

CHAMPAIGN COUNTY ZONING BOARD OF APPEALS NOTICE OF REGULAR MEETING

Date: **September 29, 2011**
Time: **6:00 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 P.M.
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

1. Call to Order
2. Roll Call and Declaration of Quorum
3. Correspondence
4. Approval of Minutes (September 1, 2011 and September 8, 2011)
5. Continued Public Hearings

*Note 1: The full ZBA packet is now available
on-line at: co.champaign.il.us.*

Note 2: MEETING TIME: 6:00

- * **Case 696-S-11** Petitioner: **California Ridge Wind Energy LLC and the participating landowners listed in the legal advertisement. California Ridge Wind Energy LLC is wholly owned by Invenenergy Wind North America LLC, One South Wacker Drive, Suite 1900, Chicago, IL, with corporate officers as listed in the legal advertisement.**

Request: **Authorize a Wind Farm which consists of 30 Wind Farm Towers (wind turbines) in total with a total nameplate capacity of 48 megawatts (MW) of which 28 Wind Farm Towers with a total nameplate capacity of 45 MW are proposed in Compromise Township (Part A) and 2 Wind Farm Towers with a total nameplate capacity of 3 MW are proposed in Ogden Township (Part B), and including access roads, wiring, and public road improvements, and including the waivers of standard conditions in Section 6.1.4 as listed in the legal advertisement.**

Location: **In Compromise Township the following sections are included with exceptions as described in the legal advertisement:**

•Sections 19, 20, 21, 28, 29, 30, 31, 32, and 33 of T21N, R14W of the 2nd P.M.,

•Sections 24, 25, and 36 of T21N, R10E of the 3rd P.M.,

•Fractional Sections 30 and 31 of T21N, R11E, of the 3rd P.M.

In Ogden Township the following sections are included with exceptions as described in the legal advertisement:

•Fractional Section 6, T20N, R11E of the 3rd P.M.,

•Fractional Sections 4, 5, 6, and 7 of T20N, R14W of the 2nd P.M.,

•Sections 8, 9, and 16 of T20N, R14W of the 2nd P.M.

6. New Public Hearings
7. Staff Report
8. Other Business
 - A. Review of ZBA Docket
9. Audience Participation with respect to matters other than cases pending before the Board
10. Adjournment

* **Administrative Hearing. Cross Examination allowed.**

1 **MINUTES OF REGULAR MEETING**

2 **CHAMPAIGN COUNTY ZONING BOARD OF APPEALS**

3 **1776 E. Washington Street**

4 **Urbana, IL 61801**

5 **DATE: September 1, 2011**

6 **PLACE: Lyle Shields Meeting Room**
7 **1776 East Washington Street**

8 **TIME: 7:00 p.m.**

9 **Urbana, IL 61802**

10 **MEMBERS PRESENT:** Catherine Capel, Thomas Courson, Roger Miller, Melvin Schroeder,
11 Eric Thorsland, Paul Palmgren, Brad Passalacqua

12 **MEMBERS ABSENT :** None

13 **STAFF PRESENT :** Connie Berry, Lori Busboom, John Hall, Jamie Hitt

14 **OTHERS PRESENT :** Michael Blazer, Greg Leuchtman, Deanne Sims, Kim Cambron,
15 Kim Schertz, Bill Ingram, Tim Casey, Matt Cavalenes, Sue Naughtin,
16 Roy Knight, Greg Frerichs, Richard Grant, Rob Parker, Michael
17 Jarboe, Eileen Jarboe, Harold Hovel, James Rusk, C. Pius Weibel,
18 Sherry Schildt, Herb Schildt, Patti Cavalenes, Mitch Fruhling, Kay
19 Fiscus, John Fiscus, Larry Kearns, Amy Allen, Erica Harris, Steve
20 Moser, Alan Nudo, Patti Petri, Ralph Langenheim, Marvin Johnson,
21 Jeff Blue

22 **1. Call to Order**

23 The meeting was called to order at 7:02 p.m.

24 Mr. Thorsland requested a moment of silence in honor Wayne Busboom, former Zoning Board of
25 Appeals member.

26 **2. Roll Call and Declaration of Quorum**

27 The roll was called and a quorum declared present.

28 Mr. Thorsland informed the audience that anyone who desires to present testimony must sign the
29 witness register. He reminded the audience that when they sign the witness register they are signing
30 an oath.

31 **3. Correspondence**

32 None

33 **4. Approval of Minutes**

34 None

DRAFT

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5. Continued Public Hearing

Case 696-S-11 Petitioner: California Ridge Wind Energy LLC and the participating landowners listed in the legal advertisement. California Ridge Wind Energy LLC is wholly owned by Invenergy Wind North America LLC, One South Wacker Drive, Suite 1900, Chicago, IL, with corporate officers as listed in the legal advertisement. Request: Authorize a Wind Farm with consists of 30 Wind Farm Towers (wind turbines) in total with a total nameplate capacity of 48 megawatts (MW) of which 28 Wind Farm Towers with a total nameplate capacity of 45 MW are proposed in Compromise Township (Part A) and 2 Wind Farm Towers with a total nameplate capacity of 3 MW are proposed in Ogden Township (Part B), and including access roads, wiring, and public road improvements, and including the waivers of standard conditions in Section 6.1.4 as listed in the legal advertisement. Location: In Compromise Township the following sections are included with exceptions as described in the legal advertisement: Sections 19, 20, 21, 28, 29, 30, 31, 32, and 33 of T21N, R14W of the 2nd P.M.; and Section 24, 25, and 36 of T21N, R10E of the 3rd P.M.; and Fractional Sections 30 and 31 of T21N, R11E of the 3rd P.M. In Ogden Township the following sections are included with exceptions as described in the legal advertisement: Fractional Section 6, T20N, R11E of the 3rd P.M.; and Fractional Sections 4, 5, 6 and 7 of T20N, R14W of the 2nd P.M.; and Sections 8, 9, and 16 of T20N, R14W of the 2nd P.M.

Mr. Thorsland informed the audience that this is an Administrative Case and as such the County allows anyone the opportunity to cross examine any witness. He said that at the proper time he will ask for a show of hands for those who would like to cross examine and each person will be called upon. He requested that anyone called to cross examine go to the cross examination microphone to ask any questions. He said that those who desire to cross examine are not required to sign the witness register but are required to clearly state their name before asking any questions. He noted that no new testimony is to be given during the cross examination. He said that attorneys who have complied with Article 6.5 of the ZBA By-Laws are exempt from cross examination.

Mr. Thorsland asked the Petitioner’s representative if he would like to make a statement outlining the nature of the request prior to introducing evidence.

Mr. Greg Leuchtmann, Invenergy project representative, stated yes.

Mr. Greg Leuchtmann, Invenergy project representative, gave a PowerPoint presentation regarding the proposed special use permit. He said that he wanted to follow up on some of the items which were discussed at last week’s meeting and address some of the questions and concerns that the ZBA voiced. He said that the project is 48 MW in Champaign County with a 214 MW project capacity.

1 He said that there are 30 General Electric 1.6-100 wind turbine generators proposed with a 100 meter
2 hub height and 100 meter rotor diameter. He said that there are approximately 10,200 acres in
3 Champaign County within a portion of the project area and approximately 26,000 total acres under
4 easement.

5
6 Mr. Leuchtmann stated that there were five main concerns raised during the last hearing and those
7 concerns were as follows: 1. Reclamation Agreement; and 2. Road Use Agreement; and 3. wind
8 resource for California Ridge; and 4. power output for 48 MW of wind turbines; and 5. school
9 district benefit. He said that the a Draft Reclamation Agreement was submitted to Champaign
10 County and the State's Attorney on August 30, 2011, therefore the State's Attorney is in the process
11 of reviewing that agreement. He said that the Draft Reclamation Agreement includes removal of all
12 above-ground structures and turbines, turbine foundations down to 4-1/2 feet, site grading and de-
13 compaction to return the property to its previous condition and repair and maintenance of roads
14 during that effort. He said that the initial decommissioning report included in the Special Use Permit
15 Application was submitted on July 1, 2011. He said that the professional engineer estimates the
16 current demolition costs for removal of turbines, foundations and roadway repair and maintenance.
17 He said that the professional engineer also estimates the current costs to dump or salvage demolished
18 materials, including steel, copper, aluminum, tin and concrete. He said that the costs are summarized
19 in the decommissioning report and the report is updated every five (5) years to reflect current market
20 conditions and financial securities revised accordingly. He said that the decommissioning costs,
21 including dumping or salvage costs, are multiplied by 210% and that becomes the basis for the
22 financial assurance which is provided to the County. He said that decommissioning and dumping
23 costs as well as the salvage values are in current year dollars and inflated to account for labor and
24 commodity fluctuation. He said that the financial assurance is a combination of a letter of credit, a
25 surety bond and an escrow and this is one of the waivers that are being requested. He said that they
26 would like to provide an escrow in the amount of 25% and a letter of credit for the remaining 75%.

27
28 Mr. Leuchtmann stated that the road use agreement is currently being reviewed by Champaign
29 County, Ogden and Compromise townships. He said that Invenergy received comments back from
30 Champaign County although he has not had a chance to review those comments while traveling
31 down to the meeting although he does plan to review those comments and will hopefully be moving
32 forward to a signed agreement within the next few weeks. He said that they are requesting a waiver
33 of strict IDOT-BLR standards for the project's road maintenance and upgrades. He said that the road
34 use agreement includes requirements for the project to keep the existing roadway configurations,
35 upgrade roads, as necessary and repair what is used. He said that they are proposing to keep the
36 width of the pavement, shoulder and ditches as they currently exist because adherence to BLR
37 standards could push the existing road and ditches past available rights-of-way and could require
38 removal of farm land from landowners.

39
40 Mr. Leuchtmann stated that when they began analyzing the wind resource for California Ridge they
41 started to look at a state wide map and verified the area to have a sound wind resource. He said that

1 an initial review of the National Renewable Energy Laboratory (NREL) Wind Maps indicated a good
2 wind regime. He said that the maps indicate the wind resource at certain levels and certain heights
3 and this information is provided at a 50 meter basis and 80 meter basis and from that information
4 Invenergy is able to get a good idea of what the wind resource is at a particular location. He said that
5 what the wind resource is on a certain piece of land becomes very specific to that land therefore it is
6 specific to the elevation. He said that if the proposed site is near agricultural land the wind resource
7 will be better versus a forested or mountainous region. He said that based on the NREL maps
8 Invenergy installed four meteorological (MET) towers on the project site to obtain data for an in-
9 depth wind study which confirmed the wind resource and that data was used as a design basis for the
10 facility. He indicated the project area on the NREL map and stated that the area is in the middle of
11 6.5 and 7.5 meters per second on an 80 meter basis which is some of the best wind in Illinois. He
12 said that when they collected MET data on their 58 meter met towers they collected between 6.5 and
13 7.5 meters per second at a 58 meter height therefore when they predict what the wind speed will be
14 on an average basis for a 100 meter hub height turbine they get up to 7.6 to 7.9 meters per second.

15
16 Mr. Leuchtmann stated that the power output and efficiency for a 48 MW wind turbine was
17 questioned at the last meeting. He said that at the right wind speed the wind turbine will be 100%
18 efficient therefore at 10 meters per second 48MW of power will be generated. He said that the
19 power output on an annual basis must be based on what the wind speeds are during different hours
20 over a year's time as well as laying that against the power chart for the turbines. He said that
21 maximum power output is reached at approximately 9.5 to 10 meters per second and currently it is
22 predicted that the turbines will operate above 9 meters per second approximately 50% of the time.
23 He said that based on wind conditions, land, layout and maintenance project estimates are that the
24 annual output will be between 38% and 44% of the full rated capacity of 48MW for the entire farm.
25 He reviewed the GE-1.6-100 Power Curve Chart and the California Ridge Wind Speed Distribution
26 Chart with the Board.

27
28 Mr. Leuchtmann stated that at the last meeting there were some questions regarding school district
29 benefits. He said that property taxes for a wind turbine are based on the assessed value and the
30 megawatts that are installed on the property. He said that the Illinois Department of Revenue has a
31 standard assessment procedure for wind turbines. He said that in 2007 the assessed value established
32 for wind turbines was \$119,988 dollars per wind turbine and currently it is around \$135,000 dollars
33 per MW. He said that the school district revenue and property tax revenue would come from the per
34 MW dollars. He said that as a hypothetical example, if you multiple 48MW by \$135,000 dollars the
35 amount of assessment or EAV would increase by that sum. He said that for a 48MW wind farm the
36 county taxes would increase approximately \$548,000 dollars in the first year and the school district
37 would receive approximately \$301,400 dollars.

38
39 Mr. Leuchtmann stated that this concludes his presentation and Mr. Tim Casey is present tonight to
40 answer any of the Board's questions regarding the noise analysis.
41

1 Mr. Thorsland stated that at this time he would like staff to review any new information for the
2 Board.

3
4 Mr. Hall distributed a new Supplemental Memorandum dated September 1, 2011, for the Board's
5 review. He said that the Board requested information regarding the best prime farmland that is
6 located within the project area. He said that the Champaign County Soil and Water Conservation
7 District has completed an analysis of the soils that will be used for the wind tower sites and access
8 roads. He said that approximately 22 acres of farmland will be used for the sites and roads. He said
9 that the soils that will be used have an overall Land Evaluation of about 80.5 which is well below the
10 LE of 85 that indicates best prime farmland therefore the land that will be used for the project will
11 not be best prime farmland on average.

12
13 Mr. Hall stated that included separately from the new Supplemental Memorandum dated September
14 1, 2011, is a Memorandum dated August 26, 2011, from Michael S. Blazer, legal counsel for
15 Invenergy, regarding the court case which was most pertinent to the issue about whether the Illinois
16 Pollution Control Board standards are property line noise standard or are they actually applied at the
17 dwelling. Mr. Hall stated that the August 25, 2011, minutes are included separately and will be on
18 the September 8, 2011, agenda for approval. He said that attached to the Supplemental
19 Memorandum is the handout, "Fifteen Bad Things with Windpower and Three Reasons Why," that
20 Mr. Bill Ingram referred to during his testimony at the August 25th meeting. He said that also
21 attached to the memorandum is an Erratum received August 2, 2011, which is a correction to Section
22 4.3.6 Decommissioning and Restoration, third paragraph, page 4-10 of the Special Use Permit
23 application. He said that also attached to the memorandum is the Draft Reclamation agreement
24 which has been forwarded to the State's Attorney for legal review therefore he has no comments on
25 the agreement for tonight's hearing. He said that the last attachment to the memorandum is
26 Attachment E. Compliance with Subsection 6.1.4 Not Requiring Waivers, which is a written
27 assessment of all the other standard conditions for which no waiver is required and supplements the
28 most pertinent information so that Board members can see if the conditions are met or not. He said
29 that he hopes to have a Draft Summary of Evidence for the Board's review at the September 8th
30 meeting.

31
32 Mr. Thorsland asked the Board if there were any questions for Mr. Hall and there were none.

33
34 Mr. Thorsland asked the Board if there were any questions for Mr. Leuchtmann.

35
36 Mr. Miller asked Mr. Leuchtmann to clarify what happens to the tax assessment after the year 2016.

37
38 Mr. Leuchtmann referred Mr. Miller's question to Michael Blazer.

39
40 Mr. Michael Blazer, legal counsel for Invenergy, stated that the same questions surfaced during the
41 public hearings for Vermilion County and to be truthful there is no concrete answer. He said that

1 currently there are so many variables due to the economic condition of the State of Illinois but it is
2 assumed that things will remain relatively the same as to where taxes are distributed but it is
3 impossible to tell what the State will do to fill the colossal financial hole that exists.

4
5 Mr. Courson asked if the taxes increase ten-fold would the wind farm be economically feasible or
6 would Invenergy go bankrupt and shut the wind farm down.

7
8 Mr. Leuchtmann stated that when Invenergy proposes a project the lenders are aware of the risk that
9 the tax rates could increase although they are still willing to invest in the project. He said that there
10 are mechanisms in the lending, debt agreements and power agreements which can, at times, take care
11 of those types of situations but most of the time Invenergy pays the taxes in accordance with the
12 existing State and Federal guidelines. He said that the investors are willing to stand behind what
13 could occur.

14
15 Mr. Passalacqua asked Mr. Leuchtmann if the same would hold true with a 38% output.

16
17 Mr. Leuchtmann stated yes. He said that at times in Michigan there is only 25% output which is still
18 pretty good.

19
20 Mr. Courson asked Mr. Leuchtmann if Invenergy's costs increase do they pass that increase on to the
21 power company.

22
23 Mr. Leuchtmann stated that the lenders have mechanisms in the debt agreement and at times the
24 power purchase agreement will have mechanisms to offset the increases. He said that at this point he
25 is not sure what the power purchase agreement includes for this project. He said that most
26 importantly it is Invenergy's relationship with the lenders and debt holders because they are the ones
27 who are backing the project and are willing to take the tax increase risk.

28
29 Mr. Courson stated that the financial holders are those who are on the hook for the tax increase.

30
31 Mr. Leuchtmann stated yes.

32
33 Mr. Courson asked if the financial holders would pull the plug on the project due to the increase and
34 would deal with the loss.

35
36 Mr. Leuchtmann stated that it is all dependent on what happens after 2016 and that is unpredictable
37 at this point. He said that assumptions will have to be made that it will remain somewhat similar but
38 if there are some increases in the tax then adjustments will have to be made to either the debt or
39 equity side.

40
41 Mr. Blazer stated that no one in Springfield is discussing increases at that level or even approaching

1 ten-fold. He said that the project financing is occurring now and it doesn't vary based on what the
2 case may be in five or ten years from now. He said the financing will go forward as soon as the time
3 that the case is approved based primarily on the income from the power purchase agreement with
4 certain assumptions built into it based on presumed escalations of the early basis of what the project
5 costs may be. He said that he cannot tell the Board that the project has a ten-fold increase built in to
6 it but there are actuaries who are paid to determine whether or not the project is a viable financial
7 risk and they have.

8
9 Mr. Miller asked Mr. Leuchtmann and Mr. Blazer if a power purchase agreement exists to date.

10
11 Mr. Leuchtmann stated that Invenergy is in the advanced stages of finalizing and completing a power
12 purchase agreement and the details of whom and what are not in his hands.

13
14 Mr. Miller asked if the power purchase agreement is pending the Board's decision.

15
16 Mr. Leuchtmann stated no.

17
18 Mr. Courson asked what is the typical rate used to sell to the utilities.

19
20 Mr. Leuchtmann stated that he does not negotiate the power purchase agreement therefore he cannot
21 answer Mr. Courson's question.

22
23 Mr. Blazer stated that he can supply this information to staff for distribution to the Board.

24
25 Mr. Miller asked if construction would continue with or without a power purchase agreement.

26
27 Mr. Leuchtmann stated no. He said that Invenergy is a project financing company therefore what
28 secures their projects is a power purchase agreement and typically the agreement is a 15 to 20 year
29 agreement.

30
31 Mr. Blazer stated that a project will not be built without a power purchase agreement in place. He
32 said that every project that Invenergy has built has had a power purchase agreement but there are
33 companies that will build spec projects although Invenergy is not one of those companies. He said
34 that a power purchase agreement is in the advanced stages of negotiations and it is going to happen
35 although he can not disclose as to who the agreement is with yet.

36
37 Mr. Miller asked if Invenergy has the intention of marketing the project to another company once the
38 power purchase agreement is finalized.

39
40 Mr. Leuchtmann stated that out of the 28 projects that have been built by Invenergy only two have
41 been sold. He said that Invenergy is mainly an owner, developer and operator and their goal is to

- 1 own the project for a long term timeframe.
2
- 3 Mr. Blazer stated that Invenergy does not operate as a spec company.
4
- 5 Mr. Miller asked Mr. Leuchtmann if the two projects that were sold were sold after they were
6 completed.
7
- 8 Mr. Leuchtmann stated yes.
9
- 10 Mr. Thorsland asked the audience if anyone desired to cross examine Mr. Leuchtmann.
11
- 12 Mr. Thorsland called Mr. Bill Ingram.
13
- 14 Mr. Bill Ingram, who resides at Catlin, Illinois, stated that Vermilion County is going through this
15 process and asked Mr. Leuchtmann if he is correct in assuming that the landowner who signed a
16 lease has no input on what happens to the land for 25 years.
17
- 18 Mr. Thorsland noted that Mr. Leuchtmann did not discuss the land leases during his testimony.
19
- 20 Mr. Ingram asked what obligation Invenergy would have if they went out of business. He asked if
21 Invenergy would have to reclaim the land or leave it as it exists for 30 years.
22
- 23 Mr. Leuchtmann stated that Invenergy would reclaim the land either way.
24
- 25 Mr. Ingram asked if things go south for Invenergy is the landowner stuck with an inoperable wind
26 turbine during the length of the lease.
27
- 28 Mr. Leuchtmann stated that there is financial assurance from the County's perspective, financial
29 assurance from the landowner's perspective, and there is a debt holder on the equipment that has an
30 interest to make sure the project continues whether Invenergy is operating the wind farm or someone
31 else is but either way the landowner has several different levels of security.
32
- 33 Mr. Ingram asked if Invenergy falls upon hard times, goes into bankruptcy and loses its subsidies
34 what is the landowner to do to obtain the reclamation.
35
- 36 Mr. Leuchtmann stated that reclamation is in the contract with the landowner and with the County.
37 He noted that the Letter of Credit is not with Invenergy but with a third party bank. He said that
38 whether it is with Invenergy or someone else as long as the project is operating there would be no
39 need to reclaim the land by the landowner or by the County.
40
- 41 Mr. Ingram asked what would happen to the reclamation and all the other agreements if all of the

1 subsidies ceased.
2
3 Mr. Leuchtmann stated that they plan to continue running the project with or without the subsidies.
4
5 Mr. Ingram asked Mr. Leuchtmann if Invenergy can run the project without subsidies.
6
7 Mr. Thorsland noted that the subject of subsidies was not part of Mr. Leuchtmann's testimony.
8
9 Mr. Ingram asked if the subsidies were cut what would happen to the reclamation agreement.
10
11 Mr. Leuchtmann stated that Invenergy's financial team considered worst case scenarios therefore
12 they are willing to take the risks involved.
13
14 Mr. Ingram asked if Invenergy's financial team and number crunchers indicated that they will be
15 okay if the subsidies cease.
16
17 Mr. Thorsland reminded Mr. Ingram again that Mr. Leuchtmann's testimony did not include a
18 discussion about subsidies. He said that the reclamation agreement does not include the word
19 subsidy in it either therefore for Mr. Ingram to continue this path will not be allowed during his cross
20 examination of Mr. Leuchtmann.
21
22 Mr. Ingram stated that reclamation is part of the entire project and the project depends upon
23 subsidies therefore if Invenergy is not around how will the land be reclaimed.
24
25 Mr. Thorsland pointed out that this is a wind farm application based on the Champaign County
26 Zoning Ordinance therefore his questions regarding subsidies are not relevant to the Board's
27 application of the Ordinance to Invenergy's special use permit request.
28
29 Mr. Ingram stated that Mr. Leuchtmann's presentation indicated that the foundation is approximately
30 54 yards of concrete and the reclamation calls for reducing it to four feet below grade. He asked Mr.
31 Leuchtmann to indicate the top of the foundation in relation to the grade.
32
33 Mr. Leuchtmann stated that the information is included in their report.
34
35 Mr. Ingram asked if it is possible that the top of the foundation and the 54 yards of concrete which
36 supports the tower could already be four feet below grade.
37
38 Mr. Leuchtmann stated that the foundation would go to grade but it would slope down with the idea
39 that the landowner could farm within three feet of the tower without any issue.
40
41 Mr. Ingram asked if it is possible that nothing would have to be done for reclamation because the

1 concrete is already four feet below grade.
2
3 Mr. Leuchtmann stated no. He said that the HDR engineer has made plans as to what will be
4 removed and with the intent that once the reclamation is complete the land could be farmed.
5
6 Mr. Ingram asked if there would be a significant amount of concrete left in the ground.
7
8 Mr. Leuchtmann stated that there would be concrete left in the ground.
9
10 Mr. Ingram asked if the salvage value of the tower and equipment is the amount that the landowner
11 will be compensated to bring the land to its original state.
12
13 Mr. Leuchtmann stated that the decommissioning plan takes into account the salvage value but the
14 financial assurance is intended to account for the expenses in decommissioning, costs for removal of
15 the turbine, costs for removal of the foundation, costs for public road improvement, as well as taking
16 into account the salvage value but the financial assurance that the landowner and the County are
17 getting separate items.
18
19 Mr. Ingram asked if Invenergy were to cease to exist would the lease holders' only recourse be the
20 court system to obtain compensation.
21
22 Mr. Leuchtmann stated that such was not part of his presentation.
23
24 Mr. Ingram asked if it was true that the CEO of Invenergy just purchased a multi-million dollar
25 mansion.
26
27 Mr. Thorsland reminded Mr. Ingram again that his question or statement is irrelevant and was not
28 part of Mr. Leuchtmann's testimony. He asked Mr. Ingram if he had any further questions that are
29 relevant only to Mr. Leuchtmann's testimony.
30
31 Mr. Ingram stated no.
32
33 Mr. Thorsland asked the audience if anyone else desired to cross examine Mr. Leuchtmann. He
34 reminded the audience that all cross examination should be based on testimony given at tonight's
35 public hearing.
36
37 Mr. Thorsland called Deanne Sims.
38
39
40 Ms. Deanne Sims, who resides at 2765 CR 2500N, Penfield, Illinois, asked Mr. Leuchtmann to
41 explain how decommissioning is defined.

- 1
2 Mr. Leuchtmann stated that the Ordinance has certain stipulations that trigger a decommissioning
3 event. He said that if the wind farm is not in operation and Invenergy is not making a reasonable
4 effort to get the wind farm operated then a decommissioning event would be triggered and the
5 County would have the ability to go through the process of drawing upon the financial assurance to
6 take down the turbines.
7
- 8 Ms. Sims asked if the financial backers are a group or the individuals who own each turbine.
9
- 10 Mr. Thorsland noted that the information regarding the financial entities of the wind farm project
11 was not part of Mr. Leuchtmann's presentation. He said that the requested information is private.
12
- 13 Ms. Sims asked if the guidelines for decommissioning are listed in the Ordinance.
14
- 15 Mr. Leuchtmann stated yes, and they are also included in Attachment D of the Supplemental
16 Memorandum dated September 1, 2011.
17
- 18 Mr. Thorsland called Mr. Matt Cavalenos.
19
- 20 Mr. Cavalenos, who resides at Catlin, Illinois, stated that the special use permit application indicates
21 28 projects and of those 28 five have been sold. He asked Mr. Leuchtmann if this information is
22 correct.
23
- 24 Mr. Leuchtmann stated that he would need to review the information.
25
- 26 Mr. Thorsland called Kim Schertz.
27
- 28 Ms. Kim Schertz, who resides at Hudson, Illinois, asked Mr. Leuchtmann how many current wind
29 farms in Illinois have 100 meter rotors.
30
- 31 Mr. Leuchtmann stated that he cannot answer Ms. Schertz's question.
32
- 33 Ms. Schertz asked if the fiberglass blades are included in the salvage value for decommissioning.
34
- 35 Mr. Leuchtmann stated that the contractors indicated that if they can they will recycle the blades but
36 typically the fiberglass blades have to be sent to the dump.
37
- 38 Ms. Schertz asked Mr. Leuchtmann how many tons of hazardous waste would be created by the
39 blades.
40
- 41 Mr. Leuchtmann stated that he does not know the exact weight of the blades.

1
2 Mr. Thorsland stated that Mr. Leuchtmann's testimony did not include the weight of the blades.
3
4 Ms. Schertz stated that Mr. Leuchtmann admitted that the blades are included in the
5 decommissioning cost.
6
7 Mr. Leuchtmann stated that the blades were accounted for as part of the decommissioning costs in
8 that they will be hauled off and dumped.
9
10 Ms. Schertz asked if the blades would be dumped at a regular land fill or a hazardous waste dump
11 site.
12
13 Mr. Leuchtmann stated that he does not know if the blades would be considered hazardous waste.
14
15 Ms. Schertz asked if the location of the nearest dumping site to the project was considered in the
16 decommissioning plan.
17
18 Mr. Leuchtmann stated that the decommissioning plan is located in the special use permit
19 application.
20
21 Ms. Schertz asked Mr. Leuchtmann to indicate how much the roads would be raised to reinforce
22 them for the proposed project.
23
24 Mr. Leuchtmann stated that they are in negotiations for the road agreements.
25
26 Mr. Thorsland noted that, to date, no road agreement has been finalized.
27
28 Ms. Schertz stated that Mr. Leuchtmann stated that Invenergy did not want to push out the
29 pavements therefore keeping the existing width of the ditches. She said that she has heard that at
30 other wind farms there is an extra foot of gravel placed on top of the existing road and the ditches are
31 not the standard grade and must be re-graded. She asked if this issue will be addressed.
32
33 Mr. Thorsland stated that when the road agreement is received perhaps those questions will be
34 answered. He informed Ms. Schertz that she is on the border line in providing testimony rather than
35 cross examination.
36
37 Ms. Schertz asked Mr. Leuchtmann to explain how a wind reading could be accurate when there are
38 only four MET towers on 10,000 acres.
39
40 Mr. Leuchtmann stated that it is accurate enough that they have completed this process on previous
41 projects and the data proves to be accurate.

