more than what that acre will produce for the rest of its life on any basis. He said that the Board should be very careful about establishing setbacks because you are talking about viability and if the Board insists on those type of setbacks, beyond the health and safety issue, you will lock yourself out and your neighboring counties will take over your wind resources, you will remain paying for your roads and school districts will be dredging along with a locked in tax base that is not increasing at a rate that it should be in order to keep up with modern society. He said that his company has been involved in construction of peaker power plants, coal power plants and ethanol plants and from his company's standpoint wind if the most intelligent form of alternative energy that our nation is looking at today.

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Mr. Thorsland asked if staff had any questions for Mr. Davis and there were none.

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Mr. Davis stated that they just completed Phase II of Twin Groves Wind Farm which was 120 turbines and their firm alone, which only did the balance of plant construction, directly employed 125 people to construct

43 the local and access roads on that project. He said that in addition to that the erection contractor employed

Mr. Thorsland asked Mr. Davis how many construction jobs would be created for 100 towers.

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75 people and the electrical contractor had in the neighborhood of 75 people employed. He said that they started in March and pulled out in February of the next year and the mass of those people were there from April thru December. He said that each wind turbine represents approximately 2000 to 2500 craftsman hours to get in place and his company put over one million man hours into the wind project last year.

Mr. Thorsland stated that Mr. Farber previously indicated that the Twin Groves Wind Farm employed 50 permanent staff.

Mr. Davis stated that he is only referring to the construction phase.

Mr. Thorsland stated that the manufacturer of the tower parts is now located in Clinton.

Mr. Davis stated that this is correct. He said that an existing facility in Clinton was revamped and they are producing three-section GE towers and they are committed to General Electric for tower production. He said that those towers will be taken to Wisconsin and northern Illinois. He said that currently there are five or six places that are manufacturing towers and since they are so long and awkward to transport the idea is to bring some of that manufacturing closer to the wind areas so that the freight bills are not so high and the inconvenience to the public is not as large.

Mr. Thorsland asked the Board if there were any additional questions for Mr. Davis and there were none. He thanked Mr. Davis for his informative testimony.

Ms. Birgit McCall, who resides at 1085 CR 2200N, Champaign stated that she lives in Champaign County but not in Newcomb Township. She said that there have been alot of interesting studies on how people perceive risk and that the lower the risk and more spectacular the risk they tend to weigh significantly heavier than a situation where there has been more risk in a more mundane fashion. She said that this is an agricultural community and we tend to forget that agriculture is a somewhat dangerous occupation because there are farm implement accidents and a lot of people get hurt just doing their day-to-day farming. She said that just this week there was an incident at the Andersons where an explosion occurred and these are all things that we have to deal with as part of doing our day-to-day work. She said that we cannot remove risk but can reduce it to an acceptable level and identify up-front what those risks are and qualify those risks so that they can be dealt with. She said that some of the submitted photographs show rather spectacular failures of some of the older technology and as with the incident at the Andersons the new technology minimized any loss. She said that wind turbines have evolved through technology and have been improved so that these types of catastrophic events do not happen. She said that she appreciates everyone's concern about some sort of spectacular failure but those failures are extremely rare. She said that energy is an inherently riskful activity and in the past 40 years there have been more than 74,000 deaths in the mining industry alone either from direct cave-ins or from secondary things like "black-lung" disease. She said that the ability to get a clean energy that has a very, very low risk is something that we should seriously consider.

Ms. McCall stated that 110 feet is the equivalent of an 11 story building and many of the buildings being built in Champaign are more than 11 stories in height and people live in those buildings. She said that if the intention is to not build anything taller than what the fire district can deal with then we shouldn't be building

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that area and looking at the wind turbines. She said that the Altamont Pass is a high fire risk area and there is a lot of concern about fires although there are hundreds of wind turbines located along those passes that are dry as a bone. She said that she believes that it is great that the County considers the rights of the 20% of people who do not want the turbines because she wants someone to protect her land rights from Wal-mart and a subdivision in her back yard but unfortunately unless you have a lot of money so that you can buy all the land around you it is hard to control what other people do with their land.

anything that tall. She said that she lived in California by the Altamont Pass and she loved driving through

Mr. Thorsland asked the Board if there were any questions for Ms. McCall.

Ms. Capel asked Ms. McCall if she could reveal her sources for the figures used in her testimony.

Ms. McCall stated that regarding the resulting deaths due to the mining industry was from website which had a study of the number of deaths for coal workers. She apologized for not having the name of the source with her at tonight's meeting.

Ms. Capel asked Mr. McCall if she could reveal her sources regarding risk.

Ms. McCall stated that this information came from stories that she has read from popular journals.

Mr. Rob Parker, who resides at 467 CR 2500N, Mahomet stated that testimony was received about noise and the Ordinance indicates that the County will use the EPA recommendation for noise limits. He requested that those limits be explained. He said that the noise is very subjective and questioned what the ambient noise level is in Newcomb Township. He said that every 3 decibels is a doubling of the noise so when you go from 20 decibels to 23 it is twice as loud and 80 decibels is considered detrimental to a person's hearing.

Mr. Thorsland asked Mr. Knight if he had a response to Mr. Parker's question.

Mr. Knight stated that at the last meeting a document was distributed titled, "Title 35: Environmental Protection, Subtitle H: Noise, Chapter I: Pollution Control Board. He said that this document gave noise pollution guidelines although since he is not familiar with the document he cannot quote numbers from it.

Mr. Thorsland informed the audience that if someone is in attendance but does not wish to speak they are encouraged to sign the attendance record so that they will be included on the mailing list for the additional two meetings regarding this case.

Mr. Schildt requested the opportunity to respond to comments submitted regarding his testimony.

Mr. Thorsland stated that he would allow Mr. Schildt to respond.

Mr. Schildt stated that he does not believe that it is right for one man to profit at the expense of another. He said that property rights as well as property values need to be maintained and certainly his property rights end at his property line. He said that everything he said about setbacks was always referred to non-

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participating landowners. He said that a coal miner chooses to take the risk of being employed as a coal miner but a non-participating landowner has this risk imposed upon them therefore it is important that the setbacks, at the County level, are right. He said that the Cornbelt Fire Protection District does not cover Champaign-Urbana and he does not believe that there are any buildings in that fire protection district that are over 110 feet therefore the Cornbelt Fire Protection District does have the capability of fighting any fire that occurs in their district and the comparison to Champaign-Urbana was not fair.

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Mr. Thorsland asked the Board if there were any questions for Mr. Schildt and there were none.

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Mr. Thorsland asked if staff had any questions for Mr. Schildt and there were none.

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Ms. Capel moved, seconded by Mr. Schroeder to recess the February 26, 2009, public hearing for a ten minute break. The motion carried by voice vote.

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- The meeting recessed at 8:07 p.m.
- The meeting resumed at 8:17 p.m.

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Mr. Knight stated that everything regarding Part A of the Ordinance is almost complete and should be included in the next mailing. He said that staff hopes to have the mailing for the March 12, 2009, public hearing out sooner so that people will have adequate time to review the information. He asked the Board if there was any information that they would like to have before the next public hearing.

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Ms. Capel stated that it would be nice to have a more definitive number on the noise.

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Mr. Thorsland agreed with Ms. Capel. He said that Mr. McKeever brought up the point about participating landowners who desire to have a private wind tower on their property therefore it may be an issue that staff should research.

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Mr. Thorsland announced that the next meeting is March 12, 2009, and invited everyone to attend to present testimony regarding Case 634-AT-08.

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Mr. Thorsland requested a motion to close the public hearing for tonight.

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Mr. Schroeder moved, seconded by Ms. Capel to close the public hearing. The motion carried by voice vote.

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6. **New Public Hearings** 

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# **COUNTY ROADS AGREEMENT**

THIS AGREEMENT (the "Agreement") is made and entered into as of August 26, 2008 by and between Bureau County, Illinois (the "County") and Walnut Ridge Wind, LLC, a Delaware limited liability company ("Walnut Ridge"). The County and Walnut Ridge may each be referred to herein as a "Party" and together, the "Parties."

#### RECITALS

WHEREAS, Walnut Ridge is in the process of developing a wind energy generating facility consisting of up to 151 wind turbines in the County (the "Project") and, in connection therewith, has submitted Conditional Use Permit applications for the Project to the County (the "Conditional Use Permit") in accordance with the Zoning Ordinance for the County (the "Zoning Ordinance"); and

WHEREAS, the County is directed and authorized pursuant to the Counties Code, 55 ILCS 5/5-101 et seq., and the Illinois Highway Code, 605 ILCS 5/5-101 et seq. (the "Highway Code"), to construct, administer, operate and maintain highways in Bureau County, Illinois, acting by and through its County Engineer (the "County Engineer"); and

WHEREAS, Section 9-113 of the Highway Code grants to the County the authority to impose reasonable rules, regulations and specifications for the use of County roads by public and private utilities; and

WHEREAS, Section 9-113.01 of the Highway Code imposes liability on public or private utilities for any damage to County roads; and

WHEREAS, in connection with the construction of the Project, the Parties desire to address certain issues related to certain roads owned, operated and maintained by the County and the County Engineer (the "County Roads") over which it will be necessary for Walnut Ridge and its respective agents, contractors, subcontractors, material suppliers, vendors, employees, and designees (collectively the "Walnut Ridge's Parties") to, among other things, (i) transport heavy equipment and materials over the County Roads, which may in certain cases be in excess of the design limits of the County Roads; (ii) transport certain locally sourced materials, such as concrete and gravel, on such County Roads and (iii) widen the County Roads and make certain modifications and improvements (both temporary and permanent) to the County Roads (including to certain culverts, road shoulders and other related fixtures) to permit such equipment and materials to pass:

## WHEREAS, Walnut Ridge:

(i) has provided to the County Engineer a preliminary site layout plan for the Project complying with the State of Illinois Professional Engineering Act and signed by an engineer licensed in the State of Illinois, a copy of which is attached hereto as Exhibit "A" (the "Site Layout Plan");

- (ii) shall, prior to the issuance of any building permits by the County, and with the agreement of the County Engineer physically mark the locations of the proposed Project site access road entrances and the underground collection system cable crossings; and
- (iii) shall, prior to the issuance of any building permits by the County, provide to the County Engineer a Transportation Impact Analysis prepared by an independent engineer mutually acceptable to Walnut Ridge and the County Engineer which:
  - (a) identifies by name and surface type each County Road and portion thereof that Walnut Ridge and Walnut Ridge's Parties intend to use during the construction of the Project (the "Affected Roads") as well as the number of loads, per axle weight of each load and type of equipment that will be used to transport each load and the inter-Project equipment movements;
  - (b) includes a schedule of the across road culverts and bridges affected by the Project and the recommendations as to actions, if any, required with respect to such bridges and culverts and estimates as to the cost to replace such bridges and culverts; and
  - (c) sets forth the anticipated road repair costs to be made in advance of the Project and following construction of the wind turbines

(the "Transportation Impact Analysis"). Before construction of the Project may proceed, the County Engineer must approve the Transportation Impact Analysis, including the estimated road repair costs, which approval shall not be unreasonably withheld or delayed. In connection with review and approval of the Transportation Impact Analysis, the County Engineer may retain an engineering firm and Walnut Ridge shall reimburse the County Engineer for all reasonable engineering fees incurred in connection with the review and approval of the Transportation Impact Analysis. Payment shall be made within thirty (30) days of receipt of such engineering bills by Walnut Ridge; and

WHEREAS, the County, the County Engineer and Walnut Ridge wish to set forth their understanding and agreement as to the road issues relating to the construction of the Project in this Agreement which the Parties intend to satisfy the requirements of Section 3.41-4(s)(2)(f) of the Zoning Ordinance.

NOW, THEREFORE, in consideration of the mutual promises and covenants herein set forth, the Parties, intending to be legally bound, agree as follows:

Section 1. County Approvals. The County and the County Engineer hereby agree to permit:

- (a) Project site access road entrances to the County Roads and
- (b) Underground collection system cable crossings under the County Roads

and shall, prior to the issuance of any building permits by the County, coordinate with Walnut Ridge and approve the locations of the Project site access road entrances and the underground collection system cable crossings.

- Section 2. Walnut Ridge Undertakings. Walnut Ridge hereby agrees, and shall cause Walnut Ridge's Parties to agree, to undertake the following in connection with the development of the Project:
- (a) Walnut Ridge represents and warrants that the Project plans have been prepared by a qualified professional engineer and, as a result of the construction of the Project (including the construction of access roads), there will be no increased runoff or change in drainage patterns as a result of Walnut Ridge's use of, repairs to and removal of materials from the County Roads.
- (b) Permanent markers/stakes meeting the requirements of State and Federal regulations and good utility practice shall be installed at the edge of the road right-of-ways to identify where the collection system cables cross the roads.
- (c) Iridescent marker tape shall be buried in the trench twelve inches (12") above the collection system cables where they cross the road right-of-ways.
- (d) Prior to the start of construction on the Project, Walnut Ridge shall become a member of Joint Utility Locating Information for Excavation ("JULIE") and provide JULIE with the necessary information to update their records and memorialize the locations where the underground cables cross the road right-of-ways. Walnut Ridge shall preserve and protect all properties of public utility companies, such as lines, conduits, gas or water pipes, sewers and tile lines which run over, through or under any part of the County Roads used by Walnut Ridge. It shall be Walnut Ridge's responsibility to contact the various public utility companies and locate their properties before any construction shall start and Walnut Ridge shall assume full responsibility for reimbursing owners for any damage or injury to such properties which may be caused by Walnut Ridge's operations.
- (e) Prior to the start of construction on the Project, Walnut Ridge shall identify all heavy lift crawler crane road crossings at locations to be coordinated with, and approved by, the County Engineer.
- (f) Horizontal/directional boring shall be used where the collection system cables cross under the roads such that the road surface shall not be cut, and such cables shall be installed in steel conduit or Schedule 80 conduit used in public right-of-way locations in accordance with good utility practice.
- (g) The size and type of any culverts installed or replaced as a result of construction of the Project or repair to the County Roads shall be approved by the County Engineer at or prior to the time Walnut Ridge submits a permit application for a culvert. Any such culverts shall be no less than fifteen inches (15") in diameter and shall be new, pre-coated, corrugated metal culvert pipes.

- (h) In the event that County Road corners are widened for truck navigation in connection with the development of the Project, such road corner modifications shall be designed by an engineer and shall satisfy County Road standards. The widened road corners shall remain in place inside the existing County Road rights-of-way after construction of the Project unless the County Engineer specifically requests that such widening be removed. If the widened corners are removed, Walnut Ridge shall repair all damage and ensure proper drainage. Walnut Ridge shall make all commercially reasonable efforts to obtain permanent easements from private land owners so that widened road corners can remain fully in place and, if so obtained, shall convey such permanent easements to the County. In the event that Walnut Ridge is unable to secure such permanent easements from private land owners and the County exercises its powers of eminent domain to obtain the necessary right-of-way, Walnut Ridge agrees to reimburse the County for reasonable expenses associated therewith, including the sum paid to the private land owner.
- (i) While the Project is under construction, transport schedules shall be provided regularly (and in any event, no less than weekly) by Walnut Ridge to the County Engineer to indicate when heavy traffic will be in the area of the Project site.
- (j) Walnut Ridge shall provide the County Engineer with a copy of each overweight and oversize permit issued by the Illinois Department of Transportation ("IDOT") to Walnut Ridge or Walnut Ridge's Parties promptly upon receipt thereof.
- (k) Project traffic shall be scheduled in a way to reasonably minimize the adverse impact on local agricultural truck transport. In the event of traffic conflicts, priority shall be given to emergency response vehicles, rural mail delivery, transportation of children to and from school, and the transportation of agricultural commodities and implements of husbandry. Walnut Ridge agrees to coordinate with the County Engineer scheduling of Project construction traffic in weekly scheduled meetings, which meetings shall include all affected parties (including school bus transporters) and shall be held at the offices of Walnut Ridge. The County may, but shall not be obligated to, have representatives participate in such meetings.
- (l) If the County Roads degrade (by way of example and not limitation, "degrade" means to show signs of bleeding, rolling, breaking or pumping) while construction of the Project is ongoing due to construction activities or the volume of construction traffic related to the Project, Walnut Ridge, at the reasonable request of the County Engineer, shall cause necessary remedies to be implemented to ensure safe passage of the motoring public within a reasonable time and, in any event, within twenty-four (24) hours; unless immediate hazards exist, in which case, Walnut Ridge shall take immediate action to make the County Roads safe for the motoring public. If Walnut Ridge fails to act, the County Engineer may take remedial action and may close the road until the road is made safe.
- (m) If, during the course of construction of the Project, the County Engineer notifies Walnut Ridge of significant potholes or other conditions caused by the construction traffic or construction activities which make travel on the County Roads hazardous, Walnut Ridge shall remediate the hazard prior to dusk on the day it receives notice of the hazardous condition from the County Engineer (or place illuminated or night condition warning signs pending the remediation of the hazard within twenty-four (24) hours). If Walnut Ridge fails to act, the County Engineer may take remedial action and may close the road until the road is made safe.

- (n) At all times during the construction of the Project and Repair Work performed on the County Roads, Walnut Ridge and Walnut Ridge's Parties shall ensure that construction areas and routes are free and clear of mud, dirt, debris, garbage, obstructions or hazards. Upon the reasonable request of the County Engineer, Walnut Ridge shall clear any mud, dirt, debris, garbage, obstructions or hazards from a County Road, culvert or ditch prior to dusk on the day such a request is made.
- (o) If work during the construction phase of the Project or the post-construction road repair phase is suspended for an extended period, due to seasonal conditions or other cause, Walnut Ridge, at Walnut Ridge's expense, shall take such measures as laying additional gravel, installing barriers, posting signs and providing interim repairs or protections, as may be reasonably required to render the County Roads safe for vehicular traffic during the period such work is suspended.
- (p) Representatives of Walnut Ridge shall meet with the school bus operator(s) and the relevant school officials to ensure suitable arrangements are put into place for the safe and timely transport of children to and from school via the normal services for such transport. At least thirty (30) days prior to Walnut Ridge's use of the County Roads, Walnut Ridge shall deliver written confirmation of such arrangements to the County Engineer.
- (q) Heavy lift crawler cranes shall only cross the County roads in low traffic periods, provided that any such crawler crane shall be disassembled prior to crossing a County Road. The Parties contemplate such crane crossings will take place during the night. Walnut Ridge shall ensure that property owners affected by such crane crossings have utility service for occupied residences. Walnut Ridge shall advise the Bureau County Emergency Services and Disaster Agency, local law enforcement and fire protection, and ambulance service providers of such crane crossings.
- (r) Except as otherwise specifically provided for in this Agreement, Walnut Ridge shall ensure that its contractors, subcontractors, material suppliers and their respective transport providers transporting oversize and overwidth loads use the County Roads during daylight hours.
- (s) In the event that Walnut Ridge or Walnut Ridge's Parties move a traffic control device to accommodate its construction traffic, such sign shall be immediately replaced by Walnut Ridge in accordance with the Illinois Manual on Uniform Traffic Control Devices issued by IDOT (current edition) at its expense.
- (t) Walnut Ridge, upon the request of the County Engineer, shall obtain and post traffic signs, including signs advising "No Wind Farm Construction Traffic." This exclusion shall apply to all vehicles, at various locations, as an aid to traffic management. All such signage or postings shall comply with the Illinois Manual on Uniform Traffic Control Devices issued by IDOT, current edition.
- (u) In accordance with permits issued by State and County authorities and as otherwise required by the Illinois Vehicle Code (and regulations promulgated thereunder), oversize and/or overweight vehicles shall display slow moving vehicle emblems and provide escort vehicles and related signage and lighting, to the end of protecting public safety and property.

- (v) Walnut Ridge shall obtain permits from IDOT's Bureau of Local Roads and Structures prior to transporting overweight and/or oversize loads over any bridges and, promptly upon receipt thereof, shall provide copies of such permits to the County Engineer.
- (w) All construction traffic related to the Project shall use exclusively routes as designated in the Transportation Impact Analysis and shall not use any other County roads and routes. In the event this provision is violated by Walnut Ridge or Walnut Ridge's Parties, the County Engineer may impose a fine of Five Hundred Dollars (\$500.00) per occurrence on Walnut Ridge. The Parties recognize that Project traffic may, either through mistake or with the consent of the County Engineer, use County roads other than those designated in the Transportation Impact Analysis. Repairs for damage caused by Walnut Ridge or any of Walnut Ridge's Parties during:
  - (i) permitted use shall be made by Walnut Ridge in accordance with Section 4 of this Agreement and the burden of proving such incidental road damage was not caused by Walnut Ridge or Walnut Ridge's Parties shall be on Walnut Ridge; and
  - (ii) mistaken use shall be made by Walnut Ridge in accordance with Section 4 of this Agreement provided the road damage is apparent at the time the mistaken use occurs.
- (x) The County Engineer, or his designee, shall have unfettered access to the County Roads to inspect the roads, culverts and adjacent ditches.
- (y) Walnut Ridge shall reimburse the County and/or the County Engineer for all reasonable inspection, observation and coordination costs, including, but not limited to, engineer fees, incurred in connection with any and all road issues relating to the construction of the Project and repairs to the County roads and all roadway appurtenances, including costs incurred during the Road Maintenance Period. Payment shall be made within thirty (30) days of receipt of such engineering bills or other bills by Walnut Ridge.
- (z) Walnut Ridge shall submit applications for points of access and utility crossings to the County and/or the County Engineer as required.
- (aa) Walnut Ridge shall hold harmless, indemnify, defend, pay costs of defense (including attorneys' fees), and pay any and all claims or judgments which may hereafter accrue against the County and/or the County Board members, the County Engineer, the County Zoning Administrator and/or (notwithstanding that such individuals are not specifically named herein) their agents, servants, employees and attorneys, arising out of any of the use of the County roads by Walnut Ridge, Walnut Ridge's Parties and their respective successors and/or assigns and their respective transport providers in connection with the construction of the Project and repair and reconstruction of the County Roads and all roadway appurtenances.
- (bb) With regard to work performed on the County Roads in connection with construction of the Project, Walnut Ridge's Parties shall be pre-qualified by IDOT to perform the work such parties are hired to perform. Upon request, Walnut Ridge shall provide to the County Engineer documents establishing that a contractor or subcontractor has been pre-qualified by IDOT.

