AS APPROVED JUNE 14, 2018

MINUTES OF REGULAR MEETING

CHAMPAIGN COUNTY ZONING BOARD OF APPEALS
1776 E. Washington Street
Urbana, IL 61801

DATE:	**May 3, 2018**	**PLACE:**	**Lyle Shields Meeting Room**
			1776 East Washington Street
TIME:	**7:00 p.m.**		**Urbana, IL 61802**

MEMBERS PRESENT: Catherine Capel, Frank DiNovo, Ryan Elwell, Debra Griest, Jim Randol, Marilyn Lee, Brad Passalacqua

MEMBERS ABSENT: None

STAFF PRESENT: Connie Berry, Susan Burgstrom, John Hall

OTHERS PRESENT: Vince Koers, Phillip Geil, Chuck White, Theodore Hartke, John Dorsey, Matthew Herriott, Terri McFall, Tannie Justus, Steven Herriott, Tammar Geil, Ben Theobald, Bill Becker, Tim Osterbur, Jim Nonman, Stuart Levy, Daniel Herriott, Stacy Gloss, John Althauser, Patrick Brown, Jim Reuter

1. Call to Order

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

2. Roll Call and Declaration of Quorum

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

Ms. Capel informed the audience that anyone wishing to testify for any public hearing tonight must sign the witness register for that public hearing. She reminded the audience that when they sign the witness register they are signing an oath.

3. Correspondence

None

4. Approval of Minutes

None

5. Continued Public Hearing

895-AT-18 Petitioner: **Champaign County Zoning Administrator Request to amend the Champaign County Zoning Ordinance as follows: Part A: Amend Section 3 by adding definitions including but not limited to "NOXIOUS WEEDS: and "SOLAR FARM"; Part B: Add paragraph**

4.2.1 C.5 to indicate that SOLAR FARM may be authorized by County Board SPECIAL USE permit as a second PRINCIPAL USE on a LOT in the AG-1 DISTRICT or the AG-2 DISTRICT; Part C: Amend Section 4.3.1 to exempt SOLAR FARM from the height regulations except as height regulations are required as a standard condition in new Section 6.1.5; Part D: Amend subsection 4.3.4 A. to exempt WIND FARM LOT and SOLAR FARM LOT from the minimum LOT requirements of Section 5.3 and paragraph 4.3.4 B. except as minimum LOT requirements are required as a standard condition in Section 6.1.4 and new Section 6.1.5; Part E: Amend subsection 4.3.4 H. 4. to exempt SOLAR FARM from the Pipeline Impact Radius regulations except as Pipeline Impact regulations are required as a standard condition in new Section 6.1.5; Part F: Amend Section 5.2 by adding "SOLAR FARM" as a new PRINCIPAL USE under the category "Industrial Uses: Electric Power Generating Facilities" and indicate that SOLAR FARM may be authorized by a County Board SPECIAL USE Permit in the AG-1 Zoning DISTRICT and the AG-2 Zoning DISTRICT and add new footnote 15. to exempt a SOLAR FARM LOT from the minimum LOT requirements of Section 5.3 and paragraph 4.3.4. B. except as minimum LOT requirements are required as a standard condition in new Section 6.1.5.; Part G: Add new paragraph 5.4.3 F. that prohibits the Rural Residential OVERLAY DISTRICT from being established inside a SOLAR FARM County Board SPECIAL USE permit; Part H: Amend subsection 6.1.1 A. as follows: 1. Add SOLAR FARM as a NON-ADAPTABLE STRUCTURE and references to the new Section 6.1.5 where there are existing references to existing Section 6.1.4; and 2. Revise subparagraph 6.1.1 A. 11c. by deleting reference to Section 6.1.1A. and add reference to Section 6.1.1A.2; Part I: Add new subsection 6.1.5 SOLAR FARM County Board SPECIAL USE Permit with new standard conditions for SOLAR FARM; Part J: Add new subsection 9.3.1 J. to add application fees for a SOLAR FARM zoning use permit; and Park K: Add new subparagraph 9.3.3 B.8. to add application fees for a SOLAR FARM County Board SPECIAL USE permit.

Ms. Capel asked those present to silence their cell phones. She said that public testimony would be taken, and that if someone would like to provide testimony, they can sign the Witness Register at the middle table. She asked that people step outside if they want to have a conversation so that you won't disturb the Board. She said that if someone would like to offer comments without actually testifying in person, they are welcome to email the comments or give them to Ms. Berry or Ms. Burgstrom, and those comments would be included in the Board's meeting packet for review.

Ms. Capel informed the audience that anyone wishing to testify for any public hearing tonight must sign the witness register for that public hearing. She reminded the audience that when they sign the witness register they are signing an oath. She asked the audience if anyone desired to sign the witness register and there was no one.

Mr. John Hall, Zoning Administrator, distributed Supplemental Memorandum #13, with attachments, dated May 3, 2018, to the Board for review. He said that there were three emails from Mr. Hartke, with one including testimony by Dr. Schomer before the Illinois Pollution Control Board on October 3, 2005. Mr. Hall said that an attachment to the memorandum is an email from Tom Sinder with just one question. Mr. Hall stated that Professor Scott Willenbrock submitted information related to recycling of PV modules. He said that three emails were received from Terry McFall on April 12, April 26, and May 2, 2018. He said that an email was received from Jonathan Livengood, basically in support of allowing solar farms and comments regarding separations and regulatory burdens. Mr. Hall said that two articles were included as an attachment from the *County Star* regarding a public open house held in Sidney by BayWa-r.e., and one regarding tonight's public hearing. He said that there are a number of sound level estimates done by P&Z Staff using

an online tool; these are approximate sound level estimates. He said he believes the methodology is accurate, but it is only for a single inverter and it is going to be a different situation when you have a solar farm with multiple inverters, and PV modules that are reflecting the noise or blocking it, depending on the specifics of the case. He said the memo also includes two attachments from previous memos regarding warranties for solar modules, and that is one thing we discuss in the memo. He said on the second page, P&Z Staff just wanted to remind the Board that when discussing the alternative decommissioning last week, there was concern that 100% of the escrow needed to be in place by year 20 due to a concern about continual degradation. He said he should have reminded the Board at the time, but he did not, so it had to be put in tonight's memo. He said that the limited warranty, guaranteeing no less than 80% nominal power output, lasts all the way to year 25. He said that in terms of needing protection because the panel output is continuing to degrade, it probably does degrade somewhat between year 20 and 25, but by year 25, it is still at 80% and still under warranty. He said he knows the Board had not settled on a complete recommendation regarding the alternative decommissioning, but he would encourage the Board to consider going back to just years 20 through 25.

Mr. Passalacqua referred to the excerpt of the warranty attached to the memo, saying that he can see the beginning of the remedy section if there were a claim, but cannot see all of it. He said that if it is like lots of warranties, it is probably prorated. He asked Mr. Hall if there is much value in the warranty. He said he has dealt with building materials and warranties, and quite honestly, they say a lot more than what they are worth. He said he could see the warranty having some value, but only if it is a good warranty.

Mr. Hall stated that there is only one way to find that out. He said he has not read the complete warranty, but the complete versions of these warranties were included in a prior memo. He said that Mr. Passalacqua could be right; the Board might not accept a limited warranty as sufficient to revise the decommissioning.

Mr. Passalacqua stated that most often, the warranty settlement is almost an insult. He said if that were the case here, there really is not a lot of weight in honoring the warranty instead of an escrow account.

Mr. Hall stated that if that were the feeling of the Board, then we would definitely want to put that in the Finding of Fact. He returned to the contents of the memo, stating he has not heard the Board discuss a lot the proposed separation distance of 200 feet from the property line and then the separation to an inverter of 275 feet from the solar farm fence. He said that together it totals 475 feet; we have talked in the past about how if you just do that distance calculation for an inverter that we know is proposed in one of the farms, at the property line it would be a decibel rating of 41.1. He said that he does not know if 200 feet is a modular dimension with modern farm equipment, but he was talking with someone recently that 240 feet was a great dimension for their equipment; it fits with their planter and their sprayer. He said if the Board wanted to go to 240 feet just to have a more farmable separation, that would make the total separation 515 feet. He said at the property line, that separation would equate to an approximate noise level of 40.4 dBA, so for that extra 40 feet, the noise level has dropped by a little more than one-half of a decibel. He said staff provided other separations there – with a separation of 260 feet plus the 275 separation to the inverter results in a noise level of approximately 40 dBA, which is a number that has been mentioned before in this hearing. He said that another number that has been mentioned is 39 dBA; that would require increasing the property line separation to 330 feet plus the 275 feet to the inverter, or 605 feet total, with the noise at the property line to be 39 dBA. Mr. Hall said he also wants to discuss screening; he realized this week that he is from a design background, where you keep improving the design every time you have it. He confessed that he keeps fiddling with these things, but he does not bring them back to the Board unless he thinks there is an important purpose to be served. He said the reason we have the screening in the memo tonight is because

previously, the amendment only required a 30 feet depth of either native plantings or agricultural production with an opaque fence. He said that if you look at the physical distance that any of the separations using trees and shrubs would require under that NRCS standard, it would require much more than 30 feet. He said that a smart developer would think they only have to have 30 feet if they are using native grass and/or row crop. He said he thinks there is a loophole in that, so this version that is in front of the Board tonight requires a vegetated screen buffer using native evergreen foliage and/or native shrubs and/or native trees at a minimum. He said that the Board could authorize the use of native grasses and other native flowering plants and/or an area of crop production along with the opaque fence as an alternative on a case by case basis. He said that this version suggests that it will not be adequate to just let someone propose a minimum of 30 feet wide buffer and let that be sufficient. Mr. Hall said that the last thing in the memo is that staff realized that when we proposed the one-half mile separation from a municipality, one of the solar farms that has been proposed is near a substation that is already much less than one-half mile from the municipality. He said that the solar farm has to do its own small substation to connect to the existing substation, and it looked like in that instance, some part of the solar substation would be less than one-half mile. He said that staff is proposing that when there is already an existing substation less than one-half mile from the municipality, the solar farm substation would be exempt from that one-half mile separation. Mr. Hall said that the Board could approach that on a case-by-case basis; from a staff level, we think it would be better having it written into the ordinance so that everyone knows up front that there is at least that much that is not at issue.

Ms. Lee asked how close the solar substation could be to the substation that is already there, in terms of proximity to the village.

Mr. Hall responded that we have no required separation for a non-solar farm substation.

Ms. Lee asked what about the substation for the solar farm.

Mr. Hall stated that we have not tried to determine how close that should be, because that depends on where that existing substation is. He said that you could probably put language in the ordinance to specify that any new solar farm substation can be no closer than any existing substation is to the village. He said we did not get that detailed with this language. He said that in the review of any particular solar farm, his view would be that making judgments like that would certainly be within the Board's authority, and if the Board thought that the proposed solar farm substation was a little closer than it needed to be, then you could certainly do something about it. He said that the current proposed text would allow it to be within one-half mile. He said that he thinks you can trust that the solar farm developer is going to minimize how far his substation is from the existing substation because those are expensive connections to make and you want to keep that to the absolute minimum.

Ms. Capel asked if there were any questions for Mr. Hall.