- 1
2 Ms. Schertz asked if any data is available to indicate that a 38% capacity in Illinois was received year
3 around.
4
- 5 Mr. Leuchtmann stated that the presentation indicates such. He said that the Ordinance did not
6 request this information therefore it was not provided in the application.
7
- 8 Ms. Schertz asked if Mr. Leuchtmann was aware that last year legislation was proposed to make the
9 wind turbines exempt.
10
- 11 Mr. Thorsland noted that Ms. Schertz's question is truly testimony and the Board is hearing a zoning
12 case and not a tax case.
13
- 14 Ms. Schertz stated that Mr. Leuchtmann indicated that of the 28 projects only two were sold but Mr.
15 Cavalenes stated that five were sold. She asked Mr. Leuchtmann if the sale of the White Oaks
16 project, which is close to her residence, was sold before it was built and a condition of the sale was
17 that it be completed. She said that it is her understanding that the project was sold in January when
18 the turbines were being erected.
19
- 20 Mr. Leuchtmann stated that he is not aware of the details of that sale.
21
- 22 Ms. Schertz stated that if Mr. Leuchtmann did not know the details then he should not have answered
23 Mr. Cavalenes question.
24
- 25 Mr. Leuchtmann stated that he is not aware of the exact time frame as to when the White Oaks
26 project was sold.
27
- 28 Ms. Schertz stated that Mr. Leuchtmann indicated that the project was complete and in operation
29 before it was sold. She said that it is her understanding that the project was sold in January yet they
30 were constructing towers near her residence during that same time.
31
- 32 Mr. Leuchtmann stated that it is his understanding that construction had been completed and then
33 transferred.
34
- 35 Ms. Schertz stated that Mr. Leuchtmann indicated that he did not know the timeframe which would
36 trigger the decommissioning process.
37
- 38 Mr. Thorsland indicated that the timeframe that would trigger the decommissioning process is in the
39 Ordinance.
40
- 41 Ms. Schertz asked Mr. Leuchtmann if the foundation was removed down to four feet would it allow

1 Invenergy to avoid the Illinois EPA Hazardous Waste requirements.
2
3 Mr. Leuchtmann stated no.
4
5 Ms. Schertz asked what percentage of the concrete is removed.
6
7 Mr. Leuchtmann stated that the information is included in the decommissioning plan.
8
9 Mr. Thorsland asked the audience if anyone else desired to cross examine Mr. Leuchtmann and there
10 was no one.
11
12 Mr. Thorsland again informed the audience that anyone who desires to present testimony must sign
13 the witness register. He reminded the audience that when they sign the witness register they are
14 signing an oath.
15
16 Mr. Thorsland called Mr. Tim Casey to testify.
17
18 Mr. Tim Casey, Senior Environmental Scientist with HDR Engineering, whose office is located at
19 701 Xenia Avenue, Minneapolis, Minnesota, stated that he is the founder and national manager of
20 HDR's Acoustics Program. He said that HDR was hired to complete the noise analysis for the wind
21 farm project which included an initial component of measuring existing noise levels and an analysis
22 of project related noise. He said that he would like to briefly explain some basic acoustical concepts
23 that will be part of his testimony because it will help everyone understand the messages that he is
24 trying to share.
25
26 Mr. Casey stated that the human ear hears a wide range of sounds and the sounds that are heard are
27 comprised of a wide range of energy and frequencies. He said that frequencies can be thought of as
28 tones upon which there are high frequencies and low frequencies. He said that the human ear does
29 not hear all frequencies equally in that low frequencies are not heard well at all and some of the
30 higher frequencies are heard just fine. He said that if the ability to hear frequencies could be graphed
31 the graph would slope down dramatically where the lower frequencies are and that type of graph is
32 used to correct the measurement of sound to put them in a context that meaningful and into the
33 context of what is heard and such a graph is called the A-weighting scale. He said that when you
34 hear about sound and noise expressed as A-weighted decibels or dBA it means the total content of
35 that sound has been corrected so that it reflects our ability to hear it. He said that dogs hear much
36 higher pitches than humans therefore different animals have different abilities to hear energy
37 throughout the tone range. He said that humans hear the overall sound level and we hear a
38 combination of sounds but perceive them as one sound. He said that it is possible to take a
39 measuring instrument and have the analyzer break up the sound into frequency components and
40 indicate how much energy is in each frequency range. He said that such an analyzer is sometimes
41 called a Real Time Analyzer or Spectral Analyzer. He said that the range of sounds of low and high

1 frequencies is sometimes referred to as using the concept of a spectrum, indicating low frequency at
2 one end and high frequency at the other end. He said that environmental sound is regulated
3 differently in each state in the United States and in Illinois it is regulated by frequency components
4 which are not A-weighted and in reality it is a little bit abstract as the way noise is regulated in
5 Illinois. He said that noise is regulated in Illinois in frequency components and not representative of
6 how humans actually hear things.

7
8 Mr. Casey stated that other there are other scales such as the B-weighted scale and C-weighted scale
9 and in the context of wind turbines sometimes the C-scale is discussed. He said that if the A-
10 weighted scale cut the low frequencies in a manner that simulates how we hear them the C-weighted
11 scale does not because it does not cut the low frequencies but is useful for measuring sound from a
12 source that is known to have a lot of low frequency noise, such as a jet engine. He said that when
13 noise analyses are completed for a jet engine that is bolted to the ground and used to drive a
14 generator to generate electricity, called a peaking turbine or simple cycle turbine, it is useful to
15 understand the low frequency content of their noise because there is a lot of it. He said that when
16 you hear a jet airplane there is a lot of low frequency noise and you can really tell when there is a lot
17 of low frequency sound and at times there is a tactile sensation that can be felt. He said that low
18 frequencies can be heard and felt if they are high enough.

19
20 Mr. Casey stated that HDR's noise assessment for this project had two primary components, a
21 measuring component and a modeling component. He said that his staff visited the project area and
22 based on their review of aerial photographs and land use they identified all principal noise sources.
23 He said that in most rural communities principal noise sources are railroads, highways, township
24 roads or streets, airports or industrial facilities. He said that based on the review of the digital aerial
25 photograph for the wind farm project location they identified two locations that had land use in
26 proximity to noise sources that were generally representative of everywhere else in the project area.
27 He said that at those two selected locations they placed sound level meters on tripods and measured
28 noise levels for 24 continuous hours and those measurements and data which were collected were
29 compared with the noise limits in the IPCB Environmental Rules. He said that he has been involved
30 in several other projects in Illinois where he has measured existing noise levels in Illinois and
31 compared the data with the state noise limits which are frequency and spectral based and are not A-
32 weighted and what is found is that whenever the wind blows those limits are exceeded. He said that
33 they have 48 hours of data collected within the wind farm project and there was an average of 13
34 hours per location that were out of compliance.

35
36 Mr. Casey said that there are two fundamental issues when it comes to environmental noise, a
37 regulatory compliance issue and a perception issue. He said that when the wind blows not many
38 people run inside complaining that the law is being broken because the state noise limits are not A-
39 weighted and not expressed in a way that is necessarily how we hear stuff. He said that the key
40 message is that on average, 13 of the 24 hours at each of the two locations noise levels exceeded the
41 state levels and that was because the wind was blowing. He said that since we are here to talk about

1 a wind energy project we want to harvest the kinetic energy of that wind and convert it into useable
2 electricity.

3
4 Mr. Casey stated that the modeling portion of HDR's analysis is where they calculate the wind
5 turbine noise levels. He said that HDR completed this analysis by using commercially available
6 software called Cadna-A which is based on international acoustic standards. He said that they
7 imported into Cadna-A a digital terrain file that was a three dimensional map of the project area
8 which covered 33,500 acres. He said that the three dimensional map helped them tell the model
9 what the terrain was like because if there is an obstacle in that sound propagation path, such as a hill,
10 the model will be able to see it and take that into account as it calculates sound that is traveling from
11 the source to the receiver. He said that the analysis was done in 3-D. He said that in addition to the
12 digital terrain model they imported another file which had the X, Y and Z coordinates of 260 homes
13 and then another file was imported which had the X, Y and Z coordinates of every proposed wind
14 turbine. He said that they go into the model and input the height of the wind turbine, a hub height of
15 100 meters, and then they tell the model how loud the wind turbines are which is data provided by
16 General Electric which is spectral noise emission data. He said that wind turbines are a little
17 different than motorcycles, boats, cars and trucks because their noise emission varies based on how
18 fast the wind is blowing and GE has data over a variety of wind speeds therefore HDR picked the
19 loudest noise emission that was representative of a 14 meter per second wind or 31 miles per hour.
20 He said that they had the option of incorporating the site specific meteorological data that was
21 recorded from the MET towers which would have told them from which direction the wind blows
22 and at what percent of the time on an annual basis it comes from that direction. He said that they
23 chose to not input the meteorological data and instead use an option in the model which indicates
24 that the wind blows from every direction all the time all year long because if you review the
25 meteorological data you will find that there is a predominant wind direction. He said that if the
26 predominant wind direction is used the model would calculate wind levels downstream in that
27 predominant direction as being pushed downstream more efficiently and the noise levels it calculates
28 in directions other than downwind would not be enhanced by that downwind effect. He said that
29 they tell the model that the wind blows in every direction all of the time so that it calculates noise
30 levels that are a little bit higher than what would normally happen. He said that telling the model
31 that the wind always blows in all directions is somewhat unrealistic but it over estimates noise levels
32 therefore they are being conservative in not under-calculating noise levels anywhere.

33
34 Mr. Casey stated that HDR input into the model site specific terrain, 3-D locations of 260 homes and
35 30 turbines, the loudest noise emission data for the GE turbine that is provided by GE, and assume
36 that the winds are constantly 31 mph therefore obtaining a noise level from the model that is a one
37 hour average. He said that the wind does not blow 31 mph for one hour in every direction uniformly
38 therefore the analysis is very conservative. He said that the model can give results broken out into
39 the same frequency spectrum range so that HDR could do apples to apples comparison to the IPCB
40 noise limits. He said that the results are not A-weighted because the noise rules are not A-weighted.
41 He said that they found that the highest calculated noise level amongst the 260 homes complies with

1 the daytime and night time noise limits.
2
3 Mr. Thorsland asked the Board if there were any questions for Mr. Casey.
4
5 Mr. Courson asked Mr. Casey if there were any models on the noise from the braking mechanisms
6 on the wind turbines.
7
8 Mr. Thorsland stated no.
9
10 Mr. Passalacqua asked Mr. Casey if a baby crying for 13 hours is a noise that he would be okay with
11 as long as it was just under the limit because it is just a matter of perception. He said that maybe
12 wind is a soothing sound that everyone is used to but perception of noise is the key.
13
14 Mr. Casey stated that there are two issues to look at, the regulatory compliance issue which is the
15 purpose for his presentation, and the perception issue which is his attempt to help the Board
16 understand the results that he presents.
17
18 Mr. Passalacqua stated that he was talking about the perception of sound therefore he asked Mr.
19 Casey if, at his home for 14 hours per day, would it be okay if there was a baby crying just under the
20 limit.
21
22 Mr. Casey stated that he does not understand the relevance of Mr. Passalacqua's question in the
23 context of wind turbines. He said that he had three sons within three years therefore he could
24 imagine the scenario that Mr. Passalacqua is indicating but it has nothing to do with wind turbines.
25
26 Mr. Passalacqua stated that it is the perception of the sound and not the legal limit especially if it can
27 be heard and is not natural. He said that if the sound is a droning sound it could be irritating.
28
29 Mr. Casey stated that the way Mr. Passalacqua perceives sound could be different than anyone else
30 on the planet therefore we have to be careful how we answer any questions. He said that when the
31 wind blows the noise level exceeds the limits.
32
33 Mr. Passalacqua stated that he is not as concerned about the limits as he is the affect of the sound on
34 humans. He said that some sounds are not soothing.
35
36 Mr. Casey stated that he would agree that some sounds are not soothing.
37
38 Ms. Capel asked Mr. Casey if we are just talking about the wind, the turbine or a combination of
39 both the wind and the turbine.
40
41 Mr. Casey stated that if you take the IPCB noise limits and apply A-weighting and do the math to

1 condense them into one overall number the daytime and night time limits are 61 and 51 which are A-
2 weighted decibels, the maximum wind turbine level amongst all 260 homes was 45.

3
4 Mr. Palmgren asked Mr. Casey if they ever go out with a meter to measure existing wind farms to
5 measure high and low ambient noise levels during the day.

6
7 Mr. Casey stated that HDR is under contract to perform post construction monitoring on a handful of
8 projects. He said that the requirement for the follow up monitoring is a relatively new requirement in
9 the industry and as a result there is not a tremendous abundance of post construction monitoring data
10 but there is some compelling post-construction monitoring data that is readily available and it
11 showed that calculated noise levels and measured noise levels were very close depending upon how
12 the modeling was completed. He said that he read a post-construction monitoring report for a project
13 in Minnesota which had measurements at five locations and they felt that the data showed that the
14 project was in agreement with the state noise regulations.

15
16 Mr. Thorsland asked if staff had any questions for Mr. Casey.

17
18 Mr. Hall asked if there are certain weather conditions that conspire to make the turbines sound louder
19 than they normally would when there is a lot of wind.

20
21 Mr. Casey stated that turbine noise emissions vary under wind speed conditions throughout the range
22 of wind speeds but there are also meteorological conditions that effect noise emissions from wind
23 turbines. He said that under a temperature inversion the temperature of the atmosphere decreases as
24 you get higher away from the ground and at night things cool and as the sun begins to raise the warm
25 air rises and cooler air remains at ground level. He said that the temperature inversion can have a
26 refracting affect on sound. He said that sound waves travel equally in all directions but under
27 temperature inversion conditions the sound that would normally go up and continue beyond the
28 altitude in the atmosphere, a portion of it is refracted down therefore causing slightly elevated noise
29 levels at a location where the slightly elevated noise level would occur.

30
31 Mr. Hall asked if it was possible to model such an occurrence.

32
33 Mr. Casey stated that they use the best available tools, computer models, and there are ways that the
34 model can be tricked but there is very limited ability in importing real meteorological data and have
35 the model create an accurate report.

36
37 Mr. Hall asked him if he believed that the difference in noise may only be a few decibels.

38
39 Mr. Casey stated that there are different ranges in the literature and there is a document regarding
40 study that was done on the Dutch/German border that indicated that their coastal inversion layers
41 produced dramatically higher noise levels than was modeled. He said that he does not believe that

1 the report indicates how the modeling was done therefore he does not know how conservative their
2 base model analysis was and if some conservative assumptions are not built in to it then the margins
3 could be large. He said that if there are two noise sources that are identical and they are placed
4 together there is a 3 decibel increase therefore if all of the acoustic energy was reflected downward
5 there would be a 3 decibel increase.

6
7 Mr. Hall asked if there is another condition during the summer which may not have a lot of wind at
8 the ground level but a lot of wind in the higher elevation therefore making the noise more noticeable.

9
10 Mr. Casey stated yes under certain atmospheric stability conditions. He said that when there is an
11 unstable atmosphere one of the conditions that occur is that the winds above the trees is very active
12 therefore the human ear hears the wind rustling the leaves and foliage and that makes noise plus the
13 wind itself is heard and the turbines are turning because they are 80 or 100 meters in the air. He said
14 that when you have different stability conditions and a more stable atmosphere exists at ground level
15 wind speeds can be calm and the human ear is not hearing the wind sound or the rustling of leaves
16 but at the hub height the wind turbine blades could be experiencing a wind speed above the cut in
17 speed which would mean that they are rotating. He said that if the wind turbine blades are still
18 turning and making sound under such conditions there may not be elevated turbine noise at the
19 ground level because the perception is different due to the natural environmental noise that would
20 normally be heard is no longer evident to mask the wind turbine sound. He said that under stable
21 atmospheric conditions the wind turbines may be a little bit more perceivable but it doesn't mean
22 that the wind turbine is any louder.

23
24 Mr. Hall stated that Tables 5 and 6 in the report were very helpful in that they report the maximum
25 sound levels and it indicates that the modeling never exceeds the maximum levels. He said that he
26 does not know what to make of the large table that was included in the Appendix that reports an
27 average sound level because he does not know how that relates to the IPCB regulations.

28
29 Mr. Casey stated that the large table in the back of the report is the raw modeling of all 260 locations
30 and that data was put onto a spreadsheet and sorted and identified the highest calculated noise level
31 in any given location and that data is what is indicated in Tables 5 and 6. He said that the raw
32 modeling is expressed in two ways, the second column has the overall dBA which is the overall
33 noise level that is A-weighted and is expressed using an acoustic measure called an LEQ which
34 stands for an equivalent level and is one way to express an average noise level. He said that there are
35 mean, median and low and the LEQ is the mean. He said that the next column is the hourly LEQ
36 broken into octave band which are regulated by the State of Illinois therefore the column can be
37 reviewed to see the range of calculated wind turbine noise levels and how it varies amongst the 260
38 homes.

39
40 Mr. Hall stated that for clarification there is no key in the report for someone like Ms. Sims to
41 determine the octave noise level at her home.

1
2 Mr. Casey stated that Mr. Hall is correct.
3
4 Mr. Thorsland asked the Board and staff if there were any further questions for Mr. Casey and there
5 were none.
6
7 Mr. Thorsland asked the audience if anyone desired to cross examine Mr. Casey.
8
9 Mr. Thorsland called Mr. Rob Parker.
10
11 Mr. Rob Parker, who resides at 467 CR 2500N, Mahomet, Illinois, asked Mr. Casey if 31 mph is the
12 data used for the maximum wind speed.
13
14 Mr. Casey stated no. He said that the noise emission data published by General Electric was
15 representative of noise emissions for this model turbine under wind speed conditions of 31 mph.
16
17 Mr. Parker asked what happens over 31 mph.
18
19 Mr. Casey stated that turbines use the technology of feathering the blades because they want to try to
20 extract the maximum power under the full range of wind speed therefore when the wind is not so
21 strong the wind turbine will turn on its axis and make it close to perpendicular so that it is harvesting
22 more of the kinetic energy. He said that when the wind speeds pick up it has to maintain control of
23 the rate of rotation so they will rotate the blade so that it doesn't exceed a rate of rotation that is
24 within its design constraints. He said that if the winds pick up to more than 31 mph the blade will
25 not turn any faster.
26
27 Mr. Parker asked if the turbine would be louder with wind speeds over 31 mph.
28
29 Mr. Casey stated that he has to rely on the data prepared by GE and they indicate that 31 mph is the
30 loudest noise emission condition.
31
32 Mr. Parker asked if the modeling is conducted at 100 meters.
33
34 Mr. Casey stated yes.
35
36 Mr. Parker asked if the IPCB requires the modeling to be conducted at 100 meters.
37
38 Mr. Casey stated that he does not believe that noise regulations in Illinois include modeling guidance
39 but if you submit something and said that it doesn't demonstrate compliance and it is clearly not
40 representative of the noise codes then it would be reasonable to assume that someone would point
41 that out and question the merit of the information.

1

2 Mr. Parker asked if the temperature inversion would cause a significant doubling of the noise.

3

4 Mr. Casey stated that it depends on the term significant. He said that doubling of the noise would be
5 a 3 decibel increase therefore you would have to look at what octave band did that 3 decibel increase
6 occur and apply A-weighting to it and compress it into one overall noise level and then the relevance
7 of the increase could be assessed in the context of human hearing. He said that the noise limits in
8 Illinois are quite stringent in comparison to other states and if the Illinois rules were compressed into
9 A-weighted noise levels, 61 for daytime and 51 for night-time, their highest noise level is 45. He
10 said that if the wind turbines got louder there is still a 6 decibel range which is more than just a
11 doubling and that would be a clearly perceivable increase. He said that the average person cannot
12 perceive a change in increase or decrease of less than 3 decibels and before a person with average
13 hearing can hear a difference it has to be 3 decibels or higher. He said that if it gets up to 5 decibels
14 the change is clearly perceivable and a change of 10 is considered a halving or doubling therefore a
15 slight increase based on increased wind speeds or MET conditions may or may not be perceivable.

16

17 Mr. Parker asked if the A-weighting is the noise pressure and C-weighting is the human perception
18 of the noise.

19

20 Mr. Casey stated no. He said that the purpose of the A-weighting is to correct spectral measurement
21 data so that it is representative of how people perceive it. He said that the purpose of C-weighting is
22 to help identify a noise source that has an elevated low frequency.

23

24 Mr. Parker asked if there is any data suggesting how the noise will affect animals.

25

26 Mr. Casey stated that there have been very brief discussions with wildlife biologists regarding the
27 topic of acoustics and wildlife and it has always been very site specific and is an area that he tries to
28 stay out of because he is not a wildlife acoustician therefore he cannot comment on Mr. Parker's
29 question.

30

31 Mr. Thorsland called Deanne Sims.

32

33 Ms. Deanne Sims, who resides at 2765 CR 2500N, Penfield, Illinois, asked Mr. Casey to disclose
34 what 24 hour period the noise tests were conducted.

35

36 Mr. Casey stated that the tests were conducted during the week of May 4, 2009, as indicated in the
37 report.

38

39 Ms. Sims asked Mr. Casey to disclose the location of the tests.

40

41 Mr. Casey stated that there is a graphic which indicates where the monitoring was done although he

1 cannot provide addresses.
2
3 Ms. Sims asked if there were monitoring sites in Champaign County.
4
5 Mr. Casey stated yes, there were two monitoring locations in Champaign County.
6
7 Ms. Sims asked if there was any third party data available other than the data which was provided by
8 GE.
9
10 Mr. Casey stated that GE hires a certified acoustical laboratory to measure noise emission sound
11 power from a wind turbine using an IEC 61-400 which is an international electrical standard for
12 measuring sound power output from a wind turbine and so the data does come from a third party.
13
14 Ms. Sims asked if this data was specific to the proposed wind turbines for California Ridge.
15
16 Mr. Casey stated yes.
17
18 Ms. Sims asked if any post-construction monitoring will be conducted.
19
20 Mr. Casey stated that the requirement for post-construction monitoring is a fairly new one relative to
21 the age of the industry therefore there is not an overwhelming abundance of post-construction
22 monitoring data. He said that he and his staff are dying to go measure and record noise from wind
23 turbines and have attempted to get permission to do so but have not been successful.
24
25 Mr. Thorsland called Herb Schildt.
26
27 Mr. Herb Schildt, who resides at 398 CR 2500N, Mahomet, asked Mr. Casey if Appendix A was
28 generated by the computer model.
29
30 Mr. Casey stated yes.
31
32 Mr. Schildt asked Mr. Casey to indicate what program was used.
33
34 Mr. Casey stated that he used Cadna-A.
35
36 Mr. Schildt asked how Cadna-A was certified.
37
38 Mr. Casey indicated that he is not a representative of a software company therefore he cannot answer
39 Mr. Schildt's question.
40
41 Mr. Schildt asked Mr. Casey if he is capable of doing the analysis without the computer.

1
2 Mr. Casey stated yes.
3
4 Mr. Schildt asked if he took a few of the locations and manually did the computations to assure
5 accuracy.
6
7 Mr. Casey stated that he did that a few years ago but he did not do it with the latest version.
8
9 Mr. Schildt asked Mr. Casey if he had seen the source code for the computer model and did he know
10 if it accurately represents what is being seen.
11
12 Mr. Casey stated that they have compared Cadna-A results on non-wind turbine projects with noise
13 levels that have been calculated by using spreadsheet files that they wrote themselves and found very
14 close agreement.
15
16 Mr. Schildt stated that Mr. Casey is here tonight as an expert witness although he is relying on a
17 computer program and the public cannot ask any questions to the creator of the program to determine
18 what formulas were used for the methodologies.
19
20 Mr. Casey stated that he has no idea how software is certified because he is not in that type of
21 business therefore he asked Mr. Schildt to accept his response. He said that Cadna-A is based on the
22 International Acoustical Standard for Sound Propagation.
23
24 Mr. Schildt stated that he cannot respond to what Mr. Casey has said and accepts his answer. He
25 stated that it would make him feel better if he could get a solid answer as to how the software was
26 certified.
27
28 Mr. Casey stated that he is in not in the business of certifying software therefore the question is
29 irrelevant to the context of his testimony. He said that he has already stated that he has calculated
30 noise levels using spreadsheets that he wrote and Cadna-A results using the same methods that were
31 used for this analysis.
32
33 Mr. Thorsland stated that certification of the software is irrelevant and Mr. Casey was hired to do the
34 analysis by using available tools. He suggested that Mr. Schildt speak with the software company
35 that developed Cadna-A to obtain answers to his questions regarding certification.
36
37 Mr. Schildt stated that it is incumbent upon an expert witness to be able to validate the tools that he
38 used in testimony given.
39
40 Mr. Casey stated that he gave Mr. Schildt two examples that clearly demonstrate that he has
41 completed that step.

1
2 Mr. Thorsland requested that Mr. Schildt keep his questions relevant to Mr. Casey's testimony.
3
4 Mr. Schildt stated that he needs to ask Mr. Casey a question regarding a noise that he has heard but
5 without explaining the noise he cannot properly ask the question.
6
7 Mr. Thorsland stated that if Mr. Schildt would like to sign the witness register he could present
8 testimony at that time. He said that by asking Mr. Casey the question regarding a noise that was
9 previously heard is on the edge of presenting testimony therefore he will not allow the question. He
10 again asked Mr. Schildt to keep his questions relevant to Mr. Casey's testimony.
11
12 Mr. Schildt asked Mr. Casey if the analysis includes damage to the turbine which could create
13 additional noise.
14
15 Mr. Casey stated that he does not believe that the GE noise emissions data represents a
16 malfunctioning wind turbine.
17
18 Mr. Schildt stated that it is Mr. Casey's understanding that the GE noise emissions data only
19 represents a properly functioning wind turbine.
20
21 Mr. Casey stated yes.
22
23 Mr. Schildt asked Mr. Casey if the noise contours represent any noise created by the maintenance
24 vehicles that will operate in the area.
25
26 Mr. Casey stated that he did not monitor maintenance vehicles.
27
28 Mr. Schildt stated that the maintenance vehicles add to the noise.
29
30 Mr. Casey stated that maintenance vehicles could emit noise.
31
32 Mr. Schildt asked about the low frequency component that is emitted to the ground.
33
34 Mr. Casey stated that this is just airborne sound in the frequency bands that are regulated by the State
35 of Illinois.
36
37 Mr. Schildt stated that since the turbine is mounted to the ground can any noise be transmitted
38 through the ground into a house.
39
40 Mr. Casey stated that there was a study done to measure ground-borne energy from a wind turbine in
41 the vicinity of an Italian physics laboratory and the results of the study were published at the Wind

1 Turbine Noise Conference in Denmark and he does not believe that they found any meaningful
2 ground-borne energy associated with an operating wind turbine in the vicinity of the Italian physics
3 laboratory.
4

5 Mr. Schildt asked Mr. Casey if data was provided regarding the composition of the ground.
6

7 Mr. Casey stated that he does not know.
8

9 Mr. Thorsland called Ms. Kim Schertz.
10

11 Ms. Kim Schertz, who resides at Hudson, Illinois, asked Mr. Casey if he stated that humans do not
12 hear low frequency well but they can feel it.
13

14 Mr. Casey stated no. He said that his comment was that the average human has a response to
15 spectral sounds that can be characterized by a dip in the low frequencies. He said that humans do not
16 hear the low frequencies very well but they can hear them when they are at high elevated levels and
17 when they are at those elevated levels it is conceivable that there would be a tactile response
18 depending upon the intensity of the sound and what frequency it is in.
19

20 Ms. Schertz stated that a human could feel them if the noise was a high enough spectral sound.
21

22 Mr. Casey stated that humans can feel low frequency sound if the levels are high enough.
23

24 Ms. Schertz asked what active enforcement agency does the IPCB utilize.
25

26 Mr. Thorsland stated that Mr. Casey did not testify about such.
27

28 Ms. Schertz stated that Mr. Casey indicated that he relies on data provided by General Electric and
29 that the IPCB regulates the sound at an un-weighted frequency. She asked Mr. Casey to indicate the
30 lowest un-weighted frequency that was provided by General Electric.
31

32 Mr. Casey stated 31.5 hertz.
33

34 Ms. Schertz asked Mr. Casey if there is anything lower than what GE provides.
35

36 Mr. Casey stated that his testimony is clear in that 31.5 hertz is the lowest octave band that they
37 report.
38

39 Ms. Schertz asked if there were lower frequencies that occur in the world.
40

41 Mr. Casey stated yes.

- 1
2 Mr. Schertz stated that the lower frequencies occur in wind turbine emissions.
3
4 Mr. Casey stated yes.
5
6 Ms. Schertz asked Mr. Casey if the GE data does not show any violations, yet he just indicated that
7 GE does not provide the lowest level frequencies, there is no proof that there is no violation at
8 frequency levels lower than 31.
9
10 Mr. Casey stated that Ms. Schertz is incorrect. He said that it is a very simple concept because the
11 State of Illinois does not regulate noise below 31.5 hertz.
12
13 Ms. Schertz asked Mr. Casey if people can feel the lower frequency through perception.
14
15 Mr. Casey stated that everyone's perception is unique.
16
17 Ms. Schertz asked Mr. Casey if the crops were up or down on May 4, 2009, when the 24 hour sound
18 monitoring was completed.
19
20 Mr. Casey stated that the information is not in his report.
21
22 Ms. Schertz asked Mr. Casey if it is true that the crops create an absorbing factor for sound.
23
24 Mr. Casey stated that the ground has the potential to absorb acoustical energy.
25
26 Ms. Schertz asked Mr. Casey if the 13 hours which were out of compliance were during the night.
27
28 Ms. Casey stated that he indicated that on an average of the 24 hours measured at two different
29 locations in Champaign County there were an average of 13 hours that were out of compliance. He
30 said that Table 3 in HDR's report indicates that summary.
31
32 Ms. Schertz apologized for not reviewing the report. She asked Mr. Casey if he provided an hourly
33 summary of what was out of compliance at night and by how much it was out of compliance.
34
35 Mr. Casey stated that Table 3 indicates daytime, night time and total hours and the number of hours
36 exceeding the IPCB sound limits in the daytime and night time.
37
38 Ms. Schertz asked if the report is indicating a 12 hour daytime average and a 12 hour night-time
39 average.
40
41 Mr. Casey stated no. He said that Table 3 indicates the number of hours in daytime and the number

1 of hours in night time when measured noise levels exceeded the IPCB noise limits.