- (cc) With regard to work performed on County roads in connection with construction of the Project, Walnut Ridge, its contractors and subcontractors shall pay wages in accordance with the Illinois Prevailing Wage Act, 820 IL CS 130/1 et seq.
- (dd) Walnut Ridge shall provide to the County Engineer any "As-Built" drawings of improvements to the County Roads or road rights-of-way that Walnut Ridge, its engineers, contractors or subcontractors may possess.
- (ee) Walnut Ridge shall provide written notice to the County Engineer identifying the name, address and both regular and emergency contact information of Walnut Ridge's on-site representative for communication purposes regarding this Agreement. Walnut Ridge's on-site representative may be changed and any such change and change in contact information shall be communicated to the County Engineer in writing.
- (ff) Walnut Ridge shall pay to the County a Permit Fee of Three Thousand Seven Hundred Dollars (\$3,700.00) for each tower constructed in connection with the Project and said fee shall be deemed to provide permission for the overweight and oversize vehicles related to the Project to travel upon the County Roads designated in the Transportation Impact Analysis. The fee shall be made payable to the County Highway Department at least thirty (30) days prior to the start of construction of the Project and said fee shall be deposited in the County Highway Fund.
- Section 3. Pre-Project Roadway Condition Survey. Walnut Ridge agrees to undertake an independent Project roadway condition survey, which shall include videotaping the County Roads, structures and across road culverts, (an "Independent Road Survey") prior to starting construction of the Project. The Independent Road Survey shall record the condition of the Affected Roads specified in the Transportation Impact Analysis to be used or affected by the Project. Prior to the Independent Road Survey, Walnut Ridge and the County Engineer shall mutually agree on an independent engineer to conduct the Independent Road Survey. Walnut Ridge shall cause the results of the Independent Road Survey to be shared with the County Engineer promptly upon its receipt thereof and, in any event, at least thirty (30) days prior to the start of construction of the Project.

### Section 4. Walnut Ridge Obligation to Repair County Roads.

- (a) Walnut Ridge hereby agrees that, upon notice from the County Engineer it shall, at its expense, repair, or cause to be repaired, any damage to County Roads caused by the construction of the Project whether such damage is caused by Walnut Ridge or Walnut Ridge's Parties (the "Repair Work"). "Damage" shall be interpreted in the broadest sense and shall include, but not be limited to, damage to the road surface, subsurface, culverts, bridges, drainage tiles, signs and adjacent ditches. All repair and/or restoration of County Roads shall be constructed in a good and workmanlike manner and in accordance with "Standard Specifications for Road and Bridge Construction," current edition, issued by IDOT.
- (b) Upon substantial construction of the wind turbines which comprise the Project, Walnut Ridge shall provide to the County Engineer its engineer's estimates of the engineering, labor and material costs to repair or improve (in accordance with this Section 4) the County Roads

affected by the construction of the Project, and shall include the costs of the liability insurance premiums as set forth in Section 6 of this Agreement. These engineer's estimates, once approved by the County Engineer, shall be used as the basis for determining the amount of the Letter of Credit during the post-construction road repair phase as provided for in Section 7 of this Agreement. Walnut Ridge's post-construction road Repair Work shall begin as soon as practicable upon the County Engineer's approval of Walnut Ridge's engineer's estimates of the cost of the post-construction road Repair Work.

- (c) <u>Dirt Roads.</u> In the event that Walnut Ridge desires use of any County Road which is an unsurfaced, unimproved dirt road, Walnut Ridge shall, at its sole expense and subject to the review and approval of the County Engineer, improve such road with a crushed stone surface comprised of 3 to 3½ inches of compacted CA-6 or CA-10 from a limestone or dolomite quarry, and install or improve culverts as directed by the County Engineer, and grade and seed any disturbed ditches in compliance with all federal, state and County requirements. In addition, at the conclusion of construction of the Project, Walnut Ridge shall, at its expense, repair or cause to be repaired any such road, including the culverts, ditches and the gravel surface.
- (d) <u>Gravel Roads.</u> In the event that Walnut Ridge uses a County Road which is a gravel road, Walnut Ridge shall, at its sole expense and subject to the review and approval of the County Engineer, restore such road by coring the existing road and shoulders to a depth of twelve inches (12"), occurrences of subbase failure below the twelve inch (12") core shall have remedial work, that is, stabilization and subsurface drainage work, performed as directed by the County Engineer, laying a base course of eight inches (8") of compacted CA-2 and laying a surface course comprised of four inches (4") of compacted CA-6 or CA-10, and shall also install or improve across road culverts and entrances as directed by the County Engineer, and grade and seed any disturbed ditches in compliance with all federal, state and County requirements.
- (e) Other Roads. The Parties anticipate and agree that the Repair Work for the County Roads used for the construction of the Project will consist of all labor, materials and equipment to repair:
  - (i) With respect to any occurrence of roadbed damage resulting from subbase failures, such repair work shall include, but not be limited to, stabilization and subsurface drainage work, coring to a depth of fifteen inches (15"), laying a base course of eight inches (8") of compacted CA-2, and laying a surface course comprised of four inches (4") of compacted CA-6 or CA-10, and three inches (3") of hot mix asphalt pavement for the full width of the road, all such work to be performed as directed by the County Engineer;

or

(ii) With respect to road damage resulting from surface failures, such repair work shall include recycling the road surface to a depth suitable for and incorporation of a foamed asphalt treatment with subsequent resurfacing of the road with three inches (3") of hot mix asphalt pavement for the full width of the road.

Regardless of whether repairs are made according to (i) or (ii) above, four foot (4') wide crushed aggregate shoulders with a minimum depth of three inches (3") shall be placed adjacent to the

repaired roads. Disturbed ditches will also be graded and seeded in compliance with all Federal, State and County requirements.

(f) <u>Tiles.</u> The Parties acknowledge that there are farm drainage tiles located under roads to be used by Walnut Ridge for construction of the Project. In the event that these drainage tiles are damaged, Walnut Ridge shall replace said tiles, within the entire road right-of-way, with double-walled plastic pipes approved by IDOT, unless otherwise directed by the County Engineer.

#### (g) <u>Degradation Damage</u>.

- i. The Parties anticipate and agree that some County Roads may not require extensive repairs, but will suffer wear and tear as a result of the volume of traffic associated with the construction of the Project, and such wear and tear will shorten the useful life of such roads ("Degradation Damage"). Walnut Ridge agrees to compensate the County for Degradation Damage to County Roads caused by Walnut Ridge's activities notwithstanding that such damage is not apparent upon visual inspection. The Parties agree that some roads will suffer Degradation Damage and the amount of Degradation Damage cannot be calculated with certainty prior to the completion of construction activity.
- Walnut Ridge shall conduct an Independent Road Survey after ii. completion of construction activity on the Project, prepared by an independent engineer mutually acceptable to Walnut Ridge and the County Engineer, which shall record the conditions of the Affected Roads at such time. Such Independent Road Survey shall also evaluate the Degradation Damage compensation, which shall be calculated by and based upon the independent engineer's Transportation Impact Analysis (to be prepared in accordance with the Recitals to this Agreement), the pre-construction Independent Road Survey and those formulae and variables said independent engineer deems necessary and appropriate for fair and just compensation for the loss of useful service life of the Affected Roads not exhibiting visual damage. The variables to be expected in a formulation and calculation of compensation shall include, but not be limited to, current and normally anticipated average daily traffic, reasonably expected number of years remaining in the road's useful service life, estimate of cost to completely replace and rebuild each Affected Road not exhibiting visual damage, pavement cross section, road base types, existing sub-base and sub-grade, obligation of State Transportation Rural and Federal Aid Matching funds on the part of the County, all traffic counts expected and/or realized through actual traffic counts experienced as a result of Walnut Ridge's Parties, and the general traffic patterns indicative of the rural nature of the entire roadway system of the County. All Affected Roads exhibiting visual damage shall be repaired in accordance with Section 4(a)-(e).
- iii. At the time the Letter of Credit is adjusted, in accordance with the terms of this Agreement, to provide security for the post-construction Repair Work, Walnut Ridge shall compensate the County for Degradation Damage. Such compensation shall be deposited in the County Highway Fund.

- (h) All road resurfacing shall be completed so as to provide a smooth, gradual integration with an existing road surface, even if such resurfacing requires improvements to County Roads not affected by the construction traffic.
- Any repairs undertaken pursuant to this Section 4 shall be subject to reasonable approval by the County Engineer.
- (j) All post-construction Repair Work shall be completed within six (6) months of the date the Letter of Credit is adjusted, in accordance with the terms of this Agreement, to provide security for the post-construction Repair Work. If completion of the post-construction Repair Work cannot be completed within the period designated for road construction Repair Work by IDOT, then (i) the six (6) month repair period shall be tolled pending the resumption of the Repair Work in accordance with IDOT rules and regulations and (ii) Walnut Ridge shall, at its expense, lay additional gravel, install barriers, post signs and take all actions necessary to make County Roads damaged by the Walnut Ridge's construction activities safe for vehicular traffic until such time that construction of the Project and the post-construction Repair Work is completed. All such actions undertaken by Walnut Ridge shall be subject to the supervision and approval of the County Engineer.
- (k) Walnut Ridge shall provide written notice to the County Engineer when Walnut Ridge has completed the Repair Work (the "Completion Notice"). Attached to the Completion Notice shall be proof of payment to contractors, subcontractors and material suppliers, and lien waivers executed by all contractors, subcontractors and material suppliers who have performed the Repair Work. The Completion Notice and lien waivers shall be delivered to the County Engineer.
- (l) Upon receipt of the Completion Notice and lien waivers by the County Engineer, the County Engineer shall have thirty (30) days to inspect the Repair Work and provide written notice to Walnut Ridge of rejection of the Repair Work in whole or in part (the "Rejection Notice").
  - i. If no Rejection Notice is tendered by the County Engineer, then the Letter of Credit shall be adjusted to provide security for the Road Maintenance Period as provided for in Section 7(e) of this Agreement.
    - ii. If a Rejection Notice is tendered by the County Engineer, then:
    - a. Walnut Ridge shall make repairs as identified in the Rejection Notice. Upon completion of such additional repair work, Walnut Ridge shall serve the County Engineer with a supplemental Completion Notice and the notice procedures set forth herein shall apply;

or

b. Within ten (10) days of receipt of the Rejection Notice, Walnut Ridge shall provide written demand to the County Engineer requesting that the

County Engineer and Walnut Ridge select an independent engineering firm to inspect the Repair Work and determine if additional repairs, as demanded by the County Engineer in a Rejection Notice, are required. The Parties shall select an independent engineering firm within twenty-one (21) days of Walnut Ridge's written demand. The independent engineering firm shall complete its inspection within thirty (30) days and issue its report. The determination of said independent engineering firm shall be binding upon the Parties hereto. The cost of the engineering firm for such inspection and report shall be divided evenly among the Parties hereto.

- (m) The "Date of Final Acceptance" of all road repairs shall be the later of the following:
- i. The date of the delivery of the Completion Notice to the County Engineer if no Rejection Notice is given by the County Engineer to Walnut Ridge; or
- ii. If a Rejection Notice is given by the County Engineer to Walnut Ridge, then either:
  - a. date the identified repairs are completed to the reasonable satisfaction of the County Engineer (but no later than thirty (30) days after a Supplemental Completion Notice is submitted); or
  - b. the date of the written report by the independent engineering firm showing no further repairs are necessary or reasonably required.
- (n) If any County Road used by Walnut Ridge shall require any repairs in the opinion of the County Engineer as a result of damage, caused by Walnut Ridge or Walnut Ridge's Parties, or Repair Work is defective and additional repairs are required during the three (3) year period following construction of the Project (the "Road Maintenance Period"), Walnut Ridge shall, upon notification by the County Engineer of the necessity for the repair, make repairs at its own cost and expense. Should Walnut Ridge fail to make the repairs within the reasonable time specified in the notification, the County Engineer may cause the work to be done and the County may draw upon the Letter of Credit as provided for in Section 7(h) (the "Road Maintenance Period Letter of Credit") to pay the entire cost or expense of the repair, including, but not limited to, engineer, attorney and consultant's fees and costs. Should the cost or expense exceed the amount set forth in the Road Maintenance Period Letter of Credit, Walnut Ridge shall remain liable for any additional cost or expense incurred.
- (o) The Parties understand that the Project may be constructed in two phases. In the event that the Project is built in two phases, Walnut Ridge shall be permitted up to eighteen (18) months between the completion of construction of the first phase and the commencement of construction of the second phase (the "Interim Period"), during which time Walnut Ridge shall not be required to make permanent repairs to the County Roads; provided that the following conditions are satisfied:

- i. as soon as practicable, Walnut Ridge shall provide written notice to the County Engineer of its intent to construct the Project in two phases, in which case the Parties shall mutually agree, in writing, as to the date the Interim Period begins and ends; and
- ii. Walnut Ridge shall be obligated to maintain the County Roads in a manner that is safe and passable to the motoring public. Prior to and throughout the Interim Period, Walnut Ridge, at its expense, shall take such measures as laying additional gravel, installing barriers, posting signs and providing other repairs or protections, as may be reasonably required to render the County Roads safe for vehicular traffic during the Interim Period. The Parties anticipate and agree that some County Roads may require a seal coat, cold patch repairs or hot patch repairs so as to provide a smooth and safe road surface. In particular, prior to and during the winter season, the County Roads may require additional measures to ensure that such roads are plowable.

During the Interim Period, the Letter of Credit shall be increased to one hundred and fifty percent (150%) of the cost of the estimated post-construction repair work, as determined in the Transportation Impact Analysis and approved by the County Engineer. If Walnut Ridge fails to make adequate repairs or take necessary protection during the Interim Period, the County Engineer may take remedial action, including, but not limited to, making such repairs and drawing on the Letter of Credit in accordance with Section 7.

- Section 5. County Undertakings. In consideration for the obligations of Walnut Ridge under this Agreement, the County agrees as follows:
- (a) Upon presentation of the Letter of Credit as provided for in Section 7, to permit Walnut Ridge and Walnut Ridge's Parties to use the County Roads designated in the Transportation Impact Analysis for construction of the Project, including overweight and oversize vehicles, the County Engineer shall, in a manner consistent with County ordinances and customary practices, issue permits to Walnut Ridge and Walnut Ridge's Parties in a timely manner upon the filing of permit applications. The County Engineer agrees to send a copy of each permit issued to Walnut Ridge at the address provided hereinafter in Section 10(g).
- (b) The County Engineer shall permit time-sensitive, essential turbine and/or transformer component parts to be transported on County Roads, notwithstanding other applicable County ordinances.
- (c) The County Engineer will coordinate and cooperate with Walnut Ridge and Walnut Ridge's Parties to minimize the impact of their use of the roads on normal local traffic.
- Section 6. Insurance. Walnut Ridge shall furnish the County and the County Engineer with evidence of liability insurance in the amount of at least Five Million Dollars (\$5,000,000.00) per occurrence, covering the construction activities of Walnut Ridge and road Repair Work contemplated by this Agreement. The insurance shall be written by a company rated by Standard & Poor's rating group as B+ or better. The Certificate of Insurance shall be provided

to the County and County Engineer before the commencement of any work by Walnut Ridge or Walnut Ridge's Parties. The insurance policy shall provide for a thirty (30) day "prior notice of termination" provision in favor of the County and the County Engineer. Should Walnut Ridge allow such liability insurance to terminate prior to the completion of the construction activities and road Repair Work contemplated by this Agreement, the County and the County Engineer shall have recourse against the Letter of Credit provided for in Section 7 for funds sufficient to cause the liability insurance to be reinstated until the completion of the road Repair Work. The County, County Board members, County Zoning Administrator and the County Engineer shall be named as additional insureds on the policy.

#### Section 7. Letter of Credit.

- (a) Not less than thirty (30) days prior to the start of construction of the Project, Walnut Ridge shall provide the County with an irrevocable Letter of Credit (the "Letter of Credit") issued by a sound financial institution located in the State of Illinois in a form reasonably acceptable to the County and the County Engineer, and with a draw request substantially in the form of Exhibit "B" attached hereto. The Parties acknowledge that the exact terms of the Letter of Credit may be subject to terms requested by the financial institution issuing the Letter of Credit.
- (b) The Letter of Credit shall provide security to the County and the County Engineer for the following phases of the Project:
  - (i) the construction of the Project,
  - (ii) the Interim Period (if any),
  - (iii) the post-construction road Repair Work, and
  - (iv) the Road Maintenance Period.

At six (6) month intervals from the date the Letter of Credit is initially provided by Walnut Ridge to the County, and until completion of post-construction road Repair Work, Walnut Ridge, subject to approval by the County Engineer, will reassess the estimated cost of post-construction road Repair Work, and the Letter of Credit shall be adjusted to reflect the periodically revised estimate.

- (c) During the construction of the Project, the Letter of Credit shall be the cost of the estimated post-construction Repair Work as determined in the Transportation Impact Analysis and approved by the County Engineer.
- (d) During the post-construction road Repair Work phase, the Letter of Credit shall not be less than one hundred twenty-five percent (125%) of the cost of the Repair Work as agreed upon by the Parties in accordance with Section 4.
- (e) During the Road Maintenance Period, the Letter of Credit shall not be less than twenty-five percent (25%) of the actual cost of the post-construction road Repair Work as agreed upon by the Parties when the post-construction road Repair Work is accepted by the County Engineer and the County.

- (f) A reduction in the Letter of Credit shall not amount to acceptance by the County and/or the County Engineer of improvements or repairs to County Roads by Walnut Ridge.
- (g) The County and/or the County Engineer shall not draw on the Letter of Credit until ten (10) days after the delivery of written notice to Walnut Ridge, specifying a default hereunder by Walnut Ridge, during which ten (10) days Walnut Ridge may cure such default and, in the event Walnut Ridge so cures, or is actively pursuing a cure which would be acceptable to the County in its reasonable discretion, the County and/or the County Engineer shall not draw on the Letter of Credit on account of such default. The insuring or bonding over of any payment claim of a contractor, subcontractor or material supplier by Walnut Ridge with the County, shall constitute an acceptable cure of a default based upon Walnut Ridge's failure to pay a contractor, subcontractor or material supplier.
- (h) The Letter of Credit may be used by the County and/or the County Engineer, in their reasonable discretion, to cure any uncured defaults of any kind or nature with respect to the improvement and/or repair of County Roads by Walnut Ridge, including, but not limited to:
  - (i) providing payment for any of Walnut Ridge's obligations under this Agreement which remain unpaid for thirty (30) days after such obligations have been incurred and documented, which obligations shall include, without limitation, modification and repairs of the County Roads during construction of the Project, the Interim Period (if any), and post-construction road Repair Work;
  - (ii) keeping the liability insurance policy pursuant to Section 6 in force and effect;
  - (iii) in the event the County and/or the County Engineer is served with a notice pursuant to the Illinois Mechanics' Lien Act from any of Walnut Ridge's contractors, subcontractors, material suppliers, engineers or others (a "Lien Claimant") that Walnut Ridge has not paid for work, payment may be made to such Lien Claimant (this right in the County and/or the County Engineer shall not be construed as granting to any Lien Claimant any right as a third party beneficiary or otherwise to the proceeds of the Letter of Credit). The insuring or bonding over of any payment claim of a contractor, subcontractor or material supplier by Walnut Ridge with the County, shall constitute an acceptable cure of a default based upon Walnut Ridge's failure to pay a contractor, subcontractor or material supplier;
  - (iv) reimbursement for emergency actions by the County and/or the County Engineer to protect public health and safety as a result of the activities of Walnut Ridge or Walnut Ridge's Parties; and
  - (v) reimbursement for such other actions (erection of traffic control signs, payment for outside consultants and advisors, etc.) as are provided for under this Agreement.

- (i) Any time this Agreement calls for a Letter of Credit, the County Board and County Engineer may, in their sole discretion, upon request of Walnut Ridge, accept substitute collateral other than a Letter of Credit.
- (j) Upon the expiration of the Road Maintenance Period, Walnut Ridge shall have no further obligation to maintain the Letter of Credit and the Letter of Credit shall be cancelled and returned to Walnut Ridge.
- Section 8. Future Work by Walnut Ridge. This Agreement is limited to the construction of the Project as described in the recitals to this Agreement and as depicted in Exhibit "A." hereto, which may be built in two phases. In the event that Walnut Ridge desires use of County Roads following the expiration of the Road Maintenance Period for future maintenance work on the Project, for demolition of the Project or for the development of another project, another roads agreement with the County shall be required.
- Section 9. Approval of Conditional Use Permits by the County. The obligations of the Parties hereto are subject to and conditioned upon approval of the Conditional Use Permits for the Project by the County. In the event that the County fails to approve all of the Conditional Use Permits applied for by Walnut Ridge, this Agreement may, at the election of Walnut Ridge, be considered null, void and without legal effect, provided a written notice of such election is provided to the County and the County Engineer within sixty (60) days of the decision by the County.

#### Section 10. Miscellaneous.

- (a) <u>Recitals</u>. The Recitals set forth above are hereby incorporated herein and made a part of this Agreement.
- (b) Remedies and Enforcement. Each of the Parties hereto, their successors and assigns, covenant and agree that in the event of default of any of the terms, provisions or conditions of this Agreement by any party or their successors or assigns, which default is not cured for a period of ten (10) days after written notice to the defaulting party of such default, the party seeking to enforce said provisions shall have the right of specific performance. The remedy of specific performance and injunctive relief shall not be exclusive of any other remedy available at law or in equity. Notwithstanding the foregoing, the County Engineer may, without notice, take remedial action if immediate hazards exist and Walnut Ridge is unable to or fails to take immediate action to make the County Roads safe for the motoring public and any costs reasonably incurred by the County Engineer in such a circumstance shall be reimbursed by Walnut Ridge.
- (c) <u>Due Authorization</u>. Walnut Ridge hereby represents and warrants that this Agreement has been duly authorized, executed and delivered on behalf of Walnut Ridge. The County and County Engineer hereby represent and warrant that this Agreement has been duly authorized, executed and delivered on behalf of the County and the County Engineer.