Ms. Lee stated that we have talked about native flowering plants. She said there are some native flowering plants that become invasive. She said she planted something that was a "native" plant in her garden over 25 years ago, and she has been trying to get rid of it for the last 25 years and has not succeeded. She said that some of these things, for the sake of the farmers, cannot be killed by regular herbicides that are used. She said we may want to think about that aspect.

Mr. Hall said that he would love to know the name of that "native" plant. He said in that regard, the only things we have prohibition on and controls for are noxious weeds as identified by the State of Illinois. He

said that the State of Illinois, in departments other than agriculture, has identified other invasive species, but to his knowledge, none of them is native.

Mr. DiNovo stated that we would have to approve the screening plan in detail for each of these submissions. He thinks that the easiest way to address this is to actually have species suggested that we can check to see whether there are problems with them. He said he does not think we are capable of imagining every possible problem in advance.

Ms. Capel stated that the NRCS does not always know either what they are providing in that mix that might be invasive. She knows that several years ago, they included some type of hemp in one of them.

Ms. Lee stated, just so we get it on the record, that she asked Mr. Hall a question before the meeting last week about protecting mutual and private drains with the protection they already have either under the Drainage Code or common law. She asked Mr. Hall to repeat what he told her last week.

Mr. Hall stated that he believes the discussion was about why not have a no-build area above every underground tile.

Ms. Lee said that was part of the discussion, but basically, under common law and the Drainage Code, mutual and private drains also have protections so that the water will continue to flow through those drainage tiles. She said that Mr. Hall said that there was something else in another one of the statutes.

Mr. Hall stated that our Storm Water Management and Erosion Control Ordinance has extensive protections for all tile, but it does not establish a no-build area; it does require them to be rerouted in some instances. He said that he agrees that if there were a case before the Board with a mutual tile that served many land owners, the Board could establish a protection for that tile in the context of that decision. He said he would not want to make the ordinance any more complicated than it is. He said he does believe that this protection for *bona fide* drainage district tile is an important thing to have, and he is kind of embarrassed that we don't have that kind of thing already. He said that is why he has proposed that as part of this amendment, and it would only be applicable to a solar farm. He hopes that we would someday add that to our Storm Water Management and Erosion Control Ordinance. He said that in the context of any solar farm, any tile that you are made aware of you could deal with however you think best.

Ms. Lee said that in the Drainage Code, it talked about how a drainage tile did not necessarily have to be recorded anywhere, they could have mutual drains and other drains that did not have to be in writing. She said they are protected in the Drainage Code. She said she would want the same provisions to be applicable whether those tiles be on a solar farm or elsewhere.

Ms. Capel said that Mr. DiNovo made some revisions.

Mr. DiNovo said that he has some more technical, non-substantive changes, and has other concerns; all are thoughts that he had about how the ordinance could be revised for clarity and so that it is easier to use. As an example, he said that instead of citing the Public Act, we could cite the Illinois Combined Statutes because it is easier to find. He said there was one place where we cited the provisions of the Illinois Administrative Code and there were a couple of other places where he thinks that citation could go in. He said there were some provisions in the text amendment that were really about submissions that he thought could be moved to paragraph 6.1.5 U. so that there would be one section where all the required submissions would be listed and

would simplify the substance of the text. He said that an example is in section 6.1.5 B.(2), where there is a provision that the application include documentation, such as provide a complete Special Use Permit to the municipality, and another regarding documentation from the Zoning Administrator with respect to the fact that had happened. He said that putting those two things in paragraph U. would keep subparagraph (2) focused on the actual separation requirements. He said there are some other minor revisions; if anybody has questions about any of this, section 6.1.5 M.(1)c. talks about setbacks from roads, and maybe it would be clearer if it said setback from the centerline. He said he had a concern about section 6.1.5 P.(1)a., which uses the definite article "the" to refer to "the required operations and maintenance reports"; that suggests that those reports are established somewhere else, and he is wondering if there is something that describes what those are and what the contents of them are. He said if not, maybe we want to drop the article "the" out of there and just say "operations and maintenance reports."

Mr. Hall agreed that the word "the" should be removed.

Mr. DiNovo stated that it raises the question of whether we need to specify what should be included in those reports.

Mr. Hall stated that he thinks dropping the article "the" out is sufficient. He said that he does not think we should try to tell a solar farm operator what they need to be worried about. He said that they should have operations and maintenance reports, and if they don't, that is an issue.

Mr. DiNovo stated that in 6.1.5 R.(1), since the Agricultural Impact Mitigation Agreements have not yet been made into law, it might be prudent to add "if provided by State law." He said if that does not pass, we are not requiring something that doesn't exist.

Mr. Hall stated that is a good point, and that is a way to do it; he wonders if back in the section regarding mitigations to farmland, 6.1.5 F., under every part of that we refer to the Agricultural Impact Mitigation Agreement. He assumes that every place where we refer to the Agricultural Impact Mitigation Agreement, we would need to insert "if provided by State law." He said that he had not worried about that in drafting it, and he would be fine with saying something like "if not enacted by law, a Wind Farm Agricultural Impact Mitigation Agreement may be used. He added that the nature of the Agricultural Impact Mitigation Agreement is that anything in it can be waived anyhow, so there is some question about how much it should be relied on. He said as to Mr. DiNovo's comments about moving things to Section U. so there is a complete list of submittals, he agrees with that, but he believes the things that are mentioned in earlier parts of the section need to stay there, because that is where one understands why it is being asked for in the first place. He said he absolutely agrees that if we can find the time to list all the submittals that we're aware of under that Section U., we should; we just never got those all identified like we did with the wind farm amendment, and we haven't yet done that in this amendment.

Mr. DiNovo said that he thinks that could also be done administratively as a guidance sheet for applicants. He said it doesn't have to be in the ordinance as long as somewhere there is a checklist; staff will want to have a checklist. He said that he doesn't know if we need to talk about the changes to 6.1.1 A.5.

Mr. Hall stated that he agrees with Mr. DiNovo's point, but Mr. Hall had problems with language down in 6.1.1 C., and so if we are so unfortunate that we don't finish this hearing tonight, he would be happy to look at that before the next hearing.

Mr. DiNovo stated that his principal concern was initially reading through it, the 150% seemed to apply to everything, so we were asking for 150% of the 125%, or 150% of the 210%, and he does not think that is what was intended. He said this 150% was the original version before the special cases were invented. He said that again, this is not substantive; it is just for clarity.

Mr. Hall said clarity is what he disagrees with, to some extent.

Mr. DiNovo said that he also was not sure about some of the uses as standard rather than special conditions; he said that as he read the paragraph, it confused him. He referred to paragraph 6.1.5 B.(2), which says that the special use cannot be located in an easement. He said the sites are much larger than any easement that might go through them, so it seemed to him that this provision would make more sense in the design and construction section. He said if there is an easement passing through the site, we want all of it within the boundaries of the Special Use Permit, but we want to be sure that nothing is built in that easement without a crossing agreement. He said it made more sense to him to put this in 6.1.5 E. since the easements will be inside the Special Use Permit rather than the other way around.

Ms. Lee referred to the bottom of page 1 of tonight's Supplemental Memorandum #13, and asked Mr. Hall if he is proposing that this be changed from the current 10 feet that we have from the property line for agriculture and lots other than residential.

Mr. Hall said no. He said he is not proposing to change the required separation for farmland; he is still recommending 10 feet for that.

Ms. Lee stated that she does not think that 10 feet is adequate for this circumstance.

Mr. Hall said okay.

Mr. Passalacqua asked Ms. Lee if she had a suggestion, if she didn't think 10 feet was enough.

Ms. Lee said that her suggestion would be to have at least 20 feet.

Mr. Hall asked Ms. Lee if there is some phenomena at 20 feet that 10 feet doesn't accommodate.

Ms. Lee said that with the solar panels being 8.5 feet tall, you do have an issue of shade. She said that if you take a tree, which of course is taller than that, it can affect a crop with its shade.

Mr. Hall stated, from looking at the plans, they all have an interior clear space from the fence to the first panels of approximately 16 feet. He said at this point, with that 10 feet from the property line to the fence, plus the 16 feet inside, and again, that 16 feet is not part of your regulations, they all have it, that's a total of 26 feet separation between the property line and the nearest PV solar panel.

Ms. Lee asked if we couldn't put the 26 feet as the language in the amendment.

Mr. Hall asked for clarification.

Ms. Lee asked if we couldn't say in the text that a PV solar panel must be 26 feet from the nearest adjacent property. She said she would be happier with that.

Mr. Hall stated that it sounds like she is referring to a combined separation, 10 feet from the property line to the fence, and no less than 26 feet to the first solar equipment inside the fence.

Ms. Lee said that is correct.

Mr. Hall responded that since he said that most of the plans have that, that would not be a burden. He referred to Section 6.1.5 M. which has the information on the fencing and 10 feet separation.

Ms. Griest asked Mr. Hall to provide the page number in the annotated version so they could follow along.

Mr. Hall stated that page 21 of the annotated amendment indicates that the perimeter fencing shall be a minimum of 10 feet from a side or rear lot line, but he does not think that would be the correct place to add that separation. He said that section is titled Screening and Fencing, and the standard that Ms. Lee is proposing is more than just screening and fencing. He thinks that the combined separation should be part of the minimum separations that are talked about in Section 6.1.5 D.; he said that could be a new subsection (8). He said that we could work on that now if there is nothing else the Board wants to discuss.

Ms. Capel agreed, and asked if that would be on page 10. She said we would work on this revision, and then go through the amendment item by item.

Ms. Lee stated that she has a few more comments before we go through it.

Mr. Hall offered a first draft of the revision regarding separation, which would be new subparagraph 6.1.5 D.(8): "PV SOLAR FARM solar equipment shall be no less than 26 feet from the property line of any lot greater than 5 acres. He said that for a lot 5 acres or less, it is actually a much greater separation that you already have, 200 feet, because we haven't bothered to add that 16 feet inside.

Ms. Lee asked if the building was restricted to just residential, not any other building, so you could have buildings that may not be residential.

Mr. Hall stated that it is hard to believe there would be any other principal building that is not a residence. He said that the 250-foot separation is not proposed to apply to barns, sheds, livestock barns, silos, things like that. He said that with a solar farm, you would have a chance to say that the Board wants greater separation at a specific part of the farm.

Ms. Lee asked Mr. Hall to read the proposed revision again.

Mr. Hall repeated the revision, new subparagraph 6.1.5 D.(8): "PV SOLAR FARM solar equipment shall be no less than 26 feet from the property line of any lot greater than 5 acres in area."

Ms. Capel stated that Ms. Lee had mentioned wanting to make a couple of other comments.

Ms. Lee said she hadn't had a chance to go through it; she said that she knows that in one of the other meetings, she said that there was language in there where it said "owner", and it was the requirement that the successors notify when there is any new successor in interest. She said that if we have "owner" in there, in one of the proposed solar farm projects, they are leasing the land, so technically they are not the owner. She

said we have to be careful that we always have language that refers to the applicant or the successor to the applicant rather than the owner, when we really mean the solar farm operation itself.

Mr. DiNovo stated that he noticed the same language used in section 6.1.1 A.(2).

Ms. Lee said that she knows we had a bunch of sections it was true of when we discussed it a long time ago.