2
3 Ms. Schertz asked Mr. Casey to indicate how many of the 260 homes were modeled and how many
4 of the noise levels were taken at the site.

5
6 Mr. Casey stated that HDR's analysis calculated project related noise levels at 260 locations that are
7 considered to be representative of homes in the project area.

8
9 Ms. Schertz stated that the number would be zero.

10
11 Mr. Casey stated that the noise levels were calculated at 260 homes.

12
13 Ms. Schertz asked how many actual noise readings on the ground were taken.

14
15 Mr. Casey stated that the report which is in the record indicates the results of two measurements that
16 were completed at two representative locations in Champaign County.

17
18 Ms. Schertz asked Mr. Casey if either of the two locations were at homes.

19
20 Mr. Casey stated that he does not have the information in the record although the two locations were
21 in the project area therefore it is more than reasonable to assume that they were done at locations
22 which were at or near two of the 260 homes.

23
24 Ms. Schertz asked Mr. Casey if he has the full discretion as to the location of the two monitoring
25 sites.

26
27 Mr. Casey stated that they modeled 260 locations.

28
29 Ms. Schertz asked Mr. Casey if he picked the actual two locations of the real-time noise readings that
30 were used during the modeling of the 260 homes.

31
32 Mr. Casey stated that the noise analysis team reviewed digital aerial photographs and identified noise
33 sources and noise distribution throughout the project area. The noise analysis team then identified
34 noise sensitive locations, homes, throughout the project area and attempted to identify potential
35 candidate locations where they could measure noise levels and feel confident that the measurement
36 data was representative with other portions of the project area based on proximity to land base noise
37 sources and noise sensitive receivers.

38
39 Mr. Thorsland asked Ms. Schertz if she has had an opportunity to go on-line to read the report.

40
41 Ms. Schertz stated that she has not.

1
2 Mr. Thorsland stated that many of Ms. Schertz's questions could be answered by reading the report.
3 He noted that the report has been available for viewing for several weeks.

4
5 Ms. Schertz asked Mr. Casey how many wind turbines were in existence when the IPCB regulations
6 were enacted.

7
8 Mr. Casey stated that the requested information was not part of his testimony.

9
10 Ms. Schertz asked Mr. Casey if the waiver is granted for measurement from the home and not the
11 property line could that negatively affect animals and livestock and businesses on that acreage.

12
13 Mr. Casey stated that he did not discuss any waivers during his testimony.

14
15 Mr. Thorsland informed Ms. Schertz that questions regarding the waivers should be directed to Mr.
16 Leutchmann.

17
18 Ms. Schertz stated that she believed she heard someone indicate that 10 decibels was four times
19 louder.

20
21 Mr. Casey stated that he did make a comment regarding how 10 decibels would be perceived and the
22 comment that he made was that an increase or decrease of 10 decibels would be perceived by a
23 person with average hearing senses as being a halving or a doubling of the sound pressure levels.

24
25 Ms. Schertz asked Mr. Casey to indicate what was the lowest ambient rural background noise level
26 that he has ever taken.

27
28 Mr. Thorsland stated that such was not part of Mr. Casey's testimony and it is up to him as to
29 whether he chooses to respond to the question.

30
31 Mr. Casey stated that he will respond to Ms. Schertz' question. He said that he has 5,000 hours of
32 measurement and audio recordings done on the north slope of Alaska where there is virtually no
33 human activity and the average decibel levels were in the low 20's.

34
35 Ms. Schertz asked Mr. Casey if he had such data for central Illinois farm fields.

36
37 Mr. Casey stated that such information was not part of his analysis.

38
39 Ms. Schertz asked if it could be in the same range of 20 decibels.

40
41 Mr. Casey stated that he does not consider central Illinois to be representative of the north slope of

- 1 Alaska and he has no reason to believe, based on the data that he collected during his professional
2 career, that noise levels in central Illinois approach the noise levels on the north slope of Alaska.
3
- 4 Ms. Schertz asked if he was indicating that it was not possible to get a 25 decibel reading in the wind
5 farm project.
6
- 7 Mr. Casey stated that he did not indicate such.
8
- 9 Ms. Schertz asked if icing has been modeled during the analysis.
10
- 11 Mr. Casey stated that Ms. Schertz will have to read the report to obtain an answer to her question.
12
- 13 Ms. Schertz asked Mr. Casey if he would like her to read the report or if he does not want to answer
14 the question.
15
- 16 Mr. Casey stated that he is trying to walk the fine line of trying to deal with the question that is
17 outside the testimony.
18
- 19 Ms. Schertz asked if any icing was considered.
20
- 21 Mr. Casey stated that he does not believe that General Electric reports spectral sound data for icing
22 conditions.
23
- 24 Ms. Schertz asked if there were any factors included in the noise data regarding the pulsating or tonal
25 noise of the turbine.
26
- 27 Mr. Casey stated that the noise analysis incorporated spectral sound power data published by General
28 Electric for the model turbine as proposed for use in this project and that analysis addresses the tonal
29 issue.
30
- 31 Ms. Schertz asked Mr. Casey to indicate the maximum hub height.
32
- 33 Mr. Casey stated that the 1.6-100 GE wind turbine has a hub height of 100 meters.
34
- 35 Ms. Schertz asked Mr. Casey to indicate the decibel level at the hub height.
36
- 37 Mr. Casey stated that the sound power data expressed by GE and used in the HDR analysis is
38 expressed on a spectral level therefore there are several noise levels in different octave bands
39 therefore there is no convenient one answer to the question.
40
- 41 Ms. Schertz asked Mr. Casey to indicate the loudest decibel at the hub height.

1
2 Mr. Casey stated that the GE data for 1.6-100 shows 99.9 which is an A-weighted sound power level
3 and humans do not hear sound power but sound pressure therefore the data is not very meaningful.
4
5 Mr. Thorsland repeated that the report indicates most of the information that Ms. Schertz is
6 requesting tonight and it might be helpful for everyone to review that report prior to the next
7 meeting.
8
9 Ms. Schertz stated that she read the Denmark report and asked Mr. Casey if there was no ground
10 energy reported.
11
12 Mr. Casey stated that the conclusion that he remembers them reaching and stating at the conference
13 was that there was no meaningful amount of ground-borne energy.
14
15 Ms. Schertz asked if it was true that the report also indicated that the noise could be heard seven
16 miles away.
17
18 Mr. Thorsland informed Ms. Schertz that she is presenting testimony and indicated that Mr. Casey is
19 not obligated to respond to her last question.
20
21 Ms. Schertz asked Mr. Casey that even though the report indicated that there is no ground energy he
22 is not aware that noise was emitted seven miles out.
23
24 Mr. Casey stated that he has not read the entire report.
25
26 Mr. Thorsland called Ms. Sims to testify.
27
28 Ms. Deanne Sims, who resides at 2765 CR 2500N, Penfield, Illinois, stated that she would like to
29 discuss Waiver #8 which would place the boundary at the foundation of her home rather than at the
30 property line. She said that her house is roughly 1200 square feet and her property is roughly three
31 acres, two acres of grass and one acre which is tillable. She said that there are 43,560 square feet in
32 three acres therefore Invenergy is asking the County permission to take everything that she owns and
33 pays property taxes upon and reduce it down from 43,560 square feet to 1,200 square feet. She said
34 that the map that was presented at the last hearing does not have a scale because she was trying to
35 determine how many feet the proposed turbines would be from her back door and to the east and
36 west.
37
38 Mr. Hall stated that the map that was presented at the last hearing was only a portion of a larger map
39 that was put together at a staff level. He said that the map provided by Invenergy did have a scale
40 indicated.
41

- 1 Mr. Thorsland stated that as a rough idea the section lines are generally one-mile apart.
2
- 3 Ms. Sims stated that her property was not indicated on the map either.
4
- 5 Mr. Hall stated that with the scale used on the map should indicate Ms. Sims' property, a three acre
6 lot, as a darker area.
7
- 8 Ms. Sims stated that the list that she received in the mail, indicating the descriptions of the locations
9 of the turbines, does not appear to match up with the spots on the map.
10
- 11 Mr. Hall stated that he does not know how familiar Ms. Sims is with the township grid but in some
12 parts of this project area the fractional sections make it very difficult to read the map.
13
- 14 Ms. Sims asked if the map is a legal document.
15
- 16 Mr. Hall stated no. He said that the map is just for general information. He said that the scale on the
17 map in question appears to be $\frac{3}{4}$ of an inch equals 1800 feet.
18
- 19 Ms. Sims noted that the CR District is circled on the map provided by staff although it is not
20 indicated on Invenenergy's map.
21
- 22 Ms. Sims stated that a portion of the text under 55ILCS Division 5/5-12001, Authority to regulate
23 and restrict location and use of the structures reads as follows: For the purpose of promoting the
24 public health, safety, morals, comfort and general welfare, conserving the values of property
25 throughout the county, lessening or avoiding congestion in the public streets and highways, and
26 lessening or avoiding the hazards to persons and damage to property, etc.
27
- 28 Ms. Sims asked if the setback determined in the wind farm ordinance is to the foundation of her
29 house or to the property line.
30
- 31 Mr. Hall stated that the setback is to Ms. Sims' house.
32
- 33 Ms. Sims stated that the County Board has already reduced her property to 1,200 square feet and the
34 remaining is unusable.
35
- 36 Mr. Hall stated that the 1,200 feet is the separation to principal structures and Ms. Sims' house is a
37 principal structure and it has nothing to do with the size of the property. He said that the setback is
38 only the minimum distance between the nearest turbine and the nearest line of the home on the
39 property.
40
- 41 Mr. Thorsland asked the Board if there were any questions for Ms. Sims and there were none.

1
2 Mr. Thorsland asked if staff had any questions for Ms. Sims and there were none.
3
4 Mr. Thorsland asked the audience if anyone desired to cross examine Ms. Sims and there was no
5 one.
6
7 Mr. Miller requested a five minute recess.
8
9 **The Board recessed at 9:07 p.m.**
10 **The Board resumed at 9:12 p.m.**
11
12 Mr. Thorsland called Ms. Kim Cambron to testify.
13
14 Ms. Kim Cambron, who resides at 2736E CR 3700N, Rankin, Illinois, stated that at the last meeting
15 she had submitted a letter from Mr. Gerry Meyer. She said that she has been in contact with Mr.
16 Meyer and requested a signed copy of his letter and he indicated that he will place it in the mail. She
17 said that once she receives the signed copy she will submit it to the Board. She submitted, as a
18 Document of Record, a document titled "*Properly Interpreting the Epidemiologic Evidence about*
19 *the Health Effects of Industrial Wind Turbines on Nearby Residents*" by Carl V. Phillips, PhD. She
20 encouraged the Board to review the document and not to approve any of the waivers requested by
21 Invenergy because the County established the rules for a reason.
22
23 Mr. Thorsland asked the Board if there were any questions for Ms. Cambron.
24
25 Ms. Capel asked Ms. Cambron if she knows whether the document was submitted to a peer review
26 journal.
27
28 Ms. Cambron stated that she does not know but she will look in to it. She said that sometimes you
29 receive information quickly and you only have time to read it and pass it along.
30
31 Mr. Thorsland asked if staff had any questions for Ms. Cambron and there were none.
32
33 Mr. Thorsland asked the audience if anyone desired to cross examine Ms. Cambron and there was no
34 one.
35
36 Mr. Thorsland called Ms. Kim Schertz to testify.
37
38 Ms. Kim Schertz, who resides at Hudson, Illinois, stated that she distributed a packet of information
39 as a Document of Record and for the Board's review. She said that the three waivers that she is most
40 concerned about are the waivers concerning the road agreement, decommissioning and noise. She
41 said that the document titled "*Trouble in the wind*" indicates that the turbines are not going to be

1 around for more than five to ten years. She said that *Wind Energy Update* has shown that the
2 operation and maintenance costs are sharply increasing rising to two or three times more than first
3 projected causing a 21 percent decrease in returns on investments. She said that operation and
4 maintenance costs were found to be especially high in the United States. She said that the problem
5 with this is that when Invenergy is indicating successful decommissioning and successful
6 maintenance, 80% of the world's turbines are still under a five year warranty but once the warranty
7 expires the cost skyrockets and the project will not be feasible and will be shut down. She said that
8 they will never get past the ten year tax credit because of the skyrocketing maintenance costs. She
9 said that in Bureau County the maintenance costs went up from \$8,500 per year to an additional
10 \$35,000 rider that would be required for them to keep their warranty insurance. She said that when
11 those kinds of numbers come in at the same time that the ten year tax credit expires it isn't going to
12 be economically feasible for Invenergy to maintain the turbines and they are going to be standing
13 there.

14
15 Ms. Schertz stated that the article titled "*Caught in the turbine: Some aren't so excited to see the*
16 *region filled with new wind farms*" is about Oregon. She said that you hear about the number of
17 wind farms that are in Oregon but people wonder what it is going to look like when the gold rush is
18 over. She said that the article cites the wind graveyards in California where abandoned and obsolete
19 turbines sit and decay. She said that Oregon is always used as a prime example of how great wind is
20 but the problem is that they have never removed a turbine to date therefore you cannot guess the
21 estimates of what it is going to take to take them down. She said that the article titled,
22 "*Decommissioning Myths,*" is in regards to the White Oak Wind Farm Project, an Invenergy project.
23 She said that Ken Davis, Project Manager for White construction, testified that it takes 2,000 man
24 hours to install a turbine but when he was asked how many hours it takes to remove a turbine he
25 indicated that it would take the same amount. She said that Mr. Davis estimated \$25,000 dollars to
26 remove the first five feet of concrete but that did not include taking the turbine, blades or tower down
27 or bringing in the crane or anything else other than the five feet of concrete. She said that Ken Davis
28 also indicated during the public hearing that he is in the business of estimating these projects and if
29 he is capable of understanding how much it costs to put it up the first time, it's a pretty good bet it's
30 going to take as much to take it down. She said that this Board can estimate how much 2,000 man
31 hours will cost for union labor for removal of one turbine.

32
33 Ms. Schertz stated that the article titled "*The Rest of the Story...What I learned at the Wind*
34 *Conference*" includes the following testimony from Mike Pierce, Vice-Chairman of the Bureau
35 County Board: Mr. Pierce stated that he has seen estimates ranging from \$180,000 to one-quarter of
36 a million dollars to take down one turbine. He said that the problem with the scrap value provision is
37 that scrap is not in any useable form because towers may have to be cut down into three foot
38 sections, which escalates the labor cost. He said that it's the same with copper because it's very
39 valuable but not when it's encased in a generator 300 feet up in the air. He said that turbine blades
40 are tons of carbon fiber and fiberglass and the EPA says some of it may be recycled but it may be a
41 huge liability.

1
2 Ms. Schertz stated that the article titled *“Tilting at Windmills”* was included for the simple reason
3 that everyone has heard the wind companies say that they have had successful decommissioning in
4 southern California and this is an example of successful decommissioning. She said that the article
5 indicates that wind turbines were removed at a project in Palm Springs, California and they are now
6 being used in Minnesota. She said that in Minnesota they spent \$3.3 million dollars on eleven wind
7 turbines but Minnesota experiences cold weather and it was discovered that the wind turbines freeze
8 up. She said that apparently the hydraulic fluid which propels the turbines was supposed to work in
9 colder temperature but it failed because they did not take in to account the difference in temperature
10 between Palm Springs and Minnesota. She said that the article titled, *“As the turbine blades turn,”*
11 is in regards to the same wind turbines in Minnesota. She said that the 20-year old windmills were
12 made in Denmark and had operated on a wind farm in California before being bought by the
13 Minnesota Municipal Power Agency. Avant Energy brought in enXco, a California firm that
14 refurbished the windmills and installed upgrades to get the turbines spinning. Avant Energy
15 indicated that when the machines languished, critics said the problem could be that they are too short
16 and too old, 80 feet high with a 160 kW capacity.

17
18 Ms. Schertz stated that the article titled *“For the sake of green or greed”* indicates that wind farm
19 owners have a strong incentive to sell off or abandon their projects once the tax benefits have been
20 captured, 5-6 years for accelerated depreciation, 10 years for production tax credits. She said that
21 when the turbine performance deteriorates the maintenance costs escalate. She said that economics
22 may dictate abandonment of individual windmills or entire wind farms. She said that in California
23 there are thousands of abandoned wind turbines which litter the landscape.

24
25 Ms. Schertz stated that the document titled *“Decommissioning costs and scrap value: Beech Ridge*
26 *wind energy facility”* is in relation to an Invenergy project that was located in West Virginia. She
27 said that Energy Ventures Analysis, Inc. was hired as an independent assessment of the salvage value
28 of the Beech Ridge Wind turbines and during the analysis they uncovered several major flaws in the
29 applicant’s study methodology and pricing. She said that the developer used old scrap prices but
30 failed to take into account costs related to transporting scrap to a yard and in addition to obtain the
31 posted scrap price they would need to break down the tower into 3 to 4 foot length pieces and the
32 quoted prices would be significantly less. She said that the copper materials would have to have the
33 insulation stripped and the copper pieces separated to obtain their posted copper price and it was
34 found that posted price was 40 to 50% less than what was originally estimated.

35
36 Ms. Schertz stated that the article titled *“Wind Energy’s Ghost”* discusses how many thousands of
37 abandoned turbines exist. She said that there is not decommissioning in the United States and the
38 only wind turbines which have been taken down are the ones that have been taken down so that they
39 could be replaced with a larger turbine and if they are not replaced they are left there. She said that
40 the article discusses 37 abandoned turbines in Hawaii but it is California where the impact is felt
41 because thousands of abandoned wind turbines litter the landscape and the city of Palm Springs was

1 forced to enact an ordinance requiring their removal. She said that the turbines installed in the first
2 wind rush were not very reliable and some never worked at all. She said that the elements took their
3 toll and downtime climbed closer to 100% therefore the developers often set the malfunctioning
4 turbines to virtual mode and for public relations the blades would spin appearing to generate
5 electricity.

6
7 Ms. Schertz stated that the article titled "*Misquoted? Tell the DEC, USFWS*" discusses the Invenergy
8 Stony Creek Wind Farm. She said that Invenergy used 45,000 tons of slag that was ordered from the
9 100-year old federal Brownfield cleanup operation on the grounds of the former Bethlehem Steel
10 plant site. She said that this was contaminated slag that was hauled in and dumped on Invenergy
11 leased land, agricultural fields, at depths of 4 feet deep and 32 feet wide despite the fact that they had
12 an agreement that called for stone fill.

13
14 Ms. Schertz stated that the article titled "*Wind farm officials emphasize safety; Landowners meet
15 with Bent Tree Representative,*" is in regards to road damage. She said that one of the main speakers
16 at a meeting with landowners for the Bent Tree Wind Farm project indicated that there will be an
17 exasperating amount of traffic for the duration of the project. The speaker stated that for each of the
18 122 sites there will be about 55 trucks of gravel for the access road, 50 trucks of concrete and two
19 semis of steel for the foundation as well as trucks hauling the pieces of the 11 cranes. Ms. Schertz
20 stated that something that the Board may want to consider is setting limitations as to when the
21 project can operate during construction. She said that when the project starts the workers will be in
22 the area at 8:00 p.m. blocking roads, installing the hubs and blades at 3:00 a.m. She said that if no
23 limitations are set by the County then there will be no limitations.

24
25 Ms. Schertz stated that the document titled "*Potential Road Damage from Loads Needed for Each
26 Wind Turbine Tower*" indicates testimony from Ken Davis at the McLean County ZBA meeting on
27 January 18, 2007. Mr. Davis was asked if he had ever taken down a wind turbine and he replied no
28 and asked the Board if they knew of anyone in the U.S. that has taken down a tower. Mr. Davis
29 continued to say that to his knowledge, no one has taken one down in the U.S. Mr. Davis stated that
30 the concrete foundation will go down 7 to 11 feet therefore they virtually will leave all of the
31 concrete in place which is going to devalue the farmland for the rest of its life because you can never
32 build anything on and or remove the hunk of concrete.

33
34 Ms. Schertz stated that the document titled "*Black Prairie Wind Farm ZBA Hearing Notes*" includes
35 testimony from Eric Schmidt, McLean County Highway Engineer, who discusses the Cooksville
36 Area Wind Farm which is permitted but not built. She said that Mr. Schmidt testified that the
37 township roads are rebuilt but probably to a lesser standard and there were a lot of problems with the
38 right-of-way acquisition and the shoulders were not as good as they should be. Ms. Schertz stated
39 that when you are rebuilding a road that has 50 years of asphalt, four to five inches deep and it is
40 being torn out and replaced with an A-3 surface that is only 1 to 1.5 inches thick. She said that
41 testimony was received that sometimes it take 50 years to get a road built back up to what previously

1 existed and the new surface is probably easier to tear. She said that when the developer indicates
2 that the roads will be structurally better they mean tensile strength and not the surface. She said that
3 when she is driving down her road she does not care whether the road can handle 80,000 pounds she
4 only cares that her shocks are not going to be broken when she hits a pothole. She said that at the
5 wind farm project at Carlock, Illinois, which is close to her residence, a hot mix is being used rather
6 than gravel therefore there is a much higher cost in keeping it repaired and that cost goes to the
7 county.

8
9 Ms. Schertz stated that the article titled "*County Board ok's landscape work for Soldiers and*
10 *Sailors*" discusses the law suit between Bureau County and Iberdrola Renewables. She said that
11 Bureau County was sued and they had to sue the wind developer and the wind developer sued
12 Bureau County. She said that Bureau County sued Iberdrola Renewables to make them enforce their
13 road agreement. She said that Champaign County is two steps behind because they are considering
14 approving the project without a road agreement and if you did you must consider how much money it
15 is going to take in attorney fees to enforce the road agreement. She said that the article indicates that
16 the Bureau County Board voted to take legal action to force Iberdrola Renewables to comply with its
17 county road agreement. The County Board claimed that the wind farm developers had refused to
18 honor its contractual obligations to accept responsibility for its fair share of the road damage.

19
20 Ms. Schertz stated that the article titled "*Wind farm dispute may be on 'road' to court*" discusses the
21 Bureau County lawsuit again Iberdrola Renewables. She said that Rick Wilkin, Bureau County
22 Board Transportation Committee member, stated that Iberdrola is getting a massive influx of
23 taxpayers' dollars yet is refusing to live up to the roads agreement in Bureau County and pay for the
24 damage to the roads that was caused by their construction. Mr. Wilkin also stated that it takes 20
25 truckloads of cement to create the base on which each turbine stands therefore for the 37 turbines in
26 Providence Heights, 740 cement trucks will travel over the county roads that weren't built to sustain
27 such consistent, heavy use. Ms. Schertz stated that the lawsuit was recently settled although the
28 terms of the settlement were not published. She said that the article titled "*County to take legal*
29 *action*" discusses the same lawsuit.

30
31 Mr. Thorsland reminded Ms. Schertz that the County does not have a road agreement to date
32 therefore the Board has a lot of time to digest all of the articles that she has submitted regarding the
33 roads.

34
35 Ms. Schertz stated that the article titled "*Wind farm work leaves roads in bad shape*" is a letter to the
36 editor of the Daily Pantagraph, from a private citizen who lives in the middle of an existing wind
37 farm, which describes how bad the roads were left in the Ellsworth project in McLean County.

38
39 Ms. Schertz stated that the article titled "*Wind turbines too noisy, internal Ontario government*
40 *memo says*" discusses a memo written by Cameron Hall, as senior environmental officer in the
41 ministry's Guelph district office, which concludes that the current limit of 40 decibels should be

1 reduced to 30 to 32 decibels. She said that according to the 2008 ministry guideline, the tonal blade
2 swoosh should trigger another five-decibel penalty because this is the sound which is most annoying
3 to the human ear.

4
5 Ms. Schertz stated that the document titled "*Noise Measurements – Twin Groves Wind Farm – 4-23-*
6 *07*" was previously distributed to the Board. She said that in Central Illinois she personally
7 measures the noise levels in the Twin Groves Wind Farm and has gotten 15 or 20 noise readings at
8 night. She said that it is easy to get 25 to 28 decibels at night. She stated that the Board needs to do
9 a ton of research to discover how Mr. Casey found two sites that are representative of the entire
10 proposed wind farm project. She said that she has been up against Mr. Casey before and at the
11 Carlock wind farm Mr. Casey's representative areas were very close to East White Oak Church
12 which has a five acre flat parking lot and pond which both reflect noise. She said that the pond had a
13 fence around it with a metal fence with chains on it and it was once a cattle pasture. She said that
14 this is what is done to the Board to make it relevant and they attempt to con the Board into thinking
15 that there is an average background noise of 45 decibels. She encouraged the Board to check out the
16 representative areas themselves with a noise meter because she has done this at almost every wind
17 farm hearing and it was found that in Grundy County the MET tower was placed next to a puppy mill
18 therefore at 2:30 a.m. it was possible to obtain an 85 decibel reading in the middle of the night. She
19 said that one of the other testing sites was near the Clinton Nuclear Power Plant with a huge lake
20 therefore she is informing the Board that there is always a reason why and how they can give you a
21 45 decibel background and the Board needs to know what it is before it subjects all of the people in
22 the area to it.

23
24 Mr. Thorsland asked the Board if there were any questions for Ms. Schertz and there none.

25
26 Mr. Thorsland asked if staff had any questions for Ms. Schertz and there were none.

27
28 Mr. Thorsland asked the audience if anyone desired to cross examine Ms. Schertz.

29
30 Mr. Thorsland called Mr. Herb Schildt.

31
32 Mr. Herb Schildt, who resides at 398 CR 2500N, Mahomet, Illinois, asked Ms. Schertz if she has
33 ever heard a damaged turbine or a turbine that is exhibiting unusual noise.

34
35 Ms. Schertz stated that she has not but she has read a lot of articles that indicate that the damaged
36 turbines omit a whistling sound. She said that she has heard testimony from a gentleman who is
37 located in a Dekalb County wind farm who indicated that when icing occurs the wind turbines
38 produce a screaming noise. She said that the turbines near her home have only been up since January
39 therefore she has not gotten the full noise when the crops are out. She said that currently there are 55
40 acres of corn blocking the wind turbine noise. She said that when construction began in January she
41 lost her television reception and the turbines have only been running for a few months. She said that

1 a few nights ago at 12:00 a.m. the turbines were all lined up and she began hearing the pulsating
2 noise which was sad because it was the first time all summer that they could actually open their
3 windows but were forced to shut them so that they could go to bed.

4
5 Mr. Schildt asked Ms. Schertz if she is speaking about the “whoosh” noise.

6
7 Ms. Schertz stated yes. She said that every morning she hears a very mechanical background noise
8 which sounds like a generator running two miles away and the kicker is that the nearest turbine is
9 three-quarter of a mile away therefore she cannot imagine what the landowners in project area are
10 going to go through when the crops come out.

11
12 Mr. Thorsland called Ms. Kim Cambron.

13
14 Ms. Kim Cambron, who resides at 2736E CR 3700N, Rankin, Illinois, asked Ms. Schertz to indicate
15 how many years she has been educating herself about wind farms.

16
17 Ms. Schertz stated that her first opposition to a wind farm was five years ago with Invenergy in
18 regards to the wind farm at Carlock. She said that she was part of the active team lawsuit that was
19 against them and they basically ran a group of 80 concerned citizens out of money and then we ran
20 them into the financial crisis therefore it has taken them four or five years to get the project built.

21
22 Ms. Cambron asked Ms. Schertz if she has ever testified as an expert.

23
24 Mr. Thorsland noted that Ms. Schertz did not testify as an expert.

25
26 Ms. Schertz stated that she has never testified as an expert but she has given a lot of agricultural
27 testimony because her husband is a crop duster and she was asked to testify. She said that the
28 information is available and people need to find it from non-wind energy sources and people who are
29 not trying to con you. She said that one of the articles that she submitted to the Board for review is
30 titled “*The Anatomy of a Sucker*” and if the Board gives Invenergy 11 waivers from zoning then the
31 Board can figure out how she believes the Board would fit into the equation.

32
33 Mr. Thorsland asked the audience if anyone else desired to cross examine Ms. Schertz and there was
34 no one.

35
36 Mr. Thorsland called Bill Ingram to testify.

37
38 Mr. Bill Ingram declined to testify at this time.

39
40 Mr. Thorsland asked the audience if anyone desired to sign the witness register to present testimony
41 regarding this case.

1
2 Mr. Thorsland called Mr. Matt Cavalenes to testify.