- (d) <u>Severability</u>. If any provision of this Agreement is held invalid under any applicable law, such invalidity shall not affect any other provision of this Agreement that can be given effect without the invalid provision and, to this end, the provisions hereof are severable.
- (e) Entire Agreement. This Agreement contains the entire understanding of the Parties as to the matters set forth herein, and this Agreement supersedes any prior agreements or understandings by and between the Parties.
- (f) <u>Amendments</u>. No amendment or modification to this Agreement or waiver of a Party's rights hereunder shall be binding unless it shall be in writing and signed by the Party against whom enforcement is sought.
- (g) Notices. All notices shall be in writing. Any notice shall be deemed to be sufficiently given (i) on the date, if delivered in person; (ii) five (5) days after being sent by United States registered or certified mail, postage prepaid, return receipt requested; or (iii) on the next business day if sent by overnight delivery service (e.g. Federal Express) to the notified Party at its address set forth below. Notice may be sent via facsimile to a facsimile number provided, however, notice sent via facsimile shall be followed by notice delivered by personal service or via registered or certified mail, return receipt requested, postage prepaid or by overnight delivery. Notices shall be addressed as follows:

If to Walnut Ridge Wind, LLC:

#### Walnut Ridge Wind, LLC

c/o Midwest Wind Energy, LLC 211 East Ontario Street Suite 1720 Chicago, IL 60611

Attention: Stefan A. Noe Telephone: 1-312-7

Telephone: 1-312-787-6080 Facsimile: 1-312-787-6096

with a copy to:

#### **Edison Mission Energy**

18101 Von Karman Avenue Suite 1700 Irvine, CA 92612

Attention: General Counsel

Telephone: 1-949-798-7976 Facsimile: 1-949-225-2719 If to the County:

### County Engineer

595 Elm Place Princeton, IL 61356

Telephone: 1-815 -875-4477 Facsimile: 1-815 -875-4470

with copies to:

### Bureau County State's Attorney

Bureau County Courthouse 700 South Main Street Princeton, IL 61356

Telephone: 1-815-879-4941 Facsimile: 1-815-872-7060

and

Sheryl H. Kuzma Myers, Berry, O'Conor & Kuzma, Ltd. 130 East Madison Street Ottawa, IL 61350

Telephone: 1-815-434-6206 Facsimile: 1-815-434-6203

or to such other Party or address as any Party hereto may from time to time designate in a written notice to the other Party.

- (h) <u>Counterparts</u>. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. Delivery of an executed counterpart of a signature page to this Agreement by telecopier shall be as effective as delivery of a manually signed counterpart to this Agreement.
- (i) Governing Law. This Agreement shall be governed by and interpreted in accordance with the laws of the State of Illinois, (the state in which this Agreement is deemed to have been executed and delivered), irrespective of any conflict of laws provisions.
- (j) <u>Forum Selection</u>. The Parties agree that any disputes arising out of, related to, or connected with this Agreement shall be litigated, if at all, solely in the Circuit Court for the Thirteenth Judicial Circuit, Bureau County, Illinois.
- (k) <u>Commencement of Project Construction</u>. This Agreement shall be void if substantial construction of the Project is not commenced within three (3) years of the date of this Agreement.

- (l) <u>Successors and Assigns</u>. This Agreement shall inure to the benefit of and shall be binding upon the Parties hereto, their respective successors, assignees and legal representatives.
  - (i) <u>Assignment Requiring Consent.</u> This Agreement may not be assigned without the written consent of the other Party and such consent shall not be unreasonably withheld or delayed.
  - (ii) Permitted Assignment. Notwithstanding subparagraph (i) above, Walnut Ridge shall be entitled to assign this Agreement, in whole or in part, without the prior written consent of the County or the County Engineer, to any affiliate of Walnut Ridge or to any person or entity providing financing to Walnut Ridge or any such affiliate or any collateral agent or security trustee acting on behalf of any such person or entity. Any such collateral assignment for financing purposes will not relieve Walnut Ridge of its obligations under this Agreement. In the event of a permitted assignment, Walnut Ridge shall, seven (7) days prior to such assignment, provide written notice to the County and the County Engineer of the name, address, entity type and state of incorporation of the assignee, as well as the name and address of the assignee's registered agent in the State of Illinois.
- (m) No Waiver or Relinquishment of Right to Enforce Agreement. Failure of any Party to this Agreement to insist upon the strict and prompt performance of the terms, covenants, agreements and conditions herein contained or any of them, upon any other Party imposed, shall not constitute or be construed as a waiver or relinquishment of any Party's right thereafter to enforce any such term, covenant, agreement or condition, but the same shall continue in full force and effect.
- (n) Reimbursement of Costs. Walnut Ridge shall reimburse the County for the expenses of any special meetings that may be held related to the adoption or amendment of this Agreement, including but not limited to the cost of publishing notice of such meetings in local newspapers and payment to the members of the County Board and support staff for attendance at such meetings. Such reimbursement payments shall be made within thirty (30) days of such meeting and shall be deposited in the County Corporate Fund.
- (o) Attorney's Fees and Costs. Walnut Ridge agrees to reimburse the County and/or the County Engineer for all attorneys' fees and costs associated with the negotiation and drafting of this Agreement, the ongoing review of compliance with this Agreement, the review of all notices, Letters of Credit and all documents in connection with this Agreement or any extension, amendment or modification thereof, and all other legal work required by the County or the County Engineer in connection therewith. In the event that the County fails to approve all or any of the Conditional Use Permits for the Project, Walnut Ridge shall remain liable for the reimbursement of said attorneys' fees and costs incurred by the County and/or the County Engineer. Payment shall be made within thirty (30) days of receipt of such legal bills by Walnut Ridge. If any action at law or in equity is brought by the County and/or the County Engineer to enforce this Agreement and the County and/or County Engineer prevail in such litigation, the County and/or the County Engineer shall be entitled to receive from Walnut Ridge reasonable attorneys' fees and costs

incurred, in addition to any other relief to which the County and/or the County Engineer may be entitled.

- (p) <u>Preparation of Agreement</u>. This Agreement shall be deemed to have been prepared by Walnut Ridge and shall be construed against Walnut Ridge as the drafter, preparer and producer of the language herein.
- (q) Memorandum. A Memorandum of this Agreement, substantially in the form of Exhibit "C" hereto, shall be recorded with the Bureau County Recorder of Deeds by Walnut Ridge within thirty (30) days after the execution of this Agreement.

### SIGNATURES ON FOLLOWING PAGE

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement the day and year first written above.

Bureau County

By:

Title: County Board Chairman

ATTEST:

Title: Bureau CountyClerk

Walnut Ridge Wind, LLC

Name: Stefan A. Noe Title: Manager

# EXHIBIT A SITE LAYOUT PLAN

### **EXHIBIT B**

# LETTER OF CREDIT FORM

# IRREVOCABLE STANDBY LETTER OF CREDIT

		DATE:	, 20
BENEFICIARI	ES: Bureau County; Bureau County Engineer		
ADDRESS:			
	Attn: Telephone Number: Facsimile Number:		
APPLICANT:	Walnut Ridge Wind, LLC		
ADDRESS:			
	Attention: Facsimile Number:		
COUNTY AND WALNUT RIE CREDIT IS ISS ROADS AGRE PAYMENT WE ATTACHMENT REPRESENTAT AND ALL COM		DIT") IN FAVOR ARY") FOR THE DUNT OF USE DERSTAND THE ICANT UNDER T REEMENT") AV NTIALLY IN THE IED BY AN A DICH). EACH DRA	OF BUREAU ACCOUNT OF S S LETTER OF THE COUNTY ALLABLE BY HE FORM OF AUTHORIZED AW REQUEST
PROCESSING CI	F CREDIT EXPIRES ON, 20 ("EXPIRATION D C/O JPMORGAN TREASURY SERVICES, GLOBAL TR ENTER, STANDBY LETTERS OF CREDIT DEPARTMENT, S ANGELES, CA 90071.	IADE CENTRACO	DESCRIPTION
SPECIAL CONDI	TIONS		

### SPECIAL CONDITIONS:

PARTIAL AND MULTIPLE DRAWINGS ARE PERMITTED, AND THE AMOUNT OF THIS LETTER OF CREDIT WILL BE REDUCED BY THE AMOUNT OF EACH DRAWING HONORED BY US.

ALL ISSUING BANK CHARGES ARE FOR THE ACCOUNT OF THE APPLICANT.

THIS LETTER OF CREDIT MAY NOT BE AMENDED, CHANGED OR MODIFIED WITHOUT THE EXPRESS WRITTEN CONSENT OF THE BENEFICIARY AND THE ISSUER; PROVIDED, HOWEVER, THE AMOUNT AVAILABLE FOR DRAWING UNDER THIS LETTER OF CREDIT MAY BE REDUCED OR INCREASED AUTOMATICALLY, WITHOUT AMENDMENT, FROM TIME TO TIME UPON OUR RECEIPT OF REDUCTION OR INCREASE CERTIFICATE STATING THE AMOUNT OF REDUCTION OR INCREASE AND AVAILABLE AMOUNT AFTER SUCH REDUCTION OR INCREASE, EXECUTED AND PURPORTEDLY SIGNED BY BOTH APPLICANT AND BENEFICIARY.

IF A COMPLYING PRESENTATION IS MADE PRIOR TO 12:00 P.M. (C.ST.) ON A BUSINESS DAY THEN ISSUER SHALL, PRIOR TO CLOSE OF BUSINESS ON THE SECOND FOLLOWING BUSINESS DAY, MAKE PAYMENT IN IMMEDIATELY AVAILABLE FUNDS BY WIRE TRANSFER TO SUCH ACCOUNT AS MAY BE DESIGNATED BY A BENEFICIARY IN THE APPLICABLE DRAW REQUEST. IF A COMPLYING PRESENTATION IS MADE AT OR AFTER 12:00 P.M. (C.S.T.) ON A BUSINESS DAY, THEN ISSUER SHALL, PRIOR TO CLOSE OF BUSINESS ON THE THIRD FOLLOWING BUSINESS DAY, MAKE PAYMENT IN IMMEDIATELY AVAILABLE FUNDS BY WIRE TRANSFER TO SUCH ACCOUNT AS MAY BE DESIGNATED BY A BENEFICIARY IN THE APPLICABLE DRAW REQUEST. BUSINESS DAY AS STATED IN THIS LETTER OF CREDIT MEANS ANY DAY OTHER THAN A SATURDAY, SUNDAY, OR BANK HOLIDAY IN THE STATE OF ILLINOIS.

IN THE EVENT I THAT A DRAW REQUEST FAILS TO COMPLY WITH THE TERMS OF THIS LETTER OF CREDIT, WE SHALL, NOT LATER THAN THE NEXT BUSINESS DAY, NOTIFY THE BENEFICIARIES IN WRITING, SPECIFYING WITH PARTICULARITY THE REASONS THEREFOR. SUCH NOTICE SHALL BE DELIVERED IN PERSON OR SENT BY OVERNIGHT DELIVERY OR SENT BY FACSIMILE TRANSMISSION TO THE BENEFICIARIES AND TO SHERYL H. KUZMA, MYERS, BERRY, O'CONOR & KUZMA, LTD., 130 EAST MADISON STREET, OTTAWA, ILLINOIS 61350, 815-434-6203 (FACSIMILE). UPON BEING NOTIFIED THAT A DRAW REQUEST WAS NOT EFFECTED IN COMPLIANCE WITH THIS LETTER OF CREDIT, A BENEFICIARY MAY ATTEMPT TO CORRECT SUCH NONCOMPLYING DRAW REQUEST IN ACCORDANCE WITH THE TERMS OF THIS LETTER OF CREDIT.

WE HEREBY ENGAGE WITH YOU THAT DOCUMENTS PRESENTED UNDER AND IN CONFORMITY WITH THE TERMS AND CONDITIONS OF THIS LETTER OF CREDIT WILL BE DULY HONORED ON PRESENTATION IF PRESENTED ON OR BEFORE THE EXPIRATION DATE OF THIS LETTER OF CREDIT.

THIS LETTER OF CREDIT IS GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF ILLINOIS, AND, EXCEPT AS OTHERWISE EXPRESSLY STATED HEREIN, IS SUBJECT TO THE UNIFORM CUSTOMS AND PRACTICE FOR DOCUMENTARY CREDITS, 2007 REVISON, INTERNATIONAL CHAMBER OF COMMERCE PUBLICATION NO. 600 (THE "UCP600") AND AS TO MATTERS NOT ADDRESSED BY UCP600 SHALL BE GOVERNED AND CONSTRUED IN ACCORDANCE TO THE LAWS OF THE STATE OF ILLINOIS. WE IRREVOCABLY AGREE WITH YOU THAT ANY LEGAL ACTION OR PROCEEDING WITH RESPECT TO THIS LETTER OF CREDIT SHALL BE BROUGHT IN THE CIRCUIT COURT FOR THE THIRTEENTH JUDICIAL CIRCUIT, BUREAU COUNTY, ILLINOIS.

PLEASE ADDRESS ALL CORRESP NAME AND ADDRESS> ATTN:	ONDENCE DECAR	DDIC THE		
NAME AND ADDRESS> ATTN:	TO THE REGARD	DING THIS FEL	TER OF CREDIT	TO <bank< td=""></bank<>
INCLUDING THE LETTER OF CREDIT	TEL.	OR	, TEL.	
INCLUDING THE LETTER OF CREDIT	NUMBER MENTIO	NED ABOVE.		

THE LETTER OF CREDIT ISSUER
AUTHORIZED SIGNATURE

#### DRAW REQUEST

<BANK NAME>
Attn: <NAME>, <TITLE>
<ADDRESS>
<CITY>, IL <ZIP>

Copy to: Edison Mission Energy on behalf of Walnut Ridge Wind, LLC 18101 Von Karman Avenue Suite 1700

Irvine, CA 92612

#### Ladies and Gentlemen:

The undersigned \_\_\_\_\_\_ (the "Beneficiary"), being either the Chairman of the County Board of Bureau County (the "County") or the Bureau County Engineer (the "County Engineer"), hereby requests a draw in the amount of \$\_\_\_\_\_ (this "Draw") against the Irrevocable Letter of Credit dated <MONTH DATE>, 200\_> (the "Letter of Credit"), issued by <BANK NAME> in favor of the County and the County Engineer. Any capitalized term used but not defined herein shall have the meaning given to such term in the Letter of Credit.

In connection with this Draw, the Beneficiary hereby certifies, represents and warrants that:

- A) This Draw is authorized by the Roads Agreement between the County and Walnut Ridge Wind, LLC dated August 26, 2008 (the "Roads Agreement").
- B) This Draw is being made in accordance with and as permitted by Section 7(h) of the Roads Agreement.
- C) The Beneficiary has determined that there has been a default under the Roads Agreement and that by reason thereof the Beneficiary is entitled to the amount demanded.
- D) The Beneficiary has given written notice of such default to Walnut Ridge Wind, LLC in accordance with the terms of the Roads Agreement and Walnut Ridge Wind, LLC has failed to cure the default within ten (10) days after the mailing of the written notice and is not actively pursuing a cure which would be acceptable to the County.

E)	This Draw request, when aggregated with all prior draws under the Letter of Credit, does not exceed the Stated Amount.
F)	You are directed to make payment of this Draw to
	IN WITNESS WHEREOF, the undersigned has executed and delivered this request on this day of, 200
	Bureau County, Illinois, as Beneficiary
	By:
	Name:
	Name: Title: County Board Chairman
	[ALTERNATIVELY:
	Bureau County Engineer, as Beneficiary
	Ву:
	Name:

#### EXHIBIT C

### MEMORANDUM OF AGREEMENT

# MEMORANDUM OF AGREEMENT

NOTICE IS HEREBY GIVEN that an Agreement was entered into by and between Bureau County, Illinois and Walnut Ridge Wind, LLC concerning use of county roads located within Bureau County and affecting real estate in the following Townships and Sections of Bureau County, Illinois:

Townships and Sections: TO BE INSERTED

The Agreement imposes obligations upon Walnut Ridge Wind, LLC related to its use of Bureau County roads for the construction of the Walnut Ridge wind energy project.

		Walnut Ridge Wind, LLC
Date:	, 2008	By: < <insert &="" name="" title="">&gt;</insert>

### THIS DOCUMENT PREPARED BY:

Midwest Wind Energy, LLC 211 East Ontario Street Suite 1720 Chicago, IL 60611

### AND RETURN TO:

Sheryl H. Kuzma Myers, Berry, O'Conor & Kuzma, Ltd. 130 East Madison Street Ottawa, Illinois 61350 815-434-6206

# CASE NO. 634-AT-08

SUPPLEMENTAL MEMORANDUM Champaign March 6, 2009

County F
Department of

County Petitioner: Zoning Administrator



Prepared by: John Hall

Zoning Administrator

Brookens
Administrative Center
1776 E. Washington Street

J.R. Knight

Associate Planner

Urbana, Illinois 61802 \*Request:

(217) 384-3708 **(A)\*** FAX (217) 328-2426 Authorize the County Board to approve Special Use Permits (SUP) and to change the requirements for the development of wind turbine developments (wind farms) to a County Board Special Use Permit (CBSUP) and a rezoning to the new Wind Farm Overlay Zoning District (WFO).

- (B)\* Change the requirements for private wind turbines.
- (C)\* Add a requirement for a County Board Special Use Permit for subdivisions in a Rural Residential Overlay District.

(\*NOTE: SEE LAST ATTACHMENT FOR FULL LEGAL ADVERTISEMENT)

### STATUS

This case was continued from the February 26, 2009, meeting. The minutes of that meeting are included separately and are ready for approval. Note that meeting closed on a motion to "close the public hearing" even though the Board clearly intended to continue the case. The meeting should have closed on a motion to "end the meeting" and the public hearing must be reopened (see below).

Almost all of Part A is included with this memo except for exemptions for "test" (meteorological) towers and non-wind farm developments of less than 10 megawatt (MW) capacity.

### REOPENING THE PUBLIC HEARING

Note that meeting closed on a motion to "close the public hearing" even though the Board clearly intended to continue the case. The meeting should have closed on a motion to "end the meeting". The ZBA Bylaws allow the public hearing to be reopened (see below). Section 6.11 of the ZBA Bylaws allow a public hearing to be reopened after being closed. The Bylaws do require the majority vote of those Board members present and not abstaining from the final vote.

### NEW ADDITIONS TO PROPOSED PART A

Several missing portions of Part A of the amendment are now available for the Board's consideration. The more significant portions are the following:

Paragraph 6.1.4 E. Standard Conditions to Mitigate Damage to Farmland. This paragraph has been reviewed by all three wind farm developers (to various degrees) and the Champaign County Soil and Water Conservation District. Relevant sections of the Stormwater Management Policy have also been included for reference.

- Paragraph 6.1.4 N. Standard Conditions for Visual Impact Assessment. Most county ordinances do not include any requirements for visual impact assessment. This is a staff recommendation that was included on the list of recommended changes that ELUC reviewed but like all other parts of the amendment the final recommendation is whatever the Board determines to be necessary.
- Changes to subsection 9.1.11 to authorize County Board Special Use Permit.
- Changes to subsections 9.3.1 and 9.3.3 to add fees for wind farm zoning use permits and special use and map amendment application. Wind farms are such unique land uses that special fees are proposed. The Environment and Land Use Committee (ELUC) of the Champaign County Board reviewed the attached memoranda of November 10, 2008, regarding fees. The proposed fees have been based on a comparison of other comparable Illinois counties and a comparison of the fees will be available at the hearing. The entire Section 9.3 Fees from the Zoning Ordinance has been included for reference.

### MAJOR REVISIONS TO PROPOSED PART A

Minor revisions have been made throughout most portions of Part A since February 6, 2009. The Board should review all attachments. The following major revisions are especially important and serve as a response to certain concerns that have been raised in the public hearing:

- Revised minimum separation from public street right of way (see subparagraphs 6.1.4 C. 8. & 9.). The previous draft required a separation distance from a public street right of way of 1.10 times the overall height of the wind farm tower (a maximum of 550 feet). That proximity to a public street could be a problem for relatively small tracts of land on the opposite side of the street. The minimum separation from a public street right of way has been increased to 1.50 times the overall height of the wind farm tower (a maximum of 750 feet). And, to make up for this increase, the requirement for the Wind Farm Overlay Zoning District to include all land within 1,000 feet of the base of a tower (except for land more than ¼ mile from a public street; see paragraph 5.5.3 C.) has been reduced to only land within 1.50 times the overall height of the wind farm tower. This will hopefully reduce the need for the wind farm developers to involve landowners who live across the street and still allow those non-participating landowners to create building lots that provide the same separation as required for existing dwellings.
- Revised minimum required separation from pipelines, water mains, and land uses that are flammable, explosive, or hazardous by nature (see subparagraphs 6.1.4 C. 8. & 9.). These changes do not achieve all of the requests of the Newcomb Township Plan Commission because the setbacks may not amount to a complete prohibition of wind farms from the vicinity of the Manlove Gas Storage Facility. A very large setback would be the most practical way to implement such a prohibition. The recommended changes should provide for adequate land use compatibility without a complete prohibition.
- Revised Standard Conditions for Use of Public Streets (see paragraph 6.1.4 F.). The County Engineer recently visited with the Bureau County Engineer to get additional perspective on road impacts of wind farm construction. Bureau County, Illinois has approved several wind farms. A County Roads Agreement between Bureau County and Walnut Ridge Wind has been included separately. The Standard Conditions for Use of Public Streets has been revised to provide greater

flexibility regarding what agreement is necessary prior to County Board approval and what agreement is necessary prior to Zoning Use Permit approval. The revised conditions have been reviewed by the County Engineer. These standard conditions require similar agreements for all affected Township Highway Commissioners and municipalities.

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- Clarification of replacement provisions (see paragraph 6.1.4 P.).
- Clarification of areas to be included in the map amendment (see paragraph 5.4.3 C.). An illustration of the map amendment area will be available at the public hearing.

### PUBLIC CONCERNS FOR WHICH NO REVISIONS HAVE BEEN MADE TO THE DRAFT

1. Newcomb Township Plan Commission safety concerns related to land use compatibility between wind farms and the Manlove Gas Storage Field. In testimony at the February 12, 2009, public hearing Herb Schildt, Chair of the Newcomb Township Plan Commission, made clear that the Township has significant safety concerns related to any possible wind farm in the Manlove Gas Storage Field in Newcomb Township. Two changes were made to the proposed separations for wind farms based on his testimony. The changes probably will not amount to a complete prohibition of wind farm towers from the vicinity of the gas storage field.

It is difficult if not impossible to actually define the "Manlove Gas Storage Field" for such a purpose because the actual geologic structure that is the principal component of the gas storage field is thousands of feet deep and quite extensive. It may be more practical to simply refer to setbacks from the above ground gas injection wells.

Staff has recommended the same 1,200 feet setback from gas well heads as is required from dwellings and other principal buildings. It is presumed that if any wind farm turbine catches fire anywhere in the County, the local fire protection district will have to monitor the fire until it burns out so that ground fires are controlled. The Board should consider the safety implications in both instances (turbine fire 1,200 feet from a gas wellhead or turbine fire 1,200 feet from a dwelling).

If the Board determines that a prohibition as suggested by Newcomb Township is warranted, it is recommended that a greater setback be required but it is not clear at this time what dimension would be required for that setback.

2. Newcomb Township Plan Commission (and others) request for larger setback (minimum separation) from non-participating residence. In testimony at the February 12, 2009, public hearing Herb Schildt, Chair of the Newcomb Township Plan Commission, also made clear a greater setback to non-participating dwellings is warranted. Other citizens who testified also had similar concerns but there was no specific recommendation. In personal testimony Mr. Schildt has suggested that a setback of more than 1,600 feet is warranted based on debris fields left by self destructing wind turbines.