Mr. Hall stated that in paragraph 6.1.1 A. that Mr. DiNovo just mentioned, you could insert "and the applicant" after address on the fourth line of page 4.

Mr. DiNovo said that he is looking at page 2.

Mr. Hall said that he thought Mr. DiNovo referred to paragraph 6.1.1 A.(8).

Mr. DiNovo stated that he thinks it also comes up in 6.1.1 A.(2) on page 2. He read, "binding to all successors of title to land and on all successor lessees."

Mr. Hall asked where that should be inserted.

Mr. DiNovo said that it should go at the end of the first sentence in 6.1.1 A.(2) on page 2.

Mr. Hall asked him to repeat the proposed revision.

Mr. DiNovo stated, "The site reclamation plan shall be binding upon all successors of title to the land and all successor lessees, or lessee operators."

Mr. Hall suggested "solar farm operators."

Ms. Lee stated that we had specific language about binding upon all successors, but she thinks we need it to be broader in terms of more than just this reclamation site, so that you have the same authority that is binding on all its successors.

Mr. Hall stated that he thinks the County clearly has that authority in all respects. He said we go to great pains to always point that out in regard to the site reclamation plan. He said this is the problem with these references; we use different things so many times that it is even difficult for staff to keep on track of it. He suggested that we try to pick something that is more consistent, such as solar farm operator.

Mr. DiNovo suggested "all parties to the decommissioning agreement."

Ms. Lee said that technically, there is a little bit of differentiation in here; you have the investors that you want to be bound too, not just the operator who will be taking care of the maintenance.

Mr. Hall stated that for our wind farm, the only entity that we have any agreements with is California Wind Energy LLC; no other company shows up anywhere in the letter of credit, the escrow agreement, or the reclamation agreement. He said that we only enter into an agreement with the LLC; different companies can own the LLC without even telling us.

Mr. DiNovo stated, not only that, but different persons can own the lease; if you go online, there are all kinds of people out there who will buy these leases from the land owners, and pay cash up front for the revenue stream of lease payments. He said at least the rights to the rents may go to somebody else. He said these investments may be grouped into bundles that are capitalized, divided and resold. He said that who ultimately has the interest in the business entity with whom we deal is way beyond our control.

Ms. Lee asked if we dealt with part 9 on page 4 of the annotated version, where it talks about the landowner in both a. and b., and not the applicant.

Mr. Hall informed the Board that this is language that the State's Attorney helped us prepare; it's not like this was just created overnight and it has had extensive review already.

Mr. DiNovo stated that he is confused by the references to the landowner, because the landowner is not providing the financial performance guarantee. He said that all our dealings would be with the solar farm operator. He said he wonders if all these references to the landowner should be changed to facility operator or something similar.

Ms. Lee stated that technically, in the illustration that we have with the large solar farm, they are planning on just leasing it, and the landowner technically is just leasing it to the solar farm operator. In paragraph (9), the landowner does not breach anything, and Ms. Lee understands that the State's Attorney may not understand that the solar farm operator is not going to be the landowner; it is just going to be the lessee, which would make a difference.

Mr. Hall asked if there is anything else to discuss.

Mr. DiNovo said that he has something to discuss in 6.1.5 A.; he said, for the record, he has no expectations that this is going to go anywhere. He said he is generally wary of turning any administrative approval authority over to elected bodies; they are ill-equipped to operate in a quasi-judicial manner to keep extraneous political concerns from entering into the decision. He said he understands that projects of this significant magnitude cannot be handled any other way. He said he is fine with utility scale solar farms being treated as County Board Special Use Permits, but he feels strongly that community scale solar farms can be handled as straight-forward, regular Special Use Permits by this Board. He said that he would prefer if subparagraph A. be modified to make that clear, that community solar farms are regular Special Use Permits and utility scale solar farms are County Board Special Use Permits.

Mr. Hall asked Mr. DiNovo what he thought about an agglomeration of community scale solar farms within one locale.

Mr. DiNovo stated that he thinks the Board is capable of handling that.

Mr. Hall asked Mr. DiNovo if that includes the decommissioning agreements.

Mr. DiNovo stated yes.

Mr. Hall stated that he does not think it would be proper to leave a decommissioning agreement that could end up costing the county money to the ZBA; he thinks that is inappropriate.

Mr. DiNovo said that the ZBA makes decisions all the time that expose the County to legal liability. He said that someone could bring a Section 1983 suit against the County that could cost the County money because something we did or failed to do with an administrative case. He said that the Board is competent to take the advice of Mr. Hall and the State's Attorney, and in fact, we are likely to be at least as conscientious about the County's financial position as the County Board would be. He said that he does not have that concern. He said again, he just wanted to get this on the record, and frankly, in his experience, this Board is in fact more competent to deal with quasi-judicial administrative decisions than the County Board is. Mr. DiNovo referred to subparagraph 6.1.5 D.(3)a. on page 8, asking if it was really necessary to have a 200-foot separation from a small lot that is occupied by a non-residential use. He was wondering if the first sentence of a. could read, "For any adjacent lot that is 5 acres or less and occupied by Class A land use, pursuant to 35 Illinois Administrative Code part 900…", or just say residential land use. He said this is not really a big issue for him, but it seems that noise is not really a big deal for non-residential land uses.

Ms. Lee stated that we did have comments made about raising livestock.

Mr. DiNovo said that we do not know of a 5-acre parcel that only has livestock on it; as far as we know, the only examples have houses on them.

Mr. Hall stated that he can guarantee that any owner of such a parcel would come in and complain that they are going to build a house in a few years, because that is the only reason we let small lots be created in the first place is for a use. He said he is not aware of any small lots like that without a dwelling, and he knows that is exactly what people would say if we adopted that standard. He said they would say "you're robbing me of the residential use of that property."

Mr. DiNovo said we could handle it by waivers; he is just envisioning a site that is adjacent to something that is zoned for a business or industrial use. He said we have business uses here and there in our jurisdiction. He said we could exclude commercial or industrial, or we could deal with it as a waiver when the time comes. He said there might even be parcels that are zoned agricultural, but what about a parcel that has a substation on it and you built a solar farm right up against the substation. He said it might be zoned agricultural, so he thinks that maybe it is best if we just deal with it with waivers.

Ms. Lee said that, sort of along the same line, in an agricultural land, say that there are no structures on there, but they want to build a structure. She said they could come in and say that we have really deprived them of building on the best part of agricultural land that would be the most appropriate for a residence. She asked what would happen then.

Mr. Hall said that we are not actually depriving them; they could still do it, but he understands Ms. Lee's point. He said that in the wind farm amendment, we actually had a special separation within one-quarter mile of a road, so that no one could make that claim. He said that in the wind farm amendment, we were looking at a separation of 1,000 feet in every instance from a principal use, and given the risks that are inherent with a 500-foot tall windfarm tower, he thinks that there was reason to make sure that you weren't impacting the use of adjacent land. He said the Board could do something like that with solar farms, but he would not want to try to cook that up here tonight. He said that although he has never known what separation the Board is leaning towards, he guessed he never knew what the impact might be to adjacent properties. He said that given that the average width is 200 feet, and we are talking about lots larger than 5 acres, he guessed he had always assumed there would be some place where something new could be established that would be an adequate distance from the solar farm.

Mr. DiNovo said that we need to respect the rights of parties on both sides of the property line. He said that constraining the possible locations for carving out small lots for adjacent land owners is a trivial burden on them. He said you could make your judgment: would you rather have it right up against the solar farm, or would you rather put it somewhere else. He said that if you want to carve out that lot, you make your choice; he does not have any problem with that constraint.

Mr. DiNovo said he wanted to state for the record that he does not think that 6.1.5 F.(5) and (6) on page 13 are required. He said whatever concerns there are with land leveling and compaction can be handled in the lease between the landowner and the developer; he does not see why we need to get involved in that. He said these are not things that are going to affect other property owners, and in his view, they are provisions that can be dispensed with.

Ms. Lee disagreed. She said that farmers are used to negotiating contracts for the sale of their grain, in the normal course. She said that in the normal course, they are not used to a solar farm and all the aspects that may be entailed in that. She said she does not see any detriment to including the things that the Illinois Department of Agriculture has required for the Mitigation Agreements. She said that she thinks we had some records that the solar farm developers did not have things for reclamation and something else in their standard leases that they proposed to the farmers. She said she does not see how this is hardly any different from reclamation to mitigation, just to make sure that it protects the parties.

Mr. Hall stated that it might be worth considering making subparagraphs 6.1.5 F.(4), (5) and (6) only applicable to best prime farmland.

Ms. Lee asked Mr. Hall if it were not prime farm ground, then they would be ignored.

Mr. Hall said at least in regard to topsoil replacement and mitigation of soil compaction, rutting, and land leveling.

Ms. Lee asked Mr. Hall what his basis is for excluding the other farmland.

Mr. Hall stated that he would default to Mr. DiNovo's justifications for that.

Mr. DiNovo said that he doesn't know if it's worth the candle, because in a lot of areas, the best prime farmland and the non-best prime farmland soil types are intermingled on a given parcel. He said it is unlikely that we would have a parcel that is all one or all the other; it is possible we would have a parcel that is all best prime farmland, but it is not likely we will have one that is all non-best prime farmland. He said that as a practical matter, you would want it to be uniform over all the sites, so he would not worry about that. He said that his experience with farmers is that they are the smartest and shrewdest business people that he knows; he does not have concerns that they would have trouble writing good language.

Mr. Passalacqua said that it is very difficult with our policies, our land use, our treatment of best prime farmland, that he also does not think it is a detriment to any person applying for a permit to adhere to what we require all over the county.

Ms. Capel agreed; she said we are establishing some standards in the ordinance.

Mr. Passalacqua said that we are being consistent with our other standards.

Ms. Griest stated that she thinks that if we are adopting the premise that this application or use is not detrimental to the public health or productivity of the soils upon which it's constructed, we must have those types of protections in place. She said that good common sense, as Ms. Lee alluded to, is going to be included in the contract, most of the time, but in the occasion it is not, she thinks the Board needs to be the overseer that says, no, you cannot do that. She said you're not going to sell off the topsoil and you're not going to make the ground less productive than it was before you put a solar farm on it, with the claim that it does not damage the productivity of that ground.

Mr. DiNovo said that his next biggest concern is paragraph 6.1.5 G. starting on page 15 of the annotated version. He said that in his view, solar farms are very different from wind farms in terms of how they potentially affect roads. He said that we don't have oversize components, we don't have very heavy components, and we have less concrete than what would go into a lot of buildings. He said he just doesn't see where it poses the same requirements; his proposal is that instead of making the roadway agreement automatic and mandatory, we provide that copies of the application be given to the County, the township, and to anyone else we determine might be interested as we look at routes to the site, and it may be there are certain municipalities that need to be brought into this. He said that if any of them request such an agreement, then we make it part of the Special Use Permit as a special condition. He said that rather than imposing a requirement up front, we make it a special condition if it is necessary. He said he has a feeling that people are reflecting on the process of developing the wind farm amendment and not considering fully that this construction is a very different animal. He said this may be necessary, it may not; but even if we decide we have to keep this, it seems to him that after the end of subparagraph (1), we could stick a subparagraph (2) in there that just refers to the provisions in 6.1.4 F. rather than repeat them here, because if he is right, they are identical.