3
4 Mr. Cavalenes, who resides at Catlin, Illinois, asked the Board to clarify the setbacks in the Zoning
5 Ordinance in relation to Ms. Sims' concerns. He said that it was stated that the setback is 1,200 feet
6 from a non-participating dwelling but isn't there also a setback from the property line of a non-
7 participating dwelling.

8
9 Mr. Hall stated that within one-quarter mile of the street there is a requirement that certain areas
10 must be part of the special use permit and there are separations from property lines which are less
11 than 1,200 feet. He said that there are a lot of different separations and there are also requirements
12 for areas that must be part of the special use permit. He said that the question posed by Ms. Sims
13 was the 1,200 foot separation and that is specific to the dwelling and not the property line.

14
15 Mr. Cavalenes asked if as a non-participating dwelling wouldn't she also have setbacks from her
16 property line.

17
18 Mr. Hall stated yes, but the setbacks are nowhere near 1,200 feet and are never more than 750 feet.

19
20 Mr. Thorsland asked the Board if there were any questions for Mr. Cavalenes and there were none.

21
22 Mr. Thorsland asked if staff had any questions for Mr. Cavalenes and there were none.

23
24 Mr. Thorsland asked the audience if anyone desired to cross examine Mr. Cavalenes and there was
25 no one.

26
27 Mr. Thorsland asked the audience if anyone desired to sign the witness register to present testimony
28 regarding this case and there was no one.

29
30 Mr. Thorsland closed the witness register for tonight's meeting.

31
32 Mr. Thorsland asked the Board for staff direction. He said that Mr. Hall indicated that he will be
33 preparing a Draft Summary of Evidence for the Board's review.

34
35 **Ms. Capel moved, seconded by Mr. Schroeder to continue Case 696-S-11 to the September 8,**
36 **2011, meeting. The motion carried by voice vote.**

37
38 **6. New Public Hearings**
39 None

40
41 **7. Staff Report**

1 Mr. Hall stated that staff has reserved the Lyle Shields Meeting Room for October 6, 2011, for any
2 anticipated continuance of the wind farm.

3

4 **8. Other Business**

5 **A. Review of ZBA Docket**

6

7 Mr. Hall distributed a new ZBA Docket dated September 1, 2011, for the Board's review.

8

9 Mr. Thorsland asked the Board if there were any questions regarding the docket and there were none.

10

11 **9. Audience Participation with respect to matters other than cases pending before the**
12 **Board.**

13

14 Mr. Schildt asked if it was allowed for someone to ask a question regarding testimony that was given
15 at a previous hearing.

16

17 Mr. Thorsland stated that all testimony is part of the record therefore it would be allowed.

18

19

20 **10. Adjournment**

21

22 **Mr. Schroeder moved, seconded by Mr. Courson to adjourn the meeting. The meeting**
23 **adjourned at 9:50 p.m.**

24

25

26

27

28

29 Respectfully submitted

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34 Secretary of Zoning Board of Appeals

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1 **MINUTES OF REGULAR MEETING**
2 **CHAMPAIGN COUNTY ZONING BOARD OF APPEALS**
3 **1776 E. Washington Street**
4 **Urbana, IL 61801**

7 **DATE:** September 8, 2011 **PLACE:** Lyle Shields Meeting Room
8 1776 East Washington Street
9 **TIME:** 7:00 p.m. **Urbana, IL 61802**

11 **MEMBERS PRESENT:** Catherine Capel, Thomas Courson, Roger Miller, Melvin Schroeder,
12 Eric Thorsland, Paul Palmgren, Brad Passalacqua

14 **MEMBERS ABSENT :** None

16 **STAFF PRESENT :** Connie Berry, Lori Busboom, John Hall, Jamie Hitt

18 **OTHERS PRESENT :** Greg Leuchtman, Bill Ingram, Michael Blazer, Kim Cambron, Kim
19 Schertz, Darrell Cambron, Ruth Hunt, Deanne Sims, Jeff Blue, Nora
20 Maberry, Steve Burdin, Matt Cavalenes, Patti Cavalenes, Mary Mann,
21 Lloyd Wax, Judi O'Connor, Steve O'Connor, Greg Frerichs, Roy
22 Knight, Marvin Johnson, James Rusk, Debra Griest, Ray Griest,
23 Curtis Hunt, Jeff Suits, Sherry Schildt, Herb Schildt, Alan Nudo,
24 Patti Petri

27 **1. Call to Order**

28 The meeting was called to order at 7:00 p.m.

30 **2. Roll Call and Declaration of Quorum**

31 The roll was called and a quorum declared present with one member absent.

33 Mr. Thorsland informed the audience that anyone who desires to present testimony must sign the
34 witness register. He reminded the audience that when they sign the witness register they are signing
35 an oath.

37 **3. Correspondence**

38 None

40 **4. Approval of Minutes (August 25, 2011)**

41 Mr. Passalacqua stated that the minutes do not indicate that he was present nor absent from the
42 August 25, 2011, public hearing. He requested that the minutes indicate his presence at the meeting.

44 **Ms. Capel moved, seconded by Mr. Palmgren to approve the August 25, 2011, minutes as**
45 **amended. The motion carried by voice vote.**

47 Mr. Miller arrived at 7:03 p.m.

48
DRAFT

1 **5. Continued Public Hearing**

2

3 **Case 696-S-11 Petitioner: California Ridge Wind Energy LLC and the participating**

4 **landowners listed in the legal advertisement. California Ridge Wind Energy LLC is**

5 **wholly owned by Invenergy Wind North America LLC, One South Wacker Drive,**

6 **Suite 1900, Chicago, IL, with corporate officers as listed in the legal advertisement.**

7 **Request: Authorize a Wind Farm with consists of 30 Wind Farm Towers (wind**

8 **turbines) in total with a total nameplate capacity of 48 megawatts (MW) of which**

9 **28 Wind Farm Towers with a total nameplate capacity of 45 MW are proposed in**

10 **Compromise Township (Part A) and 2 Wind Farm Towers with a total nameplate**

11 **capacity of 3 MW are proposed in Ogden Township (Part B), and including access**

12 **roads, wiring, and public road improvements, and including the waivers of**

13 **standard conditions in Section 6.1.4 as listed in the legal advertisement. Location:**

14 **In Compromise Township the following sections are included with exceptions as**

15 **described in the legal advertisement: Sections 19, 20, 21, 28, 29, 30, 31, 32, and 33 of**

16 **T21N, R14W of the 2nd P.M.; and Section 24, 25, and 36 of T21N, R10E of the 3rd**

17 **P.M.; and Fractional Sections 30 and 31 of T21N, R11E of the 3rd P.M. In Ogden**

18 **Township the following sections are included with exceptions as described in the**

19 **legal advertisement: Fractional Section 6, T20N, R11E of the 3rd P.M.; and**

20 **Fractional Sections 4, 5, 6 and 7 of T20N, R14W of the 2nd P.M.; and Sections 8, 9,**

21 **and 16 of T20N, R14W of the 2nd P.M.**

22

23 Mr. Thorsland informed the audience that this is an Administrative Case and as such the County

24 allows anyone the opportunity to cross examine any witness. He said that at the proper time he will

25 ask for a show of hands for those who would like to cross examine and each person will be called

26 upon. He requested that anyone called to cross examine go to the cross examination microphone to

27 ask any questions. He said that those who desire to cross examine are not required to sign the

28 witness register but are required to clearly state their name before asking any questions. He noted

29 that no new testimony is to be given during the cross examination. He said that attorneys who have

30 complied with Article 6.5 of the ZBA By-Laws are exempt from cross examination.

31

32 Mr. Thorsland asked the Petitioner’s representative if he would like to make a statement outlining

33 the nature of the request prior to introducing evidence.

34

35 Mr. Greg Leuchtmann, Invenergy project representative, stated yes.

36

37 Mr. Leuchtmann stated that he would like to address the status of the pending agreements and some

38 of the waivers. He said that currently the reclamation agreement, which was submitted on August

39 30, 2011, is being reviewed by the State’s Attorney. He said that consideration is still ongoing as to

40 how the reclamation agreement is going to work in regards to decommissioning expenses and

41 salvage value. He said that the township road agreements are still being discussed with the highway

1 commissioners and their attorney and the County agreement will be sent to the State’s Attorney once
2 the agreement is completed with Jeff Blue, County Engineer. He said that the agreements are
3 moving forward and they hope to have them finalized by the September 29th meeting.
4

5 Mr. Thorsland asked Mr. Michael Blazer to address the Board with any further information regarding
6 the status of the case.
7

8 Mr. Michael Blazer, legal counsel for Invenergy, stated that last week he had informed the Board that
9 last Thursday they had received a new updated draft of the County Road Agreement. He said that
10 during a conference call with Greg Leuchtmann, Sheryl Kuzma, Jeff Blue and himself they
11 hammered out all of the details therefore completing the County road agreement. He said that the
12 latest updated draft was received today indicating all of the agreed revisions for review by the State’s
13 Attorney. He said that, if necessary, Ms. Kuzma has indicated that she will send a letter to the Board
14 recommending approval of the County road agreement. Mr. Blazer stated that the issue at hand is
15 that the *Champaign County Zoning Ordinance* requires that the road agreement be completed prior
16 to final determination by the Zoning Board of Appeals. He said that Mr. Blue cannot sign the
17 County road agreement without approval by the County Board and the earliest date that he can obtain
18 that approval is October 4th. Mr. Blazer stated that if the County Road Agreement is approved by the
19 State’s Attorney’s office the ZBA could find that approval adequate and move forward with the final
20 determination for the case. He said that the township road agreement for Pilot Township in
21 Vermilion County is in draft form and the provisions in that agreement would be similar to the road
22 agreement for Compromise and Ogden townships. He said that there are some issues that he and
23 Sheryl Kuzma are working through but there is a deadline and it is hopeful that the Pilot,
24 Compromise and Ogden Township’s Road Agreements will be completed by the September 29th
25 meeting.
26

27 Mr. Leuchtmann stated that he will now address the requested waivers. He said that Waiver #1
28 requests to waive the standard condition of 6.1.4 A.1.(e) that requires the special use permit area to
29 include a minimum of 40 feet wide area for electrical lines. He said that Invenergy will disclose the
30 locations after construction so that they can deal with any issues such as avoiding drainage tile or
31 other field conditions that they are unaware of at this time.
32

33 Mr. Leuchtmann said that Waiver #2 requests to waive the standard condition of 6.1.4 A.2.(b) that
34 requires a wind farm to be a minimum of one mile from the CR District to allow wind farm wiring to
35 be less than one mile from the CR District. He said that Waiver #2 will not be required because the
36 CR District will be avoided and no wiring will run through that area.
37

38 Mr. Leuchtmann said that Waiver #5 requests to waive the standard condition of 6.1.4.D.9 that
39 requires wind farm towers to be protected by non-climbing devices 12 feet vertically from the base.
40 He said that the towers are solid mono-pole towers with lockable doors at the bottom therefore the
41 ability to climb the tower is mitigated as opposed to a trellis type structure.

1

2 Mr. Leuchtmann said that Waiver #10 requests to waive the standard condition of 6.1.4 P.4.(b) that
3 requires the applicant to gradually pay down 100% of the value of the irrevocable letter of credit by
4 placing cash deposits in an escrow account over the first 13 years of the Wind Farm operation. He
5 said that they proposed to the State's Attorney an agreement that would equate to 25% of the
6 financial assurance in an escrow account which would be available in the first year and the remaining
7 financial assurance would be adjusted on a five year basis to cover any kind of adjustments in
8 inflation for decommissioning expenses or salvage value throughout the life of the project.

9

10 Mr. Leuchtmann stated that Invenergy feels that Waiver #10 is in line with the purpose and intent of
11 the Ordinance because they are still providing adequate security for decommissioning the project in
12 the form of 210% of the decommissioning expenses they are willing to put that amount up as
13 financial assurance to the County and in addition the salvage value is taken into account but
14 reviewed on a consistent basis so that engineers can adjust the value based on the fluctuation of scrap
15 steel prices. He said that the special conditions and circumstances that exist with the project is
16 related to the fact that the wind farm is the first potential wind farm in Champaign County. He said
17 that the County has not done a special use permit or decommissioning agreement and the true
18 securitization of the project is Invenergy's Power Purchase Agreement with the utility company. He
19 said that this is an industrial project in an agricultural area which is not typical therefore Invenergy is
20 attempting to find a good mix for approval of the special use. He said that it is a financial hardship
21 to have the required amount of money in a cash account or Letter of Credit if the salvage value is not
22 being recognized. He said that when other demolition projects are reviewed the salvage value is
23 always taken into account because if it isn't the County will have to pay for the salvaging. He said
24 Invenergy is trying to achieve a reclamation agreement which balances how they are protecting the
25 County as well as California Ridge from being at a disadvantaged position in not moving forward
26 because of too many requirements.

27

28 Mr. Blazer stated he has been authorized to advise the Board that Invenergy has entered into a Power
29 Purchase Agreement although he is not at liberty to disclose all of the terms of the agreement
30 because there are some ancillary issues that still need to be worked out but the agreement itself has
31 been executed. He said that in regards to the periodic review of salvage value, the Draft
32 Decommissioning Agreement is to be reviewed every five years but Mr. Hall suggested a more
33 frequent period would be acceptable. Mr. Blazer stated that Invenergy is willing to review the
34 salvage value every three years although there are more costs each time the review is completed but
35 one of the nice things about doing it every three years rather than five would be that Invenergy could
36 tie a term of a Letter of Credit to the periodic review time frame. He said that if it is a three year
37 review period Invenergy could do a Letter of Credit which would automatically renew over a three
38 year period and the Letter of Credit would only change when, upon review, the amount changes. He
39 said that the County would always have more than adequate security on a rolling basis and would
40 know where the County stands in terms of what the value of the security is in relation to what the
41 actual costs may be for decommissioning.

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Mr. Blazer stated that Waiver #3 requests to waive the standard conditions of 6.1.4 C.3 and 6.1.4 C. 8 that require the application to include copies of all private waivers of wind farm separations. He said that they are requesting this waiver on behalf of the participants because all of their easement agreements already have waivers in them. He said that the easement agreements are private agreements and are not recorded at the Recorder's Office. He said that all of the easement agreements are identical in terms of the boiler plate language. He read Section 8.4 of the easement agreement reads as follows: Owner shall assist and fully cooperate with grantee, at no out-of-pocket expense to the owner, in complying with or obtaining any land use permits and approvals, building permits, environmental impact reviews or any other approvals (collectively the "Approvals") required for the financing, construction, installation, monitoring, replacement, relocation, maintenance, operation or removal of wind power facilities, including execution, if necessary, of applications for such approvals, and including participating in any appeals or regulatory proceedings respecting the wind power facilities. Owner hereby appoints Grantee as its agent for the purpose of preparing, executing, applying for, submitting and prosecuting, in Owner's name, any and all such approvals on behalf of the owner, provided, however, that all costs incurred in connections with such approvals shall be borne solely on Grantee to the extent permitted by law. Owner hereby waives enforcement of any applicable setback requirements respecting the wind power facilities to be placed on the property or any such facilities to be placed upon property adjacent to the owner's property.

Mr. Blazer stated that Waiver #4 requests to waive the standard condition of 6.1.4 D. 1(a) that requires certificates of design compliance from Underwriters Laboratories ("UL") or an equivalent third party. He said that it was suggested in Vermilion County that a condition of the special use permit be that commencement of commercial operations cannot occur until the certification is provided. He said that this would not give rise to any public safety risk, since the wind farm could not commence commercial operations until the condition was met. He said that Invenergy expects the design certification to be completed and produced by the end of the year.

Mr. Blazer stated that Waiver #6 requests to waive the standard condition of 6.1.4 F. 1 that requires a signed Roadway Upgrade and Maintenance Agreement prior to the close of the public hearing before the Zoning Board of Appeals. He said that Waiver #6 has already been addressed by Mr. Leuchtman. Mr. Blazer suggested that upon confirmation from Jeff Blue, County Engineer, indicating that he agrees with agreement and will recommend it to the County Board along with a similar statement from the State's Attorney and if necessary from outside counsel this, could be considered adequate for the ZBA to proceed forward.

Mr. Blazer stated that Waiver #7 requests to waive the standard condition of 6.1.4 F.1.u. which requires that street upgrades be in accordance with IDOT Bureau of Local Roads manual, 2005 edition. He said that the BLR manual imposes a lot of requirements that do not apply to the project. Mr. Blazer stated that, per Jeff Blue's recommendation, Invenergy has incorporated the appropriate BLR requirements into the road agreement itself in addressing repairs and road upgrades as

1 necessary. He said that this is an additional justification for waiving the requirement in the
2 Ordinance because it has now been made a special provision in the road agreement.

3
4 Mr. Blazer stated that Waiver #8 requests to waive the standard condition 6.1.4 I.1. that requires the
5 noise level of each wind farm tower and that the wind farm is to be in compliance with the Illinois
6 Pollution Control Board regulations at the residential property line rather than to be in compliance
7 just at the dwelling. He said that he provided a memorandum dated August 26, 2011, to John Hall
8 for distribution at the September 1, 2011, public hearing for Board review regarding the point of
9 measurement for IPCB Noise Regulations. He said that the Ordinance requires compliance with the
10 IPCB noise regulations and those regulations require the measurement to be at the residence and not
11 at the property line.

12
13 Mr. Blazer stated that Waiver #11 requests to waive the standard condition for 6.1.4 S. 1.(c)(3) that
14 requires that locations of wind turbines for the zoning use permit application cannot increase the
15 noise impact over that approved in the special use permit. He said that they are concerned that the
16 way the Ordinance is written it could be interpreted to require that Invenergy comply with the noise
17 modeling that Mr. Casey presented during his testimony which is below the regulations. Mr. Blazer
18 stated that the highest noise level that was recorded was 45 decibels in an area where during the
19 daytime the IPCB would allow 51 decibels and at night-time allow 61 decibels. He said that the
20 regulations are 51 decibels and 61 decibels and not 45 decibels therefore the waiver is being
21 requested that the requirement is consistent with the Ordinance in that they are to comply with the
22 IPCB regulations and not the lower limit that they say they will achieve at that area.

23
24 Mr. Blazer stated that Waiver #9 requests to waive the standard condition of 6.1.4 J. that requires
25 the application to contain a copy of the Agency Action Report from the Illinois Department of
26 Natural Resources Endangered Species Program. He said that the Ordinance requires the submission
27 of a Consultation Agency Action Report from the Illinois Department of Natural Resources
28 Endangered Species Program. He said that the form is an official form that IDNR generates although
29 Invenergy did not use the form and completed the consultation process by correspondence which the
30 IDNR accepted. He said that IDNR issued their consultation report on December 4, 2009, and
31 updated it on August 18, 2011. He said that Invenergy is simply requesting the waiver because they
32 did not use the specific form, as indicated in the Ordinance, and IDNR did not require that they use
33 the form.

34
35 Mr. Thorsland asked the Board if there were any questions for Mr. Leuchtmann and there were none.

36
37 Mr. Thorsland asked if staff had any questions for Mr. Leuchtmann and there were none.

38
39 Mr. Thorsland asked the audience if anyone desired to cross examine Mr. Leuchtmann.

40
41 Mr. Matt Cavalenes, who resides at Catlin, Illinois, referred his questions to the Invenergy California

1 Ridge Energy Project, Champaign County Special Use Permit Application, dated June, 2011. He
2 asked Mr. Leuchtmann if the information on page 1-2, Table 1-1, Invenergy’s Completed Wind
3 Projects and Projects under Construction, which indicates 28 projects of which five are listed as
4 being sold is accurate.

5
6 Mr. Leuchtmann stated that he cannot verify the information in Table 1-1.

7
8 Mr. Cavalenes asked if it is typical for Invenergy to obtain approval for a wind project, construct the
9 project and then sell it.

10
11 Mr. Leuchtmann stated that typically Invenergy owns, develops and operates the wind projects.

12
13 Mr. Cavalenes stated that page 4-2, Section 4.1.1, Description of Wind Turbines, Foundation Design
14 indicates that geotechnical survey and turbine tower load specifications will dictate final design
15 parameters of the foundations. He asked if soil borings will be taken at each foundation location.

16
17 Mr. Leuchtmann stated yes.

18
19 Mr. Cavalenes asked if the foundations will be prepared by an Illinois Licensed Professional
20 Engineer or Structural Engineer.

21
22 Mr. Leuchtmann stated yes.

23
24 Mr. Cavalenes asked if Champaign County has qualified staff to review the designs and oversee that
25 the design specifications are adhered to.

26
27 Mr. Leuchtmann stated that he cannot answer Mr. Cavalenes questions regarding Champaign County
28 staffing.

29
30 Mr. Thorsland noted that Champaign County staffing was not part of Mr. Leuchtmann’s testimony.

31
32 Mr. Cavalenes stated that page 4-10, Section 4.3.6, Decommissioning and Restoration, the second
33 sentence of the third paragraph states that based on estimated costs of decommissioning and the
34 salvage value of decommissioned equipment, which is the estimate use by a structural engineer, the
35 salvage value of the wind farm will be less than the cost of decommissioning. He said that the last
36 two sentences of the same paragraph states that the salvage or resale value of each turbine is
37 estimated to be \$180,785 dollars. This does offset the anticipated decommissioning costs. He asked
38 Mr. Leuchtmann to indicate which statement is correct.

39
40 Mr. Leuchtmann stated that the second statement is correct. He said that Jim Booty, independent
41 engineer, prepared the decommissioning report but submitted a revised document to Champaign

1 County and that the first report contained a typo.

2

3 Mr. Cavalenes stated that page 3 of Appendix B: California Ridge Wind Energy Project
4 Decommissioning Report, regarding Access Road Decommissioning and Public Street Repair, states
5 that access road decommissioning will involve the removal and transportation of the aggregate
6 materials from the site to a nearby site where the aggregate can be processed for salvage. Mr.
7 Cavalenes asked if the removal and transportation of the aggregate materials from the site to a nearby
8 site was included in the decommissioning cost.

9

10 Mr. Leuchtmann stated that the removal and transportation of the aggregate materials was not taken
11 into account in the decommissioning plan but is something that the demolition contractor will
12 attempt to do.

13

14 Mr. Cavalenes stated that the last paragraph on page 6 of Appendix B: California Ridge Wind
15 Energy Project Decommissioning Report, regarding Summary of Decommission Costs, states that
16 the estimated total costs of the project can be completely recovered by the salvage and resale value of
17 the turbine components. He said that the second paragraph on page 6, Financial Assurance, states
18 that for Champaign County, financial assurances shall be 210% of an independent professional
19 engineer's cost estimate to complete the decommissioning, or less, if specifically authorized by the
20 County Board. Mr. Cavalenes noted that 210% of zero is zero.

21

22 Mr. Leuchtmann stated that Mr. Cavalenes is correct. He said that they are working to obtain what
23 the County requires for financial assurance and they are taking into account other items such as road
24 improvements, which the report does not indicate but will be included in the reclamation agreement.

25

26 Mr. Cavalenes asked Mr. Leuchtmann to indicate the actual amount of the financial assurance for
27 Champaign County.

28

29 Mr. Leuchtmann stated that the actual amount is still being determined.

30

31 Mr. Cavalenes asked Mr. Leuchtmann to indicate the actual amount of the Letter of Credit.

32

33 Mr. Leuchtmann stated that the actual amount of the Letter of Credit is also to be determined. He
34 said that at this point he does not know the amount.

35

36 Mr. Cavalenes stated Section 1.A 1. of the Reclamation Agreement received on August 30, 2011,
37 indicates that salvage value means recoverable costs from the product including steel, concrete and
38 other base metals but shall not include the value of any reclaimed roadway material. He asked Mr.
39 Leuchtmann to indicate the salvage value of concrete.

40

41 Mr. Leuchtmann stated that if the concrete can be demolished properly it can have a lot of value but

1 it is not being recognized in the financial assurance.

2
3 Mr. Cavalenes stated that Appendix B indicates that the concrete will be included in the salvage
4 value.

5
6 Mr. Leuchtmann stated that the concrete is not recognized as a salvage review in the
7 decommissioning plan. He said that the only materials that are recognized in the decommissioning
8 plan are the steel, copper and the transformer.

9
10 Mr. Cavalenes stated that there is a positive salvage value per turbine of approximately \$16,000
11 dollars. He said that Section 1.A.3 of the Reclamation Agreement indicates that financial assurance
12 will be calculated by multiplying the decommissioning expense by 210%. He said that 210% of zero
13 is still zero.

14
15 Mr. Leuchtmann stated that the decommissioning plan that was provided by HDR was to give base
16 information related to decommissioning expenses to take down the turbines and take out foundations
17 and other items as well as recognize what salvage value of scrap steel is at this time. He said that the
18 roadway improvements are not included in the decommissioning plan because Mr. Booty does not
19 have a good estimate of what that value is but once we get to a reclamation agreement a solid
20 number will be inserted as to the financial assurance and once the State's Attorney reviews it the
21 Letter of Credit will be determined for this year.

22
23 Mr. Cavalenes asked when the taxpayers will see those numbers.

24
25 Mr. Thorsland noted that only a proposed reclamation agreement has been submitted.

26
27 Mr. Thorsland asked the audience if anyone else desired to cross examine Mr. Leuchtmann.

28
29 Ms. Kim Schertz, who resides at Hudson, Illinois, asked Mr. Leuchtmann if he testified at the last
30 hearing that Invenenergy did not intend to purchase any right-of-way access along the side of the roads.

31
32 Mr. Leuchtmann stated that he did not testify to that.

33
34 Ms. Schertz asked if the road agreement includes purchase of access roads for the 60 foot right-of-
35 way so that they can make the corners.

36
37 Mr. Leuchtmann stated that the township road agreements are still under discussion.

38
39 Ms. Schertz asked Mr. Leuchtmann asked if this was a concern.

40
41 Mr. Leuchtmann stated that he cannot answer Ms. Schertz's question.

1

2 Mr. Blazer stated that he received a request from Sheryl Kuzma that they not publically discuss the
3 ongoing negotiations regarding the township road agreements and they will respect her request.

4

5 Mr. Thorsland noted that the Board does not have the road agreements to review therefore Mr.
6 Leuchtmann is doing his best to answer Ms. Schertz's questions.

7

8 Mr. Thorsland asked the audience if anyone else desired to cross examine Mr. Leuchtmann.

9

10 Ms. Deanne Sims, who resides at 2765 CR 2500N, Penfield, Illinois, stated that at the last hearing
11 she specifically asked if there were any guidelines regarding the decommissioning plan and she was
12 told that the guidelines were in the application.

13

14 Mr. Leuchtmann stated that the guidelines are not in the application but are indicated in the
15 *Champaign County Zoning Ordinance*.

16

17 Ms. Sims stated that Mr. Blazer indicated that they are requesting to change the time table for the
18 road agreement approval and suggested a change in the Ordinance. She asked if Invenergy is
19 requesting that Champaign County actually amend the Ordinance to accommodate Invenergy's
20 request.

21

22 Mr. Leuchtmann stated that Mr. Blazer was basically stating that the Ordinance was ambiguous and
23 was not suggesting that the Ordinance be revised to accommodate Invenergy's request.

24

25 Mr. Thorsland asked if anyone else desired to cross examine Mr. Leuchtmann and there was no one.

26

27 Mr. Thorsland called John Hall.

28

29 Mr. John Hall, Zoning Administrator, distributed a new Supplemental Memorandum dated
30 September 8, 2011, for the Board's review. He said that attached to the memorandum are the
31 minutes from the September 1, 2011, meeting which will be on the September 29, 2011, agenda for
32 approval and an e-mail from Mary L. Mann. He said that Mary L. Mann is a non-participating
33 landowner who resides at 2778 CR 2550N, Penfield, Illinois, and has strong concerns regarding two
34 turbines which appear to be very near to her property. He said that the Champaign County Non-
35 Participating Dwelling Separation Summary Map that was received on July 29, 2011, indicates that
36 the Mann residence is so far from the proposed turbines that a dimension was not indicated. He said
37 that the Ordinance is mainly interested in homes which are within 1,500 feet of turbines and it
38 appears that the Mann residence is more than 1,500 feet from the nearest turbines. He said that he let
39 Mr. Leuchtmann know about Ms. Mann's concerns and Mr. Leuchtmann is working on a map that
40 will show those plan dimensions. Mr. Hall stated that as far as he can tell the separation distance is
41 the only technical, substantive concern that Ms. Mann mentions in her e-mail. He said that he spoke

1 to Ms. Mann today in the office but did not gain any further insight into her concerns and he made
2 her aware of the tonight's meeting and the meeting on September 29th.

3
4 Mr. Thorsland asked the Board if there were any questions for Mr. Hall and there were none.

5
6 Mr. Thorsland called Mr. Jeff Blue.

7
8 Mr. Jeff Blue, County Engineer, confirmed what Mr. Leuchtmann and Mr. Blazer have indicated
9 regarding the County Road Use Agreement. He said that the agreement is 99% complete and all of
10 the details have been hammered out. He said that the agreement has to be submitted to the State's
11 Attorney for approval. Mr. Blue stated that he does not have the authority to sign the agreement. He
12 said that the agreement has to be signed by the County Board Chair and before the County Board
13 Chair can do such there has to be a resolution that is passed by the County Board giving the County
14 Board Chair the authority to sign the agreement. He noted that he is the party that negotiated the
15 road agreement with Invenergy for the California Ridge Wind Farm Project but he does not have the
16 authority to sign the agreement on behalf of the County. He said that the agreement will need to go
17 to the County Board Committee of the Whole meeting during the first week of October and then to
18 the full County Board on October 20th for approval.