Staff has not recommended any changes to the separation from non-participating dwellings (see paragraph 6.1.4 C.2.). Self-destruction of wind turbines as reported in articles submitted in the public hearing seems exceedingly rare to form the basis of such a setback but the Board could recommend such setbacks if it is convinced of the necessity.

An alternative is to adopt a setback similar to the minimum setback for large livestock operations as included in the Illinois Livestock Management Facilities Act (510 ILCS 77/et seq.). See Attachment M. Informed non-farm rural residents know that a large livestock facility (up to 1,000 animal units) can locate within one-quarter mile (1,320 feet) from any non-farm residence with no required zoning approval. Larger facilities require separation of up to a half-mile from any non-farm residence. This is not meant to equate a wind farm to a livestock facility but simply to make clear what the informed expectations of non-farm residents should be.

3. Newcomb Township Plan Commission concern that the maximum allowable wind farm tower height should be 400 feet instead of 500 feet. This was another concern raised by Herb Schildt, Chair of the Newcomb Township Plan Commission, in testimony at the February 12, 2009, public hearing.

No change has been made to proposal.

4. Midwest Wind Energy comment regarding the requirement for a decommissioning plan. In testimony at the February 12, 2009, public hearing Tom Polz with Midwest Wind Energy suggested that the decommissioning plan could be a stipulation of the Special Use Permit approval but the final signed plan not be required until a Zoning Use Permit is requested.

The signed and executed plan is not needed until a Zoning Use Permit application is made. However, the wording of the plan (reclamation agreement) and the dollar amount of the Letter of Credit must be reviewed in the public hearing and approved by the County Board. No change has been made.

- 5. Dwight Farber's (Horizon Wind Energy)request that tile deeper than 48 inches should not be a concern. This suggestion was made at the February 26, 2009, public hearing. Comment has been requested from the Soil and Water Conservation District.
- 6. Herb Schildt's concern that Cornbelt Fire Protection District cannot fight fires in wind turbine nacelles and the risk this poses if located in the vicinity of the Manlove Gas Storage Field. This concern was discussed at the February 26, 2009, public hearing. See the discussion in item 1 above.
- 7. Sherry Schildt's concern regarding turbine setback from property line and the impact on adjacent property rights. Sherry Shildt raised a concern at the February 26, 2009, public hearing regarding the required separation from a non-participating dwelling versus the required separation from the boundary of the wind farm. Ms Schildt was concerned that an adjacent non-participating property owner would be limited or impacted in what they could do on their land.

Neither the preliminary version of the proposed amendment nor the current revised version placed any restrictions on non-participating landowners. Both versions either require the wind farm developer to acquire the rights to all land that is required for minimum separation requirements.

- 8. Steve Burdin's concern regarding disclosure of dwellings subject to private waivers. Staff will address this concern at the meeting.
- 9. Steve Burdin's concern that C-weighted noise regulations should be the standard. The Illinois Pollution Control Board (IPCB) rules are the noise regulations that the County zoning

jurisdiction is under. The IPCB rules apparently use the A-weighted noise scale rather than the C-weighted scale. Enforcement of a different noise standard would be the responsibility of the County. However, the IPCB rules are supposed to be enforced by the Illinois Environmental Protection Agency (IEPA) but the IEPA has not actually had any enforcement staff for some years and it is not known when if ever the IEPA will gain noise enforcement staff. Thus, it looks as if any noise enforcement will have to be provided by the County.

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It would be extremely difficult and time consuming to develop a new set of noise regulations and it would also require the County to provide its own enforcement, which may be the only enforcement available in any case.

10. Rob Parker and others concerns over the application of the IPCB noise regulations. Since the IEPA has no staff to enforce the rules there is no IEPA staffer to invite to the meeting to explain the IPCS rules. The County also has no acoustical consultant to call on. The following is the limited information staff can provide regarding the IPCB noise regulations.

A copy of the IPCB regulations was included with the Preliminary Memorandum. The IPCB regulations regulate noise at the property line (but require it to be measured no closer than 25 feet to the property line). Wind farms and agriculture are both considered "Class C Land" and dwellings are considered "Class A Land". Sound emitted to Class A Land from other Class A Land and from Class B and C Lands is limited to both daytime and nighttime limits. There is apparently no limit for the emission of sound from one Class C Land to other Class C Land. The limits on sound emission are not given at a single decibel level but are different for the constituent frequencies of the sound.

It may be more useful to consider nighttime limits since this limit is lower than daytime. The IPCB regulations apparently use the A-weighted sound level. The nighttime limits for emission of sound from Class C Land to Class A land is given in Section 901.102 as follows:

Octave Band Center Frequency (Hertz)	Allowable Octave Band Sound Pressure Levels (dB)	Last Alternative Method for Measuring Long Term Background Ambient Noise for RURAL AREAS TABLE A Category 5 (nighttime)
31.5	69	38
63	67	40
125	62	40
250	54	38
500	47	34
1000	41	28
2000	36	21
4000	32	15
8000	32	8

Note that the IPCB regulations also require as part of enforcement a determination of the Long Term Background Ambient Noise level. There are alternative methods of determining the long term level and the last alternative is literally a published table of values for five different

categories of predominant land use and time of day. The third column in the table are the values for "Rural Areas" and comparing these values to the central column values indicates one approach for determining how much increase in noise is allowable under the IPCB regulations. Note that a 10 decibel increase in sound is generally perceived as a doubling of the noise level.

### SOME EXAMPLE WIND TURBINE NOISE VALUES

The appropriate type of noise regulation is one of the most controversial aspects of wind farm development. The Danish Wind Industry Association website (<a href="www.windpower.org">www.windpower.org</a>) provides a sound calculator that is extremely simple (probably too simple) but nonetheless it purports to calculate the sound level from wind turbines (assumed 100 decibel source) at various distances. Assuming a listening point that is centrally located along a straight line of four wind turbines that are spaced at approximately 1,300 feet apart, this simplistic model indicates the following A weighted noise levels (see attached screen dumps):

Distance from centroid of line of four wind turbines	Danish Wind Industry Association Sound Calculator Resulting Sound (dB)
550 feet (169 meters; 1.1 x max. height)	48.430
750 feet (231 meters; 1.5 x max. height)	45.715
1,000 feet (308 meters)	43.216
1,200 feet (369 meters)	41.647
1,320 feet (1/4 mile; 406 meters)	40.817
2,640 feet (1/2 mile; 812 meters)	36.026

The values in the table above are not assumed to be accurate enough for regulatory purposes. The website also does not explain how to compare the single decibel values to multiple frequency values so there really is not much useful information provided by these values. However, the question arises as to how unrealistic these values are and what the implications are for the proposed minimum required separations of 1,000 feet and 1,200 feet. Both of these separations would provide the required IPCB noise control only for frequencies below 1000 hertz. Note that low frequencies are those below 250 hertz.

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### **ATTACHMENTS**

A	Draft Proposed	Change '	To Section	2 dated	February	6,	2009
---	----------------	----------	------------	---------	----------	----	------

- B Revised Proposed Changes To Section 3
- C Draft Proposed Changes To Section 4
- D Draft Proposed Change To Section 5.1 dated February 6, 2009
- E Draft Proposed Changes To Section 5.2
- F Draft Proposed Changes To Section 5.3
- G Draft Proposed Changes To Section 5.4
- H Revised Draft Proposed New Section 5.5
- I Draft Proposed Change to Subsections 6.1.1, 6.1.2, and 6.1.3
- J Revised Proposed New Subsection 6.1.4
- K Draft Proposed Changes To Section 9.1.11
- L Draft Proposed Changes To Section 9.3.1 and 9.3.3
- M Illinois Livestock Management Facilities Act (510 ILCS 77/et seq.) General Requirements Related to Size of Facility
- N Sections 7 and 12 of the Champaign County Stormwater Management Policy
- O Existing Section 9.3 Fees
- P ELUC Memorandum of November 10, 2008
- Q Excerpts from Danish Wind Industry Association website
- R Legal advertisement for Case 634-AT-08
- S County Roads Agreement between Bureau County and Walnut Ridge Wind (included separately)
- T Minutes of February 26, 2009, public hearing (included separately)

# 1. Add new purpose 2.(r):

(r) providing for the safe and efficient development of renewable energy sources in those parts of the COUNTY that are most suited to their development.

(NOTE: No changes are proposed from the February 6, 2009, version)

# Attachment B. Revised Draft Proposed Changes To Section 3 MARCH 6, 2009

**1. Add the following to Section 3.0 Definitions** (underlined text has been added since February 6, 2009, version)

DWELLING OR PRINCIPAL BUILDING, PARTICIPATING: A <u>DWELLING</u> that is owned by a landowner who has agreed to lease land to a WIND FARM.

DWELLING OR PRINCIPAL BUILDING, NON- PARTICIPATING: <u>A DWELLING</u> that is owned by a landowner who has not agreed to lease land to a WIND FARM.

PRIVATE WAIVER: A written statement asserting that a landowner has agreed to waive a specific WIND FARM standard condition and has knowingly agreed to accept the consequences of the waiver. A PRIVATE WAIVER must be signed by the landowner.

WIND FARM: A unified development of WIND FARM TOWERS and all other necessary components including cabling, transformers, a common switching station, and maintenance and management facilities which are intended to produce electricity by conversion of wind energy and to deliver the electricity to the power grid and having a name plate capacity of more than 10 megawatts (MW). A WIND FARM is under a common ownership and operating control even though the individual WIND FARM TOWERS may be located on land that is leased from many different landowners.

WIND FARM TOWER: A wind turbine nacelle and rotor and the supporting tower structure that are part of a WIND FARM development and intended to produce electricity for the power grid.

WIND TOWER, TEST:

{NOTE: Staff is still drafting this definition.}

WIND TURBINE TOWER: A wind turbine nacelle and rotor and the supporting tower structure that is owned by a private landowner for the purpose of producing electrical energy that may be used onsite or sold to a utility. {the regulations will identify relevant height limits, limit on number, etc.)

#### 4.2.1 CONSTRUCTION and USE

- A. No STRUCTURE or land shall hereafter be used or occupied and no STRUCTURE or part thereof shall hereafter be CONSTRUCTED, erected, ALTERED, remodeled, extended, or moved unless in conformity with all the regulations and standards herein specified for the DISTRICT in which it shall be located.
- B. No STRUCTURE shall hereafter be CONSTRUCTED, erected, ALTERED, remodeled, extended or moved:
  - 1. To exceed the HEIGHT;
  - 2. To occupy or house a greater number of FAMILIES;
  - 3. To occupy a greater percentage of LOT AREA; or
  - 4. To exceed the housing density

than hereinafter required or in any manner contrary to the regulations and standards of the DISTRICT in which it is located.

- C. It shall be unlawful to erect or establish more than one MAIN or PRINCIPAL STRUCTURE or BUILDING per LOT or more than one PRINCIPAL USE per LOT in the AG-1, Agriculture, AG-2, Agriculture, CR, Conservation-Recreation, R-1, Single Family Residence, R-2, Single Family Residence, and R-3, Two Family Residence DISTRICTS other than in PLANNED UNIT DEVELOPMENTS except as follows:
  - 1. Mortuary or funeral home may be authorized as a Special Use Permit in the AG-2, Agriculture Zoning District, when it is on a lot under common management with a cemetery.
  - 2. A WIND FARM may be authorized as a County Board SPECIAL
    USE permit in the AG-1, Agriculture Zoning District, as a second
    PRINCIPAL USE on a LOT with another PRINCIPAL USE. WIND
    FARM TOWERS may be authorized by County Board SPECIAL USE
    permit as multiple PRINCIPAL STRUCTURES on a single LOT in
    the AG-1, Agriculture Zoning District.

#### **4.3.1 HEIGHT**

A. HEIGHT regulations and standards shall not apply to towers, spires, belfries, chimneys, ventilators, skylights, water tanks, utility poles and power lines, silos, and other necessary mechanical appurtenances of 100 feet or less in

HEIGHT provided their location shall conform where applicable to the regulations and standards of the Federal Communications Commission, the Federal Aviation Administration, and other public authorities having jurisdiction.

- B. Spires, belfries, chimneys, ventilators, skylights, water tanks, silos, and other necessary mechanical appurtenances over 100 feet in HEIGHT require a SPECIAL USE Permit.
- C. Where a tower (including antennas) over 100 feet in HEIGHT exists on the effective date of amendment to this ordinance, and it is classified as a SPECIAL USE in the DISTRICT in which it is located by said ordinance, it shall be considered to be a lawful SPECIAL USE. Any such lawful SPECIAL USE shall be allowed to reconstruct in the event of destruction or expand without obtaining a new SPECIAL USE Permit so long as it is not increased in HEIGHT greater than 10 percent of its existing HEIGHT or 25 feet whichever is greater or relocated to any other portion of the LOT or tract of land beyond 100 feet from the base of the location of the existing tower provided it meets the setback requirements of Section 6.1. Said tower shall be subject to the requirements of Section 9.1.2, Zoning Use Permit, and shall conform to the standards of the Federal Aviation Administration, Federal Communications Commission, and the Illinois Department of Transportation, Division of Aeronautics.
- D. In the event of destruction of a lawful SPECIAL USE, a temporary tower (including antenna) shall be permitted. Said temporary tower shall meet the provisions of Section 9.1.2 E, Application for a Temporary Tower Permit, of this ordinance. The Zoning Administrator shall issue a Temporary Tower Permit only if the following conditions have been met:
  - 1. Temporary towers shall conform to the minimum setback requirements in the DISTRICT in which it is located.
  - 2. Temporary towers shall conform to the standards of the Federal Communication Commission, Federal Aviation Administration, and the Illinois Department of Transportation, Division of Aeronautics.
- E. Any tower (including antenna) over 100 feet in HEIGHT shall be subject to the SPECIAL USE requirements in the DISTRICT in which it is located if said tower does not meet the requirements of Section 4.3.1.C above.

F. HEIGHT regulations shall not apply to WIND FARM TOWERS except as HEIGHT regulations are required as a standard condition in Section 6.1.4.

#### 4.3.4 LOTS

- A. All LOTS shall meet the minimum requirements of Section 5.3, Paragraph B below, and as established elsewhere in this ordinance except for the following:
  - 1. Outlots in platted SUBDIVISIONS provided that such outlots contain no STRUCTURES requiring permits under the terms of this ordinance.
  - 2. LOTS for WIND FARM TOWERS except as minimum LOT requirements are required in Subsection 6.1.4.
- H. Restrictions on LOTS and USES within any PIPELINE IMPACT RADIUS
  - PIPELINE IMPACT RADIUS
    - The PIPELINE IMPACT RADIUS for a GAS PIPELINE is similar to the potential impact radius identified by Title 49 of the Code of Federal Regulations Part 192.903. Potential impact radius as defined by 49 CFR 192.903 is determined by the formula  $r=0.69*(\sqrt{p*d2})$ , where r' is the radius of a circular area in feet surrounding the point of pipeline failure, p' is the maximum allowable operating pressure in the pipeline segment in pounds per square inch and d' is the nominal diameter of the pipeline in inches. Maximum allowable operating pressure and nominal diameter will be provided by the pipeline operator. The PIPELINE IMPACT RADIUS indicated in these regulations is not necessarily the same as the potential impact radius used by the Illinois Commerce Commission to enforce 49 CFR 192.903. Both the PIPELINE IMPACT RADIUS and potential impact radius are approximations of the effect of any given potential failure event.
    - b. The PIPELINE IMPACT RADIUS for a HAZARDOUS LIQUID PIPELINE is 150 feet.
  - 2. Any LOT created in an RRO DISTRICT or in the R-1, R-2, R-3, R-4, or R-5 DISTRICT after November 20, 2008, shall have a minimum LOT AREA outside the PIPELINE IMPACT RADIUS equal to the minimum requirements of Section 5.3. No LOT created in an RRO DISTRICT or in the R-1, R-2, R-3, R-4, or R-5 DISTRICTS shall be

located entirely within the PIPELINE IMPACT RADIUS.

3. No USE, BUILDING, or STRUCTURE established or built after November 20, 2008, shall be located within a PIPELINE IMPACT RADIUS except as provided in paragraph 4.3.4 H.4.

### 4. Exemptions

- a. AGRICULTURE or an ACCESSORY USE, ACCESSORY BUILDING, or ACCESSORY STRUCTURE to AGRICULTURE.
- b. Any PIPELINE, wellhead, or USE that is an ACCESSORY USE, ACCESSORY BUILDING, or ACCESSORY STRUCTURE to a GAS PIPELINE or HAZARDOUS LIQUID PIPELINE or a wellhead.
- c. Enlargement, repair, and replacement of conforming USES, BUILDINGS, and STRUCTURES that were lawfully established and existed on November 20, 2008.
- d. USES, BUILDINGS and STRUCTURES established after November 20, 2008, on conforming LOTS of record that existed on November 20, 2008.
- e. Any outlot per paragraph 4.3.4.A., or STREET created in any RRO or residential DISTRICT.
- f. Any portion of a lot containing a driveway and construction of a driveway on any lot in the RRO DISTRICT or in the R-1, R-2, R-3, R-4, or R-5 DISTRICTS
- g. USES, BUILDINGS, and STRUCTURES on LOTS that are exempt from the requirement for the Rural Residential Overlay Zoning District and that are created after November 20, 2008.
- h. WIND FARMS and WIND FARM TOWERS except as PIPELINE IMPACT RADIUS regulations are required in Subsection 6.1.4.

- 5. Notice of PIPELINE IMPACT RADIUS.
  - a. The ZONING ADMINISTRATOR shall provide notice of the existence of a PIPELINE IMPACT RADIUS to any land owner that submits a Zoning Use Permit Application on any of the following:
    - i. Land that is located within a PIPELINE IMPACT RADIUS; or
    - ii. Land that is subject to an easement for underground gas storage; or
    - iii. Land within 150 feet of an easement for underground gas storage.
  - b. The notice shall include the following information:
    - i. The approximate location and type of the relevant pipeline
    - ii. The dimension of the PIPELINE IMPACT RADIUS including the approximate location on the proposed LOT.
    - iii. The last known point of contact for the relevant pipeline operator.

### 1. Add new Subsection 5.1.17 as follows:

### 5.1.17 WIND FARM OVERLAY

The WIND FARM OVERLAY Zoning District is intended to provide areas that are suitable for development of a WIND FARM County Board SPECIAL USE Permit.

(NOTE: No changes are proposed from the February 6, 2009, version)

### SECTION 5.2 TABLE OF AUTHORIZED PRINCIPAL USES - CONTINUED

Fertilizer Manufacturing and Bulk Storage														s
Bone Distillation and Glue Manufacturing														s
Radioactive Materials Manufacturing and Refining														s
Corrosive Acids, Chlorine, Caustic Soda, and Potash Manufacturing and Bulk Storage														s
Insecticide, Fungicide, Herbicide and Poisons Manufacturing and Bulk Storage														s
Industrial Uses: Electric Power Generating	Facil	ities								_	,	<b>,</b>		
Coal/Oil Steam Turbine														s
Natural Gas Steam Turbine									10					S
Wind Turbine (more than 3 wind turbines)			8	ļ.,	ļ		ļ							s
Gas Turbine Peaker		s	s										s	s
WIND FARM		<u>B</u> <sup>17</sup>												
Wind Turbine (1-3 wind turbines)		s	s					<u> </u>					s	s
Industrial Uses: Petroleum and Rubber Pr	oduct	s				 <u>, n. 1 6 m</u>			·	<b>,</b>				
Petroleum Refining														s
Paving and Roofing Materials Manufacturing														s
Rubber Products Manufacturing, Including the Reclamation of Rubber														s
Linoleum and other Hard Surface Floor Coverings Manufacturing									9					s
Gasoline and Volatile Oils Storage up to and Including 80,000 gallon capacity in the Aggregate <sup>6</sup>								s		s			s	
Gasoline and Volatile Oils Storage of greater than 80,000 gallons but no more than 175,000 gallon capacity in the Aggregate <sup>6</sup>								s					S	

greater than 80,000 gallons b than 175,000 gallon cap						s	
= Permitted by right	S	1	ted on ind ted as a C				

#### SECTION 5.2 TABLE OF AUTHORIZED PRINCIPAL USES - CONTINUED

- 12. A VETERINARY HOSPITAL is permitted by right only if it meets all of the following requirements; otherwise it shall be permitted only with a SPECIAL USE Permit:
  - A. The VETERINARY HOSPITAL must be entirely enclosed and have no outdoor exercise areas or animal runs.
  - B. The VETERINARY HOSPITAL must not permit animals to be kept either temporarily or permanently outside the HOSPITAL BUILDINGS.
  - C. No animal shall be boarded except as incidental to providing veterinary care.
- 13. Permitted by Special Use Permit only if located in buildings constructed prior to January 1, 1988.
- 14. Only ethanol production facilities utilizing the dry mill process shall be permitted.
- 15. Fuel ethanol plants shall be required to install thermal oxidizers or other similar technology to remove the volatile organic compounds (VOCs) to reduce odors.
- 16. Mortuary or Funeral Home is only allowed in the AG-2, Agriculture Zoning District as a second principal use on the same lot as a cemetery and the lot must be under common management.
- 17. A WIND FARM County Board SPECIAL USE Permit is only authorized in the WIND FARM OVERLAY Zoning DISTRICT in areas also zoned AG-1.