Mr. Hall said that they are not identical. He said that if the Board is interested in that, he strongly suggests that they do not take final action on this until we get comments from the County Engineer. He said that he disagrees with Mr. DiNovo's proposal; he believes that the way this is written is adequate, with the highway authority being able to waive a road use agreement for a community solar farm. He said it is up to the Board, but if the Board wants to do what Mr. DiNovo suggested, please continue this hearing so Mr. Hall can get comments from the County Engineer.

Mr. Randol stated that he disagrees with Mr. DiNovo, because we are presuming that today, the equipment is going to be all right, but if these contracts are going for 40 to 50 years, who knows how long, in 25 years they could be doing something different, they could be stacking these solar panels or something that we're not looking at today. He said they might have bigger equipment they are bringing in to do that. He does not think we should do what Mr. DiNovo is saying at all.

Mr. Passalacqua stated that he also does not think this is putting any undue expectation on the construction site, so he is comfortable with it as written.

Ms. Griest stated that she too thinks we need to leave it in, although she does agree that the size and weight impacts are less for solar than they are for wind. She said she thinks there are some other factors related to solar that might come into play where she thinks that the road commissioners from the County or a township do need to be integrally involved in this process. She said that they need to step forward and say they have no concerns, to where we get it on the record, or that they have dealt with those concerns. She said that in her

opinion, the fencing being 10 feet from the road with an impermeable screen may cause a snow problem. She said we have not talked about that and she does not want to put anything in the amendment, but it may cause some drifting and snow problems.

Mr. Hall stated that the only reason the fencing would have to be opaque is if it is within 1,000 feet of a dwelling, in which case there will have to be more than just the opaque fence, unless this Board grants a waiver.

Ms. Griest said again, they need to come to the table and be a party to it, so she wants to leave it in.

Ms. Capel stated that the way this is written, the road people can waive the requirement.

Mr. DiNovo said that suppose the approval we are being asked to give is unreasonably withheld; we can't give other units of government a veto over our decisions – we would have to deal with that with a waiver.

Mr. DiNovo said that his next issue is paragraph 6.1.5 M.(2)a.(a) on page 22. He thinks that the 1,000-foot screening requirement is very unreasonable. He said that 500 feet would be ample, and he sees no value in the additional 500 feet. He is not persuaded from all the photographs the Board has seen of solar farms taken from different distances, that screening is required at 1,000 feet. He said 500 feet is adequate in his view.

Mr. DiNovo moved on to his next concern, regarding subparagraph N.(2) on page 23. He said he appreciates how difficult this was to write, but he thinks it is unenforceable. He said we cannot have a provision without standards that is enforceable. He said he does not think any court in the country would allow us to take any action on an unspecified standard. He said taking action on the basis of what ELUC thinks is inappropriate; we don't give any advance notice to anybody about what would be a problem. He said there aren't any ready standards at hand; he thinks that this is harmless as far as it falls short of the County taking any legal action, but it has very little effect to the point that it stops short at that. He said it is not enforceable and he assumes that this would result in some sort of discussion and voluntary action on the part of the operator to allay the County's concerns. He said he understands the problem, you'd like to be able to do something about it, but he doesn't think we can if we can't identify some standard.

Mr. Hall said that if Mr. DiNovo has a standard to propose, he is willing to listen. He said he has found no standard for glare; he knows for a fact that the ELUC committee that authorized the amendment to come to this Board thought this was ideal. He said ELUC just wanted something to hang a hat on later, and Mr. DiNovo is correct; there is not much here to hang much of a hat on, but at least it's something. He asked Mr. DiNovo, based on his comments, if he sees a need for a complaint hotline, which is required in a paragraph further on.

Mr. DiNovo said that we would get to the complaint hotline later. He said that the problem comes in subparagraph 6.1.5 N.(2)b., where it says "the Environment and Land Use Committee shall require…" He said we are making determinations on whether the glare is excessive and shall require what ELUC thinks is reasonable; those are what makes this problematic. He said that he thinks the best we can probably say is that "the Environment and Land Use Committee shall consult with the owner or operator regarding steps to be taken…" and we can bring whatever moral suasion we're able to bring, or political muscle we can bring, but he thinks we have to stop short of requiring anything.

Mr. Hall stated that as long as ELUC is not requiring anything that isn't reasonable, we are much stronger

with saying "ELUC shall require reasonable steps…" He told Mr. DiNovo he is right, it is nonsense language for the most part, but it's something. He said that requiring reasonable steps is never unreasonable.

Mr. DiNovo said that if he were a State's Attorney, he would not want to bring a case on this language.

Mr. Hall said that he suspects that will be the case.

Ms. Lee stated that hearing Mr. DiNovo talk about this issue with glare, we have not established any standard as to how high these arrays may be. She said we have talked about them being 8.5 feet tall, but how do we know that down the road they won't want to put up something that is 30 feet tall. She said we even eliminated the 50 feet reference, and said that you could have different areas of glare with taller arrays in the future, so this is language that could be much more applicable in those cases than solar farm developers may be proposing currently.

Mr. Hall stated that all the separations in this amendment only apply to the solar farms where the solar modules are no taller than 8 feet. He said that if you have something taller than 8 feet, the Board has the right to require greater separations. He said that he does not know what issues are going to come with PV panels stacked on poles 30 feet high, and he hopes we never see that. He said that the way this is written, the Board would have maximum discretion in an instance like that.

Ms. Griest stated that it would be dealt with in each individual Special Use Permit application, and if they come in requesting a permit with 8-foot panels, and then 20 years down the road they want to retrofit it with 40-foot panels, that is a different special use, that is not an automatic you get to put something bigger and better in, because it doesn't continue to match the standards you were approved for.

Mr. Hall said, just to remind the Board, that is why we have had a PV module panel here for half of these meetings, so that you can see what these things look like, although looking at it in this room is not the same as looking at it in the bright sun when it is tracking the sun over the course of the day.

Mr. DiNovo stated that his next point would be for subparagraphs 6.1.5 Q.(3)h. and j. on pages 26 and 27 regarding concrete removal. He said that he just doesn't see the need for this. He said there is not enough concrete, it's not such a peculiar character requiring backfilling and grading. He said it seems that for the kinds of structures that we are talking about, do we have to have a licensed engineer certify the removal.

Mr. Randol said it still has to be removed.

Mr. Hall said that the reason that language is in here is that it required no effort; removing it would have required effort, leaving it in here would require no effort. He said he can remove the language if the Board wants.

Mr. DiNovo said that if that is the only reason it is in the amendment, then yes, remove it.

Mr. Passalacqua stated that he does not know why you want to give these protections away; he is fine with the way it is written.

Mr. Hall stated that his view is that they do not know what they are going to see over the course of the lifetime of this amendment. He said this was already here; why not leave it in. He said that it is certainly not

imposing any burden on anybody.

Mr. DiNovo said that it is another certification by another engineer.

Mr. Randol said that it seems we're probably in a majority to leave the language in.

Mr. DiNovo said his next concern is about decommissioning, referring to subparagraph 6.1.5 Q.(4)b.(g) on page 29. He proposed to amend (g) so that it reads, "The total financial assurance shall not exceed 150% of the estimated decommissioning costs after deduction of the full estimated salvage value, and shall not be less than $1,000 per acre." He said that the reason he thinks that is important is, as the salvage value increases relative to the decommissioning costs, and again, we have independent engineers making these estimates, if the salvage value gets to be around 50% of the decommissioning costs, we would wind up having in the financial guarantee almost 3 times as much money as we would actually need to do the decommissioning. He said we would have a 180% safety factor, and he thinks we should cap our safety factor at 150%.

Ms. Lee stated that one of the things she thinks is relevant is the people who testified that these panels contain certain components, that there was no salvage value if they had to pay the place that would take them.

Mr. DiNovo said yes, if that's true, you don't come close to this being an issue. He said that this cap is only meaningful if there is a high salvage value, and we can use the salvage value as part of our guarantee. He said that he thinks asking for more than 150% of the actual net costs is unreasonable and he does not see how it can be justified.

Mr. Passalacqua asked Mr. DiNovo to read his proposed language again.

Mr. DiNovo read, "The total financial assurance shall not exceed 150% of the estimated decommissioning costs after deduction of the full estimated salvage value, and shall not be less than $1,000 per acre."

Mr. Hall asked Mr. DiNovo if it was his intention to use the phrase "full estimated salvage value" rather than the maximum 70%.

Mr. DiNovo stated yes.

Mr. Hall stated that it would contradict the other section that talks about no more than 70% of the salvage value.

Mr. DiNovo said it would not, if the salvage value is 50%, you are still not getting close to this.

Mr. Hall said that it is the previous paragraph that establishes that limit.

Mr. DiNovo said, using the 70% and the 125%, if there is no salvage value, then we have 125% of the decommissioning costs, because there is no 70% of the salvage value to subtract. He said if we have a salvage value equal to 25% of the decommissioning costs, then we wind up with 125% of the decommissioning costs less 70% of 25%, so we are only allowing 18% of the salvage value, and we wind up with a 144% safety margin. He said if you go up to 50%, you go up to a 180% safety margin. He said all he is proposing to do is to keep this from blowing up, because as the salvage value rises, eventually, we would

wind up with a lot more money than we would ever need. He said he just does not want that to blow up so that we are getting 2, 3, 6 or 7 times the amount of money we actually may need. He reiterated that what he is actually saying is we will always have 150% decommissioning costs less salvage costs; we would never have less than that.

Ms. Lee asked Mr. Hall if having to pay to take the decommissioned equipment to a safe disposal facility was part of the decommissioning cost, would there be no salvage value.

Mr. Hall said that they would be decommissioning costs.

Mr. DiNovo said that this language would accommodate negative salvage value, if there was negative salvage value, it would be decommissioning costs plus whatever the negative salvage value was, times 150%.

Mr. Hall stated that he thinks that change in general is good, but it bothers him that Mr. DiNovo is using 150% again when we are already at 125%. He said this stuff is confusing enough to keep track of once approved.

Mr. DiNovo said that we need a certain fudge factor because there is a lot of uncertainty. He said we have a fudge factor on salvage value because there is uncertainty in those numbers. He said he just wants to put an upside cap on when those two fudge factors are combined; if the salvage value gets to be relatively high, the actual amount that we have against the actual costs blows up. He said at 0% salvage value, we have 125%; at 25% salvage value, we got 144%; at 50% salvage value, we got 180%; if we go up to 75%, we got 292% of what we would actually expect to need. He said that just the way the arithmetic works, numbers can blow up, so he would like to put a cap there so they don't blow up.

Mr. Hall suggested that there needs to be some specification there that this 150% is not meant to replace the 125% that was used previously, and the total estimated salvage value is not really meant to replace the 70% cap, or is it.

Mr. DiNovo said that it is not intended to replace the 70% cap. He said that what he is trying to get at is that no matter what, we do not want more than 150% of our estimated net decommissioning costs.