19
20 Mr. Thorsland asked the Board if there were any questions for Mr. Blue.

21
22 Mr. Courson asked Mr. Blue if there were copies of the draft road agreement for the ZBA to review.

23
24 Mr. Blue stated that Ms. Kuzma has advised that the road agreement should be reviewed by the
25 State's Attorney before it is viewed by the public. He said that once the State's Attorney has
26 approved the agreement it could be forwarded to John Hall for distribution.

27
28 Mr. Miller asked Mr. Blue if all of the road concerns from the township road commissioners have
29 been addressed.

30
31 Mr. Blue stated that he is only discussing the County Road Use Agreement which will only deal with
32 county highways and there will be a separate agreement with Invenergy and the township road
33 commissioners. He said that the township road agreements will not go before the County Board
34 because it is the township road commissioner's job to work through the agreement with Invenergy
35 and the road commissioner will sign-off on those agreements. He said that there will be three road
36 agreements because there will be a road agreement for each township, Ogden and Compromise and
37 the County agreement. He noted that there are only two miles of County highway which will be
38 impacted by the project.

39
40 Mr. Thorsland asked the Board if there were any additional questions for Mr. Blue and there were
41 none.

1

2 Mr. Thorsland asked if staff if there were any questions for Mr. Blue.

3

4 Mr. Hall asked Mr. Blue if the agreement that will be forwarded to the County Board is an agreement
5 that he would have signed on his own if he had the authority.

6

7 Mr. Blue stated yes. He said that he will recommend approval of the County Road Use Agreement.

8

9 Mr. Hall stated that as soon as the agreement is reviewed by the State's Attorney and Mr. Blue is
10 confident in releasing the agreement staff will obtain a copy and distribute it to the Board for review.

11

12 Mr. Thorsland asked the audience if there were any questions for Mr. Blue.

13

14 Mr. Thorsland reminded the audience that only questions regarding Mr. Blue's testimony are allowed
15 during cross examination.

16

17 Mr. Darrell Cambron asked if the public will have a chance to review the road use agreement prior to
18 County Board approval.

19

20 Mr. Thorsland informed the audience that the road use agreement will be placed on the County
21 website and will also be included as part of the mailing packet for public review.

22

23 Mr. Thorsland reminded the audience that anyone who desires to present testimony must sign the
24 witness register. He reminded the audience that when they sign the witness register they are signing
25 an oath.

26

27 Mr. Thorsland called Ruth Hunt to testify.

28

29 Ms. Ruth Hunt declined to testify at this time.

30

31 Mr. Thorsland called Darrell Cambron to testify.

32

33 Mr. Darrell Cambron, who resides at 2730E CR 3700N, Rankin, Illinois, stated that he has reviewed
34 the requested waivers and he believes that the Board has completed a lot of work on the Ordinance in
35 developing regulations that are to be followed therefore no waivers should be granted and Invenergy
36 should be required to follow all of the rules as they are written. He said that the Board should take
37 it's time because there is no need to hurry with the review of this project. He distributed several
38 documents for the Board's review. He said that one of the documents is a verified complaint to the
39 Public Service Commission of Wisconsin from Jason and Ann Wirtz versus Invenergy, LLC. He
40 said that a waiver has been requested in Champaign County for the design certification and
41 Vermilion County has authorized Invenergy to proceed up to the point of starting construction. He

1 said that the design certification is an important safety factor and he urged the Board to not grant any
2 waivers regarding the design certification.
3
4 Mr. Thorsland asked the Board if there were any questions for Mr. Cambron and there were none.
5
6 Mr. Thorsland asked if staff had any questions for Mr. Cambron and there were none.
7
8 Mr. Thorsland asked the audience if anyone desired to cross examine Mr. Cambron.
9
10 Ms. Kim Schertz asked Mr. Cambron if he is aware of any turbines in Illinois which are similar to
11 the proposed turbines for the wind project.
12
13 Mr. Thorsland stated that Mr. Cambron did not testify that he was an expert in design certification
14 and only requested that no waivers be approved.
15
16 Ms. Schertz asked Mr. Cambron to indicate why no waivers should be approved.
17
18 Mr. Cambron stated that it appears to be a significant part of safety assurance in the Ordinance
19 therefore he does not understand why the Board would consider waiving such an important part of
20 the Ordinance.
21
22 Mr. Thorsland asked the audience if anyone else desired to cross examine Mr. Cambron and there
23 was no one.
24
25 Mr. Thorsland called Deanne Sims to testify.
26
27 Ms. Deanne Sims, who resides at 2765 CR 2500N, Penfield, Illinois, stated that page 4-8 of the
28 Invenergy Special Use Permit Application, Section 4.2.4, Complaint Hotline indicates the following:
29 Prior to beginning construction, California Ridge will establish a telephone number hotline for the
30 general public to call with any questions, comments, or complaints. The hotline will be available
31 throughout the entire term of the County Board Special Use Permit and extension. The telephone
32 number will be publicized and posted at the O&M facility. The hotline will be manned during usual
33 business hours. All complaints will be logged with the caller's name, address, and reason for calling.
34 All calls will be recorded and those recordings will be kept for a minimum of two years. California
35 Ridge will take all necessary measures to resolve all legitimate complaints. A copy of the telephone
36 number hotline shall be provided to the Zoning Administrator on a monthly basis.
37
38 Ms. Sims stated that it is her understanding that the only O&M facility is located somewhere in
39 Vermilion County. She asked who will decide which complaints are legitimate and which are not.
40 She said that she believes that a legitimate complaint would be if her telephone is not working for
41 two or three days and it should not be a month or two later before the Board hears about it for action.

1

2 Ms. Sims stated that on page 4-9, Section 4.3.3, Construction Activities, indicates the following:
3 California Ridge shall maintain a current general liability policy covering bodily injury and property
4 damage with limits of at least \$5 million per occurrence and \$5 million in the aggregate. The same
5 shall apply to all contractors and subcontractors during the construction process. The general liability
6 policy shall identify landowners in the Special Use Permit as additional insured. Proof of such
7 insurance shall be kept current and on file at the County Board office.

8

9 Ms. Sims stated that she called her State Farm agent today and asked them what kind of coverage she
10 would have if the access road was placed along the side of her yard. She asked her agent who would
11 be responsible if her basement wall cracked due to the construction equipment moving back and
12 forth along the road and she was informed that her homeowner's policy under State Farm would not
13 be responsible. She said that State Farm indicated that whoever the developer is for the project
14 would be responsible for repair of any damage. She said that careful review of the general liability
15 policy should be completed by the County so that it includes homeowner's who may have damage
16 due to the construction process. She said that her agent advised her to videotape her basement walls
17 as they are currently and any construction that is occurring near her home and if any damage occurs
18 she should videotape that damage as well.

19

20 Ms. Sims submitted photographs as Documents of Record for the Board's review. She said that
21 Photo #1, indicates the location of the sound device which is near the intersection of CR 2500N and
22 2600E. She said that the photograph indicates row crop fields but there are photographs in the
23 application which indicate how the fields appeared when the noise study was completed. She said
24 that Photo #2 indicates the road sign for CR 2650E and the roof top of a blue building which is a soil
25 testing facility and the railroad crossing. She said that CR 2700E, which is designated over and over
26 again in the application, is actually CH 22. She said that Photo #3 indicates the site located at
27 intersection of 2200N and CH 22 and the white building in the photograph is occupied by Osterbur
28 Trucking. She said that when the noise study was conducted in May there would have been a lot of
29 noise generated from the Osterbur Trucking site and CH 22. She said that Photo #4 was taken from
30 the same location as Photo #3 although it indicates the scenery to the east of the intersection. She
31 said that Photo #5 was taken from the same location as Photos #3 & 4 although it indicates the
32 scenery to the west of the intersection. She noted that next to the railroad tracks there is a large
33 metal bridge which covers a big ditch and she is sure that there would have been water in the ditch
34 during the month of May. She noted that the report did not indicate the weather conditions during
35 the study.

36

37 Ms. Sims stated that page 5-1, Section 5.2.1, Description of Resources, indicates that daytime
38 background noise levels were dominated by vehicular traffic and natural sources. She said that the
39 previous sentence may be true but freight running back and forth on the railroad tracks cannot be
40 ignored. She said that Section 5.2.1, also states that nighttime background noise levels were
41 generally dominated by natural resources. She said that the report later indicates that nighttime

1 noises may have been higher because of the noise which is generated by the actual machine itself.
2 She said that page 5-3, Section 5.2.3, Operation Noise, states that nighttime analysis results indicate
3 that noise from 134 wind turbines are at least 1 dB below the maximum allowable noise limit in all
4 octave bands at all noise-sensitive receivers within one mile of the project area. She said that she
5 would suppose that the statement in Section 5.2.3 would be okay if there were only one wind turbine
6 near her home but there are more than that and it was previously indicated that for every 3dB is a
7 doubling therefore having more than just one would be a doubling of the noise.

8
9 Ms. Sims stated that page 5-22, Section 5.9.5, Impacts, discusses the avian study completed by
10 WEST in the project area. She said that on two different occasions she noticed a man standing in the
11 middle of the road which is not unusual since this project began in 2009 because she has had many
12 people take pictures of her home, yard, her neighbor's house, etc. She said that finally she went out
13 and asked the man what he was doing and he indicated that he was counting birds along Ms. Mary
14 Mann's fence. She said that she thought that the man's process was odd because if you wanted to
15 know how many birds were in an area you wouldn't stand in front of an open field with an electric
16 fence behind you. She said that Photograph III, included in Appendix E, is a photo of Mary Mann's
17 house and one of her llamas and Photograph II is the field in front of Ms. Mann's home which is also
18 a proposed location of one of the turbines.

19
20 Ms. Sims stated that Photos #6 & 7, submitted as a Document of Record, indicates a tree line near
21 her property which goes pretty far through the field and from what she can tell the location of the tree
22 line is the location of the proposed access road for Turbine #28. She said that she is not sure but
23 perhaps no bird study was taken at this location because the trees will be removed for the 40 foot
24 access road. She said that Photo #8 indicates the scenery from her back yard and this is the location
25 of one of the proposed wind turbines. She said that Photo #9 indicates the scenery to the east of her
26 home which appears to be the proposed location of the access road for Turbine #29. She asked if
27 since her neighbor has signed a waiver for separation if her property rights are also waived. She said
28 that Photo#10 indicates the MET tower which is where the bat survey was completed. Ms. Sims
29 asked why the bat study wasn't completed near a tree line or fence row rather than in an open field
30 near a MET tower when the report indicates that the bat's habitat is in trees.

31
32 Ms. Sims stated that page 9 of Appendix C, Section 7.0: Construction Noise, states that construction
33 would primarily occur over the course of a daytime shift during normal working hours, although it is
34 possible that extensions of the basic workday, or moderate amounts of evening or weekend work
35 would occur. However, increases in ambient sound associated with construction activities would
36 typically take place only during weekday daytime hours from 7 a.m. to 10 p.m., so there would be
37 little if any construction noise at night. The average individual is likely to tolerate sound associated
38 with construction, given its temporary nature and the fact that the majority of the construction will
39 take place during daytime hours, (i.e., when acceptance of noise is higher and the risk of sleep
40 disturbance and interference with relaxation activities is low). While construction sound emissions
41 will be discernable at some locations they are not expected to increase ambient noise levels

1 significantly for any appreciable period of time.

2

3 Ms. Sims stated that according to the previously read text the typical daytime hours are 7 a.m. to 10
4 p.m. but her husband works 3rd shift and he arrives home at 7:30 a.m. and sleeps during the day. She
5 said that she knows of two other gentlemen who are also employed by the same place and are on the
6 same work shift. She said that this is the main reason that the hotline is important in regards to noise
7 complaints.

8

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

10

11 Mr. Thorsland asked if staff had any questions for Ms. Sims.

12

13 Mr. Hall asked Ms. Sims if it is her understanding that the noise results only take into account one
14 turbine.

15

16 Ms. Sims stated yes.

17

18 Mr. Hall stated that was not his understanding.

19

20 Ms. Sims asked if it is Mr. Hall's understanding that the total of 134 turbines would be 1dB under
21 the maximum.

22

23 Mr. Hall stated that his understanding is that they analyzed all 134 turbines, which is many more than
24 what is proposed in Champaign County, and the results are that they did not find any exceedances
25 but depending on where a home is located the property could be hearing the noise from one, two,
26 three or four turbines.

27

28 Ms. Sims stated that even if there were four turbines near her home they would still be under the
29 sound noise.

30

31 Ms. Hall stated that the analysis indicates that they would still be under but he is not a sound
32 professional therefore he cannot evaluate the analysis. He said that the large table in the noise
33 appendix does not indicate any area that exceeds the State standards.

34

35 Ms. Sims stated that she has been advised to purchase her own noise meter. She requested that the
36 County have some sort of administrator to oversee the project so that nothing is missed such as
37 location of the turbines, access roads, etc.

38

39 Mr. Hal stated that the County does not have the staff to meet Ms. Sims' request.

40

41 Mr. Thorsland informed Ms. Sims that the Zoning Board of Appeals requested that the County Board

1 approve funds for a sound engineer to analyze the sound and the County Board denied the request.
2
3 Mr. Thorsland asked the audience if anyone desired to cross examine Ms. Sims. He reminded the
4 audience to state their name and address for the record and limit questions to only what Ms. Sims
5 testified to.
6
7 Ms. Ruth Hunt asked Ms. Sims to indicate what the noise level was that Invenergy came up with.
8
9 Ms. Sims stated that there are pages and pages of charts and numbers in the application regarding
10 noise.
11
12 Ms. Hunt asked if there was number which Invenergy has to adhere to for noise levels.
13
14 Ms. Sims stated that the noise level is one of the listed waivers.
15
16 Ms. Hunt stated that in Oregon.
17
18 Mr. Thorsland interrupted Ms. Hunt to remind her that Ms. Sims' testimony did not include any
19 numbers regarding sound and discussing Oregon would be introducing new evidence.
20
21 Ms. Hunt stated that she would assume that Invenergy would be required to stay compliant within a
22 certain number. She asked if it will be assumed that the guideline will be 51 and 61.
23
24 Mr. Thorsland stated that California Ridge Special Use Permit Application is on the County website
25 for public viewing. He said that the sound analysis and receptor data can be reviewed.
26
27 Ms. Hunt asked if there was no one to enforce the noise.
28
29 Mr. Thorsland stated that the County Board denied the ZBA's request to hire a noise consultant.
30
31 Mr. Thorsland informed Ms. Hunt that if she would like to present new testimony she should sign the
32 witness register and she will be called upon but Ms. Sims is not a sound expert and she did not
33 testify as such.
34
35 Mr. Thorsland asked the audience if anyone else desired to cross examine Ms. Sims. He reminded
36 the audience to state their name and address for the record and limit questions to only what Ms. Sims
37 testified to.
38
39 Ms. Kim Schertz stated that Ms. Sims submitted several photographs which included the railroad
40 track. She asked Ms. Sims how close is her house from the railroad tracks.
41

1 Ms. Sims stated that the railroad tracks are one-half mile from her home.

2

3 Ms. Schertz asked Ms. Sims how close is her house from the trucking facility.

4

5 Ms. Sims stated that Osterbur Trucking is one-half mile from her home.

6

7 Ms. Schertz asked Ms. Sims how close is her house from the bridge.

8

9 Ms. Sims stated that the bridge is also one-half mile from her home.

10

11 Ms. Schertz asked Ms. Sims if the one location which indicates all the extremely high commercial
12 noises is representative of the noise that is heard at her property.

13

14 Ms. Sims stated no.

15

16 Ms. Schertz asked Ms. Sims if she feels that the noise violations at her house will exceed 1dB once
17 the turbines are constructed.

18

19 Ms. Sims stated yes.

20

21 Ms. Schertz asked Ms. Sims if she agrees with Mr. Casey's assessment that the noise study site is
22 representative of the area.

23

24 Ms. Sims stated no.

25

26 Mr. Thorsland asked the audience if anyone else desired to cross examine Ms. Sims and there was no
27 one

28

29 Mr. Thorsland stated that Board will take a five minute break.

30

31 **The Board recessed at 8:15 p.m.**

32 **The Board resumed at 8:22 p.m.**

33

34 Mr. Thorsland called Mr. Bill Ingram to testify.

35

36 Mr. Bill Ingram, who resides 107 Carrigan Court, Catlin, Illinois, stated that there are two ways to
37 obtain information either by facts or emotion and too many times the information received is based
38 on emotion. He said that a recent Freedom of Information request in the northern part of Illinois,
39 regarding windmills, indicated that after much research each green wind job that has been generated
40 in the State of Illinois was at a cost of \$8 million dollars. He said that the \$8 million dollars are our
41 tax dollars and those dollars are in short supply in the State of Illinois. He said that this whole

1 project which stretches across the State is about money because money drives everything. He said
2 that money drives things up and it drives things down. He said that the history of the windmill
3 industry is bad and when subsidies are gone so is the windmill company. He said that P.T. Barnham
4 summed it up pretty well years ago and everyone should remember his quote.

5
6 Mr. Ingram stated that this project is like smoke and mirrors with the magician keeping your
7 attention by waiving a little bit of money while he has his hand, up to his elbow, in your pocket.

8
9 Mr. Ingram stated that the subsidies for a green energy project like this are huge. He said that there
10 is a bunch of legislation favoring the windmill industry and the legislation is passed while everyone
11 else is asleep. He said that the wind companies come to an area and they wave their money
12 indicating that the landowner can obtain that money if they sign a contract that probably should have
13 been reviewed closer. He said that once the landowner signs the contract they are in the bag for as
14 much as 50 years with very few rights and many of the questions are very vague and nebulous.

15
16 Mr. Ingram stated the wind companies obtain the legislation then they convince the landowners to
17 sign up and those landowners appear before the County Board indicating that they are keeping the
18 wind companies from placing windmills on their property. He said that the landowners may even
19 form a lobbying group which includes the landowners and interested citizens and the group addresses
20 the County Board which then begins to wonder what they are doing because they have never
21 experienced such a request. He said that once the wind company sees the dismay in the County
22 Board they offer to assist them with their decisions with a model regulation that they have created.
23 He said that the wind company contacts the banks to see if they will finance the project and the bank
24 indicates that they must be sure that it is a solid investment and the wind company indicates they
25 have a buyer for the product, the power company. He said that the legislature passed a law which
26 states that if there is green energy available the power company has to buy it and the power company
27 has to buy it over a conventional power plant. He said that the Oakwood Power Plant was just shut
28 down and moth balled. He said that the wind company has a buyer and a producer and they construct
29 the project and subsidies begin to come in. He said that erection of windmills could cost \$2 to \$3
30 million dollars and 50% of that is significant and that 50% goes to the developer. He said that the
31 wind farm might be a good deal for some but once the contract is signed it can be sold two or three
32 times.

33
34 Mr. Ingram stated that the ZBA should think long and hard about the fact that there are no final
35 answers regarding the reclamation agreement. He said that the ZBA is supposed to process this case
36 and make a determination as to what is best for the County.

37
38 Mr. Ingram stated that a lot of the interest regarding the wind project is geared towards education
39 because education requires additional funding although it has been proven that increased funding
40 will not improve education. He noted that the money for education does not occur for a long time
41 because there is a deadline of the end of 2011 for some of the subsidies which might spur the wind

1 developers into planning a bunch of wind turbines quickly before the deadline and there is another in
2 2016. He said that a lot of people learned a lot when ENRON folded up because they kept double
3 books, fleeced the public and while packing up their money they urged the shareholders and
4 employees to purchase shares.

5
6 Mr. Thorsland interrupted Mr. Ingram and requested that his testimony remain site specific. He said
7 that the ZBA's task is to concentrate on the proposed turbines in Champaign County.

8
9 Mr. Ingram stated that education is an issue and is a selling point for the wind turbines but what
10 happens when the subsidies end.

11
12 Mr. Thorsland asked the Board if there were any questions for Mr. Ingram and there were none.

13
14 Mr. Thorsland asked if staff had any questions for Mr. Ingram and there were none.

15
16 Mr. Thorsland asked the audience if anyone desired to cross examine Mr. Ingram.

17
18 Ms. Kim Schertz asked Mr. Ingram how many jobs were actually created.

19
20 Mr. Ingram stated that of the 15 wind farms reported on the Illinois Wind Energy Association
21 (IWEA) website only eight wind farm projects appeared in the reports. He said that the eight
22 projects totaled \$1.95 billion dollars in project costs and this created a total of 61 to 75 jobs.

23
24 Mr. Thorsland asked the audience if anyone else desired to cross examine Mr. Ingram and there was
25 no one.

26
27 Mr. Thorsland called Ms. Kim Cambron to testify.

28
29 Ms. Kim Cambron, who resides at 2736E CR 3700N, Rankin, Illinois, submitted the original signed
30 letter from Gerry Meyers as a Document of Record. She said that Mr. Meyers also included a diary
31 with the original letter. Ms. Cambron distributed supporting documents to the Board indicating peer
32 review of the document titled, *Properly Interpreting the Epidemiologic Evidence about the Health*
33 *Effects of Industrial Wind Turbines on Nearby Residents*, by Carl V. Phillips, PhD, that she
34 submitted at the September 1st public meeting. She said page 2 of 16 of the document indicates the
35 following: The purpose of this document is to inform authorities and decision makers of new
36 evidence, including articles published in peer reviewed scientific journals which advance knowledge
37 on the topic of adverse health effects of IWT's. She said that page 5 of 16 of the document indicates
38 the following: "Subsequent to the July Ontario ERT decision nine peer reviewed articles have been
39 published in a special August, 2011 edition of the scientific journal, *Bulletin of Science, Technology*
40 *and Society (BSTS)*. These articles explore health and social impacts of IWT installations.^{22 23 24 25}
41 ^{26 27 28 29 30}." She read that there are nine footnotes and footnote 29 is the report written by Carl V.

1 Phillips, PhD as indicated in the listing on page 13 of 16 of the submitted document.

2

3 Ms. Cambron submitted the following additional Documents of Record: 1. *Caribou threatened by*
4 *wind farms, expert says*; and 2. *Silence is Golden*; and 3. *Wind farms don't provide the perfect*
5 *energy solution*; and 3. *Wind farm fight draws Capitol response*; and 4. *Our life with Dekalb wind*
6 *turbines*.

7

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

9

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

11

12 Mr. Thorsland asked the audience if anyone desired to cross examine Ms. Cambron and there was no
13 one.

14

15 Mr. Thorsland called Ms. Kim Schertz to testify.

16

17 Ms. Kim Schertz, who resides at Hudson, Illinois, distributed the following Documents of Record to
18 the Board for review: 1. *White Oak Wind Farm Map of Noise Testing Location*; and 2. *Grand Ridge*
19 *Wind Energy Project Map of Noise Testing Location*; and 3. *Concerns about Proposed Invenegy*
20 *Wind Project Draws Capacity Crowd to Meeting in Brown County*; and 4. *Windmill Neighbors air*
21 *Gripes over Noise; County Planners Grapple with Issue*; and 5. *Jessica's Story – Sheldon, NY*
22 *Invenegy's High Sheldon wind Farm*; and 6. *Maintaining Wind Fleets: Dealing with Hidden Costs*;
23 and 7. *Invenegy Turbine Blade Failure – Grand Ridge – LaSalle, IL*.

24

25 Ms. Schertz stated that the document titled, *White Oak Wind Farm Map of Noise Testing Location*, is
26 a map of the wind farm which is near her home. She said that the blue dot is the location that Mr.
27 Casey decided was representative of the entire 22,000 acres. She said that the theme of the stapled
28 packet, *Noise Measurements – Kim Schertz*, that was distributed is proof that Mr. Casey faked the
29 noise studies. She said that the document indicates the noise measurements that she personally took
30 during a two month period with a noise meter in comparison to Mr. Casey's data of two days. She
31 said that her numbers are about 20 to 30 decibels lower. She said that Mr. Casey's representative
32 area was along I-39 which is a major thoroughfare which has major traffic and is next to a mega-
33 church which has a congregation of approximately 1,000 members. She said that the noise readings
34 were taken next to a pond which is a flat surface that naturally reflects more noise and makes the
35 noise bigger.

36

37 Ms. Schertz stated that she took readings at the same location as Mr. Casey took his readings and
38 along with a strong wind blowing and heavy traffic on I-39 she received data of almost 51 decibels
39 but that is not representative of the area. She said that every one of the readings on the document
40 that she submitted is within three-quarters of a mile of the project area. She said that page 4 of the
41 document indicates that when the wind was not blowing as much she was getting decibel readings of

1 35 to 40. She said that she went back to the exact same location at night and the decibel readings
2 went back down to 37 decibels therefore this is not representative of the area just like where Mr.
3 Casey took the readings in the proposed California Ridge Wind Farm area is not representative. She
4 said that Invenergy is running a con on Champaign County because they are finding the loudest place
5 in the County which looks rural and completing un-natural readings for their report that will indicate
6 that the wind turbines will not add any additional noise and that is false. She said that every wind
7 farm that has been approved has gone through the zoning process and there has been a noise expert
8 which indicates that the wind farm will not violate the noise standards. She asked why are there
9 hundreds of pending lawsuits and thousands of noise complaints if the noise standards are not
10 violated. She said that page 5 indicates that on March 11, 2007, she went back to the church location
11 at 10:30 a.m., prior to when church started, and she recorded a 38.5 decibel reading. She said that
12 five minutes later 265 vehicles had gone past the noise meter on the main road and the decibel
13 reading increased to almost 60 which is not representative of the 22,000 acres because the other
14 township roads do not have 300 vehicles traveling on them.

15
16 Ms. Schertz stated that it wasn't enough for HDR to do the two to five acre parking lot, the noise
17 along I-39, or the just the pond so they fenced in the pond and placed cattle around it which then
18 registered an extremely high noise reading. She said that she has become very good friends with her
19 noise meter which is a very high tech, sophisticated noise meter which cost approximately \$11,000.
20 She said that she returned to the same location again with her noise meter and at night she was
21 receiving 30 decibels. She said that there were many places in the project area where she was
22 receiving less than 30 decibels and if the noise was under 30 decibels the meter would stop reading
23 the noise.

24
25 Ms. Schertz stated that Mr. Casey's testimony at the McLean County wind farm hearing indicates the
26 same thing that he said in the wind farm hearing. She said that Mr. Casey indicated that this is
27 generally dominated by natural sources. The noises are from wind and agricultural use and the noise
28 from the vehicles are considered ambient. Ms. Schertz stated that a continuous practice by Mr. Casey
29 is that he only uses data from GE at a 22 MPH wind speed which is when the greatest amount of
30 masking noise is achieved and the problem occurs at lower wind speeds. She said that they are
31 taking noise readings from the ground and it is possible to have a lower ground speed and have the
32 turbines cranking in the air which is when the violations occur and it is most likely to happen at
33 night.

34
35 Ms. Schertz stated that she was concerned when Mr. Casey would not answer her questions
36 regarding the noise control program and the Illinois Pollution Control Board because he knew that at
37 the hearing in 2007 he testified that Illinois no longer has an active noise control program and if
38 complaints are made he would doubt that they will send anyone out to measure the noise. She said
39 that she did not submit the data because the Board did not require Mr. Casey to submit his data as
40 supporting evidence. She said that Mr. Casey was asked if they looked any further down than 31
41 hertz. She said that most of the noise complaints are from the lower frequencies which are not

1 controlled by the IPCB. She said that Mr. Casey indicated at the hearing that GE only went to 60 or
2 31^{1/2} un-weighted.

3
4 Ms. Schertz stated that the most flagrant faking of the noise occurred at the Arcola, Illinois wind
5 hearings. She said that Mr. Shonkwiler testified that noise readings were taken on his property and
6 he hired an attorney to represent him at the hearing. She said that Mr. Shonkwiler stated that the day
7 that the turbine readings were taken was the noisiest day ever on his farm and he begged them to
8 come back the next day for additional readings and they refused. Ms. Schertz stated that Mr.
9 Shonkwiler stated while under oath that he had three combines running all day long during fall
10 harvest and two semi-trucks were running and he requested that they come back for further readings
11 because the noise level was un-naturally high and they said no. Ms. Schertz stated that this is just an
12 example of the games the wind companies play and this is what they do.

13
14 Ms. Schertz stated that the map indicating the noise monitoring locations at the Grand Ridge Wind
15 Energy Project indicates what HDR felt was representative of the project area. She said that the map
16 indicates the turbine sites and the noise meter location which is approximately 3 to 5 miles from the
17 nearest turbine. She said that a decibel reading of 85 was reported at night which indicates that the
18 wind turbines should not violate the standards. She said that said that in relation to the 85 decibel
19 reading she has attached an e-mail from a property owner which lives within the Grand Ridge project
20 area. Ms. Schertz read the e-mail as follows: Yes, I was the one that told you if you map the
21 locations you will find that they were right where I said. The one by the pit bull mill, there at the
22 time of the noise test, about 2 acres of pit bulls staked outside next to blue barrel type things that I
23 believe are used for pigs. The dogs would howl most of the night. There is also a silo near that
24 location and the other one was right next to a farm where there are several silos and a barn. It would
25 be my guess that the dryers were probably running all night. As for myself, I spent \$10,000 dollars
26 on new windows last year on the south side of my house hoping to cut down on the noise of the
27 windmills. They are from Pella and they don't open so they were supposed to help keep the sound
28 down although it helps some in one room but not for the rest of the house. I have spent several
29 nights in a hotel when I couldn't stand it anymore and I try to stay away as much as possible. I have
30 really tried to adjust and kept thinking I would get used to it but so far that hasn't happened. It has
31 been several years now since I have sat on my front porch in the evening like I used to do in the
32 summer. I don't even bother putting the screens in the windows anymore because I know I won't
33 open them. I don't have the option of selling my home because if someone came to see it they would
34 be turned off by what sounds like a jet plane that is just stuck in the air and won't pass over. My
35 house has been hit by iced blades in the morning. Can't wait, maybe I will try to get it on tape this
36 year so that you can show it. Good luck to you in this but I have found that people who want money
37 are very apt to turn a blind eye to how it has to come about. The farmers want the money, the
38 counties want the money, the schools want the money, the politicians want the money and on and on.