Section 5.3 Schedule of Area, Height and Placement Regulations by District

Section	on 5.3 S	chedi	ile	<u>ot A</u>	rea, l	Heigh	t and Pla	acem	ent	Keg	ulatio	ons by Di	strict
Zoning	e <sup>12</sup>	Ma	ximum		Require	Maximum	Special						
DISTRICTS				HEI	3HT <sup>4,11</sup>	Front	Front Setback from STREET Centerline <sup>3</sup>				REAR <sup>6</sup>	LOT COVERAGE	Provisions
	Area		rage	Feet	Stories	s s	TREET Classi	fication					
	(square fe		dth et)			MAJOF	COLLECTO	OR MIN	IOR		The state of the s		
AG-1 AGRICULTURE	1 Acre	20	00	50	NR <sup>10</sup>	85	75	5	5	15	25	20%	(5), (13), (14)
AG-2 AGRICULTURE	20,000	10	00	50	NR <sup>10</sup>	85	75	5	5	10	20	25%	(5), (13)
CR Conservation- Recreation	1 Acre	20	00	35	2 1/2	85	75	5	5	15	25	20%	(5), (13)
R-1 Single FAMILY Residence	9,000	8	0	35	2 1/2	85	75	5	5	10	20	30%	(5), (8)
R-2 Single FAMILY Residence	6,500	6	5	35	2 1/2	85	75	5:	5	10	20	30%	(5), (8)
R-3 Two FAMILY Residence	6,500 for 1 d.u. <sup>1</sup> 2,500 per additional d	. 6	5	35	2 1/2	85	75	5:	5	5	20	30%	(5)
R-4 Multiple FAMILY Residence	6,500 for 1 d.u. <sup>1</sup> 2,000 per additional d	. 6	5	50	NR <sup>10</sup>	85	75	55	5	5	15	40%	(5), (9)
R-5 MANUFACTURED HOME PARK					SE	EE SPECI	AL STANDAF	RDS SEC	TIOI	N 6.2	•		
B-1 Rural Trade Center	6,500	65	NF	R <sup>10</sup> N	IR <sup>10</sup>	85	75	55		10	20	50%	
B-2 Neighborhood Business	6,500	65	3	5 2	1/2	85	75	55		10	20	35%	(2)
B-3 Highway Business	6,500	65	4	0	3	85	75	55		5	20	40%	(2)
B-4 General Business	6,500	65	3	5 2	1/2	85	75	55		10	20	40%	(2)
B-5 Central Business	NR <sup>10</sup>	NR <sup>10</sup>	3:	5 2	1/2	0	0	0		0	0	100%	(2)
I-1 Light Industry	10,000	100	7:	5 N	R <sup>10</sup>	85	75	55		10	20	50%	(2)
I-2 Heavy Industry	20,000	150	15	0 N	R <sup>10</sup>	85	75	55		20	30	65%	(2)

#### SECTION 5.3 SCHEDULE OF AREA, HEIGHT & PLACEMENT REGULATIONS BY DISTRICT - CONTINUED

- 12. The provisions of this Section notwithstanding, all LOTS shall comply with the provisions of Section 4.3.4.
- 13. The following maximum LOT AREA requirements apply in the CR, AG-1 and AG-2 DISTRICTS:
  - A) LOTS that meet all of the following criteria may not exceed a maximum LOT AREA of three acres:
    - 1) The LOT is RRO-exempt;
    - 2) The LOT has a Land Evaluation score greater than or equal to 85 on the County's Land Evaluation and Site Assessment System; and
    - 3) The LOT is created from a tract that had a LOT AREA greater than or equal to 12 acres as of January 1, 1998.
      - B) LOTS that meet both of the following criteria may not exceed an average maximum LOT AREA of two acres:

        1) The LOT is located within a Rural Residential Overlay DISTRICT; and 2) The LOT has a Land Evaluation score of greater than or equal to 85 on the COUNTY's Land Evaluation and Site Assessment System.
    - C) The following LOTS are exempt from the three-acre maximum LOT AREA requirement indicated in Paragraph A:
      - 1) A 'Remainder Area Lot'. A 'Remainder Area Lot' is that portion of a tract which existed as of January 1, 1998 and that is located outside of the boundaries of a RRO-exempt LOT less than 35 acres in LOT AREA. No CONSTRUCTION or USE that requires a Zoning Use Permit shall be permitted on a 'Remainder Area Lot'.
      - 2) Any LOT greater than or equal to 35 acres in LOT AREA.
  - 14. LOTS in the WIND FARM OVERLAY Zoning DISTRICT intended for WIND FARM TOWERS, substations, and WIND FARM maintenance and management facilities are exempt from the requirements of Section 5.3 except as such regulations are required by Subsection 6.1.4.

- 1. Add new paragraph 5.4.3 E as follows:
  - E. The Rural Residential Overlay Zoning District is prohibited from being established in areas also zoned WIND FARM Overlay Zoning District.

# Attachment H. Revised Draft Proposed New Section 5.5 MARCH 6, 2009

1. Add new subsection 5.5 as follows (underlined text has been added since February 6, 2009, version):

### 5.5 WIND FARM OVERLAY Zoning DISTRICT

#### 5.5.1 Acts Prohibited

No WIND FARM or WIND FARM TOWER or cabling, transformers, common switching station, or other necessary device or STRUCTURE serving a WIND FARM shall be constructed in the AG-1 District on land that is not in conformance with this Section.

### 5.5.2 Exemptions

- A. The following may be authorized without the creation of a WIND FARM OVERLAY Zoning District:
  - 1. The construction of a WIND TURBINE TOWER.
  - 2. The construction of a TEST WIND TOWER.

### 5.5.3 Establishment of the WIND FARM OVERLAY Zoning District

- A. The establishment of the WIND FARM OVERLAY Zoning District is an amendment to the Champaign County Zoning Ordinance and shall be implemented in accord with the provisions of Subsection 9.2 as modified herein.
- B. The adoption of the WIND FARM OVERLAY Zoning District shall augment the provisions of the underlying DISTRICT and shall alter the following requirements:
  - 1. The height regulations of Section 4.3.1 and Section 5.3 as applied only to WIND FARM TOWERS except as height regulations are required as a standard condition in Section 6.1.4.
  - 2. The minimum lot requirements of Section 5.3 and paragraph 4.3.4 B. as applied only to WIND FARM TOWERS except as minimum lot requirements are required as a standard condition in Section 6.1.4.
  - 3. The requirements of paragraph 4.3.4 H. regarding Pipeline Impact Radius as applied only to WIND FARM TOWERS and other WIND FARM components except as Pipeline Impact Radius regulations are required as a standard condition in Section 6.1.4.
  - 4. New DWELLINGS and PRINCIPAL BUILDINGS may not be constructed as follows:
    - (a) less than 1.10 times the total WIND FARM TOWER height (measured to the tip of the highest rotor blade) from the base of a WIND FARM TOWER or on any other part of the area of a WIND FARM County Board SPECIAL USE Permit; or
    - (b) less than 1,000 feet from the base of a WIND FARM TOWER except upon submission of a PRIVATE WAIVER signed by the owner of said dwelling

# Attachment H. Revised Draft Proposed New Section 5.5 MARCH 6, 2009

or building or adjacent property. The PRIVATE WAIVER must specify the agreed minimum separation and specifically acknowledge that the grantor accepts the resulting noise level caused by the WIND FARM

- (b) The Rural Residential Overlay Zoning District shall not be established less than 1,000 feet from the base of a WIND FARM TOWER.
- C. The WIND FARM OVERLAY Zoning District shall include the following areas:
  - 1. All land that is within 1,000 feet 1.50 times the total WIND FARM TOWER height (measured to the tip of the highest rotor blade) from the base of each WIND FARM TOWER except that land that is more than 1,320 feet from any existing public street right of way in which case the area of the WIND FARM need only include all land that is within a distance equal to 1.10 times the total WIND FARM TOWER height (measured to the tip of the highest rotor blade) from the base of a WIND FARM TOWER.
  - 2. Any tracts of land that are not included in the area of the WIND FARM County Board SPECIAL USE Permit but that are surrounded by the area of the WIND FARM County Board SPECIAL USE Permit except that any such tracts of land that are larger than five acres may be omitted from the area of the Overlay District.
  - 3. The area of the WIND FARM OVERLAY Zoning District shall also include such tracts of land or portions of tracts of land so as to make a single contiguous area and such land as required to result in a legal description of the WIND FARM Overlay Zoning District area that will conform to rectilinear land descriptions.
  - 4. The boundary of the WIND FARM OVERLAY Zoning District shall only follow tax parcel lines and shall not bisect or cross any tax parcel boundary. New tax parcels may be created to accommodate a proposed WIND FARM Overlay Zoning District provided that any resulting LOT fully conforms to all Ordinance requirements.

### D. BOARD Findings

1. The BOARD shall make the following finding before forwarding a recommendation to the GOVERNING BODY with respect to a map amendment case to create a WIND FARM OVERLAY Zoning District:

That based on the considerations in the related COUNTY BOARD SPECIAL USE PERMIT (insert actual case number) the proposed site is or is not suitable for the development of the specified maximum number of WIND FARM TOWERS.

- 2. In making the finding, the BOARD shall consider the following:
  - a. The degree of conformance of the related WIND FARM County Board SPECIAL USE permit with the standard conditions for WIND FARM

# Attachment H. Revised Draft Proposed New Section 5.5 MARCH 6, 2009

County Board SPECIAL USE permit established in Section 6.1.4 as recommended by the BOARD including any necessary waiver of standard conditions.

- b. The recommended findings of the BOARD in the related WIND FARM County Board SPECIAL USE permit.
- 3. The BOARD may also make recommendations for specific conditions that should be imposed upon the adoption of any WIND FARM Overlay Zoning District.
- E. APPLICANTS Rights and Limitations Upon Approval
  - 1. Approval of a WIND FARM OVERLAY DISTRICT is specific to the tracts of land designated on the application.
  - 2. Approval of a WIND FARM OVERLAY DISTRICT shall not be deemed to be an approval of a WIND FARM County Board SPECIAL USE permit.
  - 3. WIND FARM OVERLAY DISTRICT designation expires in 10 years if no Zoning Use Permit is granted.

### 5.4.5 Submittals Required Upon Application

- A. A written application as required in Subsection 9.2.1 may be submitted by the WIND FARM Applicant provided that it includes the signatures of the OWNERS of more than 50% of the area involved.
- B. The application shall include a plan of the proposed WIND FARM OVERLAY District indicating the overall dimensions and acreage of the proposed DISTRICT; existing STREETS and STREET numbers; existing tax parcels; township section and range; and location of the proposed WIND FARM County Board SPECIAL USE Permit.

# Attachment I. Draft Proposed Changes to Subsections 6.1.1, 6.1.2, and 6.1.3 MARCH 6, 2009

#### 6.1 Standards for SPECIAL USES

The standards listed for specific SPECIAL USES which exceed the applicable DISTRICT standards in Section 5.3 and which are not specifically required under another COUNTY ordinance, state regulation, federal regulation, or other authoritative body having jurisdiction, to the extent that they exceed the standards of the DISTRICT, shall be considered standard conditions which the BOARD is authorized to waive upon application as provided in Section 9.1.11 on an individual basis.

# 6.1.1 Standards and Requirements Standard Conditions that May Apply to Specific SPECIAL USES

- A. The SPECIAL USE permit shall be granted or denied to a petitioner consistent with all testimony and evidence submitted by the petitioner with regard to the SPECIAL USE request.
- B. The SPECIAL USE permit shall apply only to a site plan submitted with each respective SPECIAL USE petition that is specifically approved by the BOARD.
- C. Site Reclamation
  - 1. In the course of BOARD review of a SPECIAL USE request, the BOARD may find that a proposed STRUCTURE is a NON-ADAPTABLE STRUCTURE. In such a case the developer shall enter into a reclamation agreement with the COUNTY for the subject site. The reclamation agreement shall be binding upon all successors of title to the land.
  - 2. Prior to the issuance of a SPECIAL USE permit for such NON-ADAPTABLE STRUCTURES, the landowner shall also record a covenant incorporating the provisions of the reclamation agreement on the deed subject to the lot.
  - 3. Separate cost estimates for Sections 6.1.1C4a and 6.1.1C4b shall be provided by an Illinois licensed Professional Engineer. Cost estimates provided shall be subject to approval of the BOARD.
  - 4. The reclamation agreement shall provide for:
    - a. removal of above-ground portion of any STRUCTURE on the subject site; site grading; and, interim soil erosion control;
    - b. below-ground restoration, including final grading and surface treatment; and

# Attachment I. Draft Proposed Changes to Subsections 6.1.1, 6.1.2, and 6.1.3 MARCH 6, 2009

- c. provision and maintenance of a letter of credit, as set forth in Section 6.1.1C5.
- 5. No Zoning Use Permit for such SPECIAL USE will be issued until the developer provides the COUNTY with an irrevocable letter of credit to be drawn upon a federally insured financial institution within 200 miles of Urbana or reasonable and anticipated travel costs shall be added to the amount of the letter of credit. The irrevocable letter of credit shall be in the amount of one hundred fifty percent (150%) of an independent engineer's cost estimate to complete the work described in Section 6.1.1C4a. This letter of credit, or a successor letter of credit pursuant to Section 6.1.1C6 or 6.1.1C12 shall remain in effect and shall be made available to the COUNTY for an indefinite term.
- 6. One hundred twenty (120) days prior to the expiration date of an irrevocable letter of credit submitted pursuant to this Section, the Zoning Administrator shall notify the landowner in writing and request information about the landowner's intent to renew the letter of credit, or remove the NON-ADAPTABLE STRUCTURE. The landowner shall have thirty (30) days to respond in writing to this request. If the landowner's intention is to remove the NON-ADAPTABLE STRUCTURE, the landowner will have a total of ninety (90) days from the date of the COUNTY's initial notification to remove it in accordance with Section 6.1.1C4a. At the end of ninety (90) days, the Zoning Administrator shall have a period of thirty (30) days to either:
  - a. confirm that the bank has renewed the letter of credit; or
  - b. inspect the subject property for compliance with Section 6.1.1C4a;
  - c. draw on the letter of credit and commence the bid process to have a contractor remove the NON-ADAPTABLE STRUCTURE pursuant to Section 6.1.1C4a.
- 7. The Zoning Administrator may find a NON-ADAPTABLE STRUCTURE abandoned in place. Factors to be considered in making this finding include, but are not limited to:
  - a. the nature and frequency of use as set forth in the application for SPECIAL USE;
  - b. the current nature and frequency of use;

# Attachment I. Draft Proposed Changes to Subsections 6.1.1, 6.1.2, and 6.1.3 MARCH 6, 2009

- c. whether the NON-ADAPTABLE STRUCTURE has become a public nuisance, or otherwise poses a risk of harm to public health or safety;
- d. whether the NON-ADAPTABLE STRUCTURE has been maintained in a manner which allows it to be used for its intended purpose, with no greater effects on surrounding properties and the public as a whole than was originally intended.
- 8. Once the Zoning Administrator has made a finding that a NON-ADAPTABLE STRUCTURE is abandoned in place, the Zoning Administrator shall issue noted to the land owner at the owner's last known address that the COUNTY will draw on the performance guarantee within thirty (30) days unless the owner appeals the Zoning Administrator's finding, pursuant to Section 9.1.8 or enters into a written agreement with the COUNTY to remove such NON-ADAPTABLE STRUCTURE in accordance with Section 6.1.1C4a within ninety (90) days and removes the NON-ADAPTABLE STRUCTURE accordingly.
- 9. The Zoning Administrator may draw on the funds to have said NON-ADAPTABLE STRUCTURE as per Section 6.1.1C4a of the reclamation agreement when any of the following occur:
  - a. no response is received from the land owner within thirty (30) days from initial notification by the Zoning Administrator;
  - b. the land owner does not enter, or breaches any term of a written agreement with the COUNTY to remove said NON-ADAPTABLE structure as provided in Section 6.1.1C8;
  - c. any breach or performance failure of any provision of the reclamation agreement;
  - d. the owner of record has filed a bankruptcy petition, or compromised the COUNTY's interest in the letter of credit in any way to specifically allowed by the reclamation agreement;
  - e. a court of law has made a finding that a NON-ADAPTABLE STRUCTURE constitutes a public nuisance;
  - f. the owner of record has failed to replace an expiring letter of credit within the deadlines set forth in Section 6.1.1C6; or

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- g. any other conditions to which the COUNTY and the land owner mutually agree, as set forth in the reclamation agreement.
- 10. Once the letter of credit has been drawn upon, and the site has been restored to its original condition, as certified by the Zoning Administrator, the covenant entered pursuant to Section 6.1.1C2 shall expire, and the COUNTY shall act to remove said covenant from the record of the property at the Recorder of Deeds within forty-five (45) days.
- 11. The proceeds of the letter of credit may only be used by the COUNTY to:
  - a. remove the NON-ADAPTABLE STRUCTURE and return the site to its condition prior to the placement of the NON-ADAPTABLE STRUCTURE, in accordance with the most recent reclamation agreement submitted and accepted in relation to the NON-ADAPTIVE STRUCTURE;
  - b. pay ancillary costs related to this process; and
  - c. remove any covenants placed on the title in conjunction with Section 6.1.1C.

The balance of any proceeds remaining after the site has been reclaimed shall be returned to the issuer of the letter of credit.

12. Upon transfer of any property subject to a letter of credit pursuant to this Section, the new owner of record shall submit a new irrevocable letter of credit of same or greater vale to the Zoning Administrator, prior to legal transfer of title, and shall sign a new reclamation agreement, pursuant to Section 6.1.1C4a. Once the new owner of record has done so, the letter of credit posted by the previous owner shall be released, and the previous owner shall be released from any further obligations under the reclamation agreement.

#### 6.1.2 Standard Conditions for All SPECIAL USES

The standards listed for specific SPECIAL USES which exceed the applicable DISTRICT standards in Section 5.3 and which are not specifically required under another COUNTY ordinance, state regulation, federal regulation, or other authoritative body having jurisdiction, to the extent that they exceed the standards of the DISTRICT, shall be considered standard conditions which the BOARD is authorized to waive upon application as provided in Section 9.1.11 on an individual basis.

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- A. All Special Use Permits with exterior lighting shall be required to minimize glare on adjacent properties and roadways by the following means:
  - 1. All exterior light fixtures shall be full-cutoff type lighting fixtures and shall be located and installed so as to minimize glare and light trespass. Full cutoff means that the lighting fixture emits no light above the horizontal plane.
  - 2. No lamp shall be greater than 250 watts and the Board may require smaller lamps when necessary.
  - 3. Locations and numbers of fixtures shall be indicated on the site plan (including floor plans and building elevations) approved by the Board.
  - 4. The Board may also require conditions regarding the hours of operation and other conditions for outdoor recreational uses and other large outdoor lighting installations.
  - 5. The Zoning Administrator shall not approve a Zoning Use Permit without the manufacturer's documentation of the full-cutoff feature for all exterior light fixtures.
- 6.1.3 Schedule of Requirements and Standard Conditions for Specific Types of SPECIAL USES

- **1. Add new subsection 6.1.4 as follows** (underlined text has been added since February 6, 2009, version):
- 6.1.4 WIND FARM County Board SPECIAL USE Permit
  A WIND FARM County Board SPECIAL USE Permit may only be authorized in the
  WIND FARM OVERLAY Zoning District subject to the following standard conditions.
  - A. General Standard Conditions
    - 1. The area of the WIND FARM County Board SPECIAL USE Permit must include the following:
      - (a) All land that is a distance equal to 1.10 times the total WIND FARM TOWER height (measured to the tip of the highest rotor blade) from the base of that WIND FARM TOWER.
      - (b) All land that will be exposed to a noise level greater than that authorized to Class A land under paragraph 6.1.4 I.
      - (c) All land that will be exposed to shadow flicker in excess of that authorized under paragraph 6.1.4M. and for which other mitigation is not proposed.
      - (d) All necessary access lanes or driveways and any required new PRIVATE ACCESSWAYS. For purposes of determining the minimum area of the special use permit, access lanes or driveways shall be provided a minimum 40 feet wide area.
      - (e) All necessary WIND FARM ACCESSORY STRUCTURES including electrical distribution lines, transformers, common switching stations, and substations not under the ownership of a PUBLICLY REGULATED UTILITY. For purposes of determining the minimum area of the special use permit, underground cable installations shall be provided a minimum 40 feet wide area.
    - 2. The WIND FARM County Board SPECIAL USE Permit shall not be located in the following areas:
      - (a) Less than one-and-one-half miles of from an incorporated municipality that has a zoning ordinance in conformance with {legal citation to municipal zoning enabling statute}.
      - (b) Less than one mile from the CR Conservation Recreation Zoning District.

- B. Minimum Lot Standard Conditions
  - 1. There are no minimum LOT AREA, AVERAGE LOT WIDTH, SETBACK, YARD, or maximum LOT COVERAGE requirements for a WIND FARM or for LOTS for WIND FARM TOWERS, substations, and WIND FARM maintenance and management facilities.
- C. Minimum Standard Conditions for Separations for WIND FARM TOWERS from adjacent USES and STRUCTURES

The location of each WIND FARM TOWER shall provide the following required separations as measured from the exterior of the above ground portion of the WIND FARM TOWER:

- 1. At least 1,000 feet separation from the <u>exterior above-ground</u> base of a WIND FARM TOWER to any PARTICIPATING DWELLING OR PRINCIPAL BUILDING provided that the noise level caused by the WIND FARM at the particular building complies with the applicable Illinois Pollution Control Board regulations.
- 2. At least 1,200 feet separation from the <u>exterior above-ground</u> base of a WIND FARM TOWER to any <u>existing NON-PARTICIPATING</u>
  DWELLING OR PRINCIPAL BUILDING provided that the noise level caused by the WIND FARM at the particular building complies with the applicable Illinois Pollution Control Board regulations.
- 3. The above separations may be reduced to a distance no less than 1.10 times the total WIND FARM TOWER height (measured to the tip of the highest rotor blade) upon submission of a PRIVATE WAIVER signed by the owner of said dwelling or building or adjacent property. The PRIVATE WAIVER must specify the agreed minimum separation and specifically acknowledge that the grantor accepts the resulting noise level caused by the WIND FARM.
- 4. A separation distance equal to 1.10 times the total WIND FARM TOWER height (measured to the tip of the highest rotor blade) from the <u>exterior above-ground</u> base of a WIND FARM TOWER to the nearest adjacent property line for property that is also part of the WIND FARM County Board SPECIAL USE Permit. This separation may be reduced upon submission of a PRIVATE WAIVER signed by the owner of the adjacent property. The PRIVATE WAIVER must specify the agreed minimum separation.