Ms. Griest asked Mr. Hall if that was not covered in the review of the reclamation agreement every 3 years, in the amount that has to be placed on hand. She asked, isn't each and every one of those items factored into that agreement to determine the amount necessary to put on the deposit. She said you are using a 5-year average of the salvage value, which she absolutely hates, because she does not like including the salvage value at all in the reclamation amount that the County gives credit for. She said just as steel did several years ago, we had 4 or 5 really good years and it was really high, and all of a sudden, steel was worth nothing. She said that salvage value fluctuates so dramatically, and she applauds the 5-year average that puts some safeguard on that, but we don't own the salvage to be able to make claim to it. She said that putting it in the reclamation agreement gives her a lot of heartburn.

Mr. Hall said that we do calculate those based on these adjustments, and that is why the amount that the wind farm had to have for financial assurance more than doubled in the first adjustment. He said that he thinks the suggestion to clarify subparagraph (g) is a needed thing, but he is not convinced that the language Mr. DiNovo proposed is clarifying. He said he is happy to work on the text and bring it back at another

meeting.

Mr. DiNovo said there is a word we never used, a "net" decommissioning cost. We used decommissioning cost, which is what it costs to go in, take the panels down, grade the soil, and do all that stuff. He said there is also the salvage value, and the net decommissioning cost, which is the first one minus the second one. He said if the salvage value is negative, that could actually be bigger, but we never use that word. He said he would just say that 150% of net decommissioning costs, except we have not used that language before. He asked if we are proposing to bring these periodic adjustments back in front of the County Board.

Mr. Hall said absolutely; he said the County Board is going to know what that letter of credit has been adjusted to.

Ms. Griest said that would not require a new Special Use Permit approval or anything like that; it is just the financial agreement goes through like any other budgetary item.

Mr. Hall stated that it just goes back through ELUC; we go over all the numbers, with State's Attorney review, and then we send it to ELUC as a simple memo. He said it is a very simple process, although it is a big headache outside of the ELUC meeting, but it's a necessary headache.

Mr. DiNovo stated that he still thinks an upside cap on the total, relative to the actual estimated net cost, is necessary.

Mr. Hall said that he thinks it can be worded that way, and it would not be confusing, but the language that Mr. DiNovo proposed tonight is not there yet.

Mr. DiNovo asked if something like "the total financial assurance shall not exceed 150% of the net decommissioning cost" would work.

Mr. Hall said that he does not even want to say that works. He said he wants to go back to his office, on a quiet afternoon, look at it, and then sleep overnight, and look at it the next day.

Mr. DiNovo said he concurs, that is a good approach. He said he had nothing further.

Ms. Capel asked for a motion for a break.

Mr. Passalacqua moved, seconded by Ms. Griest, to take a 5-minute break. The motion passed.

Ms. Capel said that the Board would reconvene at 8:45 p.m.

Ms. Capel reconvened the Board at 8:46 p.m. She asked if there were any comments before we start.

Ms. Griest requested moving to testimony.

Ms. Capel said she did not know if we have time for this.

Mr. Passalacqua stated that we have people who came out for the meeting that we should at least heard.

Ms. Capel said that she has 3 people on the witness register, and asked if there was anyone else who would like to testify.

Ms. Capel called Vince Koers to testify.

Vince Koers, 603 West Woodlawn, Danville, stated that sworn testimony before the Board has touched on the noise from components, to the effect that there are cheap and noisy inverter components, and there are more expensive, quieter versions, and that you can get what you pay for, or better put, what your regulations require. He said that it seemed clear that the Board's premise was that it is possible, even desirable, to craft a set of regulations that would be applicable to both Wind and Solar interests, and that goal may prove to be a bridge too far. He said that there are surface similarities, many criteria fail when examined closely. He said that noise, in particular, seems more troublesome with wind turbines than solar arrays, but noise is mystifying and many listen to turbines in a field, hearing nothing, only to find that a nearby house is echoing sound as frequencies shift and sounds become trapped within the walls. He said that inverters in particular, in solar arrays, do produce noise that some say is inconsequential, yet industrial interests apparently balk at allowing the County to set the noise limit for solar arrays, said to be quiet, at a quieter 39 dBA. He said that the point has been made here tonight that some of the test information presented to you is based on one inverter, not a bank of inverters, and there is no information included about what happens when you have a whole bank of inverters making noise. He said that if solar arrays are quiet, they should be regulated by Champaign County at "not to exceed 39 dBA" instead of the higher possible statewide noise allowable, or whatever, just to justify equalization with wind turbines. He said that there are many other reasons wind and solar cannot be exactly covered by the same verbiage. He said that it is still a fact that the US EPA and the World Health Organization recognize that adverse health effects begin at 40 dBA, and that is the best reason for limiting to 39 dBA. He said that regrettably, not enough input has been given to consider the potential ruining of farmland for use for animal or human food production in the future after the life of a solar farm, and Champaign County is on the verge of allowing the few to rape the land of the many, affecting or even destroying the bounty of the land for short-term "green" interests. He said that the chemistry within the panels proposed to be used in Champaign County approved sites is, to him at least, unknown and uncontrolled by the proposed regulations, and is not addressed very well at all, except by (perhaps indirectly) in Mr. Hartke's presentations, which indicated that panels do vary, and many of them, perhaps all of them, contain components that reduce the salvage value of used panels to where one has to pay to have them taken off your hands, as opposed to them becoming a true contributor to a salvage value. He said that the Silicon Valley Toxics Coalition (SVTC) published an extensive white paper, which he attached to his written comments, titled "Toward a Just and Sustainable Solar Energy Industry" with an appendix on panel manufacturers and ultimate disposal that ought to be closely looked at. He said that it should be noted that this paper is some nine years old, and while the panel chemistry continues to evolve, it is not necessarily getting any better. He said that the problems have been well-researched by those interested in the findings, and those not interested simply seem to pretend there are no such issues. He said that the Coalition recommends that policymakers do about 5 things: (1) Enact legislation that requires take-back policies for electronic wastes, including solar panels, known as Extended Producer Responsibility (EPR). He said that the best solution to panel toxicity is to adopt EPR locally, and enforce it with solar contractors, to push the burden of the ultimate disposal back to the producer, and thus promote use of the best, environmentally safest panel available. Mr. Koers noted that Illinois has its own sustainability EPR program on consumer electronics that is not this; it does not drive improvement because all it is, is basically something that penalizes the producers that sell in the state of Illinois on a percentage basis of how much they sell, to where they have to pay for this recycling program that goes on down at the county recycle center, and that is not the same thing; that doesn't drive improvements in the product. He said that this EPR as we're describing it in

this white paper would actually make your problem go away over a long-term solution. He said that the Illinois EPR program does not cover solar; it does not cover anything except homeowner electronics, and it doesn't even cover all of that. He said that there needs to be some legislation improvements in Illinois to both take in solar and to improve the program they've got, and legislation should insure, at a minimum, that all components meet both current European Union and USEPA regulations.

Ms. Capel told Mr. Koers that the Board is trying to fashion an ordinance, and recommendations about legislation need to be addressed to your legislator.

Mr. Koers stated that panels in place in farm fields are particularly subject to long-term undetected leaching of toxics, as the panels are frequently in remote locations and not necessarily well-tended. He said that smaller plots would be preferable to larger ones; he has heard the Board talk about 1,200 acres, so apparently it is within your purview to control the number of acres. He said that it has been suggested to you that they should be smaller, and historically, they have been smaller, with many of them in the 100-acre category. He would suggest that smaller plots would be preferable to larger ones within your purview because individual panel problems would tend to be overlooked on larger plots, and would be more consequential, of course, in larger plots. He said that Champaign County regulations need to address the recording of, the tracking and the correction of any land contamination caused by panel degradation and any leakage, toxic or not, until it can be determined that such leakage does not constitute degradation of the farmland under the panels. He said that such records should be reported within the County organization, and become a permanent part of the record should future problems emerge. He said that these panels are a fairly new thing for our environment, and last year, the number of panels submitted for testing by the testing organizations, increased 66% from 2016 to 2017; of course, they have increased every year probably since 2009 when this particular study was done. He said that the point is, there is a lot more panel being submitted, and the evidence from the testing of these panels is that the bottom quarter of these panels are not financially viable, but that doesn't mean that somebody doesn't come out and put them on your farm field; it means that they won't live up to what they're being represented as, and if you're not sorting them out, you are going to end up with them, and that's the bottom line. He said that this Board needs to have the mechanism to keep those panels off the farmland, or you're going to live with the consequences. He said that regulations adopted in Champaign County need to recognize that the proposal before them contains little or nothing about the chemistry of the panels that are in use; the content of commercial panels is a constantly moving target, and not necessarily beneficial to the environment. He said that rules should be implemented to ensure that the panels used locally meet the U.S. Environmental Protection Agency (EPA) Toxicity Characteristic Leaching Procedure (TCLP) standards. He said that the TCLP is intended to ensure that potentially toxic materials do not leach into groundwater. He said that the local rule recognizes solar panels do present a serious danger to public health and the environment if they are not tracked and disposed of properly. He said that one of the pieces of information recognized in the document staff handed out today is that some of the disposal sites are reporting that they are receiving more and more panels, specifically because they don't pass the TCLP. He said that the TCLP is an American requirement imposed upon all panels, whether they are domestic or foreign, and in order to protect community health and safety within the solar panel industry, we need to ensure that communities where the products are used are informed about the hazards of the chemicals in use locally. He said that toxic chemicals used in solar production, including nanomaterials, must be listed in Material Safety Data Sheets (MSDSs) and Toxic Release Inventory (TRI) reports. He said that manufacturers of panels should take steps to continuously reduce and eliminate these chemicals that have a high potential to contaminate air, water, and soil. He said that if they contaminate today when you are putting new panels in and you can say, well, they're brand new and we don't need to worry about that, but the honest truth is, that's probably true as long as there isn't some unusual event, and an unusual event is something that generates

heat; it could be hot weather, a long, extended period of hot weather perhaps. He said that when these panels overheat, they catch fire and sometimes blow up, and when an individual panel catches fire, you may not see any open flame, and that panel reduces the output from the array. He said there might not be a fire engine or an engineer who shows up because of this, but if it spreads, and gets bad enough that it affects the output of the array, they may come out and take it out of the system, or even put in a new one. He said that this is the panel that is going to end up prematurely at some disposal site perhaps, and the balance of its cousins will maybe lay there for 25 to 30 years and eventually get recycled if that's appropriate. He said that the ones that fail due to some sort of mechanical or electrical disaster, they are going to be a small quantity, but they are also the ones that are going to have toxic materials within them turned into yet other toxic materials by the fire, and become more of a hazard and a problem, and how we deal with them is part of what the Board needs to figure out. Mr. Koers said that he would submit his comments in writing.

He said that the number of participants in this testing procedure is actually in Germany and is the largest such firm in the world, DNV-GL. He said that they have a Product Qualification Program and their scorecard over the last years says that manufacturing has jumped about 70%. He said that they are the people that say that the bottom quartile, as they term it, are not financially successful, and the firms that end up with these arrays are going to be in trouble. He said that in America, we have a saying- "let the buyer beware." He said that while green energy is a "community good" that deserves the attention of the community at large, the rush to implement the green energy can easily trample the basic community rights of the citizens at large, and the process begins to resemble the worst of the "Robber Barons" in our country. He said that those of us who would like to avoid these problems need to be willing to accept the costs, and implement the regulations that are necessary to control them.