39
40 Ms. Schertz stated that the gall of these people was just amazing because the table of page 6
41 indicates a daytime reading of 83 decibels at 11:20 a.m. and at 3:20 a.m., when the dogs were

1 barking, a reading of 85 decibels was recorded. She said that these are the lengths that they will go
2 to in indicating that there will be no noise violations.
3

4 Ms. Schertz stated that the article titled, *The latest news about Wind Turbine Syndrome*, is to refute
5 Mr. Casey's testimony that he participated in the Italian Wind Farm Conference and that there was
6 no trouble. Ms. Schertz stated that the article indicates that among the different spectral peaks thus
7 discriminated the one at frequency 1.7 Hz is associated with the greatest power and under particular
8 conditions it can be observed at distances as large as 11km (6.8 miles) from the wind farm. She said
9 that these are the low frequency violations that she keeps speaking about and this is why the Board
10 needs to protect people from their property line and not the wall of their house and not grant the
11 waiver to protect livestock from the frequency sound. She said that it isn't just the people that the
12 Board needs to protect because she doesn't just live in her house she lives on 65 acres that she
13 considers as her yard and Invenergy is trying to take it as a noise barrier.
14

15 Ms. Schertz stated that the article titled, *Concerns about proposed Invenergy wind project draws*
16 *capacity crowd to meeting in Brown County*, is an example of what the Board is going to run into as
17 far as the integrity of Invenergy. She said that the article is from a meeting in Wisconsin and states
18 the following: Along with speakers who addressed the now well-known issues of turbine noise,
19 sleep loss, shadow flicker, loss of property value and impacts on farm animals, local residences had
20 the chance to hear about something rarely spoken about in public. The landowners detailed their first
21 hand experiences with the questionable techniques used by Invenergy to convince them to sign onto
22 the project. They spoke about being lied to by the developers who said that their neighbors had
23 signed onto the project when in fact they had not. They spoke about the varying amounts of money
24 offered to different landowners even as Invenergy claimed publicly that all landowners were getting
25 the same amount.
26

27 Ms. Schertz stated that the article titled, *Windmill neighbors air grips over noise; County planners*
28 *grapple with issue*, is in regards to an Invenergy project in Oregon. She said that Invenergy was
29 offering the landowners \$5,000 dollar payments for a noise easement. She said that the article titled,
30 *Jessica's Story*, is in regards to another Invenergy project in Wyoming. The article indicates that the
31 wind turbines could be heard within 1.5 miles to the west and if the wind was stronger the swishing
32 noise became louder and was accompanied by a jet type roar. The article indicates that the author
33 indicates that the shadow flicker creates headaches and eye pain and she is unable to remain in most
34 rooms in her house during the time of shadow flicker. The last line of the article states that the wind
35 turbine companies pay many families to say wind farms are wonderful but listen to the stories of
36 uncompensated residents located near the turbines.
37

38 Ms. Schertz stated that the name of the game in decommissioning, which the Board has not
39 discussed, is the cost to get the cranes back to the sites. She said that the turbines have no salvage
40 value if you have to rent the crane for three weeks at \$5,000 dollars per day. She said that when the
41 wind company indicates that the gravel will be hauled to a nearby site the Board needs to determine

1 the definition of the term “nearby” so that it can be determined how close the hazardous waste site is
2 that will take 22 tons of fiberglass blades. She said that she included the photograph of the broken
3 turbine to indicate the date. She said that the article date is March 26, 2009, and the turbine was
4 commissioned in late 2008 therefore it is her guess that the structure is less than six months old. She
5 said that the County will have continual road issues because equipment will always be required to be
6 brought back to the sites for maintenance or repair and re-damaging the roads. She said that earlier
7 she was trying to ask if they haven’t purchased the 60 foot extension to get the blades delivered who
8 will pick up the tab after the fact. She said that if they are putting in the 60 foot turn that is required
9 to deliver the blades and then tearing up the gravel and using it at another spot who will pay for the
10 new 60 foot turn that will be required to deliver the new blade at a site. She said that she is almost
11 positive that Mr. Leuchtmann stated that they had no intention of purchasing additional right-of-way
12 and that they were leaving the roads at the same width. She said that this is problematic if they are
13 throwing eight to twelve inches of gravel on top because it is reconfiguring the ditches to a different
14 and dangerous slope.

15
16 Mr. Thorsland reminded Ms. Schertz that no road agreement has been reviewed or approved at this
17 point.

18
19 Ms. Schertz submitted the Grand Ridge Wind Energy Project Wind Turbine Noise Analysis, LaSalle
20 County, Illinois, as a Document of Record.

21
22 Mr. Thorsland asked the Board if there were any questions for Ms. Schertz and there were none.

23
24 Mr. Thorsland asked if staff had any questions for Ms. Schertz.

25
26 Mr. Hall asked Ms. Schertz if she was present at the last meeting when he asked Mr. Casey about the
27 conditions of low ground speed and higher wind speeds in the higher areas and it was Mr. Casey’s
28 opinion that it was not a violation but a change in perception.

29
30 Ms. Schertz stated yes. She said that she disagrees with Mr. Casey based on the thousands and
31 thousands of noise complaints and hundreds of lawsuits in different counties. She said that she
32 believes that Champaign County should be better safe than sorry to avoid litigation.

33
34 Mr. Hall asked Ms. Schertz if she knows what difference it makes as to what the background noise is
35 if the computer analysis of the noise generated by the turbine doesn’t exceed the IPCB standards.

36
37 Ms. Schertz stated that the IPCB standards are irrelevant in this case which is why wind companies
38 are using it. She said that the IPCB was activated in the 70’s to deal with the noise walls near
39 Chicago. She said that they are for a loud residential area that averages 50 to 70 decibels and not a
40 quiet, rural background that has 25 to 30 decibels. She said that once again GE does not provide the
41 lowest hertz level and at the time the IPCB does not either therefore you are not even getting to the

1 heart of the noise issue if you are using the IPCB standards. She said that Mr. Casey testified four
2 years ago that the IPCB has no enforcement agency. She said that it is up to this Board to protect the
3 rural residents or they will have to sue which should not be their responsibility because they were
4 already there and have been paying the property taxes.

5
6 Mr. Hall stated that there is no one to enforce the IPCB regulations and the Zoning Ordinance
7 empowers the County to enforce the noise standards if required.

8
9 Ms. Schertz stated that she is concerned about the noise study and has shown the Board three
10 different examples of how they are rigged. She said that whether the County has money or not they
11 have to address this issue.

12
13 Mr. Thorsland asked the audience if anyone desired to cross examine Ms. Schertz.

14
15 Mr. Darrell Cambron asked if she believes that the noise analysis which was submitted should be
16 thrown out and redone by an independent noise consultant.

17
18 Ms. Schertz stated yes. She said she forgot to read the statement that during the summer time in May
19 a 3 to 5 decibel increase is required because there is more masking noise due to insects and birds.
20 She said that May is the best time to obtain a high reading at their chosen locations because there is a
21 high ambient noise.

22
23 Mr. Thorsland asked the audience if anyone else desired to cross examine Ms. Schertz and there was
24 no one.

25
26 Mr. Thorsland asked the audience if anyone else desired to present testimony regarding this case and
27 there was no one.

28
29 Mr. Thorsland closed the witness register for the meeting.

30
31 Mr. Thorsland entertained a motion to continue Case 696-S-11, to the September 29, 2011, meeting.

32
33 **Mr. Courson moved, seconded by Mr. Palmgren to continue Case 696-S-11, to the September**
34 **29, 2011, meeting. The motion carried by voice vote.**

35
36 Mr. Hall stated that the Board should consider starting the meeting earlier or planning to go later. He
37 said that it is apparent that there will be approximately two hours of testimony at every meeting. He
38 said that the Board should anticipate that the meeting at which the Board will make its final
39 determination will go past three hours.

40
41 Mr. Thorsland requested direction from the Board for staff.

1

2 Mr. Thorsland informed the audience that at some point the Board must be allowed time to work on
3 fitting the application to the Ordinance. He said that even though the Board appreciates the public's
4 input they do not want to stop anyone from presenting new testimony but if no new testimony is
5 available it would be appreciated that anyone who has already testified allow new people to testify
6 and allow the Board to do the work which they are required to do.

7

8 **6. New Public Hearings**

9 None

10

11 **7. Staff Report**

12 None

13

14 **8. Other Business**

15 **A. Review of ZBA Docket**

16 Mr. Hall stated that no new information has been received for Case 691-S-11. He said that if the
17 Board thought that it would be of any value the Board could continue Case 696-S-11 to the
18 September 15, 2011, meeting but Case 691-S-11 does have a lot of interested neighbors. He said
19 that he did ask the petitioner for Case 691-S-11 if they desired to be heard at the September 15th
20 meeting and they indicated that they would.

21

22 Mr. Courson stated that he does not desire to continue Case 696-S-11 to the September 15th meeting.
23 He said that he believes that the Board has information to review and until the road agreement is
24 approved by the State's Attorney there is no need to continue this case to next week.

25

26 Ms. Capel stated that she would appreciate a chance to review all of the information for this case.

27

28 **Ms. Capel moved, seconded by Mr. Passalacqua to move the start time of the September 29,**
29 **2011, meeting to 6:00 p.m. instead of 7:00 p.m. The motion carried by voice vote.**

30

31

32 Mr. Passalacqua asked Mr. Hall if the Board can anticipate an answer from the State's Attorney
33 regarding the County Road Agreement by the September 29th meeting.

34

35 Mr. Hall stated that yes. He said that the State's Attorney's comments should be in the September
36 29th mailing packet.

37

38 Mr. Thorsland informed the audience that the September 29th meeting will begin at 6:00 p.m. rather
39 than 7:00 p.m. and the meeting will be advertised as such.

40

41 **9. Audience Participation with respect to matters other than cases pending before the**

1 **Board**

2

3 None

4

5 **10. Adjournment**

6

7 **Mr. Schroeder moved, seconded by Mr. Passalacqua to adjourn the meeting. The motion**
8 **carried by voice vote.**

9

10 The meeting adjourned at 9:09 p.m.

11

12

13 Respectfully submitted

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18 Secretary of Zoning Board of Appeals

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CASE NO. 696-S-11

SUPPLEMENTAL MEMORANDUM

September 22, 2011

Champaign
County
Department of

**PLANNING &
ZONING**

Petitioners: California Ridge Wind Energy LLC and the participating landowners listed in the attached legal advertisement. California Ridge Wind Energy LLC is wholly owned by Invenergy Wind North America LLC, One South Wacker Drive, Suite 1900, Chicago, IL 60606, with corporate officers as listed in the attached legal advertisement.

Request: Authorize a Wind Farm which consists of 30 Wind Farm Towers (wind turbines) in total with a total nameplate capacity of 48 megawatts (MW) of which 28 Wind Farm Towers with a total nameplate capacity of 45 MW are proposed in Compromise Township (Part A) and 2 Wind Farm Towers with a total nameplate capacity of 3 MW are proposed in Ogden Township (Part B), and including access roads, wiring, and public road improvements, and including the waivers of standard conditions in Section 6.1.4 as listed in the attached legal advertisement.

Location: In Compromise Township the following sections are included with exceptions as described in the attached legal advertisement:

- Sections 19, 20, 21, 28, 29, 30, 31, 32, and 33 of T21N, R14W of the 2nd P.M.,
- Sections 24, 25, and 36 of T21N, R10E of the 3rd P.M.,
- Fractional Sections 30 and 31 of T21N, R11E, of the 3rd P.M.

In Ogden Township the following sections are included with exceptions as described in the attached legal advertisement:

- Fractional Section 6, T20N, R11E of the 3rd P.M.,
- Fractional Sections 4, 5, 6, and 7 of T20N, R14W of the 2nd P.M.,
- Sections 8, 9, and 16 of T20N, R14W of the 2nd P.M.

Site Area: Approximately 10,193 acres

Time Schedule for Development: Fall 2011

Prepared by: **John Hall**
Zoning Administrator

STATUS

This case was continued from the September 8, 2011, meeting. The minutes of that meeting are included separately for approval.

As of Friday, September 23, 2011, the petitioner was still awaiting the State's Attorney's comments on the Draft Reclamation Agreement.

No new information is available regarding either the County or Township road agreements.

A letter of opposition has been received from Herbert N. Frerichs (see Attachment B).

Staff recommends that not all advertised waivers are necessary. See the updated table of required waivers (Attachment C) and the revisions to the assessment of compliance (Attachment D).

Draft Findings have also been prepared for all required waivers except for the Township road agreement (see Attachment E). Special conditions of approval are also proposed (see Attachment F) based on the information to date.

This memorandum reviews the August 18, 2011, letter from the IDNR that was distributed at the August 25, 2011, public hearing. In that letter the IDNR recommended additional studies which could be a special condition but none has been drafted.

Compliance with Standard Conditions for Endangered Species Consultation

Paragraph 6.1.4 J. contains standard conditions for endangered species consultation. Regarding compliance with 6.1.4 J. (underlining indicates new evidence that was not included in the attachment to the September 1, 2011, memorandum):

1. Paragraph 6.1.4 J. contains standard conditions for endangered species consultation and requires submission of a copy of the Agency Action Report from the Endangered Species Program of the Illinois Department of Natural Resources.
2. See the August 25, 2011, Supplemental Memorandum for a general discussion and requested a waiver regarding the Agency Action Report.
3. In a July 13, 2011, email to John Hall, Keith Shank, Division of Ecosystems and Environment, Illinois Department of Natural Resources, stated as follows:
 - a. His letter to Champaign County dated September 21, 2009, which was identical to the letter dated December 4, 2009, would substitute for an Agency Action Report and the consultation was not out of date but that conditions had changed regarding the Indiana Bat and the Mudpuppy Salamander and an updated consultation was necessitated.
 - b. Consultation is technically not complete until the authorizing agency (Champaign County) stated its response to the IDNR recommendations.
4. A second letter from Keith M. Shank regarding an additional consultation and Endangered Species Consultation Program Natural Heritage Database Review #1002516 dated August 18, 2011, states as follows:
 - a. The Department recommends Invenergy undertake mist-netting and telemetry surveys in the vicinity of the project area to better document the numbers and relative abundances of bat species occurring in the area, placing an emphasis on the Indiana Bat and its seasonal movements.
 - b. The Department recommends the County require at least one post-construction fall migration season bat mortality study to document levels of bat mortality resulting from the project's operation.
 - c. Champaign County must notify the Department of its decision regarding this recommendation and which of the following the County will require:
 - (1) Proceed with the action as originally proposed; or
 - (2) Require the action to be modified per Department recommendations (please specific which measures if not all will be required); or
 - (3) Forgo the action.

-
5. Regarding the IDNR recommendations dated August 18, 2011:
- a. Regarding the second part of the IDNR recommendation dated August 18, 2011, recommending post-construction mortality studies, post-construction mortality studies are a requirement of the Ordinance and the discussion on pages 5-23 and 5-24 of the *Special Use Permit Application* received July 1, 2011, appears to be consistent with the Ordinance.

 - b. Regarding the first part of the IDNR recommendation dated August 18, 2011, recommending mist-netting and telemetry surveys to better document the numbers and relative abundances of bat species occurring in the area, placing an emphasis on the Indiana Bat and its seasonal movements:
 - (1) In an email dated August 23, 2011, Keith Shank of the IDNR stated that Invenergy has performed the Blackball Mine Emergence Study to evaluate the movement of reproductive female Indiana bats but that study doesn't do anything to quantify the risk to or from Indiana Bats roosting along the Middle Fork.

 - (2) In the email dated August 23, 2011, Keith Shank of the IDNR noted that IDNR recommendations are advisory and Champaign County may proceed as seems best to it.

ATTACHMENTS

- A Public Notice (modified legal advertisement) for Case 696-S-11 Parts A and B dated August 17, 2011
- B Letter of opposition from Herbert N. Frerichs received September 12, 2011
- C REVISED Table of Required Waivers
- D Proposed Revisions To Compliance With Subsection 6.1.4 Not Requiring Waivers
- E REVISED Draft Findings for Required Waivers
- F Draft Special Conditions of Approval
- G Draft minutes of public hearing on September 8, 2011 (included separately)

PUBLIC NOTICE OF PUBLIC HEARING IN REGARD TO A COUNTY BOARD SPECIAL USE PERMIT UNDER THE PROVISIONS OF THE CHAMPAIGN COUNTY ZONING ORDINANCE

CASE: 696-S-11

California Ridge Wind Energy LLC and the participating landowners listed below have filed a petition for a Special Use Permit under the provisions of the Champaign County Zoning Ordinance on property in unincorporated Champaign County. The petition is on file in the office of the Champaign County Department of Planning & Zoning, 1776 East Washington Street, Urbana, IL.

California Ridge Wind Energy LLC is wholly owned by Invenergy Wind North America LLC, One South Wacker Drive, Suite 1900, Chicago, IL 60606, with President, Michael Polsky; Vice President, James Murphy; Vice-President, Bryan Schueler; Vice-President, James Shield; Vice-President, Kevin Parzyck; Secretary, Joseph Condo, all with offices at One South Wacker Drive, Suite 1900, Chicago, IL 60606.

A public hearing will be held **Thursday, August 25, 2011 at 7:00 p.m.** prevailing time in the Lyle Shields Meeting Room, Brookens Administrative Center, 1776 E. Washington Street, Urbana, IL, at which time and place the Champaign County Zoning Board of Appeals will consider a petition to:

Authorize a Wind Farm which consists of 30 Wind Farm Towers (wind turbines) in total with a total nameplate capacity of 48 megawatts (MW) of which 28 Wind Farm Towers with a total nameplate capacity of 45 MW are proposed in Compromise Township (Part A) and 2 Wind Farm Towers with a total nameplate capacity of 3 MW are proposed in Ogden Township (Part B), and including access roads, wiring, and public road improvements, and including waivers of standard conditions as listed below, on the following properties in Compromise Township (Part A) and Ogden Township (Part B) in Champaign County, Illinois:

PART A COMPROMISE TOWNSHIP

Section 19, T21N, R14W of the 2nd P.M., Compromise Township. The Special Use Permit includes all of Section 19, with exceptions. A total of 6 Wind Farm Towers (wind turbines) are proposed in Section 19 as follows:

- 2 Wind Farm Towers are proposed in the Northwest Quarter of Section 19 on a 209.15 acre tract owned by G & E Farms, Inc., POB 35, Gifford, IL 61847-0335;
- 1 Wind Farm Tower is proposed in the Northeast Quarter of Section 19 on a 66 acre tract owned by William Pflugmacher, 333 Eiler Drive, Gifford, IL 61847-9727;
- 1 Wind Farm Tower is proposed in the Northeast Quarter of Section 19 on a 65.63 acre tract owned by Eric Suits, 2655 CR 2600E, Penfield, IL 61862;
- 1 Wind Farm Tower is proposed in the East Half of the Southwest Quarter of Section 19 on a 30 acre parcel owned by Louise Fruhling, 31361 N 750 East Rd, Potomac, IL 61865-6601;
- 1 Wind Farm Tower is proposed in the North Half of the Southeast Quarter of Section 19 on an 80 acre parcel owned by Loretta Fruhling/ Fruhling Family Trust, 388 Gibbs Drive, Rantoul, IL 61866

Other participating landowners in Section 19 are the following:
John Fruhling, 2499 CR 2600N, Penfield, IL 61862

Roy and Barbara Johnson, 2640 CR 2500E, Penfield, IL 61862
Robert and Dorene Pflugmacher, 866E CR 2250N, Ogden, IL 61859-9602
Greg Frerichs, 2506 CR2300N, Ogden IL 61859

Section 20, T21N, R14W of the 2nd P.M., Compromise Township. The Special Use Permit includes an 80 acre tract of land in the West Half of the Northwest Quarter of Section 20 and an 80 acre tract of land in the South Half of the Southwest Quarter of Section 20 and a 157.98 acre tract of land in the Southeast Quarter of Section 20. Participating landowners in Section 20 are the following:

Michael Babb, 2635 CR 2700E, Penfield, IL 61862
Marsha Gates, POB 704, Tolono, IL 61880
G & E Farms, Inc., 502 S. Main St. POB 35, Gifford, IL 61847-9713

Section 21, T21N, R14W of the 2nd P.M., Compromise Township. The Special Use Permit includes the Southwest Quarter of Section 21. Participating landowners in Section 21 are the following:

Derald and Florene Ackerman, 519 South Main Street, Gifford, IL 61847-9713
Kenneth and Rosetta Suits, 2738 CR 2600N, Penfield, IL 61862
Rosetta Suits, 2738 CR 2600N, Penfield, IL 61862

Section 24, T21N, R10E of the 3rd P.M., Compromise Township. The Special Use Permit includes the South Third of the Northwest Quarter and the Southwest Quarter. Participating landowners in Section 24 are the following:

Derald and Florene Ackerman, 519 South Main Street, Gifford, IL 61847-9713
Kenneth and Rosetta Suits, 2738 CR 2600N, Penfield, IL 61862

Section 25, T21N, R10E of the 3rd P.M., Compromise Township. The Special Use Permit includes all of Section 25 with exceptions. A total of 2 Wind Farm Towers (wind turbines) are proposed in Section 25 as follows:

- 2 Wind Farm Towers are proposed on an 80 acre parcel in the South Half of the Southeast Quarter of Section 25 on land owned by the Mary Ruth Elfe Revocable Trust and Charlotte R. Van Blokland Trust, aka Tate Farm #3/Busey Ag Services, 3002 West Windsor Road, Champaign, IL 61822

Other participating landowners in Section 25 are the following:

Russell and Marilyn Buhr, 2594 CR 2300E, Gifford, IL 61847-9740
Vernon and Wilma Buhr, 2152 CR 2400N, St. Joseph, IL 61873
Luella Busboom, 2258 CR 2500N, St. Joseph, IL 61873
Maury Busboom, POB 131, Royal, IL 61871
Roger and Betty Gronewald, 508 E Main POB 117, Royal, IL 61871
Erna Hinrichs, 1037 Englewood Drive, Rantoul IL 61866
Darrell and Marilyn Mennenga, 5205 Beech Ridge Road, Nashville, TN 37221
David and Danita Uken, 2146 CR 2100N, St. Joseph, IL 61873

Section 28, T21N, R14W of the 2nd P.M., Compromise Township. The Special Use Permit includes all of Section 28 with exceptions. A total of 3 Wind Farm Towers (wind turbines) are proposed in Section 28 as follows:

- 1 Wind Farm Tower is proposed on a 62.54 acre parcel in the Northeast Quarter of Section 28 on land owned by Kenneth Suits, 2738 CR 2600N, Penfield, IL 61862
- 1 Wind Farm Tower is proposed on an 80 acre parcel being the East Half of the Southwest Quarter of Section 28 on land owned by Michael O'Neill, POB 236, Philo, IL 61864
- 1 Wind Farm Tower is proposed on a 70.26 acre parcel in the East Half of the Southeast Quarter of Section 28 on land owned by Roy and Barbara Johnson, 2640 CR 2500E, Penfield, IL 61862

Other participating landowners in Section 28 are the following:

Michelle Babb, 2635 CR 2700E, Penfield, IL 61862

Alice Buck c/o Steve Buck, 609 Bayshore Drive, #9, Ft. Lauderdale, FL 33304

Steve Buck, 609 Bayshore Drive, #9, Ft. Lauderdale, FL 33304

Alice Cain Heirs c/o Steve Cain, POB 103, Philo, IL 61864

Gary Hovel, 2518 CR 2600E, Penfield, IL

Claas Hovel, 2971 CR 2700E, Penfield, IL

Jeffrey Suits, 2703 CR 2500N, Penfield, IL 61862

Union Pacific Railroad, 1400 Douglas, Stop 1640, Omaha, NE 68179

Section 29, T21N, R14W of the 2nd P.M., Compromise Township. The Special Use Permit includes all of Section 29, with exceptions. One Wind Farm Tower (wind turbine) is proposed in Section 29 as follows:

- 1 Wind Farm Tower is proposed on a 75 acre tract in the North Half of the Southeast Quarter of Section 29 on land owned by Velma Werner, 312 Penny Lane, Peotone, IL 60468

Other participating landowners in Section 29 are the following:

Albers Farm c/o Sandra J. King, POB 562, St. Joseph, IL 61872

Dick Albers, POB 213, Royal, IL 61871

Thomas and Patricia Buck, 2321 CR 2900N, Gifford, IL 61847

Bruinius Family Limited Partnership, 7723 W. Stuenkel Rd., Frankfort, IL 60423

Franzen Family Living Trust, 861 CR 900E, Tolono, IL 61880

Edgar and Sharon Hovel, 408 Moraine Dr., Rantoul, IL 61866

Gary Hovel, Trustee, 2518 CR 2600E, Penfield, IL 61862

Kenneth and Rosetta Suits, 2738 CR 2600N, Penfield, IL 61862

Fractional Section 30, T21N, R11E, of the 3rd P.M., Compromise Township. The Special Use Permit includes all of Fractional Section 30, with exceptions. A total of 5 Wind Farm Towers (wind turbines) are proposed in Fractional Section 30 as follows:

- 1 Wind Farm Tower is proposed on a 60.86 acre parcel in the North Half of the South Half of Fractional Section 30 on land owned by Kay and John Fiscus, 105 Thomas Dr., St. Joseph, IL 61873
- 2 Wind Farm Towers are proposed on an 80 acre tract in the Southwest Quarter of Fractional Section 30 on land owned by Annette Brya Edwards c/o Busey Bank Ag Services, POB 107, Leroy, IL 61752
- 1 Wind Farm Tower is proposed on a 62.66 acre parcel in the East Half of Fractional Section 30 on land owned by Marvin and Pamela Ideus, 401 Eden Park Dr., Rantoul, IL 61866

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- 1 Wind Farm Tower is proposed on an 80 acre parcel in the Southeast Quarter of Fractional Section 30 owned by Roseann Clifford, 2008 Sunview Dr., Champaign, IL 61821

Other participating landowners in Fractional Section 30 are the following:

Lois and Herbert Frerichs, POB 25, Royal, IL 61871

Alfred and Lorine Ideus, 2124 CR 2400N, St. Joseph, IL 61873

Roy and Barbara Johnson, 2640 CR 2500E, Penfield, IL 61862

Section 30, T21N, R14W of the 2nd P.M., Compromise Township. The Special Use Permit includes all of Section 30 except the Northwest Quarter. A total of 3 Wind Farm Towers (wind turbines) are proposed in this Section 30 as follows:

- 1 Wind Farm Tower is proposed on an 80 acre parcel being the West Half of the Northeast Quarter of Section 30 on land owned by the Michael and Eileen Jarboe Trust, 2792 CR 2400N, Penfield, IL 61862
- 1 Wind Farm Tower is proposed on a 53.33 acre parcel located in the Northeast Quarter of the Southwest Quarter and the Northwest Quarter of the Southeast Quarter of Section 30 on land owned by Robert and Dorene Pflugmacher, 866E CR 2250N, Ogden, IL 61859-9602
- 1 Wind Farm Tower is proposed on an 80 acre parcel being the West Half of the Southwest quarter of Section 30 on land owned by Vernon and Wilma Buhr, 2152 CR 2400N, St. Joseph, IL 61873

Other participating landowners in this Section 30 are the following:

John Blue, 2148 CR 2650E, Ogden, IL 61859

Daniel and Amy Cain, 2567 CR 2600E, Penfield, IL 61862

Edgar and Sharon Hovel, 408 Moraine Dr., Rantoul, IL 61866

Evelyn Suits, 2331 CR 2000E, Urbana, IL 61802

Robert and Dorene Pflugmacher, 866E CR 2250N, Ogden, IL 61859-9602

Fractional Section 31, T21N, R11E of the 3rd P.M., Compromise Township. The Special Use Permit includes the North Half of the Fractional Section 31 and the North Half of the Fractional Southwest Quarter of Fractional Section 31 and the East Half of the Southeast Quarter of Fractional Section 31. One Wind Farm Tower (wind turbine) is proposed in Fractional Section 31 as follows:

- 1 Wind Farm Tower is proposed on a 140 acre parcel in the Northeast Quarter of Fractional Section 31 on land owned by Larry Foster, 28012 State Route 49, Armstrong, IL 61812

Other participating landowners in Fractional Section 31 are the following:

Mary Ruth Elfe Revocable Trust and Charlotte R. Van Blokland Trust, aka Tate Farm #3/Busey Ag Services, 3002 West Windsor Road, Champaign, IL 61822