- 5. A separation distance equal to 1.10 1.50 times the total WIND FARM TOWER height (measured to the tip of the highest rotor blade) from the exterior above-ground base of a WIND FARM TOWER to the nearest public STREET RIGHT OF WAY. This separation may be reduced upon submission of a PRIVATE WAIVER signed by the owner of said electrical transmission line or communication tower or the relevant public street maintenance jurisdiction. The PRIVATE WAIVER must specify the agreed minimum separation.
- 6. A separation distance equal to 1.10 times the total WIND FARM TOWER height (measured to the tip of the highest rotor blade) from the exterior above-ground base of a WIND FARM TOWER to the nearest third party electrical transmission lines, communication towers, or railroad right of way. This separation may be reduced upon submission of a PRIVATE WAIVER signed by the owner of said electrical transmission line or communication tower or the relevant public street maintenance jurisdiction. The PRIVATE WAIVER must specify the agreed minimum separation.
- 7. Any PRIVATE WAIVER establishing an agreement for a lesser minimum separation as authorized above shall be submitted prior to the final determination by the BOARD and must be recorded as part of the chain of title in the deed to any relevant tract of land prior to authorization of any relevant ZONING USE PERMIT. No waiver of a standard condition shall be required in the event of a duly agreed and signed PRIVATE WAIVER.
- 7. A separation distance from the base of a WIND FARM TOWER to any GAS PIPELINE or HAZARDOUS LIQUID PIPELINE equal or greater than the PIPELINE IMPACT RADIUS required by paragraph 4.3.4 H.
- 8. At least 1,200 feet separation from the exterior above-ground base of a WIND FARM TOWER to any of the following:
  - (a) any easement for a GAS PIPELINE or HAZARDOUS LIQUID PIPELINE; or
  - (b) any wellhead or other above ground fixture that is accessory to a

    GAS PIPELINE or to any valve or other above ground fixture for
    any HAZARDOUS LIQUID PIPELINE;
  - (c) provided however that if the relevant PIPELINE IMPACT

    RADIUS required by paragraph 4.3.4 H. is greater than 1,200 feet then that PIPELINE IMPACT RADIUS shall be the minimum separation of any of the above; or

- (d) any easement for an underground water main or to the actual water main if there is no easement.
- 9. At least 1,600 feet separation from the exterior above-ground base of a

  WIND FARM TOWER to any Liquefied Petroleum Gas Storage; or

  Gasoline and Volatile Oils Storage exceeding 500 gallons capacity in the
  aggregate; or other commercial or industrial use of a flammable,
  explosive, or hazardous nature.
- D. Standard Conditions for Design and Installation of WIND FARM TOWERS
  - 1. Design Safety Certification
    - (a) WIND FARM TOWERS, turbines, and all related construction shall conform to applicable industry standards, including those of the American National Standards Institute ("ANSI"). Applicants shall submit certificates of design compliance that equipment manufacturers have obtained from Underwriters Laboratories ("UL"), Det Norske Veritas ("DNV"), Germanischer Lloyd Wind Energy ("GL"), or equivalent third party.
    - (b) Each Zoning Use Permit Application for a WIND FARM TOWER shall include a certification by an Illinois Professional Engineer or Illinois Licensed Structural Engineer that the foundation and tower design of the WIND FARM TOWER is within accepted professional standards, given local soil and climate conditions.
  - 2. Controls and Brakes
    - (a) All WIND FARM TOWER turbines shall be equipped with a redundant braking system. This includes both aerodynamic over speed controls (including variable pitch, tip, and other similar systems) and mechanical brakes.
    - (b) Mechanical brakes shall be operated in fail-safe mode.
    - (c) Stall regulation shall not be considered a sufficient braking system for over speed protection.
  - 3. Electrical Components. All electrical components of the WIND FARM shall conform to applicable state and national codes including, and relevant national and international standards (e.g. ANSI and International Electrical Commission).
  - 4. The WIND FARM TOWER must be a monopole construction.

- 5. The total WIND FARM TOWER height (measured to the tip of the highest rotor blade) must be less than 500 feet.
- 6. WIND FARM TOWERS, turbine nacelles, and blades shall be painted white or gray or another non-reflective, unobtrusive color as specified in the application and authorized by the BOARD.
- 7. The WIND FARM shall comply with all applicable Federal Aviation Administration (FAA) requirements which shall be explained in the application. The minimum lighting requirements of the FAA shall not be exceeded and unless otherwise required by the FAA only white strobe lights shall be used at night and only the minimum number of such lights with the minimum intensity and the minimum number of flashes per minute (longest duration between flashes) allowed by FAA.

### 8. Warnings

- (a) A reasonably visible warning sign concerning voltage must be placed at the base of all pad-mounted transformers and Substations.
- (b) Visible, reflective, colored objects, such as flags, reflectors, or tape shall be placed on the anchor points of guy wires and along the guy wires up to a height of 15 feet from the ground.
- 9. All WIND FARM TOWERS must be protected from unauthorized climbing by devices such as fences at least six feet high with locking portals or anti-climbing devices 12 feet vertically from the base of the WIND FARM TOWER.

### E. Standard Conditions to Mitigate Damage to Farmland

1. All underground wiring or cabling for the WIND FARM shall be at a minimum depth of 4 feet below grade or deeper if required to maintain a minimum one foot of clearance between the wire or cable and any agricultural drainage tile.

#### 2. Protection of agricultural drainage tile

(a) The applicant shall endeavor to locate all existing agricultural drainage tile prior to establishing any construction staging areas, construction of any necessary WIND FARM TOWER access lanes or driveways, construction of any WIND FARM TOWERS, any common switching stations, substations, and installation of underground wiring or cabling. The applicant shall contact affected landowners and tenants for their knowledge of tile line

- locations prior to the proposed construction. Drainage districts shall be notified at least two weeks prior to disruption of tile.
- (b) All identified drainage district tile lines shall be staked or flagged prior to construction to alert construction crews of the possible need for tile line repairs unless this requirement is waived in writing by the drainage district.
- (c) Any agricultural drainage tile located underneath construction staging areas, access lanes, driveways, any common switching stations, and substations shall be replaced as required in paragraph 7.2 of the Champaign County Stormwater Management Policy.
- (d) Any agricultural drainage tile that must be relocated shall be relocated as required in the Champaign County Stormwater Management Policy.
- (e) Conformance of any relocation of drainage district tile with the
  Stormwater Management Policy shall be certified by an Illinois
  Professional Engineer. Written approval by the drainage district
  shall be received prior to any backfilling of the relocated drain tile
  and a copy of the approval shall be submitted to the Zoning
  Administrator. As-built drawings shall be provided to both the
  relevant drainage district and the Zoning Administrator of any
  relocated drainage district tile.
- (f) All tile lines that are damaged, cut, or removed shall be staked or flagged in such manner that they will remain visible until the permanent repairs are completed.
- (g) All exposed tile lines shall be screened or otherwise protected to prevent the entry into the tile of foreign materials, loose soil, small mammals, etc.
- (h) Permanent repairs shall be made within 14 days of the tile damage provided that weather and soil conditions are suitable or a temporary tile repair shall be made. Immediate temporary repair shall also be required if water is flowing through any damaged tile line. Temporary repairs are not needed if the tile lines are dry and water is not flowing in the tile provided the permanent repairs can be made within 14 days of the damage.
- (i) All damaged tile shall be repaired so as to operate as well after construction as before the construction began.

- (j) Following completion of the WIND FARM construction the applicant shall be responsible for correcting all tile line repairs that fail, provided that the failed repair was made by the Applicant.
- 3. All soil conservation practices (such as terraces, grassed waterways, etc.) that are damaged by WIND FARM construction shall be restored by the applicant to the pre-WIND FARM construction condition.

### 4. Topsoil replacement

For any open trenching required pursuant to WIND FARM construction, the topsoil shall be stripped and replaced as follows:

- (a) The top 12 inches of topsoil shall first be stripped from the area to be trenched and from an adjacent area to be used for subsoil storage. The topsoil shall be stored in a windrow parallel to the trench in such a manner that it will not become intermixed with subsoil materials.
- (c) All subsoil material that is removed from the trench shall be placed in the second adjacent stripped windrow parallel to the trench but separate from the topsoil windrow.
- (d) In backfilling the trench, the stockpiled subsoil material shall be placed back into the trench before replacing the topsoil.
- (e) The topsoil must be replaced such that after settling occurs, the topsoil's original depth and contour (with an allowance for settling) will be restored.

#### 5. Mitigation of soil compaction and rutting

- (a) The Applicant shall not be responsible for mitigation of soil compaction and rutting if exempted by the WIND FARM lease.
- (b) Unless specifically provided for otherwise in the WIND FARM

  lease, the Applicant shall mitigate soil compaction and rutting for
  all areas of farmland that were traversed with vehicles and
  construction equipment or where topsoil is replaced in open
  trenches as follows:

- (1) After WIND FARM construction is complete the soil shall be ripped at least 18 inches deep (or more shallow if required to miss tile lines) and then disked by the applicant.

  Three passes shall be made across any agricultural land that is ripped.
- (2) All ripping and disking shall be done at a time when the soil is dry enough for normal tillage operations to occur on undisturbed farmland adjacent to the areas to be ripped.
- (3) The Applicant shall restore all rutted land to the original condition.

#### 6. Land leveling

- (a) The Applicant shall not be responsible for leveling of disturbed land if exempted by the WIND FARM lease.
- (b) Unless specifically provided for otherwise in the WIND FARM lease, the Applicant shall level all disturbed land as follows:
  - (1) Following the completion of any open trenching, the applicant shall restore all land to its original preconstruction elevation and contour.
  - (2) Should uneven settling occur or surface drainage problems develop as a result of the trenching within the first year after completion, the applicant shall again restore the land to its original pre-construction elevation and contour.
- F. Standard Conditions for Use of Public Streets {NOTE: For clarity, not all changes have been indicated.}

Any WIND FARM Applicant proposing to use any County Highway or a township or municipal STREET for the purpose of transporting WIND FARM TOWERS or Substation parts and/or equipment for construction, operation, or maintenance of the WIND FARM TOWERS or Substations(s), shall identify all such public STREETS and pay the costs of any necessary permits and the costs to repair any damage to the STREETS caused by the WIND FARM construction, as follows:

1. Prior to the close of the public hearing before the BOARD, the Applicant shall enter into a Roadway Upgrade and Maintenance agreement approved by the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, and the signed and

executed Roadway Upgrade and Maintenance agreements must provide for the following minimum conditions:

- a. The applicant shall agree to conduct a pre-WIND FARM construction baseline survey to determine existing STREET conditions for assessing potential future damage including the following:
  - (1) A videotape of the affected length of each subject STREET supplemented by photographs if necessary.
  - (2) Pay for costs of the County to hire a consultant to make a study of any structure on the proposed route that the County Engineer feels may not carry the loads likely during the WIND FARM construction.
  - (3) Pay for any strengthening of STREET structures
    that may be necessary to accommodate the
    proposed traffic loads caused by the WIND FARM
    construction.
  - b. The Applicant shall agree to pay for costs of the County
    Engineer to hire a consultant to make a study of any
    structure on the proposed route that the County Engineer
    feels may not carry the loads likely during the WIND
    FARM construction and pay for any strengthening of
    structures that may be necessary to accommodate the
    proposed traffic loads caused by the WIND FARM
    construction.
  - c. The Applicant shall agree upon an estimate of costs for any other necessary roadway improvements prior to construction.
  - d. The Applicant shall obtain any necessary approvals for the STREET improvements from the relevant STREET maintenance authority.
  - e. The Applicant shall obtain any necessary Access Permits including any required plans.
  - f. The Applicant shall erect permanent markers indicating the presence of underground cables.

- g. The Applicant shall install marker tape in any cable trench.
- h. The Applicant shall become a member of the Illinois state wide One-Call Notice System (otherwise known as the Joint Utility Locating Information for Excavators or "JULIE") and provide JULIE with all of the information necessary to update its record with respect to the WIND FARM.
- i. The Applicant shall use directional boring equipment to make all crossings of County Highways for the cable collection system.
- j. The Applicant shall provide plans for the widening of any corner radius that is necessary to facilitate the turning movements of the transport trucks used by the Applicant.
- k. The Applicant shall pay for the necessary temporary STREET improvements for the widened corner radii and pay for the cost to return the widened radii to their original lines and grades when no longer needed for the WIND FARM construction unless the STREET maintenance authority requests that the widened radii remain as improved.
- 1. The Applicant shall notify the STREET maintenance authority in advance of all oversize moves and crane crossings.
- m. The Applicant shall provide the County Engineer with a copy of each overweight and oversize permit issued by the Illinois Department of Transportation for WIND FARM construction.
- n. The Applicant shall transport the WIND FARM TOWER segments and other oversize loads so as to minimize adverse impact on the local traffic including farm traffic.
- o. The Applicant shall schedule WIND FARM construction traffic in a way to minimize adverse impacts on emergency response vehicles, rural mail delivery, school bus traffic, and local agricultural traffic.
- p. The Applicant shall provide as much advance notice as is commercially reasonable to obtain approval of the STREET maintenance authority when it is necessary for a

STREET to be closed due to a crane crossing or for any other reason. Notwithstanding the generality of the aforementioned, the Applicant will provide 48 hours notice to the extent reasonably practicable.

- q. The Applicant shall provide signs indicating all highway and STREET closures and work zones in accordance with the Illinois Department of Transportation Manual on Uniform Traffic Control Devices.
- r. The Applicant shall establish a single escrow account and a single Irrevocable Letter of Credit for the cost of all STREET upgrades and repairs pursuant to the WIND FARM construction.
- s. The Applicant shall notify all relevant parties of any temporary STREET closures
- t. The Applicant shall obtain easements and other land rights needed to fulfill the Applicant's obligations under this Agreement.
- u. The Applicant shall agree that the County shall design all STREET upgrades in accordance with the IDOT Bureau of Local Roads and Streets Manual, 2005 edition.
- v. The Applicant shall provide written Notice to Proceed to the relevant STREET maintenance authority by December 31 of each year that identifies the STREETS to be upgraded during the following year.
- w. The Applicant shall provide dust control and grading work to the reasonable satisfaction of the County Engineer on STREETS that become aggregate surface STREETS.
- x. The Applicant shall conduct a post-WIND FARM construction baseline survey similar to the pre-WIND FARM construction baseline survey to identify the extent of repairs necessary to return the STREET to the pre-WIND FARM construction condition.
- y. The Applicant shall pay for the cost of all repairs to all STREETS that are damaged by the Applicant during the construction of the WIND FARM and restore such

- STREETS to the condition they were in at the time of the pre-WIND FARM construction inventory.
- z. All WIND FARM construction traffic shall exclusively use routes designated in the approved Transportation Impact Analysis.
- aa. The Applicant shall provide liability insurance in an acceptable amount to cover the required STREET construction activities.
- bb. The Applicant shall pay for the present worth costs of life consumed by the construction traffic as determined by the pavement management surveys and reports on the roads which do not show significant enough deterioration to warrant immediate restoration.
- cc. Provisions for expiration date on the agreement.
- dd. Other conditions that may be required.
- 2. All relevant Roadway Upgrade and Maintenance agreements shall be included as a condition of approval by the BOARD and the signed and executed Roadway Upgrade and Maintenance agreements must be submitted to the Zoning Administrator prior to any Zoning Use Permit approval.
- 2. A condition of the County Board Special Use Permit approval shall be that the Zoning Administrator shall not authorize a Zoning Use Permit for the WIND FARM until the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, has approved a Transportation Impact Analysis provided by the Applicant and prepared by an independent engineer that is mutually acceptable to the Applicant and the County Engineer and State's Attorney; or Township Highway Commissioner; or municipality where relevant, that includes the following:
  - (a) Identify all such public STREETS or portions thereof that are intended to be used by the Applicant during construction of the WIND FARM as well as the number of loads, per axle weight of each load; and type of equipment that will be used to transport each load.

- (b) A schedule of the across road culverts and bridges affected by the project and the recommendations as to actions, if any, required with respect to such culverts and bridges and estimated of the cost to replace such culverts and bridges;
- (c) A schedule of the anticipated STREET repair costs to be made in advance of the WIND FARM construction and following construction of the WIND FARM.
- (d) The Applicant shall reimburse the County Engineer; or Township

  Highway Commissioner; or municipality where relevant, for all
  reasonable engineering fees including the costs of a third party
  consultant, incurred in connection with the review and approval of
  the Transportation Impact Analysis.
- G. Standard Conditions for Coordination with Local Fire Protection District
  - 1. The Applicant shall submit to the local fire protection district a copy of the site plan.
  - 2. Upon request by the local fire protection district, the Owner or Operator shall cooperate with the local fire protection district to develop the fire protection district's emergency response plan.
  - 3. Nothing in this section shall alleviate the need to comply with all other applicable fire laws and regulations.
- H. Standard Conditions to Mitigate Electromagnetic Interference
  - 1. The Applicant shall provide the applicable microwave transmission providers and local emergency service provider(s) (911 operators) copies of the project summary and site plan.
  - 2. To the extent that any relevant microwave transmission provider and local emergency service provider demonstrates a likelihood of interference with its communications resulting from the WIND FARM, the Applicant shall take reasonable measures to mitigate such anticipated interference.
  - 3. If, after construction of the WIND FARM, the Owner or Operator receives a written complaint related to the above-mentioned interference, the Owner or Operator shall take reasonable steps to respond to the complaint.

4. If, after construction of the WIND FARM, the Owner or Operator receives a written complaint related to interference with local broadcast residential television, the Owner or Operator shall take reasonable steps to respond to the complaint.

#### I. Standard Conditions for Allowable Noise Level

- 1. Noise levels from each WIND FARM TOWER or WIND FARM shall be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations (35 *Illinois Administrative Code* Subtitle H: Noise Parts 900, 901, 910).
- 2. The Applicant shall submit manufacturer's wind turbine sound power level characteristics and other relevant data regarding wind turbine noise characteristics necessary for a competent noise analysis.
- 3. The Applicant, through the use of a qualified professional, as part of the siting approval application process, shall appropriately demonstrate compliance with the above noise requirements.
- 4. The Applicant shall submit a map of the relevant noise contours for the proposed WIND FARM and indicate the proposed WIND FARM TOWERS and all existing PRINCIPAL BUILDINGS within at least 1,200 feet of any WIND FARM TOWER or within the coverage of the relevant noise contours.
- 5. If a computer model is used to generate the required noise contours the Applicant shall clearly state the assumptions of the model's construction and algorithms so that a competent and objective third party can as simply as possible verify the noise contours and noise data.
- J. Standard Conditions for Endangered Species Consultation

  The Applicant shall apply for consultation with the Endangered Species Program of the Illinois Department of Natural Resources. The Application shall include a copy of the Agency Action Report from the Endangered Species Program of the Illinois Department of Natural Resources.
- K. Standard Conditions for Historic and Archaeological Resources Review
  The Applicant shall apply for consultation with the State Historic Preservation
  Officer of the Illinois Department of Natural Resources. The Application shall
  include a copy of the Agency Action Report from the State Historic Preservation
  Officer of the Illinois Department of Natural Resources.

- L. Standard Conditions for Acceptable Wildlife Impacts
  - 1. The WIND FARM shall be located, designed, constructed, and operated so as to avoid and if necessary mitigate the impacts to wildlife as much as possible including the following:
    - (a) Avoid locating WIND FARM TOWERS in known bird migration pathways and daily movement flyways and known hibernacula and flight paths between bat colonies and bat feeding areas.
    - (b) As much as possible, orient rows of WIND FARM TOWERS parallel to known movement patterns.
  - 2. A qualified professional, such as an ornithologist or wildlife biologist, shall conduct a pre-construction site assessment study to estimate the impacts of the construction and operation of the proposed WIND FARM on bird and bats. The pre-construction site assessment shall be submitted with the application and shall include the following minimum information:
    - (a) A literature review of existing information on species and potential habitats in the vicinity of the proposed WIND FARM area.
    - (b) A mapping of the general vegetation and land cover types, wildlife habitat and quality, and physical characteristics of the proposed WIND FARM area.
    - (c) A full year of site specific avian use surveys from the beginning of the spring migration for birds or bats, and extending through the end of the fall migration for birds or bats and include both the spring and fall migration for both birds and bats in the proposed WIND FARM area.
    - (d) If the above information suggests the probable occurrence of a state or federal threatened or endangered or sensitive-status species in the proposed WIND FARM area, focused surveys must be conducted during the appropriate season to determine the presence or likelihood of the species of interest and the results submitted with the application.
  - 3. A qualified professional, such as an ornithologist or wildlife biologist, shall also conduct a post-construction mortality monitoring study to quantify the mortality impacts of the WIND FARM on birds and bats. The post-construction mortality monitoring study shall consist of the following minimum information at a minimum:

- (a) At least two full years of site specific mortality monitoring from the beginning of the spring migration for birds or bats, and extend through the end of the fall migration for birds or bats and include both the spring and fall migration for both birds and bats in the immediate vicinity of some or all of the WIND FARM TOWERS.
- (b) The application shall include a specific proposal for the degree of precision of the mortality monitoring study including how many days the monitoring is done, at how many towers, for how long each day, and at what radius around the tower, and the extent of monitoring outside of the spring and fall migrations.
- (c) A written report on avian and bat mortality shall be submitted at the end of first two full years of WIND FARM operation. The mortality rate estimates should reflect consideration of carcass removal by scavengers and predators.
- (d) If the Environment and Land Use Committee determines there are legitimate mortality concerns indicated by the monitoring the post-construction mortality monitoring study shall continue in full year increments until the monitoring indicates that the mortality concerns are resolved. When mortality concerns cannot be resolved in any other way, particular WIND FARM TOWERS shall be shut down during periods of peak risk to birds or bats.
- 4. During both pre-construction assessment and post-construction monitoring, other information required by the United States Fish and Wildlife Service and the Illinois Department of Natural Resources shall also be provided to the County.

#### M. Standard Conditions for Shadow flicker

- 1. The Applicant shall submit the results of a study on potential shadow flicker. The shadow flicker study shall identify the locations of <u>both</u> summer and winter shadow flicker that may be caused by the project and the expected durations of the shadow flicker at these locations particularly areas where shadow flicker may interfere more than one hour per year.
- 2. The Applicant shall ensure the following:
  - (a) Existing DWELLINGS shall not be subjected to shadow flicker.
  - (b) No public STREET shall be subjected to shadow flicker.

- N. Standard Conditions for Visual Impact Assessment
  - 1. The Applicant shall submit simulated images of the proposed WIND FARM from the following viewpoints:
    - (a) Any portion of the WIND FARM that will be visible from and within one mile of any non-participating dwelling or other non-participating principal use.
    - (b) Any portion of the WIND FARM that will be visible from and within five miles of any forest preserve district facility.
  - 2. The simulated images shall be as follows:
    - (a) Full color photographic printing on paper that is minimum 8 ½ by 11 inches in format.
    - (b) As accurate as practical in matching the scale, perspective, and color of the probable actual visual impact.
    - (c) Computer visualization images may be provided in addition to the full color photographic simulations.
  - 3. The Applicant shall also submit a written report indicating the location of the individual images relative to the proposed site plan and explaining the techniques used to ensure that the images provide maximum practical realism.
- O. Standard Condition for Liability Insurance
  - 1. The Owner or Operator of the WIND FARM shall maintain a current general liability policy covering bodily injury and property damage with limits of a least \$1 million per occurrence and \$1 million in the aggregate. The amount of the limit shall be increased annually to account for the effects of inflation.
  - 2. The general liability policy shall identify landowners in the SPECIAL USE permit as additional insured.
- P. Operational Standard Conditions
  - 1. Maintenance
    - (a) The Owner or Operator of the WIND FARM must submit, on an annual basis, a summary of the operation and maintenance reports to the Environment and Land Use Committee and any other operation and maintenance reports as the Environment and Land Use Committee reasonably requests.