Ms. Capel asked if there were any questions for Mr. Koers from the Board, and there were none.

Ms. Capel called Phil Geil to testify.

Mr. Geil was absent from the meeting.

Ms. Capel called Chuck White to testify.

Chuck White, 309 South Bryan, Sidney, stated that he had a question on the handout from the April 26th memorandum. He referred to page 2, where there were some comments on existing sewer service or plans for sewer service coming in the future. He asked if that means that a certain town that is getting ready to put a sewer in would still have the 1.5-mile rights to control. He said that he knows a certain town has paid hundreds of thousands of dollars for engineering, and has a plan in place, and is hopefully going to start on it within the next couple of years.

Mr. Hall stated that the Contiguous Urban Growth Area (CUGA) either (1) has land designated for urban land use and is located within the service area of a public sanitary sewer system with existing service, or a plan to have it available within the next 5 years; or (2) land to be annexed by a municipality and located within the service area of a public sanitary sewer system with existing service, or a plan to have it available within the next 5 years; or (3) land surrounded by incorporated land or other urban land within the county. He said that land surrounded by incorporated land would not have to be sewerable or it would be essentially inside that municipality, and it is considered a Contiguous Urban Growth Area. He said, for example, with Champaign and Urbana, they have 1.5-mile extraterritorial jurisdiction (ETJ); he does not know what percentage of it is a Contiguous Urban Growth Area, but it is certainly no more than half. He said that there

are large areas of the Urbana ETJ that are not Contiguous Urban Growth Areas, and in general, if it is not a CUGA, it is also more than one-half mile from the municipality. Mr. Hall asked Mr. White if that answered his question.

Mr. White stated that it answered it pretty well; he had just noticed on the CUGA map that the one town that might be by a solar farm really didn't have the urban growth area around it.

Mr. Hall said that is correct, so in that instance the one-half mile separation would apply.

Mr. White asked if that town would just be considered to have a half mile instead of 1.5 miles.

Mr. Hall stated that the town has a comprehensive plan, so they have all the jurisdiction within 1.5 miles that Champaign and Urbana have. He said what this town does not have is a Contiguous Urban Growth Area.

Ms. Capel asked if there were any questions for Mr. White from the Board, and there were none.

Ms. Capel called John Dorsey to testify.

Mr. John Dorsey, 301 West Locust, Urbana, stated that he procrastinated several years before putting solar panels on his roof. He finally did it, and the payback economically will be long term; he did not do it for that reason, he did it because it felt like the right thing to do. He said he does share concern about taking good farmland out of production, but he thinks in the big scheme of things, solar farms are not the big culprit there; it's urban sprawl that in many cases he thinks is needless and unchecked. He said he thinks about Carle Clinic in that new development by Curtis Road; decentralizing population, where people have to rely more on cars; and more and more farmland will be taken up out there as a result of that. He said that with the solar farm, there is a positive payback that he sees in giving up that farmland, and it is for the good of our environment. He said he thinks the majority of people have come to the overwhelming conclusion that our planet is in trouble, and he thinks we need to do what we can as individuals and as government entities to try to turn this around for future generations.

Ms. Capel asked if there were any questions for Mr. Dorsey from the Board, and there were none. She called Theodore Hartke to testify.

Theodore Hartke, 1183 CR 2300E, Sidney, referred to Supplemental Memo #9, Attachment R, page 4 of 5. He said that on this page, there is a chart of noise levels from solar inverters, and he noticed that this chart has noise levels at 10 meters for two solar inverters at 66 dBA, and a third solar inverter at 64 dBA. He said that our example inverters that came from developers have been 66 and 64 dBA. He said that his research shows that a lot of these inverters are 66 dBA at 10 meters. He said that there is a very nice presentation in Supplemental Memo #13, Attachment K, page 4 of 5. He said it appears to be an online worksheet where you can compute noise levels and distances. He notes that a noise level of 64.3 dBA was used, which came up to a 39.5 dBA reading at 575 feet. He said that was at a 300-foot separation distance from a residential property line to the solar farm fence and another 275 from the fence to the inverter. He said that if you have a machine making 64.3 dBA at 10 meters, it says that the 575 feet would be allowable, and that would be a safe noise level. He said he thinks he is agreeable to that; however, if you have a different kind of inverter, and it is actually 66 dBA, due to the doubling in the distance and the inverse square rule of how noise attenuates and gets quieter from distance, that safe distance is approximately 722 feet. He asked the Board to consider that there is a big difference between those 2 decibels, between 575 feet all the way out to 722

feet. He said that in his previous presentations, he threw around a number of 800 feet. He referred to Supplemental Memo #11, Attachment B, page 1. He said he would like to go through this with the Board if they have it in front of them. He said that one item that jumps off the page is that there is mention of the California Ridge Wind Farm daytime ambient noise level. He said that the daytime noise level was 52 dBA, and he wanted this panel to know that the daytime noise level for the wind farm where his abandoned home is did not have microphones near residential houses amongst the wind farm turbines. He said that one microphone was set up on Route 49, and the other microphone was set up in the front yard of the new town middle school.

Mr. Randol stated that we are dealing with solar; we do not need to discuss the wind farm.

Mr. Hartke said that he believes this ambient noise level for California Ridge Wind Farm that is on this chart is being used as an excuse to keep noise levels too high on the solar farm, which is why he thinks it is relevant. He said that farther down on the chart, Illinois Pollution Control Board long-term background ambient noise level for land use category for quiet residential daytime is at 40 dBA. He said that his goal is to try to keep the noise levels below 40 dBA. He said that in the rural area in the nighttime, he notes that it is all the way down at 30 dBA; 30 dBA is what we are used to living with in the country. He said he knows that we are talking about the sun only shines during the day, therefore solar panels are quiet at night, that is understandable; however, at 6 a.m., the sun is up and these solar panels will be tipped toward the sun. He said people will still be sleeping at 6 a.m. and the noise could be as high as 45 dBA inside their homes. He said he does not mean to continue to beat the Board up on this, but he feels like this is continuously swept under the rug. He said that one of his concerns about the inverter noise is an email that came April 6, 2018, which can be found in Supplemental Memo #9, Attachment E, page 1. He said it is an email from Peter King, who is a supplier of these particular panels, and Mr. King said, "We will have some new, more powerful PV inverter models by 2021." Mr. Hartke said that whenever he sees a note that we are going to see something new that is more powerful, that means to him that there's a chance it could be a noisier inverter. He stated, with that being said, your setbacks need to be based on whatever inverter that they want to put in there. He said that perhaps in the solar ordinance language, he could make some suggestions and change some wording. He said that on the noise requirements in section 6.1.5 I.(3), it talks about computer modeling; it says "Computer modeling shall be used to generate the anticipated sound level resulting from the operation of the proposed PV solar farm at all dwellings and other principal structures within 1,500 feet of the proposed PV solar farm." Mr. Hartke thinks that the phrase "at all dwellings and other principal structures" should be deleted. He said that the IPCB rules are at the property lines. He believes that every non-leased and non-participating property owner owns all his land. He suggests replacing the phrase with "to the nearest non-participating property lines." He mentioned that it says "within 1,500 feet of the proposed PV solar farm." He said that could be reduced to 1,000 feet; if you go to the nearest non-participating property lines and the solar farm is within 1,000 feet of that property line, he thinks that is plenty far out to make them model noise. He said that it also talks about ambient background noise levels, and he thinks that can also be reduced to 1,000 feet. He said that would decrease the cost of the measuring. He said that one of the Findings of Fact used for this case referred to property value impact studies. He said that it still lists the Grand Ridge Solar Farm, which is the largest solar farm in the entire list of all the studies; it is 20 MW on 11.9 acres near Streator in LaSalle County, Illinois. He said that at the last ZBA hearing, he provided information that the houses in that study were also next to wind turbines, the solar farm, and the nuclear power plant. He said he does not believe it is appropriate to use that as a Finding of Fact, that there is no effect on property values. He said that for the record, he will never, ever, buy a house that is next to a transmission line, a solar farm, or any wind turbine, not even within 10 miles of a wind turbine. He said he has another concern about 6.1.5 I., which says that the noise analysis must document that the sound level

from the proposed PV solar farm will not exceed the Illinois Pollution Control Board standard. He thinks that the following should be added because we are here to protect health, safety, and welfare, not follow rules from the 1960s: "will not exceed sleep disturbance levels published by the World Health Organization and/or the United States EPA and the Illinois Pollution Control Board standard." He said that the reason we need to keep the IPCB standards in place there is because the IPCB standard gives them the rules and protocol of how to measure noise on the octave band widths. He also thinks one more paragraph should be added: "All land converted to solar farm use shall be considered as Class A or Class B land use due to the potential nearby residential properties." He said the reason for that is that currently, if two neighbors live next door to each other, and one puts up something that makes noise, like a solar panel or a basketball court, and that exceeds the Illinois Pollution Control Board limit, and a next-door neighbor who is actually a resident has more strict standards for noise levels than he is allowed to encroach onto the neighbor, because he is residential – the same classification of the house next to him. He said one of the reasons that the wind farm was able to stay just half of a decibel beneath the maximum allowed noise level they were allowed to have, but it still drove us out of our house, was because from Class C land, they are allowed about 6 extra decibels of noise and they were just barely under that. He said had that turbine been on a residential piece of land, they would have been in violation, but since they are on Class C agricultural land, they were allowed extra noise. He said if the Board really wants to stick with IPCB rules only, and you didn't want to worry about the World Health Organization, EPA, or what all these scientists and health professionals say is the maximum noise limit and the snoring dog situation, if you want to avoid all of that, just automatically say that noise cannot be any louder than what IPCB allows for Class A and Class B land that is going to have a wind turbine or a solar panel. He said he thinks that would be a really good compromise that he did not think about until just these last few days.

After asking if there were any questions on that topic, Mr. Hartke stated that there is an item in the Finding of Fact about a study of acoustics for solar projects. He said the study was published by the Massachusetts Clean Energy Center in 2012. He said for your information, the Massachusetts Clean Energy Center is funded by the State of Massachusetts, and the purpose of that organization is to promote renewables, and they are dedicated to accelerating the success of clean energy technologies. In his opinion, all the studies and the things promoted by the Massachusetts Clean Energy Center are all very biased, which is something that is inappropriate to have as your reasoning to base noise rules on information that comes from an organization like that. Mr. Hartke said that in noise requirements, we talk about doing a 24-hour ambient sound level near the site. He does not think we should average a 24-hour background sound level; he thinks those measurements should be recorded at residential property lines at 10-minute intervals and not averaged. He said there are times of day that are quiet, and times of day that trains go by; a five-minute train should not blow your average of your nighttime or early morning sleeping. He said there is another thing you could do; if you had the developer go through all this noise ambient level measurement, some areas may have a lot of noise and it is already 40 dBA, and to cause the solar company to stick with 39 dBA probably doesn't apply to that. He said that for areas that are noisier, or areas that are super quiet like 25 dBA, which would never allow development, typically, for project operations which are new facilities, as long as they don't increase the ambient noise by 5 dBA compared to what it was previously, you typically will not get noise complaints. He said another adjustment you could have is just to allow a 5 dBA increase in noise whenever these solar farms or wind turbines move in. He said that the proposed distances away from all electrical inverters to the houses, or even the property line, are woefully too short. He said the last thing he wanted to point out was that for all who want to dismiss the noise from the amendment, there was a New Jersey Ag Management Plan, and this is an email in Supplemental Memo #12, Attachment G, and is the entire presentation on farm energy generation from the State Agricultural Development Committee. He read the following from page 7: "The proposed Solar Ag Management Plan has 3 major concerns: setbacks and screening; site disturbance;

and noise." He said these are the top 3; not decommissioning, not providing for an ability for a church to buy solar off a farm field, not people who cannot afford to get their own solar panels to have the opportunity to invest in a solar farm. He asked that the Board recognize that the ZBA and purpose of zoning was only to protect the health, safety, and welfare; not to help farmers make money, and not to help a non-profit church to make money off of solar power, which he thinks is weird. He thinks that this group needs to remember to protect the neighbors, and if the Board can abide by the noise parameters he has presented, he does not think there will be a lot of people coming to the Board, making your life difficult or yelling at you for not listening. He said he would very much appreciate it if the loss of his house doesn't happen to anyone else; this is his only way to get the best value out of his house.