John Blue, 2148 CR 2650E, Ogden, IL 61859

Judith E. Kopmann, POB 7, Royal, IL 61871

Douglas Walker and Susan Kingston, 1111 Stockholm Rd., Paxton, IL 60957

Section 31, T21N, R14W of the 2nd P.M., Compromise Township. The Special Use Permit includes the North Half of Section 31 and the Southwest Quarter of the Southeast Quarter of Section 31. One Wind Farm Tower (wind turbine) is proposed in this Section 31 as follows:

- 1 Wind Farm Tower is proposed on an 80 acre parcel being the East Half of the Northeast Quarter of Section 31 on land owned by the LaVeda Pollack Trust c/o Kalin Kocher, 2455 CR 2600E, Penfield, IL 61862

Other participating landowners in this Section 31 are the following:

Larry Frerichs, 2474 CR 2500E, Penfield, IL 61862
Evelyn Suits, 2331 CR 2000E, Urbana, IL 61802
Carl and Jane Udovich, 3526 Bankview Dr., Joliet, IL 60431

Section 32, T21N, R14W of the 2nd P.M., Compromise Township. The Special Use Permit includes all of Section 32 except a 1.10 acre tract of land located in the West Half of the Northwest Quarter of Section 32. Participating landowners in Section 32 are the following:

Brian Loschen, 2692 CR 2300N, Ogden, IL 61859
Illini FS, Inc., 1509 E. University Avenue, Urbana, IL 61802
Union Pacific Railroad, 1400 Douglas, Stop 1640, Omaha, NE 61879
Wendy M. Heeren Trust, 50 Maywood Dr., Danville, IL 61832
Arnold & Delores Loschen Trusts, 2654 CR 2400N, Ogden, IL 61859

Section 33, T21N, R14W of the 2nd P.M., Compromise Township. The Special Use Permit includes all of Section 33, with exceptions. A total of 3 Wind Farm Towers (wind turbines) are proposed in this Section 30 as follows:

- 1 Wind Farm Tower is proposed on a 40 acre parcel being the Northeast Quarter of the Northwest Quarter of Section 33 on land owned by Robert Long, Pearl St., Bluffs, IL 62621
- 1 Wind Farm Tower is proposed on a 77.04 acre parcel in the West Half of the Northeast Quarter of Section 33 on land owned by Roger N. Carter, 2562 CR 3000N, Penfield, IL 61862
- 1 Wind Farm Tower is proposed on an 80 acre parcel being the East Half of the Northeast Quarter of Section 33 on land owned by Harold and Darlene Hovel, POB 134, Royal, IL 61871

Other participating landowners in Section 33 are the following:

Michael and Eileen Jarboe Trusts, 2792 CR 2400N, Penfield, IL 61862
Thomas and Beverly Lee, 2308 Naples Court., Champaign, IL 61822
Dennis Madigan Living Trust, 18877 Medford, Beverly Hill, MI 48025

Section 36, T21N, R10E, Compromise Township. The Special Use Permit includes all of Section 36 except the South Half of the Northwest Quarter of Section 36 and the Southwest Quarter of Section 36. A total of 3 Wind Farm Towers (wind turbines) are proposed in this Section 30 as follows:

- 1 Wind Farm Tower is proposed on a 70 acre parcel in the Northeast Quarter of the Northwest Quarter and the Northwest Quarter of the Northeast Quarter of Section 36 on land owned by Earl and Delores Ideus, 508 N. West St., Gifford, IL 61847
- 1 Wind Farm Tower is proposed on a 50 acre parcel in the North Half of the South Half of the Northeast Quarter of Section 36 on land owned by Royce and Shauna Ideus, 2229 CR 2600N, Gifford, IL 61847
- 1 Wind Farm Tower is proposed on a 157 acre parcel in the Southeast Quarter of Section 36 on land owned by Judith, Leroy and Bonita Kopmann, POB 7, Royal, IL 61871

Other participating landowners in Section 36 are the following:
Leroy and Bonita Kopmann Trust, 117 Susan Drive, Dwight, IL 60420

PART B OGDEN TOWNSHIP

Fractional Section 6, T20N, R11E of the 3rd P.M., Ogden Township. The Special Use Permit includes all of Fractional Section 6 except the Fractional Northwest Quarter of Fractional Section 6 and except the North Half of the Southwest Fractional Quarter of Fractional Section 6 and except the Northwest Quarter of the Southeast Quarter of Fractional Section 6 and except the West Half of the Northeast Fractional Quarter of Fractional Section 6. Participating landowners in Fractional Section 6 are the following:

Delores Ann Harms Trustee, POB 87, Royal, IL 61871
Mildred Hinrichs Trust, c/o Laveda Clem, 1982 CR 2100N, Urbana, IL 61822
Herbert and Betty Osterbur, 302 Benjamin Street, Royal, IL 61871

Fractional Section 6, T20N, R14W of the 2nd P.M., Ogden Township. The Special Use Permit includes all of Fractional Section 6, with exceptions. One Wind Farm Tower (wind turbine) is proposed in Fractional Section 6 as follows:

- 1 Wind Farm Tower is proposed on an 83.84 acre tract of land in the Southwest Quarter of Fractional Section 6 on land owned by Sylvia Flessner-Fulk, POB 837, St. Joseph, IL 61873

Other participating landowners in Fractional Section 6 are the following:

Darrell Bruns, c/o Marlys McCartney, 1113 Ascot Dr., Rantoul, IL 61866
Kristi Bruns, c/o Marlys McCartney, 1113 Ascot Dr., Rantoul, IL 61866
Neil Bruns, c/o Marlys McCartney, 1113 Ascot Dr., Rantoul, IL 61866
Marlys McCartney, 1113 Ascot Dr., Rantoul, IL 61866
Marvin and Bernita Harms Trust, 2592 CR 2145N, St. Joseph, IL 61873
Gene and Deanna Osterbur Irrevocable Trust c/o Julie Carlson, 3828 East Whipporwhill Lane, Byron IL 61010
Reka Sage, 2304A CR 3000N, Apt. 203, Gifford, IL 61847
Wayne and Roxie Sage, 2545 CR 2400N, Ogden, IL 61859

Fractional Section 5, T20N, R14W of the 2nd P.M., Ogden Township. The Special Use Permit includes all of Fractional Section 5, with exceptions. One Wind Farm Tower (wind turbine) is proposed in Fractional Section 5 as follows:

- 1 Wind Farm Tower is proposed on a 78.10 acre parcel in the Fractional North Half of Fractional Section 5 on land owned by Mark Loschen, 2455 CR 2050N, St. Joseph, IL 61873

Other participating landowners in Fractional Section 5 are the following:

Anna Albers, 2304A CR 3000N, Apt. 107, Gifford, IL 61847
Albers Farm c/o Sandra J. King, POB 562, St. Joseph, IL 61872
Douglas Frerichs, 2634 CR 2300N, Ogden, IL 61859
Arnold and Delores Loschen Trusts, 2654 CR200N, Ogden IL 61859
Gene and Deanna Osterbur c/o Julie Carlson, 3828 East Whipporwhill Lane, Byron IL 61010
Wayne and Roxie Sage, 2545 CR 2400N, Ogden, IL 61859
Dan Shearin, 2431 Parklake Drive, Morris, IL 60450

Fractional Section 4, T20N, R14W of the 2nd P.M., Ogden Township. The Special Use Permit includes a 72.8 acre tract of land located in the West Half of the West Half of Fractional Section 4 and an 80 acre tract of land located in the South Half of the Southeast Quarter of Fractional Section 4. Participating landowners in Fractional Section 4 are the following:

Inez K. Britt, 2333 CR 2800E, Ogden, IL 61859

John and Erna Ludwig Living Trusts, c/o Judith Ludwig Gorham, 409 N. Cherry St., Galesburg, IL 61401

Fractional Section 7, T20N, R14W of the 2nd P.M., Ogden Township. The Special Use Permit includes the Northeast Quarter of Fractional Section 7, with exceptions and a 60 acre tract of land in the East Half of the Southeast Quarter of Fractional Section 7. Participating landowners in Fractional Section 7 are the following:

Vernon and Wilma Buhr, 2152 CR 2400N, St. Joseph, IL 61873

Louis and Laverne Osterbur, 2293 CR 2600E, Ogden, IL 61859

Section 8, T20N, R14W of the 2nd P.M., Ogden Township. The Special Use Permit includes all of Section 8 with the exception of 160 acres in the West Half of Section 8 and 60.85 acres in the Southeast Quarter of Section 8. Participating landowners in Section 8 are the following:

Albert J. Franzen, POB 206, Broadlands, IL 61816

John and Erna Ludwig Living Trust, c/o Judith Ludwig Gorham, 409 N. Cherry St., Galesburg, IL 61401

Jillene and Ben Henderson, 2651 CR 2150N, Ogden, IL 61859

Randall and Deanna Loschen, 2629 CR 1800N, Ogden, IL 61859

Union Pacific Railroad, 1400 Douglas, Stop 1640, Omaha, NE 61879

Section 9, T20N, R14W of the 2nd P.M., Ogden Township. The Special Use Permit includes the Northwest Quarter of Section 9 and the Northeast Quarter of the Southeast Quarter of Section 9 and a 100 acre tract of land in the South Half of the Northeast Quarter and the West Half of the West Half of the Southeast Quarter of Section 9 and the East Half of the Southwest Quarter of Section 9. Participating landowners in Section 9 are the following:

Robert Scott Trust and Alsip Family Trust c/o Robert P. Scott, 107 Arrowhead Lane, Haines City, FL 33844

Robert and Joan Sattler Trusts, 207 McKinley, Milford, IL 60953

Busboom Family Trust c/o Glen L. and Billie J. Busboom, 2756 CR 2200N, Ogden, IL 61859

Section 16, T20N, R14W of the 2nd P.M., Ogden Township. The Special Use Permit includes an 80 acre tract of land in the East Half of the Northeast Quarter of Section 16. Participating landowners in Section 9 are the following:

Carol Sage Peak, c/o Helen Green, 206 Ridgeview St., Danville, IL 61832.

Clifford Peak, c/o Helen Green, 206 Ridgeview St., Danville, IL 61832.

Helen Green, 206 Ridgeview St., Danville, IL 61832.

Waivers of standard conditions in Section 6.1.4 are required as follows:

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1. Waive the standard condition of 6.1.4 A. 1.(e) that requires the special use permit area to include a minimum of 40 feet wide area for electrical lines
2. Waive the standard condition of 6.1.4 A.2.(b) that requires a wind farm to be a minimum of one mile from the CR District to allow wind farm wiring to be less than one mile from the CR District.
3. Waive the standard conditions of 6.1.4 C.3. and 6.1.4 C.8. that require the application to include copies of all private waivers of wind farm separations.
4. Waive the standard condition of 6.1.4 D. 1 (a) that requires certificates of design compliance from Underwriters Laboratories (“UL”) or equivalent third party.
5. Waive the standard condition of 6.1.4 D.9 that requires wind farm towers to be protected by non-climbing devices 12 feet vertically from the base.
6. Waive the standard condition of 6.1.4 F.1. that requires a signed Roadway Upgrade and Maintenance Agreement prior to the close of the public hearing before the Zoning Board of Appeals.
7. Waive the standard condition of 6.1.4 F.1.u. that requires street upgrades be in accordance with IDOT Bureau of Local Roads manual, 2005 edition.
8. Waive the standard condition 6.1.4 I. 1. that requires the noise level of each wind farm tower and wind farm to be in compliance with the Illinois Pollution Control Board regulations at the residential property line rather than to be compliance just at the dwelling.
9. Waive the standard condition of 6.1.4 J. that requires the application to contain a copy of the Agency Action Report from the Illinois Department of Natural Resources Endangered Species Program.
10. Waive the standard condition of 6.1.4 P.4.(b) that requires the applicant to gradually pay down 100% of the value of the irrevocable letter of credit by placing cash deposits in an escrow account over the first 13 years of the Wind Farm operation.
11. Waive the standard condition of 6.1.4 S.1.(c)(3) that requires that locations of wind turbines for the zoning use permit application cannot increase the noise impact over that approved in the special use permit.

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

Eric Thorsland, Chair
Champaign County Zoning Board of Appeals

— Board of Zoning: —

I would like to ask that the board of zoning does not ok the zoning for Champaign county for the California Ridge Wind Energy LLC. Why take good farm land, so they can go where they want to, when there is other places where land can't be farmed. I don't think anyone of on the board would like for me to come and plant a tree in your yard and then I can come and mow around it, maybe right through your wifes flowers.

so please take a long look at what they are doing, and what a farmer has to put up with,

I have heard that this is poorer ground anyway, but farmer around here raise just as good corn or soybeans as they do around Champaign.

so ~~lets~~ **RECEIVED** take a long look and not ok this zoning

CHAMPAIGN CO. P & Z DEPARTMENT

Herbert H Freulich
Royal, Ill.

Attachment C REVISED Table of Required Waivers

Case 696-S-11

September 22, 2011

Waiver	Requested or Required	Degree of Waiver	Notes REMEMBER TO ADD EVIDENCE SUPPORTING NO WAIVER UNDER REVIEW OF COMPLIANCE
1. Waive the standard condition of 6.1.4.A.1.(e) that requires the special use permit area to include a minimum of 40 feet wide area for electrical lines.	Requested	Essentially no waiver as the area of the special use permit will be greater than the minimum required	NO WAIVER REQUIRED: The area of the special use permit as proposed is much larger than this minimum. A special condition requires submission of "as built" drawings that will document where the wiring was located and the minimum area can be identified at that time.
2. Waive the standard condition of 6.1.4.A.2.(b) that requires a wind farm to be a minimum of one mile from the CR District to allow wind farm wiring to be less than one mile from the CR District.	Required	100% waiver but only for underground wiring which should have little actual impact	NO WAIVER ANTICIPATED: A revised site plan is anticipated that will no part of the WIND FARM within the minimum one-mile separation.
3. Waive the standard conditions of 6.1.4.C.3. and 6.1.4.C.8. that require the application to include copies of all private waivers of wind farm separations.	Required	100% waiver but only in regards to participating landowners	NO WAIVER REQUIRED: The only private waivers in the WIND FARM are the waivers agreed to by the PARTICIPATING landowners and those waivers have been documented and are in the chain of title of deed.
4. Waive the standard condition of 6.1.4.D.1 (a) that requires certificates of design compliance from Underwriters Laboratories ("UL") or equivalent third party.	Required	100% waiver but the intent is to be in compliance before commercial operation commences.	See the Draft waiver and the Draft proposed special condition.
5. Waive the standard condition of 6.1.4.D.9 that requires wind farm towers to be protected by non-climbing devices 12 feet vertically from the base.	Requested	100% waiver but it could be argued that the waiver is not required	NO WAIVER REQUIRED: The specific wording of 6.1.4.D.9 requires "... 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." (emphasis added) and the locking door on the outside of the smooth skinned monopole is similar.
6. Waive the standard condition of 6.1.4.F.1. that requires a signed Roadway Upgrade and Maintenance Agreement prior to the close of the public hearing	Required	100% waiver but the intent is to be in compliance before the County Board takes action	NO WAIVER ANTICIPATED FOR TOWNSHIP AGREEMENT. An agreement is anticipated before

before the Zoning Board of Appeals.			the end of the public hearing but a waiver is required for the County road agreement.
7. Waive the standard condition of 6.1.4 F.1.u. that requires street upgrades be in accordance with IDOT Bureau of Local Roads manual, 2005 edition.	Requested	100% waiver	See the Draft waiver and the Draft special condition.
8. Waive the standard condition 6.1.4 I. 1. that requires the noise level of each wind farm tower and wind farm to be in compliance with the Illinois Pollution Control Board regulations at the residential property line rather than to be compliance just at the dwelling.	Required	Partial waiver that is subject to some dispute; see the discussion regarding the IPCB noise regulations	See the Draft waiver. No special condition is required.
9. Waive the standard condition of 6.1.4 J. that requires the application to contain a copy of the Agency Action Report from the Illinois Department of Natural Resources Endangered Species Program.	Requested	The waiver may not actually be required because the substantive requirement appears to have been met. See the discussion.	See the Draft waiver and the Draft special condition
10. Waive the standard condition of 6.1.4 P.4.(b) that requires the applicant to gradually pay down 100% of the value of the irrevocable letter of credit by placing cash deposits in an escrow account over the first 13 years of the Wind Farm operation.	Requested	Only a partial waiver is requested.	<u>NO WAIVER ANTICIPATED.</u> The State's Attorney is still reviewing the Draft reclamation agreement but Invenergy has proposed recent changes that may eliminate the need for a waiver.
11. Waive the standard condition of 6.1.4 S.1.(c)(3) that requires that locations of wind turbines for the zoning use permit application cannot increase the noise impact over that approved in the special use permit.	Required	Only a partial waiver	See the Draft waiver. No special condition is required. The request is not to waive the applicable noise regulations but simply to provide greater flexibility for final turbine placement. The final turbine locations are still proposed to meet the applicable noise regulations.

REVISED COMPLIANCE WITH SUBSECTION 6.1.4 NOT REQUIRING WAIVERS

The following documents new recommendations for compliance based on a revised set of required waivers and in some cases simply a revised special condition. Everything in this Attachment that is underlined or indicated by strikout is a revision to Attachment E of the Supplemental Memorandum dated September 1, 2011, as follows:

1. Revise the Assessment of Compliance with General Standard Conditions as follows:

- Subparagraph 6.1.4 A.1. identifies specific areas that must at a minimum be included as the area of the WIND FARM special use permit. At this time the area of the WIND FARM Special Use Permit includes all of the relevant parcels of the participating landowners and is much larger than the minimum required area. The Supplemental Memorandum dated August 25, 2011, reviewed the requested waiver of the standard condition of 6.1.4 A. 1.(e) that requires the special use permit area to include a minimum of 40 feet wide area for electrical lines. Regarding that requested waiver:
 - The area of the special use permit as proposed is much larger than this minimum and the waiver is not required.
 - A special condition requires submission of “as built” drawings that will document where the wiring was located and the minimum area can be identified at that time or in the future if necessary.
- Subparagraph 6.1.4 A.2.(a) requires a WIND FARM to be more than one and one half miles from an incorporated municipality with a zoning ordinance and is based in Illinois law (55 ILCS 5/5-12020) that reserves jurisdiction over wind farms and electric generating wind devices within one-and-one-half miles of a municipal zoning jurisdiction to that municipality. The *Special Use Permit Application* received July 1, 2011, indicated underground wiring for the WIND FARM within a mile and a half of the Village of Royal. Champaign County cannot authorize any wind farm development within a mile and a half of the Village of Royal.). *{Note: Petitioner has indicated that the site plan will be revised to eliminate the need for the waiver and in that case this text should be revised.}*
- Subparagraph 6.1.4 A.2.(b) requires a wind farm to be a minimum of one mile from the CR District. The *Special Use Permit Application* received July 1, 2011, indicated underground wiring less than a mile from the CR District and a wavier has been requested. The Supplemental Memorandum dated August 25, 2011, reviewed the required waiver of 6.1.4 A.2.(b). *{Note: Petitioner has indicated that the site plan will be revised to eliminate the need for the waiver and in that case this text should be revised.}*

2. Add the following to the assessment of Compliance with Standard Conditions for Minimum Separations of WIND FARM TOWERS:

Subparagraphs 6.1.4 C.3. and 6.1.4 C.8. require the application to include copies of all private waivers of wind farm separations. The only private waivers in the WIND FARM are the waivers agreed to by the

PARTICIPATING landowners and those waivers have been documented in the public hearing and are in the chain of title of deed.

3. Revise the assessment of Compliance with Standard Conditions for the Design and Installation of WIND FARM TOWERS, item 10 as follows:

10. Subparagraph 6.1.4 D. 9 requires wind farm towers to be protected by non-climbing devices 12 feet vertically from the base. The *Special Use Permit Application* received July 1, 2011, requested a waiver from this requirement on p. 4-1 and the wavier was reviewed in the Supplemental Memorandum dated August 25, 2011. The specific wording of 6.1.4 D.9 requires "...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." (emphasis added) and the locking door on the outside of the smooth skinned monopole is a device that is similar so no waiver is required.

4.Revised assessment of Compliance with Standard Conditions for Endangered Species Consultation as follows:

Paragraph 6.1.4 J. contains standard conditions for endangered species consultation. Regarding compliance with 6.1.4 J.:

1. Paragraph 6.1.4 J. contains standard conditions for endangered species consultation and requires submission of a copy of the Agency Action Report from the Endangered Species Program of the Illinois Department of Natural Resources.
2. See the August 25, 2011, Supplemental Memorandum for a general discussion and requested a waiver regarding the Agency Action Report.
3. In a July 13, 2011, email to John Hall, Keith Shank, Division of Ecosystems and Environment, Illinois Department of Natural Resources, stated as follows:
 - a. His letter to Champaign County dated September 21, 2009, which was identical to the letter dated December 4, 2009, would substitute for an Agency Action Report and the consultation was not out of date but that conditions had changed regarding the Indiana Bat and the Mudpuppy Salamander and an updated consultation was necessitated.
 - b. Consultation is technically not complete until the authorizing agency (Champaign County) stated its response to the IDNR recommendations.
4. A second letter from Keith M. Shank regarding an additional consultation and Endangered Species Consultation Program Natural Heritage Database Review #1002516 dated August 18, 2011, states as follows:
 - a. The Department recommends Invenergy undertake mist-netting and telemetry surveys in the vicinity of the project area to better document the numbers and relative abundances of bat species occurring in the area, placing an emphasis on the Indiana Bat and its seasonal movements.

- b. The Department recommends the County require at least one post-construction fall migration season bat mortality study to document levels of bat mortality resulting from the project's operation.
 - c. Champaign County must notify the Department of its decision regarding this recommendation and which of the following the County will require:
 - (1) Proceed with the action as originally proposed; or
 - (2) Require the action to be modified per Department recommendations (please specific which measures if not all will be required); or
 - (3) Forgo the action.
5. Regarding the IDNR recommendations dated August 18, 2011:
- a. Regarding the second part of the IDNR recommendation dated August 18, 2011, recommending post-construction mortality studies, post-construction mortality studies are a requirement of the Ordinance and the discussion on pages 5-23 and 5-24 of the *Special Use Permit Application* received July 1, 2011, appears to be consistent with the Ordinance.
 - b. Regarding the first part of the IDNR recommendation dated August 18, 2011, recommending mist-netting and telemetry surveys to better document the numbers and relative abundances of bat species occurring in the area, placing an emphasis on the Indiana Bat and its seasonal movements:
 - (1) In an email dated August 23, 2011, Keith Shank of the IDNR stated that Invenergy has performed the the Blackball Mine Emergence Study to evaluate the movement of reproductive female Indiana bats but that study doesn't do anything to quantify the risk to or from Indiana Bats roosting along the Middle Fork.
 - (2) In the email dated August 23 ,2011, Keith Shank of the IDNR noted that IDNR recommendations are advisory and Champaign County may proceed as seems best to it.

5.Revised the assessment of Compliance with Standard Conditions for Historic and Archaeological Resources Review as follows:

Paragraph 6.1.4 K. contains standard conditions for historic and archaeological resources review. The *Special Use Permit Application* received July 1, 2011, demonstrated substantive compliance with these requirements as follows:

- 1. By consulting with the Illinois Historic Preservation Agency as evidenced by letters dated March 4, 2009, and March 11, 2010, from Anne Haaker, Deputy State Historic Preservation Officer.
- 2. By proposing to do conduct both a Phase I archaeological survey and an architectural survey of all structures within the Project Area and submitting the results to the Illinois Historic Preservation Agency as stated on pages 5-39 and 5-40 of the *Application*.

Attachment D. Revised Compliance With Subsection 6.1.4 Not Requiring Waivers

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3. In a phone call on September 19, 2011, Mr. Joseph S. Phillippe, Chief Archaeologist of the Illinois Historic Preservation Agency, stated to the Zoning Administrator that the California Ridge Wind Farm in Champaign County has complied with all recommendations of the Illinois Historic Preservation Agency.

Attachment E REVISED Draft Findings for Required Waivers

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Draft Findings for required waivers are presented below. The Draft Findings have been written so as to support the required waiver but the Board must approve each finding and should revise each finding as necessary. Each finding must be supportive of the waiver in order for the waiver to be approved. The Petitioner (Applicant) must be agreeable to all proposed special conditions.

Waivers of standard conditions in Section 6.1.4 that have been drafted are the following:

1. (originally #4) Waive the standard condition of 6.1.4 D. 1 (a) that requires certificates of design compliance from Underwriters Laboratories (“UL”) or equivalent third party.

The following are relevant considerations:

- a. The certificate of design compliance from Underwriters Laboratories (“UL”) or an equivalent third party is intended to document that the wind farm turbines meet relevant industry safety standards.
- b. The manufacturer has not yet received a certificate of compliance for this model of turbine.
- c. The applicant should be able to provide the certificate of design compliance before the wind farm begins commercial operation.
- d. The Zoning Administrator must authorize a Zoning Compliance Certificate for the wind farm before the wind farm begins commercial operation and a special condition has been proposed to require the submission of a certificate of design compliance as a prerequisite to receiving a Zoning Compliance Certificate.

The following special condition makes it clear that a **certificate of design compliance from Underwriters Laboratories (“UL”) or equivalent third party shall be required:**

The Zoning Administrator shall not approve a Zoning Compliance Certificate until the applicant submits a copy of a certificate of design compliance from Underwriters Laboratories (“UL”) or equivalent third party

The above special condition is required to ensure that:

The wind farm turbines are certified to meet relevant industry safety standards.

Regarding the required findings for this waiver of standard condition:

- (1) The waiver *{SUBJECT TO A SPECIAL CONDITION} {IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because the certificate of design compliance is not a certification of structural integrity but is related to product safety that is an operational concern rather than a structural concern and a special condition has been proposed that will require submittal of the certificate of design compliance before the WIND FARM goes into commercial operation.

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- (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because the turbine that is proposed for use in the WIND FARM, the GE 1.6 -100 wind turbine, is a relatively new wind turbine and the manufacturer is still completing the design certification process.
- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied *{WILL / WILL NOT}* prevent reasonable or otherwise permitted use of the land or structure or construction because the wind farm has been designed around the GE 1.6 -100 wind turbine and waiting to approve the special use permit until the certificate of design compliance is available will delay wind farm construction.
- (4) The special conditions, circumstances, hardships, or practical difficulties *{DO / DO NOT}* result from actions of the applicant because the applicant is not involved in the design certification process.
- (5) The requested waiver *{SUBJECT TO THE PROPOSED CONDITION} {IS / IS NOT}* the minimum variation that will make possible the reasonable use of the land/structure because it will the WIND FARM to move ahead under construction but will not go into commercial operation without the certification of design compliance.

Attachment E REVISED Draft Findings for Required Waivers

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2. (originally #6) Waive the standard condition of 6.1.4 F.1. that requires a signed Roadway Upgrade and Maintenance Agreement prior to the close of the public hearing before the Zoning Board of Appeals.

The following are relevant considerations:

- (a) Subparagraph 6.1.4F.1. requires the Applicant to enter into a signed Roadway Upgrade and Maintenance agreement approved by the County Engineer and State's Attorney and/or any relevant Township Highway Commissioner prior to the close of the public hearing.
- (b) There is no signed Roadway Upgrade and Maintenance agreement approved by either the County Engineer and State's Attorney or the Compromise or Ogden Township Highway Commissioners.
- (c) Appendix H of the *California Ridge Wind Energy Project Champaign County Special Use Permit Application* received July 1, 2011, states that a Road Use and Repair Agreement is still being negotiated with the Champaign County Engineer and the Compromise and Ogden Township Highway Commissioners. The *Application* did not request this waiver.
- (c) A letter regarding road use agreements was received from Marvin Johnson, Compromise Township Highway Commissioner, and Greg Frerichs, Ogden Township Highway Commissioner, on August 18, 2011. The letter can be summarized as follows:
 - (1) the Highway Commissioners have been discussing the use of township roads for the construction of the California Ridge Wind Farm with Invenergy since the Spring of 2009;
 - (2) they remain optimistic that the terms of an agreement can be reached within the next few weeks;
 - (3) they request that the ZBA adhere to the terms of the Zoning Ordinance while allowing them to fulfill their responsibilities as Highway Commissioners.
- (d) ~~The County Engineer has also been involved in similar negotiations since the Spring of 2009 but has not submitted a letter regarding that agreement. If the County Engineer did not feel that the negotiations were productive it is likely that he would let the ZBA know about those unproductive negotiations. At the September 8, 2011, public hearing County Engineer Jeff Blue testified that the County road agreement was ready for referral to the State's Attorney and that he could recommend the County Board to approve the County road agreement in its present form.~~
- (e) A special condition has been proposed to require ~~all required Roadway Upgrade and Maintenance Agreements to be signed and submitted~~ County Board approval of the County road agreement prior to the County Board decision in this special use permit. ~~The condition will allow the negotiations to continue as long as necessary and should ensure that signed agreements are submitted before any County Board decision.~~

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The following special condition has been proposed to require County Board approval of the County road agreement prior to the County Board decision in this special use permit:

The County Board shall not make a final decision in Case 696-S-11 until it has ~~copies of signed~~ authorized the County Board Chair to sign the Roadway Upgrade and Maintenance Agreements are received from all relevant highway jurisdictions recommended by the County Engineer.

The above special condition is required to ensure that:

All relevant highway jurisdictions are allowed to fulfill their responsibilities without unduly delaying a final decision in Case 696-S-11.