- (b) Any physical modification to the WIND FARM that alters the mechanical load, mechanical load path, or major electrical components shall require a new County Board SPECIAL USE Permit. Like-kind replacements shall not require re-certification nor will replacement of transformers, cabling, etc. provided replacement is done in a fashion similar to the original installation. Prior to making any physical modification (other than a like-kind replacement), the owner of operator shall confer with a relevant third-party certifying entity identified in subparagraph 6.1.4 D. 1. (a) to determine whether the physical modification requires recertification.
- 2. Materials Handling, Storage and Disposal
  - (a) All solid wastes related to the construction, operation and maintenance of the WIND FARM shall be removed from the site promptly and disposed of in accordance with all federal, state and local laws.
  - (b) All hazardous materials related to the construction, operation and maintenance of the WIND FARM shall be handled, stored, transported and disposed of in accordance with all applicable local, state and federal laws.
- Q. Standard Condition for Decommissioning Plan and Reclamation Agreement
  - 1. The Applicant shall submit a signed site reclamation agreement conforming to the requirements of paragraph 6.1.1 A.
  - 2. In addition to the purposes listed in subparagraph 6.1.1 A. 4. the reclamation agreement shall also include provisions for anticipated repairs to any public STREET used for the purpose of reclamation of the WIND FARM and all costs related to removal of access driveways.
  - 3. In addition to the conditions listed in subparagraph 6.1.1 A. 9. the Zoning Administrator may also draw on the funds for the following reasons:
    - (a) In the event that any wind turbine or component thereof ceases to be functional for more than six consecutive months and the Owner is not diligently repairing such wind turbine or component.
    - (b) In the event that the Owner declares any wind turbine or other component to be functionally obsolete for tax purposes.

4. The Site Reclamation Agreement shall be included as a condition of approval by the BOARD and the signed and executed Site Reclamation Agreement must be submitted to the Zoning Administrator prior to any Zoning Use Permit approval.

### R. Complaint Hotline

- 1. Prior to the commencement of construction on the WIND FARM and during the entire term of the County Board SPECIAL USE permit and any extension, the Applicant and Owner shall establish a telephone number hotline for the general public to call with any complaints or questions.
- 2. The telephone number hotline shall be publicized and posted at the operations and maintenance center and the construction marshalling yard.
- 3. The telephone number hotline shall be manned during usual business hours and shall be an answering recording service during other hours.
- 4. Each complaint call to the telephone number hotline shall be logged and identify the name and address of the caller and the reason for the call.
- 5. All calls shall be recorded and the recording shall be saved for transcription for a minimum of two years.
- 6. A copy of the telephone number hotline shall be provided to the Zoning Administrator on a monthly basis.
- 7. The Applicant and Owner shall take necessary actions to resolve all legitimate complaints.
- S. Standard Condition for Expiration of WIND FARM County Board SPECIAL USE Permit

A WIND FARM County Board SPECIAL USE Permit designation shall expire pursuant to any time limit included in the Roadway Upgrade and Maintenance agreement required by paragaph 6.1.4 G. or in 10 years if no Zoning Use Permit is granted.

### T. Application Requirements

- 1. In addition to all other information required on the SPECIAL USE Permit application and required by Section 9.1.11 A. 2. the application shall contain or be accompanied by the following information:
  - (a) A WIND FARM Project Summary, including, to the extent available:
    - (1) A general description of the project, including its approximate name plate generating capacity; the potential

equipment manufacturer(s), type(s) of wind turbines, number of wind turbines, and name plate generating capacity of each wind turbine; the maximum height of the WECS Tower(s); and the maximum diameter of the WECS(s) rotor(s).

- (2) The specific proposed location of the WIND FARM including all tax parcels on which the WIND FARM will be constructed.
- (3) The specific proposed location of all tax parcels required to be included in the WIND FARM Overlay Zoning District.
- (4) A description of the Applicant; Owner and Operator, including their respective business structures.
- (b) The name(s), address(es), and phone number(s) of the Applicant(s), Owner and Operator, and all property owner(s) for both the WIND FARM County Board SPECIAL USE permit and the WIND FARM Overlay Zoning District.
- (c) A site plan for the installation of all WIND FARM TOWERS indicating the following:
  - The approximate planned location of each WIND FARM TOWER, other PRINCIPAL STRUCTURES, property lines (including identification of adjoining properties), required separations, public access roads and turnout locations, substation(s), electrical cabling from the WIND FARM TOWER to the Substations(s), ancillary equipment, third party transmission lines, maintenance and management facilities, and layout of all structures within the geographical boundaries of any applicable setback.
  - (2) The site plan shall clearly indicate the area of the proposed WIND FARM County Board SPECIAL USE Permit as required by subparagraph 6.1.4 A. 1. as well as the area of the related WIND FARM Overlay Zoning District as required by paragraph 5.3.3 C.
  - (3) The separation of all WIND FARM structures from adjacent NON-PARTICIPATING DWELLINGS OR PRINCIPAL BUILDINGS or uses shall be dimensioned on the approved site plan and that dimension shall establish the effective minimum separation that shall be required for any Zoning Use Permit. Greater separation and somewhat

different locations may be provided in the approved site plan for the Zoning Use Permit provided that that the greater separation does not increase the noise impacts that were approved in the WIND FARM County Board SPECIAL USE Permit. WIND FARM structures includes WIND FARM TOWERS, substations, third party transmission lines, maintenance and management facilities, or other significant structures.

- (d) All other required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance.
- 2. The Applicant shall notify the COUNTY of any changes to the information provided above that occurs while the County Board SPECIAL USE permit application is pending.

### Attachment K. Draft Proposed Changes to Subsection 9.1.11 MARCH 6, 2009

#### 9.1.11 SPECIAL USES

#### A. Authorized SPECIAL USES

- 1. The BOARD may grant SPECIAL USE permits only for such SPECIAL USES as are specifically authorized in this ordinance, and are not prohibited by Section 14.2.1.
- 2. The GOVERNING BODY may grant SPECIAL USE permits only for such County Board SPECIAL USES as are specifically authorized in this ordinance, and are not prohibited by Section 14.2.1.
- 3. The BOARD <u>or GOVERNING BODY</u> may grant such SPECIAL USE permits only upon written application and after conduct of a public hearing.
  - a. The written application for a SPECIAL USE permit shall include:
    - i. The signature of the petitioner; and
    - ii. The signature of the owner or owners of all the land included in the petition, or the legal representative(s) thereof; and, if applicable, a copy of the petitioner's purchase contract.

#### B. SPECIAL USE Criteria

A SPECIAL USE permit shall not be granted by the BOARD or GOVERNING BODY unless the public hearing record and written application demonstrate:

- 1. that it is necessary for the public convenience at that location;
- 2. that it is so designed, located, and proposed as to be operated so that it will not be injurious to the DISTRICT in which it shall be located or otherwise detrimental to the public welfare;
- 3. that it conforms to the applicable regulations and standards of and preserves the essential character of the DISTRICT in which it shall be located, except where such regulations and standards are modified by Section 6.
- 4. that granting the SPECIAL USE is in harmony with the general purpose and intent of this ordinance.

### Attachment K. Draft Proposed Changes to Subsection 9.1.11 MARCH 6, 2009

- 5. that, in the case of an existing NONCONFORMING USE, it will make such USE more compatible with its surroundings.
- 6. approval of a SPECIAL USE permit shall authorize USE, CONSTRUCTION and operation only in a manner that is fully consistent with all testimony and evidence submitted by the petitioner or petitioner's agent(s).

### C. Findings

- 1. The BOARD or GOVERNING BODY shall make findings that the requirements of Section 9.1.11B have been met by the applicant for a SPECIAL USE.
- 2. The BOARD or GOVERNING BODY shall further make a finding that the reasons set forth in the application justify with respect to the criteria set forth in Section 9.1.11B the waiver of any standard condition or the imposition of any special condition.
- 3. The BOARD or GOVERNING BODY may make a finding that a proposed STRUCTURE or physical change to a site, as a part of a SPECIAL USE request, is a NON-ADAPTABLE STRUCTURE. In such a case the requirements of Section 6.1.1GA shall be applicable.
- 4. Within a reasonable time after the public hearing for any County Board SPECIAL USE Permit, the BOARD shall make a report to the GOVERNING BODY.

#### D. Conditions

- 1. Any other provision of this ordinance not withstanding, the BOARD or GOVERNING BODY, in granting any SPECIAL USE, may waive upon application any standard or requirement for the specific SPECIAL USE enumerated in Section 6.1.3 Schedule of Requirements and Standard Conditions, to the extent that they exceed the minimum standards of the DISTRICT, except for any state or federal regulation incorporated by reference, upon finding that such waiver is in accordance with the general purpose and intent of this ordinance, and will not be injurious to the neighborhood or to the public health, safety and welfare.
- 2. In granting any SPECIAL USE, the BOARD or GOVERNING BODY

# Attachment K. Draft Proposed Changes to Subsection 9.1.11 MARCH 6, 2009

may prescribe SPECIAL CONDITIONS as to appropriate conditions and safeguards in conformity with the ordinance. Violation of such SPECIAL CONDITIONS when made a part of the terms under which the SPECIAL USE is granted, shall be deemed a violation of this ordinance and punishable under this ordinance.

- 3. In granting any SPECIAL USE Permit as authorized in Section 4.2.1F for more than one MAIN or PRINCIPAL STRUCTURE or BUILDING, the BOARD shall state that any future sale of said LOT or tract of land may be subject to the *Illinois Plat Act*, (765 ILCS 205/0.01 et seq.) or the *Champaign County Subdivision Regulations*; or the SUBDIVISION regulations of a municipality that has jurisdiction within one and one-half miles of the corporate limits.
- 4. RESIDENTIAL PLANNED UNIT DEVELOPMENTS shall, in addition to or in lieu of the above, meet the provisions of Section 6.3.
- 5. The BOARD or GOVERNING BODY shall require that all applicable provisions of the *Champaign County Stormwater Management Policy* (as amended February 20, 2003) are met before approving any SPECIAL USE.
- 6. Under no circumstances shall the BOARD or GOVERNING BODY grant a SPECIAL USE to allow a USE not permissible under the terms of this ordinance, in the DISTRICT involved, or any USE expressly or by implication prohibited under the terms of this ordinance in said DISTRICT, nor shall the BOARD or GOVERNING BODY waive compliance with state or federal regulations incorporated into this ordinance.

### Attachment L. Draft Proposed Changes To Subsections 9.3.1 and 9.3.3 MARCH 6, 2009

### 1. Add the following paragraph 9.3.1 H. for Zoning Use Permit fee:

- H. WIND FARM TOWER .....\$4000
- 2. Revise subsection 9.3.3 as follows (underlined text is new):

### 9.3.3 Zoning Case Filing Fees

- A. General Provisions
  - 1. No zoning case filing shall be accepted until the filing fee has been paid.
  - 2. No zoning case filing fee shall be waived unless the Zoning Administrator determines that the petition is the only means reasonably available to bring a property into compliance with the provisions of this ordinance and the non-compliance is due solely to staff error.
  - 3. No zoning case filing fee shall be refunded after required legal notice has been made by mail or publication unless the Zoning Administrator determines such filing to have been based solely upon staff error.
  - 4. No amendment to any petition which requires new legal notice shall be considered until an amended petition fee has been received unless the Zoning Administrator determines such amendment to be required due solely to staff error.
  - 5. The fee for SPECIAL USE permits shall be determined based on the larger of the following (except for County Board WIND FARM Special Use Permits):
    - a. the area of farmland taken out of production as a result of the SPECIAL USE; or
    - b. when farmland will not be taken out of production as a result of the SPECIAL USE, the land area taken up by the existing STRUCTURES and all proposed CONSTRUCTION proposed in the SPECIAL USE application.
  - 6. When some combination of VARIANCE, SPECIAL USE and Map Amendment cases is required simultaneously for the same property, the total filing fee shall include the following (except for County Board WIND FARM Special Use Permits):
    - a. The standard fee for the most expensive individual zoning case; and
    - b. one-half of the standard fee for any other required VARIANCE,

# Attachment L. Draft Proposed Changes To Subsections 9.3.1 and 9.3.3 MARCH 6, 2009

SPECIAL USE, or Map Amendment provided that

- c. no additional fees shall be included for multiple zoning cases of the same type that can be advertised in the same legal advertisement.
- 7. There shall be no reduction in fees for combined applications of County
  Board WIND FARM Special Use Permit and a map amendment to the
  WIND FARM Overlay Zoning District.

B.	Fees	V. D. Word		
	1.	VARIANCES.		
		a. ADMINISTRATIVE VARIANCES \$100		
		b. Minor or Major VARIANCES \$200		
	SPECIAL USE permits and Map Amendments (except for County WIND FARM Special Use Permit and a map amendment to the W FARM Overlay Zoning District)			
		a. Two acres or less and Base Fee for larger areas \$400		
		<ul> <li>b. More than two acres but no more than 12 acres add \$40 per acre to Base Fee for each acre over two acres</li> <li>c. More than 12 acres add \$10 per acre for each acre over 12 acres and add to fees in a. and b. above</li> </ul>		
		add to rees in a. and b. above		
	3.	Appeals and Interpretations\$200		
	4.	Change of Nonconforming Use\$100		
	5.	Amendment to Petitions (requiring new legal notice) \$100		
	6.	County Board WIND FARM Special Use Permit  \$440 per WIND FARM TURBINE TOWER		
		Map Amendment to the WIND FARM Overlay Zoning District \$100 per WIND FARM TURBINE TOWER		

### Illinois Livestock Management Facilities Act (510 ILCS 77/et seq.)

General Requirements Related to Size of Facility

FEBRUARY 15, 2007

Number of Animal Units <sup>1</sup>	Setbacks for New Facilities <sup>4</sup>	Waste Management Plan	Livestock Manager Certification <sup>3</sup>
Less than 50 animal units	Not Required	Not Required	Not Required
50 to 1,000 animal units	1/4 Mile from Non-farm Residence	Not Required	Not Required
	1/2 Mile from Populated Area 2		
1,000 - 7,000 (between 500 to 3,500 horses; or 1,000 and 7,000 cows; or between 2,500 -17,500 hogs over 55 lbs.)	1/4 Mile + 220' for each additional 1,000 AU's from Non-farm Residence ½ Mile + 440' for each additional 1,000 AU's from Populated Area <sup>2</sup>	General Plan Required (1,000 - 5,000 animal units)  Detailed Plan Required (More than 5,000 animal units	Training Required
More than 7,000 animal units (more than 3,500 horses; or more than 7,000 cows; or more than 17,500 hogs)	<ul> <li>1/2 Mile from Any Residence</li> <li>1 Mile from a Populated Area<sup>2</sup></li> </ul>	Detailed Plan Required	Training Required

#### NOTES:

- 1. An Animal Unit is roughly equivalent to 1,000 lbs. of animal body weight. The Act specifies a conversion for different types of animals.
  - a. One animal unit is equal to 2.0 horses; or 1.0 feeder cattle; or 1.4 dairy cattle; or .4 swine over 55 lbs.; or .03 swine under 55 lbs.; or .1 goat or sheep.
  - b. Based on the conversion, 50 AU's is equivalent to 25 horses; or 50 feeder cattle; or 35 dairy cattle; or 125 hogs over 55 lbs.; or 1,666 hogs under 55 lbs; or 500 goats or sheep.
  - c. Base on the conversion, 1,000 AU's is equivalent to 500 horses; or 1,000 feeder cattle; or 714 dairy cattle; or 2,500 hogs over 55 lbs.; or 33,300 hogs under 55 lbs; or 500 goats or sheep.
- 2. A Populated Area is an area containing a public assembly use like a church or 10 or more non-farm dwellings.
- Certain Livestock Management Facilities are required to be supervised by a certified livestock manager.
- 4. Expanding a facility that existed on May 21, 1996, where the fixed capital cost of the new components constructed within a 2-year period does not exceed 50% of the fixed capital cost of a comparable entirely new facility shall not be deemed a new facility as used in this Act.

#### 6.4 Alternative Stormwater Storage Areas - Continued

and including the 50-year storm event. Open waterways such as surface overflow swales shall be designed into the grading plan to receive all excess stormwater runoff. Depressing sidewalks across such overflow swales to meet this requirement shall be acceptable. Street ponding shall be allowed only for the conveyance of stormwater runoff and will be subject to approval by the public body accepting dedication of the street.

### C. Rooftop Storm Water Storage

Rooftop storage of excess storm water shall be designed and constructed to provide permanent control inlets and parapet walls to contain excess storm water. Adequate structural roof design must be provided to ensure that roof deflection does not occur which could cause the roofing material to fail and result in leakage. Overflow areas must be provided to ensure that the weight of storm water will never exceed the structural capacity of the roof. Any rooftop storage of excess stormwater shall be approved only upon submission of building plans signed and sealed by a licensed structural engineer or architect attesting to the structural adequacy of the design.

### D. Automobile Parking Lot Storage Areas

Automobile parking lots may be designed to provide temporary detention storage on a portion of their surfaces. Automobile parking facilities used to store excess storm water may be constructed having a maximum depth of stored storm water of 0.6 feet; and these areas shall be located in the most remote, least used areas of the parking facility. Design and construction of automobile parking in storm water areas must insure that there is minimal damage to the parking facility due to flooding, including minimal damage to the subbase. Warning signs shall be mounted at appropriate locations to warn of possible flood conditions during storm periods.

#### E. Underground Storm Water Storage

Underground storm water storage facilities must be designed for easy access in order to remove accumulated sediment and debris. These facilities must be provided with a positive gravity outlet unless otherwise approved by the reviewing authority.

#### Section 7 Protecting Existing Drainage

#### 7.1 Natural Drainage

A. Existing perennial streams shall not be modified to accommodate onsite flows of stormwater. Streambanks may be modified, however, incident to the installation of excess stormwater runoff outfalls, necessary to ensure safety or bank stabilization, and/or for the improvement of aquatic habitats.

#### 7.1 Natural Drainage - Continued

B. Other natural drainage features such as depressional storage areas and swales shall be incorporated into the drainage system.

### 7.2 Agricultural Drainage Improvements

- A. The outlet for existing agricultural drainage tile will be located and the capacity of the outlet shall be maintained for the watershed upstream of the development area.
- B. Existing easements for any agricultural drainage tile located underneath areas that will be developed shall be preserved. If no easement exists an easement shall be granted for access and maintenance as provided in Section 9 below. Such easements shall be of sufficient width and located to provide for continued functioning and necessary maintenance of drainage facilities. No buildings or permanent structures including paved areas but excluding streets, sidewalks, or driveways, which cross the easement by the shortest possible route may be located within the easement without the consent and approval of any public body to which the easement is granted.
- C. All agricultural drainage tile located underneath areas that will be developed shall be replaced with non-perforated conduit to prevent root blockage provided however that drainage district tile may remain with the approval of the drainage district.
- D. Agricultural drainage tile which, due to development, will be located underneath roadways, drives, or parking areas as allowed by Paragraph C above shall be replaced with ductile iron, or reinforced concrete pipe or equivalent material approved by the reviewing authority as needed to prevent the collapse of the agricultural drainage conduit.
- E. Agricultural drainage tile may be relocated within development areas upon approval of the reviewing authority. Such relocation shall maintain sufficient slope and capacity to prevent sedimentation and to prevent an increase in scouring or structural damage to the conduit. Such relocation shall only be with the consent and approval of the drainage district which is responsible for maintaining the tile. If the tile is not under the authority of a drainage district the reviewing authority shall consider the interests of those landowners who are served by the tile.
- F. No storm sewer inlet, outlet, or detention basin outlet shall be connected to farm drainage tile unless flow is restricted to an amount equal to or less than the discharge capacity of the tile. Such connection shall only be made with the consent and approval of the drainage district responsible for maintaining the tile. If the tile is not under the authority of a drainage district the reviewing authority shall consider the interests of those landowners who are served by the tile.
- G. No fill shall be placed nor grade altered in such a manner that it will cause surface water upstream of the development to pond or direct surface flows in such a way as to

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#### Section 12 Submittals

### 12.1 Stormwater Drainage Plan

Two copies of a Stormwater Drainage Plan prepared by an Illinois Professional Engineer must be submitted with any zoning petition or subdivision application where required by this policy. Such plan must at a minimum contain the following:

- A. Full description of before and after development topography, existing drainage (including locations of agricultural drainage tile serving the area to be developed as well as serving off-site areas but which crosses the area to be developed as well as the efforts to identify and locate underground tile), grading, and environmental characteristics of the property.
- B. The potential impacts of the development on water resources both upstream and downstream.
- C. Erosion control plan.
- D. An explanation of the minor and major drainage systems' performance under storm events up to and including the 100-year precipitation event and of the provisions for handling drainage from any tributary off-site areas.
- E. Stormwater Detention or Retention System Designs

Calculations shall be submitted with all assumptions, coefficients, and other parameters identified and their sources noted. The subdivision name or other project identification, engineer's firm, the engineer's name, and date shall all be indicated. For detention systems for developments of more than 10 acres in area, a plot or tabulation of storage volumes with corresponding water surface elevations (stage storage table) and of the basin outflow rates for those water surface (stage discharge) elevations shall be furnished for the 1-year, 2-year, 5-year and 50-year precipitation events. These tabulations shall be listed for water surface elevation intervals not exceeding 1.0 foot.

#### 12.2 Certifications

The following certifications shall be submitted prior to the issuance of any Certificate of Compliance, final plat approval, or release of performance guarantee for development on the site as provided in the applicable provisions of the Champaign County Zoning Ordinance or Champaign County Subdivision Regulations:

- A. Certification of storage volume as provided in Paragraph 6.2(D).
- B. As-built drawings of the drainage system including the storage facility in sufficient detail to determine that the constructed facility is substantially the same as that

#### 12.2 Certifications - Continued

presented in the approved Stormwater Drainage Plan with certification to that effect by an Illinois Professional Engineer.

#### 9.3 Fees

A fee shall be paid in accordance with the schedule specified herein by an applicant at the time the application is filed. Such fee shall be paid to the County of Champaign through the office of the Zoning Administrator who shall forward such fees to the COUNTY Treasurer.