Ms. Griest stated that Mr. Hartke has given the Board a lot of information on noise, and she appreciates him continuing to update them on that. She said that bottom line, end of the day, does Mr. Hartke really care where the inverter is placed, as opposed to what the dBA is at the property line.

Mr. Hartke responded that his only concern is the noise level. He said the inverter can be immediately behind the fence if it has a little noise hut or something around it to block the noise. He thinks that would be a great suggestion or a waiver. He thinks that if the solar developer goes to every adjacent property owner and asks for a setback waiver, a screening waiver, a noise waiver, all those things, because as soon as they start negotiating that with the individual owners, that owner becomes a participating property owner and their property is pretty much leased. He said knowing what he knows now, he would never agree to that, but it's a free country, and if this Board inserts their selves and makes some hard distances, you are taking away the ability for someone to defend their land from noise or a potential property value loss. He said he thinks the Board is opening itself up to being the middleman negotiator, which is not a place to be.

Ms. Griest said that Mr. Hartke brought up the point that she had too, with the new proposals tonight, rather than regulating unspecified equipment at a particular location, where that technology may evolve, may change, it may get quieter, it may get louder, we don't know as technology improves what the impact is on the property line. She said she was leaning more toward give me a decibel rating at the property line as opposed to give me a specific location of a piece of equipment.

Mr. Hartke said he would fully support that. He said the only reason he was bringing back these big distances was to show how serious this noise level could be in relation to the setbacks you choose.

Ms. Griest said that Mr. Hartke brought up the second point she has. She said that we have heard varying testimony of how sites are configured, where there might be multiple units clustered together – she had the same concern – do they make more noise together than they do individually. She said again that all she was concerned about was the impact on adjacent landowners, so she does not want to tell them how to build their facility.

Mr. Hartke said he believes he can clear that up; he is less concerned about the inverters being bundled in small groups and have them spread throughout. He said that if you think about it, if you have two loud trucks and park them next to each other, you really only hear the loudest truck. He said what he would be concerned with is if you got this noise from all 4 directions; in other words, if it surrounds your home. He said, let's say you end up hating the frontage on the side of your house that is closest to the panels; you still have the option that you could maybe garden and spend more time on the opposite side of the property, where your house acts as the blockage. But if you're surrounded on 4 sides, that combination of being surrounded on all sides is a different ball game, and then you have nowhere to escape.

Ms. Capel asked if there were any more questions, and there were none. She asked if anyone else would like to testify.

Matthew Herriott, 1815 CR 900N, Philo, said that he wanted to touch on a couple of things. He said the first thing is that a lot of people have testified that they would like to see a 1.5 mile separation from villages, and he really thinks the Board needs to increase to that from one-half mile. He said they referred to a substation that is within one-half mile; he said that is a pre-existing thing, so he thinks that the Board should continue to honor that if someone wants to build something within the mile-and-one-half, make them keep their new solar substation one-half mile from town. He said don't worry about what it would cost them to get it, the Board is here to represent the county, not the solar developers; they are multi-millionaires who have the money to get whatever they need or there is other ground to go on. He said the second point he wants to make is that he thinks the Board needs to increase the setbacks; there is a lot of talk about the noise. He said the noise is important, but for him, the important thing is the property value of his home. He said that his house is not currently in the proposed solar farm, but it is close enough to develop to that. He feels that the setbacks need to be increased to 1,000 feet to protect property values. He said we don't need Champaign County to be a case study for the future of his children and why their house is not worth what it should be. He read a quote from today's County Star, which is also in the meeting packet. He said that 2 to 3 weeks ago, Patrick Brown testified that 250 foot setbacks were okay. In this article, Patrick Brown stated, "we took all the blocks of land and areas by houses; we are doing setbacks that are more than the County requires – a few hundred feet." Mr. Herriott said again, Mr. Brown said 2 to 3 weeks ago that 250 feet is what he needs, and now he has changed it; so is he now more comfortable being farther away, or is he lying to the Board or the Village. He said that the Board needs to take into account that some of these solar developers cannot be trusted, so you need to do what is in the best interest of your taxpayers.

Ms. Capel asked if there were any questions for Mr. Herriott, and there were none. She called Terry McFall to testify.

Ms. Terry McFall, 306 Shamrock Drive, Philo, stated that she too would like to ask for a 1,000 foot setback, and she just wants the Board to remember that when they are making these ordinances, they are talking about peoples' lives and their everyday quality of life. She said that sometimes she feels there is irritation on questions or comments, and the Board is making ordinances for a whole county; there are a lot of individuals who are going to be affected by this.

Ms. Capel said that they are on both sides of the property line, though, and she thinks it is important to understand that that's one of the things that we really have to think about.

Ms. McFall said that she thinks when someone has a residence, are both sides of the property line making millions of dollars, or is one side having financial devastation in the equity of their home.

Ms. Capel stated that one side is a landowner, someone who owns farmland.

Ms. McFall said that there are small property owners too.

Ms. Capel agreed. She said that what she is trying to say is that the solar developers may or may not be residents of the county, but the people who own the land are, and they have an interest in leasing their land. She said they are small property owners too.

Ms. McFall asked what about an individual who has a couple of acres with a residence there.

Ms. Capel said again, we are looking at both sides of the property line; we are trying to protect the rights of both sides.

Ms. McFall asked how a larger setback would affect the leasing.

Ms. Capel said that she thinks if you listen to our discussions, that you would understand what kinds of things we are trying to take into account. She said at some point, a big enough setback would make half of a 1,200 acre farm unusable.

Ms. McFall asked if there is a setback number that would make it unusable.

Ms. Capel said that she does not have the numbers with her. She said that Sue Smith submitted it in an email, but she was talking about how many acres on a property, and she thinks that her example was 500 feet.

Ms. McFall asked if there were a 1,000 foot setback, couldn't there be a waiver to a smaller setback if that individual would want that.

Ms. Capel said that the Board can waive just about anything. She said what the Board is trying to do is determine what the standard is. She said there can be waivers, and those things are negotiated, and they are also information that is presented when a Special Use Permit is applied for and heard at this Board.

Ms. McFall said that is her comment, and she hopes the Board will take it into consideration. She said that for a small couple of acres, if they are surrounded, there is no way that anybody could think there is going to be any kind of quality of life there.

Ms. Capel stated that she understands what Ms. McFall is saying. She asked if there were any questions for Ms. McFall, and there were none. She asked the Board if they want to start looking at the ordinance, since they have about 15 minutes.

Ms. Lee stated that she has one question that they referred to earlier about the height. She referred to the annotated text amendment version dated April 26th (Attachment R), page 10. She read, "The height limitation established in Section 5.3 shall not apply to PV solar farms." She said it is not saying anything about 8.5 feet there; she read, "The maximum height of all above ground structures shall be identified in the application and as approved in the Special Use Permit." She said that does not mean that it is 8.5 feet.

Mr. Hall said that on page 10 of the annotated amendment, subparagraph 6.1.5 D.(7) states, "Separation distances for any PV solar farm with solar equipment exceeding 8 feet in height, with the exception of transmission lines which may be taller, shall be determined by the Board on a case-by-case basis."

Ms. Lee said that in 6.1.5 E.(3), it does not have any maximum height.

Mr. Hall said that E.(3) is referring to the height limits established in the Zoning Ordinance, and those do not apply.

Mr. DiNovo stated that Mr. Hartke reminded him that he had a question about section 6.1.5 B.(1)a. on page 6 of the May 12th annotated version. He read, "The area of the PV solar farm County Board Special Use Permit must include the following areas: a. All land that will be exposed to a noise level greater than that authorized to Class A land under paragraph 6.1.5 I." Mr. DiNovo asked if this means that we are applying the noise standard at the boundary of the Special Use Permit, so it is applying at the property line.

Mr. Hall said that it is not that simple. He said this is meant to implement the Illinois Pollution Control Board standard; under the IPCB standard, farmland is not Class A land.

Mr. DiNovo said that this is just talking about land that is exposed to more than the standard that applies to Class A land, so we are taking the standard for Class A land and we are saying that if it is not met, it has to be part of the Special Use Permit. He said that the noise limit is actually being applied at the boundary of the Special Use Permit, because if there is land exposed to a higher noise level, it would have to be inside the boundary of the Special Use Permit.

Mr. Hall stated yes, so this section does not actually capture the fact that under the noise control system that we are using, that noise standard doesn't actually apply to farmland, and that detail is missing here. He said if you imagine lots that are no bigger than 5 acres, yes, the noise standard applies at the lot line. He said that going back to the wind farm hearing, we had a difficult time; in fact, that is why the wind farm amendment was actually sent with a recommendation of denial. He said we could not find what the noise level was at the property line and somehow that became clear that was the concern, and on remand, we got the necessary evidence that the noise standard was being met at the property line. He said this has been a problem for this Board in the past.

Ms. Griest asked to talk about the elephant in the room; what is the setback, what is the dB that Mr. Hall keeps saying the Board is not giving clear guidance on, and she agrees. She said that she wants to give Mr. Hall her thought and feeling, and she is just 1 of 7, but as she talked with Mr. Hartke, she had some heartburn about setting a specific placement of the inverter, because she thought the size of the inverter, or the dB rating of the inverter could vary based on manufacturer or models, or what becomes available or unavailable, and you have to replace one or not. She said she would rather see in the ordinance that we specify a decibel rating at the property line of non-participating properties rather than a specific footage requirement from the fence. She asked if Mr. Hall sees that as something we could feasibly do.

Mr. Hall stated that first of all, the minimum separation for the inverter from the fence is just there as a flag; if you see an inverter closer than that, you know it is an issue. He said it also gives us a way to do a rough noise analysis; the noise analysis is not just limited to the separation from the fence to the property line, but it recognizes that the inverter is supposed to be so many feet inside the fence. He said secondly, regarding the noise standard at the property line, if the Board wants to adopt a noise standard different from what the IPCB standard is, he does not know what that means about all the other things that we regulate in the rural area; are they not going to be subject to that standard, is it something that only applies to solar farms. He said he thinks you need a whole package, and that's the beauty of the IPCB, although the noise levels are extremely high. He said he hopes that we never have any project that does no more than barely meet the IPCB standard, because we do have a problem if that is what we get. He said he does not know what to do beyond that, because we cannot take the time here to adopt a whole new noise standard.