Regarding the required findings for this waiver of standard condition:

- (1) The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because even though the County Engineer approves of the Draft county road agreement only the County Board can authorize a signature on the road agreement .
- (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because this is the first WIND FARM reviewed under the provisions of 6.1.4 and no other WIND FARM will have that burden.
- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied *{WILL / WILL NOT}* prevent reasonable or otherwise permitted use of the land or structure or construction because without the waiver the ZBA recommendation would be delayed at least one month which is an undue financial burden for the construction of the WIND FARM.
- (4) The special conditions, circumstances, hardships, or practical difficulties *{DO / DO NOT}* result from actions of the applicant because the applicant has negotiated in good faith and the County road agreement is ready for approval.
- (5) The requested waiver *{SUBJECT TO THE PROPOSED CONDITION} { IS / IS NOT }* the minimum variation that will make possible the reasonable use of the land/structure because it is the minimum waiver necessary to allow the WIND FARM special use permit to move ahead without delay.

3. (originally #7) Waive the standard condition of 6.1.4 F.1.u. that requires street upgrades be in accordance with IDOT Bureau of Local Roads manual, 2005 edition.

Requested by Invenegy on p. H-1 in Appendix H of the *California Ridge Wind Energy Project Champaign County Special Use Permit Application* received July 1, 2011. The following are relevant considerations:

a. From Appendix H of the *Application*:

- (1) A Road Use and Repair Agreement is still being negotiated with the Champaign County Engineer and the Compromise and Ogden Township Highway Commissioners.
- (2) The intent of the Road Use and Repair Agreement is to insure that roads used in connection to the wind farm are in as good a condition after the wind farm construction as they were before the wind farm construction.
- (3) Implementation of upgrade requirements called for by the Bureau of Local Roads and Streets Manual would entail substantial widening and reconstruction of a number of roads and that would impose a significant financial burden on California Ridge to the extent that it would jeopardize the financial viability of the wind farm.
- (4) Pursuant to the Illinois Highway Code, a Township Highway Commissioner does not have the authority to unilaterally agree to the widening or alternation of township roads.

b. Repairing or rebuilding roads is not necessarily the same as an upgrade.

c. The IDOT Bureau of Local Roads Manual, 2006 edition, and the IDOT *Standard Specifications for Road and Bridge Construction*, which may be referred to collectively as the BLR standards, are the standard requirements for road and bridge construction in the rural areas of the State of Illinois and are intended to ensure that road and bridge construction provides minimum public safety.

d. The County Engineer and the relevant Township Highway Commissioner are responsible to ensure public safety, efficiency, and other relevant public considerations, on all streets (roads) within their respective jurisdictions.

e. It is anticipated that other unforeseen situations besides widening of right of way might arise during WIND FARM development for which any BLR standard might pose unique or peculiar problems that must be addressed by the Applicant and the relevant street authority.

f. Waiving the requirement for compliance with the BLR standards without some means to ensure public safety would not be consistent with the Ordinance requirement to prevent injury to the neighborhood or injury to the public health, safety, and welfare.

g. Waiving the requirement for compliance with the BLR standards subject to the discretion of the relevant street maintenance authority should ensure adequate public safety while providing the necessary flexibility to meet the peculiar conditions that may arise during WIND FARM development.

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- h. The Ordinance requires the Applicant to enter into a signed Roadway Upgrade and Maintenance Agreement with each relevant street maintenance authority prior to the close of the public hearing. Each Road Agreement should refer to the BLR standards but provide that the street maintenance authority has the authority to exercise discretion in application of the BLR standards.
- i. A special condition has been proposed that would limit the requested waiver so as to ensure adequate public safety.

The following special condition limits the requested waiver so as to ensure adequate public safety while providing the necessary flexibility to meet the peculiar conditions that may arise during WIND FARM development:

The Roadway Upgrade and Maintenance Agreements shall require road repair work to be performed in accordance with the IDOT Bureau of Local Roads Manual (BLE Manual), 2006 edition, and the IDOT Standard Specifications for Road and Bridge Construction (IDOT Specifications), but the relevant street jurisdiction may, on a case by case basis, exercise their discretion to waive either of the standards so long as public safety is not compromised.

The above special condition is required to ensure that:

Road use agreements ensure adequate public safety but also provide necessary flexibility in road repair work.

Regarding the required findings for this waiver of standard condition:

- (1) The requested waiver *{SUBJECT TO THE PROPOSED CONDITION}* *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because
 - i. under state law the relevant highway authority is responsible for providing both a safe and an efficient highway system and
 - ii. the special condition waives the BLR standards only when agreeable to the relevant highway authority and only so long as public safety is not compromised.
- (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because
 - i. the existing rural road network must accommodate the proposed WIND FARM construction in an efficient and safe manner and
 - ii. the relevant highway authority will have the discretion to waive the BLR standards if unique circumstances are encountered in the construction of the WIND FARM or if a more efficient standard is available but
 - iii. the BLR standards can only be waived so long as public safety is not compromised.

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- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied **{WILL / WILL NOT}** prevent reasonable or otherwise permitted use of the land or structure or construction because without the waiver the resulting inefficiencies could be significant enough to pose an undue financial burden for the construction of the WIND FARM even though public safety would not be enhanced.
- (4) The special conditions, circumstances, hardships, or practical difficulties **{DO / DO NOT}** result from actions of the applicant because the special conditions are related to the existing highway conditions.
- (5) The requested waiver **{SUBJECT TO THE PROPOSED CONDITION} {IS / IS NOT}** the minimum variation that will make possible the reasonable use of the land/structure because the special condition allows the relevant highway authority to follow the most efficient methods so long as public safety is not compromised.

4. (originally #8) Waive the standard condition 6.1.4 I. 1. that requires the noise level of each wind farm tower and wind farm to be in compliance with the Illinois Pollution Control Board regulations at the residential property line rather than to be compliance just at the dwelling.

The following are relevant considerations:

- a. Subparagraph 6.1.4 I. 1. requires the noise level 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).
- b. Regarding the Illinois Pollution Control Board (IPCB) regulations (35 *Illinois Administrative Code* Subtitle H: Noise Parts 900, 901, 910):
 - (1) 35 IAC 901.101 b) defines Class A land as all land used as specified by LBSC Codes 1000 through 1340, 2410 through 2455, 5200 through 5230, 5500, 6100 through 6145, 6222, 6510 through 6530, 6568 through 6600.
 - (2) Appendix B to 35 IAC 901 identifies LBCS Code 1100 as “Private Household” and as Class A under 35 IAC 901 Land Class.
 - (3) Appendix B to 35 IAC 901 does not contain the land use “wind farm” but does identify “alternative energy sources” under LBCS Code 4314 as Class C.
 - (4) 35 IAC 901.102 regulates the emission of sound from any property line noise source located on any Class A,B, or C land to any receiving Class A land. One type of Class A land is land used for a private household.
- c. Regarding the compliance of the proposed WIND FARM with the applicable IPCB noise regulations:
 - (1) The discussion of the anticipated noise levels on p. 5-3 of the *Application* explains that “a total of 553 receptors (at residences) were modeled for the Project area.” and refers several times to “residences” as “noise receivers” but never refers to “residential land”.
 - (2) Tables 5 and 6 in Appendix C summarize the daytime and nighttime sound analysis modeling results for the relevant octave bands for the residence with the highest noise level and compares those results to the maximum allowable sound level. The modeling results are lower than the maximum allowable sound level for all octave bands.
 - (3) Appendix C in Appendix C gives the noise modeling results on an hourly basis (Leq) for all receptors and the maximum allowable sound level is never exceeded at any octave band but IPCB noise regulations do not regulate Leq.
- d. In a letter approved at the October 29, 2009, ZBA meeting the ZBA had requested that the County Board approve the hiring of a noise consultant to provide a qualified evaluation of wind farm noise submittals. At the November 30, 2009, the Environment and Land Use Committee voted to not hire a noise consultant to evaluate the noise studies submitted by wind farm developers.

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September 22, 2011

- e. At the September 1, 2011, public hearing Petitioner's Attorney Michael Blazer submitted a Memorandum that briefly reviewed and had as attachment the Illinois Pollution Control Board's (IPCB) decision in *Knox v. Turris Coal Co.* which involved noise complaints by Gladys and David Knox who apparently owned a total of 94 acres of which 90 acres were farmed and the other 4 acres included their dwelling and a pond. In the *Knox* case the IPCB confirmed that a farm dwelling is Class A land but the farmland was Class C and the pond was "unclassified".
- f. Apparently no land use in the IPCB regulations is distinguished between the interior activities and exterior activities which leads to the question of whether there are no limits on the noise level that outdoor activities may be subject to or does that mean that the limit applies to all activities that are a part of that use whether it be interior activities or exterior activities, in the same way as under the Zoning Ordinance an entire property is classified as one principal use?

Regarding the required findings for this waiver of the standard condition:

1. The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because
 - i. there is some question about whether the noise regulations apply at the property line or the dwelling but the I.P.C.B. noise regulations are not regularly enforced by any state agency and so there is no official answer to that question; and
 - ii. the noise results submitted in the Application indicate that only 9 receptors are within approximately 3 decibels or less of the noise limit and the other 251 receptors are below the limit by more than 3 decibels; and
 - iii. for residential properties less than 5 acres in area the difference between the sound level at the property line versus the sound level at the dwelling is not likely to differ by much given the small distance involved and granting the waiver will not make much difference in the actual sound level; and
 - iv. the petitioner submitted evidence indicating that for larger properties the I.P.C.B. noise regulations apply at the dwelling; and
 - iv. it is more important to agree to a standard at this time that can be enforced by the County in the future if there are complaints rather than to debate whether the standard applies at the property line or the dwelling.
- (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because this is the first WIND FARM reviewed under the provisions of 6.1.4 and no other WIND FARM will have that burden.

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- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied *{WILL / WILL NOT}* prevent reasonable or otherwise permitted use of the land or structure or construction because the Applicant has gone to great trouble and expense to plan the WIND FARM so as to comply with the Illinois Pollution Control Board (IPCB) regulations as they understand the regulations should be applied.
- (4) The special conditions, circumstances, hardships, or practical difficulties *{DO / DO NOT}* result from actions of the applicant because they result from a new Ordinance requirement that has not been thoroughly tested.
- (5) The requested waiver *{ IS / IS NOT }* the minimum variation that will make possible the reasonable use of the land/structure because it is the minimum waiver necessary to resolve the question regarding whether the IPCB noise regulation applies at the property line or the dwelling for small residential properties.

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5. (originally #9) Waive the standard condition of 6.1.4 J. that requires the application to contain a copy of the Agency Action Report from the Illinois Department of Natural Resources Endangered Species Program.

The following are relevant considerations:

- a. Subparagraph 6.1.4 J. requires the application to contain a copy of the Agency Action Report from the Illinois Department of Natural Resources Endangered Species Program.
- b. As requested by Invenergy on pages 5-19 and 5-20 of the *California Ridge Wind Energy Project Champaign County Special Use Permit Application* received July 1, 2011:
 - (1) California Ridge consulted with the Illinois Department of Natural Resources (IDNR) and a letter dated December 4, 2009, was received from the IDNR and included in Appendix J. In the letter Keith Shank stated "The Department's consultation process for this proposal is terminated."
- c. In the letter dated December 4, 2009, from the IDNR Keith Shank also stated that the consultation was only valid for a two-year period and if the proposed action was not implemented in that time a new consultation will be necessary.
- d. In a July 13, 2011, email to John Hall, Keith Shank, Division of Ecosystems and Environment, Illinois Department of Natural Resources, stated as follows:
 - (1) His letter to Champaign County dated September 21, 2009, which was identical to the letter dated December 4, 2009, would substitute for an Agency Action Report and the consultation was not out of date but that conditions had changed regarding the Indiana Bat and the Mudpuppy Salamander and an updated consultation was necessitated.
 - (2) Consultation is technically not complete until the authorizing agency (Champaign County) stated its response to the IDNR recommendations.
- e. A second letter from Keith M. Shank regarding an additional consultation and Endangered Species Consultation Program Natural Heritage Database Review #1002516 dated August 18, 2011, states as follows:
 - (1) The Department recommends Invenergy undertake mist-netting and telemetry surveys in the vicinity of the project area to better document the numbers and relative abundances of bat species occurring in the area, placing an emphasis on the Indiana Bat and its seasonal movements.
 - (2) The Department recommends the County require at least one post-construction fall migration season bat mortality study to document levels of bat mortality resulting from the project's operation.
 - (3) Champaign County must notify the Department of its decision regarding this recommendation and which of the following the County will require:
 - (a) Proceed with the action as originally proposed; or
 - (b) Require the action to be modified per Department recommendations (please specific which measures if not all will be required); or

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(c) Forgo the action.

f. Regarding the IDNR recommendations dated August 18, 2011:

- (1) Regarding the second part of the IDNR recommendation dated August 18, 2011, recommending post-construction mortality studies, post-construction mortality studies are a requirement of the Ordinance and the discussion on pages 5-23 and 5-24 of the *Special Use Permit Application* received July 1, 2011, appears to be consistent with the Ordinance.
- (2) Regarding the first part of the IDNR recommendation dated August 18, 2011, recommending mist-netting and telemetry surveys to better document the numbers and relative abundances of bat species occurring in the area, placing an emphasis on the Indiana Bat and its seasonal movements:
 - (a) In an email dated August 23, 2011, Keith Shank of the IDNR stated that Invenergy has performed the the Blackball Mine Emergence Study to evaluate the movement of reproductive female Indiana bats but that study doesn't do anything to quantify the risk to or from Indiana Bats roosting along the Middle Fork.
 - (b) In the email dated August 23 ,2011, Keith Shank of the IDNR noted that IDNR recommendations are advisory and Champaign County may proceed as seems best to it.

Regarding the required findings for this waiver of the standard condition:

1. The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because
 - i. in a July 13, 2011, email to John Hall, Keith Shank, Division of Ecosystems and Environment, Illinois Department of Natural Resources, stated that his letter to Champaign County dated September 21, 2009, which was identical to the letter dated December 4, 2009, would substitute for an Agency Action Report; and
 - ii. because the letter would substitute for a Agency Action Report the submission of the letter is virtually the same thing as submitting an Agency Action Report and submitting only the letter will be no more injurious to the public health, safety, and welfare than submitting an Agency Action Report.
- (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because the Applicant has consulted fully with the IDNR and it was more convenient for the IDNR to reply with a written letter rather than an Agency Action Report.
- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied *{WILL / WILL NOT}* prevent reasonable or otherwise permitted use of the land or structure or construction because if the waiver is not granted the Applicant will have to request that IDNR staff take time to prepare an Agency Action Report and the resulting delay could be significant

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enough to pose an undue financial burden for the construction of the WIND FARM even though public benefit would result and IDNR would incur greater cost.

- (4) The special conditions, circumstances, hardships, or practical difficulties *{DO / DO NOT}* result from actions of the applicant because the Applicant consulted with the IDNR and the approach used in the IDNR review was the approach that IDNR wanted to use.

- (5) The requested waiver *{ IS / IS NOT }* the minimum variation that will make possible the reasonable use of the land/structure because the IDNR has made it clear that the letter that was provided to Champaign County substitutes for an Agency Action Report.

6. (originally #11) Waive the standard condition of 6.1.4 S.1.(c)(3) that requires that locations of wind turbines for the zoning use permit application cannot increase the noise impact over that approved in the special use permit.

The following are relevant considerations:

- a. Subparagraph 6.1.4 I. 1. requires that noise levels must be in compliance with the applicable Illinois Pollution Control Board (IPCB) regulations. Paragraph 6.1.4 I. is titled “standard conditions for allowable noise level” and does not use the term “noise impact(s)” and generally refers to noise “levels”.
- b. Subparagraph 6.1.4 S.1.(c)(3) requires that locations of wind turbines for the zoning use permit application cannot increase the noise impact over that approved in the special use permit.
- c. The applicant has requested that the special use permit allow greater flexibility in adjusting the final location of WIND FARM TOWERS provided that the applicable noise regulations are not exceeded. The requested flexibility could result in somewhat greater noise levels than indicated in Appendix C of the *Application* but the noise level at any residence would not be greater than allowed under the IPCB regulations

Regarding the required findings for this waiver of the standard condition:

- (1) The waiver *{IS/ IS NOT}* in accordance with the general purpose and intent of the Zoning Ordinance and *{WILL/ WILL NOT}* be injurious to the neighborhood or to the public health, safety, and welfare because there is only one allowable noise level and that is the noise level established in the Illinois Pollution Control Board (IPCB) regulations as established by 6.1.4 I.6.(a) and the requirement of 6.1.4 S.1.(c)(3) is in direct conflict with 6.1.4 I.6.(a).
- (2) Special conditions and circumstances *{DO / DO NOT}* exist which are peculiar to the land or structure involved, which are not applicable to other similarly situated land and structures elsewhere in the same district because this is the first WIND FARM reviewed under the provisions of 6.1.4 and no other WIND FARM will have that burden.
- (3) Practical difficulties or hardships created by carrying out the strict letter of the regulations sought to be varied *{WILL / WILL NOT}* prevent reasonable or otherwise permitted use of the land or structure or construction because the Applicant has gone to great trouble and expense to plan the WIND FARM so as to comply with the Illinois Pollution Control Board (IPCB) regulations as established by 6.1.4 I.6.(a) and not the lower noise levels that are incorrectly indicated by the reference to 6.1.4 S.1.(c)(3).
- (4) The special conditions, circumstances, hardships, or practical difficulties *{DO / DO NOT}* result from actions of the applicant because they result from a new Ordinance requirement that has not been thoroughly tested.

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- (5) The requested waiver *{ IS / IS NOT }* the minimum variation that will make possible the reasonable use of the land/structure because it is the minimum waiver necessary to resolve the contradiction between 6.1.4 I.6.(a) and 6.1.4 S.1.(c)(3).

Attachment F Special Conditions of Approval

Case 696-S-11

September 22, 2011

- A. Regarding the specific limits on the number and type of wind turbines, the maximum proposed height of WIND TURBINE TOWERS, and the overall nameplate capacity:

This special use permit authorizes a WIND FARM as follows:

- 1. The type of wind turbine authorized is the General Electric 1.6-100 wind turbine with a hub height of 100 meters (328 feet) and a rotor diameter of 100 meters (328 feet).**
- 2. The maximum overall height of each WIND FARM TOWER shall be 492 feet.**
- 3. The maximum number of WIND TURBINE TOWERS (wind turbines) is 30 with a total nameplate capacity of not more than 48 megawatts (MW) of which not more than 28 WIND FARM TOWERS with a total nameplate capacity of not more than 45 MW are proposed in Compromise Township (Part A) and not more than 2 WIND FARM TOWERS with a total nameplate capacity of not more than 3 MW are proposed in Ogden Township (Part B), and including access roads, wiring, and related work on specified public roads (highways).**

The above special condition is required to ensure that:

The constructed WIND FARM is consistent with the special use permit approval.

- B. Regarding the approved site plan:

The approved site plan consists of the following documents:

- 1. California Ridge Wind Energy Project Champaign County Special Use Permit Application received July 1, 2011**
- 2. Status Summary Map with Setbacks California Ridge Wind Energy Center, Champaign and Vermilion Counties, received July 21, 2011 (an excerpt of only the Champaign County portion**
- 3. Champaign County Non-Participating Dwelling Separation Summary map received July 29, 2011 Parcel**
- 4. {anticipated site plan amendment}**

The above special condition is required to ensure that:

The constructed WIND FARM is consistent with the special use permit approval.

- C. Regarding the requested waiver of the standard condition of 6.1.4 F.1. that requires a signed Roadway Upgrade and Maintenance Agreement prior to the close of the public hearing before the Zoning Board of Appeals, the following special condition makes it clear that a signed Roadway Upgrade and Maintenance Agreement shall be required prior to any County Board decision on this special use permit:

The County Board shall not make a final decision in Case 696-S-11 until it has copies of signed—authorized the County Board Chair to sign the Roadway Upgrade and Maintenance Agreements are received from all relevant highway jurisdictions recommended by the County Engineer.

Attachment F Special Conditions of Approval

Case 696-S-11

September 22, 2011

The above special condition is required to ensure that:

All relevant highway jurisdictions are allowed to fulfill their responsibilities without unduly delaying a final decision in Case 696-S-11.

- D. Regarding the waiver of the standard condition 6.1.4 F.1.u. that requires street upgrades be in accordance with IDOT Bureau of Local Roads manual, 2005 edition:

The Roadway Upgrade and Maintenance Agreements shall require road repair work to be performed in accordance with the IDOT Bureau of Local Roads Manual, 2006 edition, and the IDOT *Standard Specifications for Road and Bridge Construction*, but the relevant street jurisdiction may, on a case by case basis, exercise their discretion to waive the BLR standards so long as public safety is not compromised.

The above special condition is required to ensure that:

Road use agreements ensure adequate public safety but also provide necessary flexibility in road repair work.

- E. Regarding the authorized hours of construction of the proposed WIND FARM:

Construction activities required to build the WIND FARM shall generally only occur during the weekday daytime hours of 7AM to 10PM. Those construction activities include but are not limited to the following:

- 1. Construction of access roads**
- 2. Delivery and unloading of WIND FARM equipment and materials**
- 3. Excavation for and construction of WIND FARM TOWER foundations**
- 4. Installation of WIND FARM wiring**
- 5. Assembly of WIND FARM turbines**
- 6. Erection of WIND FARM TOWERS**

The above special condition is required to ensure that:

The affects of WIND FARM construction on neighbors is consistent with the special use permit approval.

- G. The Ordinance does not impose an ultimate limit on shadow flicker and neighbors who are predicted to receive no more than 30 hours of shadow flicker per year at the time of the special use permit public hearing expect that the actual shadow flicker will not be much different. The following special condition will ensure that the actual shadow flicker will not be much different than the amount indicated in the public hearing:

No NON- PARTICIPATING DWELLING or other PRINCIPAL STRUCTURE shall receive more than 45 minutes of shadow flicker per year.

The above special condition is required to ensure that:

The actual shadow flicker cast on non-participating neighbors is similar to the anticipated shadow flicker that was presented in the public hearing.

H. Regarding the standard condition 6.1.4 R. that provides for expiration of the special use permit:

This special use permit shall expire on the following dates and/ or for the following reasons:

- 1. If no zoning use permit application has been received by the Department of Planning and Zoning by 4:30PM on October 20, 2014, which is consistent with the expiration deadline in the Roadway Upgrade and Maintenance Agreements; or**
- 2. Upon completion of all decommissioning and reclamation requirements of the WIND FARM Reclamation Agreement and the subsequent release of the financial assurance required by 6.1.4 P. following the requirements of a written agreement with the COUNTY.**

The above special condition is required to ensure that:

The ultimate limits of the special use permit are clearly defined and consistent with the Ordinance requirements and the special use permit approval.

I. The following conditions will help ensure that WIND FARM TOWERS are located and constructed in conformance with the approved site plan:

- 1. Each WIND FARM TOWER shall be constructed within 125 feet of the location indicated in the approved site plan for the special use permit provided as follows:**
 - (a) no separation to a non-participating property or PRINCIPAL STRUCTURE shall be less than the minimum required by the Ordinance; and**
 - (b) A greater deviation from the approved site plan is permissible so long as the greater deviation is not towards a NON-PARTICIPATING PRINCIPAL BUILDING located within 1,500 feet of the WIND FARM TOWER.**
- 2. Prior to excavation for any WIND FARM TOWER footing:**
 - (a) The Applicant shall notify the Zoning Administrator when each WIND FARM TOWER location has been identified and marked on the ground so that the Zoning Administrator or a representative can verify that the location is consistent with the approved site plan in the special use permit case.**

- (b) **The Zoning Administrator shall issue a WIND FARM TOWER Foundation Permit after verifying that the WIND FARM TOWER location is consistent with the approved site plan.**
- (c) **The Applicant shall not excavate any WIND FARM TOWER footing until the WIND FARM TOWER Foundation Permit has been received.**

The above special conditions are required to ensure that:

The WIND FARM TOWERS are located in general conformance with the assertions and studies documented in the California Ridge Wind Energy Project Champaign County Special Use Permit Application received July 1, 2011, and that the Applicant has some flexibility for optimizing location based on circumstances at each WIND FARM TOWER site.

- J. Regarding specific submittals required prior to the approval of a zoning use permit to authorize construction of the WIND FARM:

The following submittals are required prior to the approval of any zoning use permit for a WIND FARM TOWER:

- 1. **Certification by an Illinois Professional Engineer or Illinois Licensed Structural Engineer that the foundation and tower design of each WIND FARM TOWER is within accepted professional standards, given local soil and climate conditions, as required by 6.1.4 D.1.(b).**
- 2. **A Transportation Impact Analysis provided by the applicant that is acceptable to the County Engineer and the State's Attorney; and for highways in Compromise Township is acceptable to the Compromise Township Highway Commissioner; and for highways in Ogden Township is acceptable to the Ogden Township Highway Commissioner, as required by 6.1.4 F. 2..**
- 3. **A signed Reclamation Agreement in conformance with the approved Draft Reclamation Agreement dated { } that also includes the following financial assurance:**
 - (a) **an irrevocable commercial letter of credit that is consistent with the provisions of the approved Draft Reclamation Agreement; and**
 - (b) **documentation of an escrow account that is consistent with the provisions of the approved Draft Reclamation Agreement; and**
 - (c) **a memorandum of approval for the submitted Reclamation Agreement and accompanying financial assurance from the Champaign County States Attorney.**
- 4. **A copy of the Recorded Covenant pursuant to 6.1.1 A.2.**

5. **The telephone number for the complaint hotline required by 6.1.4 Q.**
6. **A site plan for the installation of the specific WIND FARM TOWER indicating the specific proposed location of the WIND FARM TOWER, other PRINCIPAL STRUCTURES within 1,500 feet separation, 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.**
7. **A copy of the approved access permit for the access road by the relevant highway jurisdiction.**
8. **A copy of any required permits for use of public highways by overweight vehicles.**

The above special condition is required to ensure that:

The WIND FARM is constructed consistent with the special use permit approval and in compliance with the Ordinance requirements.

- K. The following special condition makes it clear that a Zoning Compliance Certificate will be required to document that each WIND FARM TOWER was constructed in conformance with the approved site plan:

A Zoning Compliance Certificate shall be required for each WIND FARM TOWER prior to the WIND FARM going into commercial production of energy. Approval of a Zoning Compliance Certificate shall require the following:

1. **An as-built site plan of each specific WIND FARM TOWER indicating the specific as-built location of the WIND FARM TOWER, other PRINCIPAL STRUCTURES within 1,500 feet separation, property lines (including identification of adjoining properties), as-built 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. **A copy of the approved as-built access road by the relevant highway jurisdiction.**

The above special condition is required to ensure that:

The WIND FARM is constructed consistent with the special use permit approval and in compliance with the Ordinance requirements.

- L. The following special condition makes it clear that a Zoning Compliance Certificate will be required to document that the entire WIND FARM complies with the specific requirements that apply to the overall WIND FARM as follows:

The California Ridge WIND FARM shall not begin commercial production of energy until the Zoning Administrator has approved a Zoning Compliance Certificate for the entire California Ridge WIND FARM based on submission and acceptance of all of the following:

- 1. A Zoning Compliance Certificate has been approved for all WIND FARM TOWERS approved in the Special Use Permit.**
- 2. A copy of a certificate of design compliance for the General Electric 1.6-100 wind turbine has been received from Underwriters Laboratories (“UL”) or an equivalent third party listed in 6.1.4 D. 1 (a).**
- 3. Documentation of compliance with all required post-WIND FARM construction requirements has been received from the relevant highway jurisdictions.**

The above special condition is required to ensure that:

WIND FARM turbines are certified to meet relevant industry safety standards and the entire WIND FARM complies with the special use permit approval before it begins commercial operation.

- M. Regarding specific requirements that apply even after the WIND FARM goes into commercial operation:

The Applicant or Owner or Operator of the WIND FARM shall comply with the following:

- 1. Cooperate with local fire protection districts to develop the districts emergency response plan as required by 6.1.4 G.2.**
- 2. Take all reasonable steps to resolve complaints of interference caused by the WIND FARM to microwave transmission providers, local emergency service providers (911 operators), and broadcast residential television as required by 6.1.4 H.**
- 3. Cooperate fully with Champaign County and in resolving any noise complaints including reimbursing Champaign County any costs for the services of a qualified noise consultant pursuant to any proven violation of the I.P.C.B. noise regulations as required by 6.1.4 I.6.**

- 4. Complete all post-WIND FARM construction mortality studies on birds and bats as required by 6.1.4 L.3. and as proposed in the *California Ridge Wind Energy Project Champaign County Special Use Permit Application received July 1, 2011* particularly pages 5-22 through 5-24, and submit written reports to the Environment and Land Use Committee at the end of the first two years of WIND FARM operation and cooperate with the Environment and Land Use Committee in resolving mortality concerns that might arise as required by 6.1.4 L. 3(e).**
- 5. Maintain a current general liability policy as required by 6.1.4 N.**
- 6. Submit annual operation and maintenance reports to the Environment and Land Use Committee as required by 6.1.4 O.1.**
- 7. Maintain compliance with the approved Reclamation Agreement including replacement irrevocable commercial letters of credit as required in the Reclamation Agreement.**
- 8. Submit to the Zoning Administrator copies of all complaints to the telephone hotline on a monthly basis and take all necessary actions to resolve all legitimate complaints as required by 6.1.4 Q.**

The above special condition is required to ensure that:

The future requirements for the Applicant or Owner or Operator of the WIND FARM are clearly identified.