### 9.3.1 Zoning Use Permit Fees

#### A. General Provisions

#### 1. Calculation of Fees

- a. Fees shall be based upon the total gross floor area including any basement and garage area that is constructed and any interior spaces accessible by means of a door, and shall include all exterior areas covered by a roof structure of any kind, except as noted.
- b. Fees calculated in units of multiple feet or square feet shall be based on a sum rounded to the nearest whole number of such units.
- c. In no case shall any Zoning Use Permit fee for a single STRUCTURE exceed \$1,500. Engineering Review Fees pursuant to Subsection 9.3.4 shall not be considered as part of the Zoning Use Permit fee.
- d. Fees shall be equal to the total for each STRUCTURE, USE, CHANGE of USE, CONSTRUCTION or ALTERATION contained in each permit except that no CHANGE of USE permit fee shall be required in a permit for CONSTRUCTION or ALTERATION of a STRUCTURE.
- 2. USES and STRUCTURES Exempt from Zoning Use Permit Fees
  - a. STRUCTURES listed in Section 4.3.3.B
  - b. STRUCTURES and USES listed in Section 4.3.5
  - c. STRUCTURES and USES owned or operated by government bodies
  - d. AGRICULTURE

#### Champaign County, Illinois Zoning Ordinance

### SECTION 9.3.1 ZONING USE PERMIT FEES - CONTINUED

### 3. Refunds of Fees

No Zoning Use Permit or Zoning Compliance Certificate Fee shall be refunded unless the Zoning Administrator subsequently determines the permit or fee not to be required and the erroneous filing is due solely to staff error.

B.	CO	ONSTRUCTION of PRINCIPAL STRUCTURES		
	1.	SINGLE and TWO-FAMILY DWELLINGS \$12 per 100 sq. ft.		
	2.	All other BUILDINGS \$275 plus \$15 per 100 sq. ft.		
	3.	PRINCIPAL STRUCTURES other than BUILDINGS (except towers and signs) \$260 each		
C. ACCESSORY STRUCTURES				
	1. BUILDINGS			
		a. up to 150 sq. ft no fee		
		b. greater than 150 sq. ft		
	2.	Other STRUCTURES (except towers and signs)		
		a. residential ACCESSORY STRUCTURES\$33		
		b. MANUFACTURED HOME SITES in MANUFACTURED HOME PARKS \$33 ea.		
		c. all other ACCESSORY STRUCTURES		
D. Towers (PRINCIPAL and ACCESSORY)				
	1.	up to 50 feet in HEIGHT		
	2.	greater than 50 feet in HEIGHT		

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### Champaign County, Illinois Zoning Ordinance

### SECTION 9.3.1 ZONING USE PERMIT FEES - CONTINUED

	E.	Sig	gns (PRINCIPAL and ACCESSORY)			
		1.	Wall or Canopy Mounted or Projecting			
		2.	Freestanding			
	F.		TER, extend or move upon the same LOT PRINCIPAL or ACCESSORY RUCTURES			
		1.	BUILDINGS \$16 per 100 sq. ft.			
		2.	STRUCTURES other than BUILDINGS			
	G.	Oth	ner Permits			
		1.	Establish a USE or change an existing USE where no CONSTRUCTION is involved			
		2.	No separate fee to establish a USE or change an existing USE that includes new CONSTRUCTION shall be required if a permit is issued for such CONSTRUCTION.			
		3.	HOME OCCUPATIONS			
	©.		a. Register a NEIGHBORHOOD HOME OCCUPATION no fee			
			b. Change of USE for a RURAL HOME OCCUPATION\$33			
		4.	TEMPORARY USE\$65			
		5.	Register a NONCONFORMING USE			
9.3.2	Zoning Compliance Certificate					
	A.	Exen	nptions			
		No Z	oning Compliance Certificate fee shall be required for:			
		1.	any HOME OCCUPATION,			
		2.	registering any NON-CONFORMING USE, or			

# Champaign County, Illinois Zoning Ordinance

# SECTION 9.3.2 ZONING COMPLIANCE CERTIFICATE - CONTINUED

3. registering a change of USE where no CONSTRUCTION is involved.

## B. General Provisions

- 1. The fee for a Zoning Compliance Certificate shall be paid at the time the Zoning Use Permit application is made.
- 2. Fees for any Temporary or Partial Zoning Compliance Certificates may be paid after issuance of the Zoning Use Permit.
- 3. No Zoning Compliance Certificate fee shall be refunded except as provided in Section 9.3.1.A.3.

# C. Fee

The fee for Zoning Compliance Certificates shall be \$33.

# 9.3.3 Zoning Case Filing Fees

## A. General Provisions

- 1. No zoning case filing shall be accepted until the filing fee has been paid.
- 2. No zoning case filing fee shall be waived unless the Zoning Administrator determines that the petition is the only means reasonably available to bring a property into compliance with the provisions of this ordinance and the non-compliance is due solely to staff error.
- 3. No zoning case filing fee shall be refunded after required legal notice has been made by mail or publication unless the Zoning Administrator determines such filing to have been based solely upon staff error.
- 4. No amendment to any petition which requires new legal notice shall be considered until an amended petition fee has been received unless the Zoning Administrator determines such amendment to be required due solely to staff error.
- 5. The fee for SPECIAL USE permits shall be determined based on the larger of the following:
  - a. the area of farmland taken out of production as a result of the SPECIAL USE; or

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### SECTION 9.3.3 ZONING CASE FILING FEES - CONTINUED

- b. when farmland will not be taken out of production as a result of the SPECIAL USE, the land area taken up by the existing STRUCTURES and all proposed CONSTRUCTION proposed in the SPECIAL USE application.
- 6. When some combination of VARIANCE, SPECIAL USE and Map Amendment cases is required simultaneously for the same property, the total filing fee shall include the following:
  - a. The standard fee for the most expensive individual zoning case; and
  - b. one-half of the standard fee for any other required VARIANCE, SPECIAL USE, or Map Amendment provided that
  - c. no additional fees shall be included for multiple zoning cases of the same type that can be advertised in the same legal advertisement.

### B. Fees

### 1. VARIANCES

	a.	ADMINISTRATIVE VARIANCES\$100
	b.	Minor or Major VARIANCES\$200
2	SPEC	IAL USE permits and Map Amendments
	a.	Two acres or less and Base Fee for larger areas\$400
	b.	More than two acres but no more than 12 acres
	c.	More than 12 acres
3.	Appeal	s and Interpretations\$200
4.	Change	e of Nonconforming Use
5.	Amend	ment to Petitions (requiring new legal notice) \$100.

# Champaign County, Illinois Zoning Ordinance

# 9.3.4 Engineering Review Fees

A. Stormwater Drainage Plan Review Fee. Fees for engineering review of Stormwater Drainage Plans shall be based on the cost of the engineering review as follows:

Basic Review Fee. When there are no conditions of unusual uncertainty regarding drainage, the fees for engineering review shall be equal to the COUNTY's costs as billed by the COUNTY's drainage review consulting engineer but shall not exceed \$1,500 and shall be payable as follows:

- a. Initial partial payment upon application for either a

  Zoning Use Permit or a SPECIAL USE ......\$500
- b. Prior to the issuance of a Zoning Compliance Certificate or the Final Determination for a SPECIAL USE . . . . the amount by which total costs billed by the COUNTY's drainage review consulting engineer exceed the initial partial fee payment provided that the total fee shall not exceed \$1,500.
- c. After the issuance of the Zoning Compliance Certificate certifying that the entire Stormwater Drainage Plan has been implemented, an applicant shall receive a refund from the COUNTY for the amount by which the initial partial fee payment exceeds the total billed cost by the COUNTY's drainage review consulting engineer, provided that no refund shall be made for less than \$50.
- 2. Unlimited Review Fee. When the Zoning Administrator determines that conditions of unusual uncertainty regarding drainage are determined to exist, the fees for engineering review shall be equal to the COUNTY's costs as billed by the COUNTY's drainage review consulting engineer payable as follows:

  - b. Prior to the issuance of a Zoning Compliance Certificate or the Final
    Determination for a SPECIAL USE . . . . . the amount by which total costs billed
    by the COUNTY's drainage review consulting
    engineer exceed the initial partial fee payment.

After the issuance of the Zoning Compliance Certificate certifying that the entire Stormwater Drainage Plan has been implemented, an applicant shall receive a refund from the COUNTY for the amount by which the initial partial fee payment exceeds the total billed cost by the COUNTY's drainage review consulting engineer, provided that no refund shall be made for less than \$50.

Champaign County Department of



Brookens Administrative Center 1776 E. Washington Street Urbana, Illinois 61802 TO: Environment and Land Use Committee

FROM: November 10, 2008

DATE: John Hall, Zoning Administrator

RE: Zoning Ordinance requirements for wind farms

# **STATUS**

This memo provides supplemental information regarding a proposed Zoning Ordinance amendment to add standards for wind farms. This memo proposes that the fee be based on "per wind turbine" basis.

Alternative Fee Basis	Resulting Fee for a County Board Special Use Permit for a Hypothetical Wind Farm with 100 Turbines on 7,000 acres	Notes
CURRENT FEE Current special use permit fee (based on the entire area taken out of production and charges a sliding per acre fee; see Sec. 9.3.3 Zoning Case Filing Fees)	\$1,680 (assumes a minimum area of one acre per wind turbine on average)	1. The existing fee structure does not include special fees for County Board Special Use Permits or special fees for wind farms. Under the current Zoning Ordinance, a 7,000 acre wind farm is only possible in the I-2 District and that would require rezoning and a special use permit and the total fee under the current Ordinance would be \$71,520.  2. Current fees have not been increased since 2003 and therefore could be increased at least 10% for a total of either \$1,848 of \$78,672 if rezoning would be required.
ALTERNATIVE FEE BASED ON TOTAL AREA Amend the Zoning Ordinance to establish a special fee for wind farms that is the standard Special Use Permit fee applied to the entire area of the Special Use Permit rather than just the land taken out of production	\$70,680* based on current SUP fee per acre  *This fee is based on a total of 7,000 acres but it is not clear what the area of the special use permit would be and it could be as little as 2,200 acres for a fee of approximately \$22,000.	1. Current fees have not been increased since 2003 and therefore could be increased at least 10% for a total of \$77,748
RECOMMENDED ALTERNATIVE FEE BASED ON NUMBER OF TOWERS Amend the Zoning Ordinance to establish a special fee for wind farms that is based on a set fee per proposed wind turbine.	\$60,000 based on a proposed Wind Farm fee of \$600 per turbine (A 50% increase over the current base special use permit fee of \$400)	1. Current fees have not been increased since 2003 and therefore could be increased at least 10% just to account for inflation. Given the complexity and magnitude of a wind farm an additional amount of fee also seems justified although the specific amount is difficult to gauge.



## Measuring and Calculating Sound Levels

#### The dB(A) Scale

Public authorities around the world use the so-called dB(A), or decibel (A), scale to quantify sound measurement. To give you an idea of the scale, look at the table below.

Sound Level	Threshold of Hearing	Whisper	Talking	City Traffic	Rock Concert	Jet Engine 10 m Away
dB(A)	0	30	60	90	120	150

The dB(A) scale measures the sound intensity over the whole range of different audible frequencies (different pitches), and then it uses a weighing scheme which accounts for the fact that the human ear has a different sensitivity to each different sound frequency. Generally, we hear better at medium (speech range) frequencies than at low or high frequencies. The dB(A) system says, that the sound pressure at the most audible frequencies are to be multiplied by high numbers while the less audible frequencies are multiplied by low numbers, and everything is then added up to get an index number.

(The (A) weighing scheme is used for weak sounds, such as wind turbines. There exist other weighing schemes for loud sounds called (B) and (C), although they are rarely used).

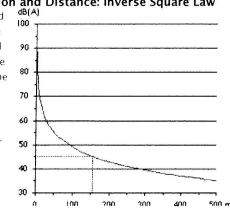
The dB-scale is a logarithmic, or relative scale. This means, that as you double the sound pressure (or the energy in the sound) the index increases by approximately 3. A sound level of 100 dB(A) thus contains twice the energy of a sound level of 97 dB(A). The reason for measuring sound this way is that our ears (and minds) perceive sound in terms of the logarithm of the sound pressure, rather than the sound pressure itself.

Most people will say, that if you increase the dB(A) by 10, you double the subjective loudness of the sound.

In case you are interested in the exact definitions, take a look at the <u>Reference Manual on Acoustics</u> of this web site.

# Sound Propagation and Distance: Inverse Square Law

The energy in sound waves (and thus the sound intensity) will drop with the square of the distance to the sound source. In other words, if you move 200 m away from a wind turbine, the sound level will generally be one quarter of what it is 100 m away. A



Home Guided tour
Wind
Furbine siting
Energy output
How does it work?
Generators
Turbine design
Manufacturing
R & D
Electrical grid
Environment
Landscape and turbines
Aerial markings
Sound from turbines
Sound measurement
Sound map calculator
Sound calculator
Energy balance
Birds and wind turbines

doubling of your @ 1998 www.WINDPOWER.org make the dB(A) level drop by 6.

At one rotor diameter distance (43 m) from the base of a wind turbine emitting 100 dB(A) you will generally have a sound level of 55-60 dB(A) corresponding to a (European) clothes dryer. 4 rotor diameters (170 m) away you will have 44 dB(A), corresponding to a quiet living room in a house. 6 rotor diameters (260 m) away you will have some 40 dB(A).

The precise relationship between sound level and distance from the sound source is given in a table on the <u>Reference Manual on Acoustics</u> of this web site

In practice, sound absorption and reflection (from soft or hard surfaces) may play a role on a particular site, and may modify the results shown here.

#### Adding Sounds from Several Sources

If we have two wind turbines rather than one, located at the same distance from our ears, naturally the sound energy reaching us will double. As we have just learned, this means that two turbines will increase the sound level by 3 dB(A). Four turbines instead of one (at the same distance) will increase the sound level by 6 dB(A). You will actually need ten turbines placed at the same distance from you, in order to perceive that the subjective loudness has doubled (i.e. the dB level has increased by 10).

If you wish to learn the details about adding sounds together, take a look at the <u>Reference Manual on Acoustics</u> in this web site.

#### The Pure Tone Penalty

The fact that the human ear (and mind) discerns pure tones more easily than (random) white noise, means the authorities may wish to take that into account when doing sound estimates. They consequently often have rules which specify that you add a certain number to the dB(A) figure in case you have pure tones present in a sound.

#### Wind Turbine Noise Information in Practice

In accordance with international standards manufacturers generally specify a theoretical dB(A) level for sound emissions which assumes that all sound originates from a central point, although in practice, of course, it will originate from the whole surface of the machine and its rotor.

Sound pressure thus calculated is typically around 96-101 dB(A) for modern wind turbines. The figure itself is rather uninteresting, since there will not be a single point, where you can experience that sound level! Rather, it is useful for predicting the sound level at different distances from the wind turbine.

Pure tones have generally be eradicated completely for modern wind turbines, at least in the case of the modern turbines listed in the catalogue on the <u>Wind Power Calculator page</u>.

#### **Legal Noise Limits**

At distances above 300 m the maximum theoretical noise level from high quality wind turbines will generally be significantly below 45 dB(A) outdoors, corresponding to the legislation in Denmark. (For built-up areas with several houses, a noise limit of 40 dB(A) is the legal limit in Denmark)

Noise regulations vary from country to country. In practice the same machine designs can be used everywhere.

# **Current Practice: Calculations Rather than Measurement**Calculating potential sound emission from wind turbines is

Birds and offshore wind

Shadow casting

Shadow calculation

Better calculations

Shadow variations

Guide to calculator

Shadow calculator

Economics

History of wind energy

Wind energy manual

generally important in order to obtain planning permission (from the public authorities) for installing wind turbines in densely populated areas.

Generally speaking, it is far easier to calculate the potential sound emissions than to measure them in practice.

The reason why it is difficult to measure the sound is that the sound level has to be some 10 dB(A) above the background noise in order to measure it properly. The background noise from leaves, birds, and traffic will frequently be above 30 dB(A), however. In most places in the world public authorities therefore rely on calculations rather than measurements, when granting planning permission for wind turbines.

© Copyright 1997-2003 Danish Wind Industry Association Updated 18 May 2003 http://www.windpower.org/en/tour/env/db/dbdef.htm



Home Guided tour	Do r	not operate t			s programme have		
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	2	100	231	41.736	0.0000000149			
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	2	100	406	36.837	0.000000048
Energy output	3	100	812	30.817	0.000000012
	4	100	812	30.817	0.000000012
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Turbine siting	1	100	812	30.817	0.0000000012			
	2	100	812	30.817	0.0000000012			
Energy output	3	100	1000	29.008	0.0000000008			
energy diriput	4	100	1000	29.008	0.0000000008			
	5	100	1000	23.000	0.0000000000			
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# LEGAL PUBLICATION: WEDNESDAY, JANUARY 28, 2009

NOTICE OF PUBLIC HEARING IN REGARD TO AN AMENDMENT TO THE CHAMPAIGN COUNTY ZONING ORDINANCE.

CASE: 634-AT-08

CASE: 634-AT-08

The Champaign County Zoning Administrator, 1776 East Washington Street, Urbana, has filed a petition to change the text of the Champaign County Zoning Ordinance. The petition is on file in the office of the Champaign County Department of Planning and Zoning, 1776 East Washington Street, Urbana, IL.

A public hearing will be held **Thursday**, **February 12**, **2009**, **at 6:30 p.m.** prevailing time in the Lyle Shields Meeting Room, Brookens Administrative Center, 1776 East Washington Street, Urbana, IL, at which time and place the Champaign County Zoning Board of Appeals will consider a petition to:

Amend the Champaign County Zoning Ordinance as follows:

## PART A

- 1. In Section 2, add a purpose statement regarding promotion of wind energy in a safe manner.
- 2. In Section 3, add definitions for "WIND FARM" and "WIND FARM TOWER".
- 3. Add subparagraph 4.2.1 C. 2. to indicate that WIND FARM may be authorized by County Board special use permit as a second principal use on a lot in the AG-1 District and indicate that WIND FARM TOWER may be authorized by County Board special use permit as multiple principal structures per lot in the AG-1 District.
- 4. Amend subsection 4.3.1 to exempt WIND FARM TOWER from the height regulations except as height regulations are required as a standard condition in Section 6.1.3.
- 5. Amend paragraph 4.3.4 A. to exempt WIND FARM TOWER lots from the minimum lot requirements of Section 5.3 and paragraph 4.3.4 B. except as minimum lot requirements are required as a standard condition in Section 6.1.3.
- 6. Amend paragraph 4.3.4 H. to exempt WIND FARM and WIND FARM TOWER from the Pipeline Impact Radius regulations except as Pipeline Impact Radius regulations are required as a standard condition in Section 6.1.3.
- 7. In Section 5.1, add the WIND FARM Overlay Zoning District with a new purpose and intent statement.
- 8. In Section 5.2 delete the uses "Wind Turbine (more than 3 wind turbines)" and "Wind Turbine (1- 3 wind turbines)"; add the uses "WIND FARM" and "WIND FARM TOWER" and indicate that both are authorized by County Board Special Use Permit in the AG-1 Zoning District and indicate footnote 17; and add new

- footnote 17 indicating WIND FARM County Board special use permit is only authorized in the WIND FARM Overlay Zoning District in areas also zoned AG-1.
- 9. In Section 5.3 add new footnote 14 that exempts WIND FARM TOWER lots in the WIND FARM Overlay Zoning District from the minimum lot requirements of Section 5.3 except as such regulations are required as a standard condition in Section 6.1.3.
- 10. Amend Section 5.4 to prohibit the establishment of the Rural Residential Overlay Zoning District on land also zoned WIND FARM Overlay Zoning District.
- 11. Add new Section 5.5 WIND FARM Overlay Zoning District that limits the overlay district to areas also zoned AG-1; reviews basic considerations in the establishment of the overlay district; requires any WIND FARM TOWER to be authorized in the WIND FARM County Board Special Use Permit; requires minimum separation distances between a new PRINCIPAL USE and a WIND FARM TOWER; establishes an expiration for the overlay district designation; and authorizes the Zoning Board and County Board to recommend specific conditions on the adoption of the overlay district.
- 12. Amend existing paragraph 6.1.1 C. Site Reclamation to require the irrevocable letter of credit to be drawn upon a federally insured financial institution within 200 miles of Urbana or that reasonable and anticipated travel costs be added to the amount of the letter of credit.
- 13. In Section 6 relocate existing paragraphs 6.1.1 A. and B. to new subparagraphs 9.1.11 A. 3. and 4.; change the name of Subsection 6.1.1 to indicate standard conditions that may apply to specific special uses; renumber existing paragraph 6.1.1 C. to 6.1.1. A.; change the name of Subsection 6.1.2 to indicate standard conditions that apply to all special use permits; relocate existing text in Subsection 6.1.2 to be under the Section 6.1 heading; relocate and renumber existing paragraph 6.1.1 D. to become new paragraph 6.1.2 A.; and change the name of Subsection 6.1.3 to indicate standard conditions that apply to specific types of special use permits.
- 14. Add new subsection 6.1.4 with new standard conditions for a WIND FARM, WIND FARM TOWER, and WIND FARM TOWER lot.
- 15. Amend existing subsection 9.1.11 Special Uses to require the County Board to authorize certain special use permits where identified in Section 5.2; require the County Board to adopt findings; authorize the County Board to waive any standard conditions; authorize the County Board to prescribe any special conditions that it may determine to be appropriate; and clarify all requirements in Section 6 are standard conditions.
- 16. Amend subsection 9.3.1 to add fees for WIND FARM and WIND FARM TOWER zoning use permits.

CASE: 634-AT-08 (continued)

17. Amend subsection 9.3.3 to add application fees for WIND FARM County Board special use permit and WIND FARM Overlay Zoning District map amendment.

## PART B

- 1. In Section 3, add a definition for "PRIVATE WIND TURBINE TOWER".
- 2. Amend subsection 4.3.1 to require that height regulations do not apply to a PRIVATE WIND TURBINE TOWER that is not part of a WIND FARM and require PRIVATE WIND TURBINE TOWER to be located from the nearest property line at least 1.10 times the overall height to the tip of the rotor; and require PRIVATE WIND TURBINE TOWERS that are more than 125 feet in height to be authorized by special use permit.
- 3. In subsection 6.1.3 add new standard conditions for PRIVATE WIND TURBINE TOWER taller than 125 feet.
- 4. Add new subsection 7.6.4 PRIVATE WIND TURBINE TOWER and require that there can be no more than one PRIVATE WIND TURBINE TOWER per lot and add other requirements.

## PART C

- 1. Amend Section 5.2 to require a County Board Special Use Permit for any subdivision that requires the Rural Residential Overlay Zoning District.
- 2. Amend Section 5.4 to require a County Board Special Use Permit for any authorized subdivision in the Rural Residential Overlay Zoning District.

All persons interested are invited to attend said hearing and be heard. The hearing may be continued and reconvened at a later time.

Doug Bluhm, Chair Champaign County Zoning Board of Appeals

# TO BE PUBLISHED: WEDNESDAY, JANUARY 28, 2009 ONLY

Send bill and one copy to: Champaign County Planning and Zoning Dept.

Brookens Administrative Center 1776 E. Washington Street

Urbana, IL 61802 Phone: 384-3708