Mr. DiNovo said that he has a very serious concern about that; what do we say to someone somewhere in the

county that is exposed to a noise source, say a commercial air-conditioned refrigeration unit, and how do we explain to them that they are not entitled to as much protection as someone who lives near a solar farm. He said that we need to have a uniform standard and he thinks the State standard is the only one we can reasonably work with at this stage.

Mr. Hall said that back to the comment that was made, you don't know what the noise level of any inverter is going to be, and that's true. He said that he does not know what the range of noise of all produced inverters is; all he knows is, at least from 66 dB to 64 dB, you add 2 dB to any of those noise levels we calculated, he believes there will not be a noise problem. He said he knows that Mr. Hartke disagrees with that, and he thinks they will always disagree about that. He said that he does not know what to do about that, because we need to have a standard that we apply in the entire area, and that we apply to everyone in the same way. He said that you can recommend that the County Board develop a new noise standard; he does not know when that would ever be done.

Ms. Griest stated that she thinks there is a difference between dealing with it in the solar; she disagrees with Mr. DiNovo. She said we have gotten enough evidence in here; Mr. Hartke also gave us information on the World Health Organization and those standards to say that although the Illinois Pollution Control Board has one standard, here is additional health information by a reputable, world class organization, and we'd like to utilize that standard in conjunction with it.

Mr. DiNovo asked why that evidence does not apply to the ventilating fan in a grain bin. He said we had a serious complaint from a woman about the grain bin at Leverette; she lived across the street. He asked why she isn't as well protected as people who live near these solar farms.

Ms. Griest stated that she does not know why that complainant is not as well protected.

Mr. DiNovo asked why don't we have the capacity to adopt a new noise standard for everybody in the whole county. He would say do it, but we can't in the context of one amendment for only one land use.

Ms. Griest said we have to start somewhere. She said we started with the wind ordinance, and we found that to be quite difficult, but short of adopting a noise standard, if that is the conclusion that you agree with, then we are going to have to have adequate separation and do it in a measured basis. She said that she was looking at protecting the petitioners on both sides, trying to be good stewards and good neighbors, because she honestly thinks we are seeing a lot of participation and trying, although there is never going to be a perfect situation. She said if they could put their converters in a hut or put shielding around them that mitigated the noise problem, she would not want to have them have a more costly design when mitigating the house that they put it in was a more cost-effective measure.

Mr. Hall said that he doesn't know, maybe the Board does not accept this as viable evidence, but with the 200 foot separation and the 275 feet inside the fence, the sound level is at 41.1 dB at the property line. He said from what he has read, the human ear cannot detect a difference of less than 3 dBA. He said that if you take 3 dBA from 41, you're at 38; his point is that he does not see a noise problem here. He said 41 is not 39; 41 is not 40; 41 is only 41; but it is less than 3 dBA away from 39, so he doesn't know what the problem is. He said he knows you can criticize the way the ambient noise levels for California Ridge wind farm were calculated, but he does not think they were so far off that they're not realistic. He thinks that we live in a loud county, particularly when you're in a rural area, and there is farming, there's a railroad, and there's a village close by. He said that adopting a lower noise standard – he agrees that if it could be done, we'd be

better off – but it's not going to be done; we're not going to have a different noise standard. He said he does not know where that leaves us.

Ms. Griest stated that she guesses that leaves her with the higher distance then, with greater setbacks.

Mr. Hall said okay, and asked what distance.

Ms. Griest said that she is not there yet. She said she is at least at 300 to 350 feet plus the 275 feet.

Ms. Capel asked if there is a way to accomplish this by providing a mechanical separation and an alternative that can be waived if the dBA at the property line is "x".

Mr. Hall asked again, what is that going to be at the property line.

Ms. Capel requested a motion to extend the meeting.

Mr. DiNovo moved, and Mr. Elwell seconded, to extend the meeting by 15 minutes. The motion passed with one opposed.

Mr. Hall stated that he thinks that, excepting the fact that this Board has to have a greater separation, whatever it is, a greater separation is a much more realistic approach than imagining that we are going to have some new noise standard.

Ms. Griest said okay, that is the guidance she looks to Mr. Hall for, and she appreciates that.

Ms. Capel asked if there was anything else that anybody wanted to bring up now.

Mr. Passalacqua said that in the last option in the new memo, you have the 330/380, is it assumed that we are still adding the 275 feet to that.

Mr. Hall said he sees what Mr. Passalacqua is saying; yes, that is just an editing error.

Mr. Passalacqua said that is the level with which he was comfortable. He said he would love 1,000 feet, but he does not see the County Board giving us 1,000, so he is happy with 330/380.

Ms. Griest asked to refresh her memory on why we are at two different distances for separation for the 5-acre and less versus the greater than 5 acre lots, why the larger lot was getting greater separation.

Mr. Hall said that one is separation to the property line; the other separation is to the dwelling.

Ms. Griest said that is where she must have missed that in the packet, because she just could not pull that out of the information provided. She asked if the 5 acre and larger separation is to the dwelling.

Mr. Hall clarified that it is larger than 5 acres.

Mr. Elwell asked Mr. Hall to refresh him on what the Board decided on the setback difference in regard to preserving best prime farmland. He said he vaguely remembers a conversation about the difference between

200 or 250 feet, where a certain amount was removing "x" amount of acres from the solar farm. He said he thinks that if we go from 240 feet to 300 feet separation, we are losing just 1 decibel according to this evidence. He said that Mr. Hall said that the human ear is not as fine-tuned to hear the difference between 1 dBA. He said we are losing "x" amount of farmland for something we cannot even tell is there or not there. He asked how he could try to be a good steward of what we have been blessed with, how can he justify that by saying it is just 1 dBA less.

Mr. Hall thanked Mr. Elwell for recognizing that you are trading off that much land for 1 dBA. He said that he thinks the separation goes to more than noise though. He said he thinks it is the biggest factor in property value impacts. He said when you get these separations of more than 200 feet, there is no reason why that land cannot continue to be farmed. He said that his view is that you don't need to be worried about being criticized for being wasteful with that separation. He said that if it is necessary for property value impacts, if it is providing a better noise level, they can farm it if they want to. He said it is true that it is not going to be as efficient to farm, but maybe that is the price we pay for allowing solar farms. He said that early in this public hearing, he urged the Board to be considerate of that, but once we got to these separation distances, it could be farmed.

Mr. Randol asked where are we at if we have, say, a home on 5 acres, and the home is maybe 30 feet off the property line; how are we handling that setback.

Mr. Hall said, again, the IPCB standard is supposed to be met at the property line, so theoretically it doesn't matter where on the lot the house is; the side yard in the AG-1 district is 20 feet, so it will never be less than that. He said the more the house is in the center of the lot or at least farther from the farm, that's even better for noise, but that standard should be met at the property line. He said, again, the ICPB standard is the standard, which he agrees is way too high, and he also believes that you will always be better than that, simply because you are making sure that the inverters are at least 275 inside the development.

Mr. Elwell asked Mr. Hall if it is his opinion that the noise levels on the Illinois Pollution Control Board standards is a waste of paper.

Mr. Hall just said that he was comfortable in knowing that we are never going to exceed those standards.

Mr. Hall said that he hopes you never even get to that level; he hopes you are always below the IPCB level. He said that is the problem with that standard; it is so high, but with the kinds of separations you are talking about, you are going to be well below that. He said you are not going to be at 39 dBA; you may not even be at 40 dBA much of the time; it depends on what inverters get proposed in any given solar farm, obviously, that's a big determinant. He said at 330 feet from the property line, with a separation like that, he can't guarantee it, but he personally has no doubt that you would ever have a *bona fide* exceedance of the Pollution Control Board noise level. He said that he encourages this Board to adopt a standard that is going to be well below that noise level, because we don't really want to have it right at that level.

Mr. Elwell stated that when we are looking at the 240, 260, 300 and 330, he is comfortable with 40 dB with the 240 feet setback. He asked are we then looking at property values, is that where this comes into play. He said it is his understanding that we are placing more value on the 330 feet setback than what we are placing on the 240 feet setback.

Mr. Hall stated that he cannot stress enough that these are noise values calculated from one inverter, not

taking into account the reflectivity of the modules or blocking of the modules. He said he does not think it is worth it to debate the value between 39 and 40 dBA.

Mr. Elwell asked if there is not any difference on the non-participating side of the property line, then should we look at the participating side of the property line to see if maybe 240 is great, maybe 330 is great, he does not know.

Mr. Hall said that Mr. Elwell is not establishing any separation for a participating property.

Mr. Elwell agreed; he said he was looking at literally the other side of the fence, at the participating ownership and the farm itself. He said if there is no difference in sound from 240 feet to 330 feet, is there any detriment to the other side of the fence between the 240 and the 330.

Mr. Hall stated that some might argue that it is causing an inefficiency; he does not know how these leases are set up, maybe they are having to lease more land for the same amount of solar farm, he does not know. He said if he were a Board member, he would not be greatly concerned about that. He said that one point he wanted to make though, in regard to what should the separation be for property value impacts, when we started here, we were at 50 feet separation, and now we are at 240 feet; we have increased it a lot. He said there is no real gauge to what it should be, and so he does not know how to advise the Board on that to feel comfortable about property values except we've never seen a property value impact. He said that if you look at what this ordinance does to protect the neighbors, he thinks it is fair to say that none of the properties in those property value impact studies had similar protections.

Mr. Elwell said that he thinks that 1,000 feet is way too much. He said there has to be a happy medium, and if we are talking about the range between 240 and 330 feet, just for this instance, if you had 240 feet or a little bit less of cornfield in between your house and the solar farm, how is that any different from 60% of the land in Champaign County. He said it does not make any difference to him the difference between 240 and 330, and he thinks visually, if you add 30 or 60 rows of corn that is not really going to change either; he thinks it is kind of a moot point if you are talking about 240 and 330, let alone 1,000 feet.

Ms. Capel said she needs a motion to continue this case.

Mr. Hall stated that the next available meeting is June 14, 2018, and after that the next available is June 28th.

Mr. DiNovo asked if the whole meeting would be for the solar farm amendment.

Mr. Passalacqua said that the docket shows there are no other cases on June 14th.

Mr. DiNovo moved, seconded by Mr. Passalacqua, to move the case to June 14th. The motion passed.

Ms. Capel stated that next time, the Board would do its discussion in the beginning too, but she wants to start going through the ordinance point by point. She thinks that there are 4 to 5 major points that we need to talk about and come up with some kind of consensus. She said it would have been nice to do that tonight, but it didn't work out that way.

6. New Public Hearings

None

7. Staff Report

None

8. Other Business

None

9. Audience participation with respect to matters other than cases pending before the Board

None

10. Adjournment

Ms. Capel entertained a motion to adjourn the meeting.

Mr. Elwell moved, seconded by Ms. Griest, to adjourn the meeting. Motion passed.

The meeting adjourned at 10:13 p.m.

Respectfully submitted

Secretary of Zoning Board of Appeals