

In The Matter Of:
McLEAN COUNTY ZONING BOARD OF APPEALS

February 20, 2018

Area Wide Reporting and Video Conferencing

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1 McLEAN COUNTY
 2 ZONING BOARD OF APPEALS
 3 CASE NUMBER SU-18-02
 4 FEBRUARY 20, 2018
 5 7:03 P.M. - 9:49 P.M.
 6 McLean County Government Center
 7 115 East Washington Street
 8 Bloomington, Illinois
 9
 10 BOARD MEMBERS PRESENT:
 11 Brian Bangert
 12 Chris Carlton
 13 Rick Dean
 14 James Finnigan
 15 Mary Beth Taylor
 16 Julia Turner
 17 ALSO PRESENT:
 18 Philip Dick, Director of Building and Zoning
 19 Samantha Walley, Assistant State's Attorney
 20 Luke Hohulin, Assistant County Engineer
 21 ON BEHALF OF APPLICANT: Amy Antonioli, Esq.
 22 ON BEHALF OF OBJECTORS: Brian Armstrong, Esq.
 23
 24 Area Wide Reporting and Videoconferencing
 Holly Wingstrom, RPR, CRR, CSR #84-03888
 31 West White Street
 Champaign, IL 61820
 800.747.6789

1 (COMMENCING AT 7:03 P.M.)
 2 CHAIRMAN FINNIGAN: We are going to call
 3 the McLean County Zoning Board to order. This is a
 4 continuation of case SU-18-02. We are going to have
 5 roll call.
 6 MR. DICK: Mark Judd?
 7 Brian Bangert?
 8 MR. BANGERT: Here.
 9 MR. DICK: Michael Kuritz?
 10 Rick Dean?
 11 MR. DEAN: Here.
 12 MR. DICK: Julia Turner?
 13 MS. TURNER: Here.
 14 MR. DICK: Greg Zimmerman?
 15 Jim Finnigan?
 16 CHAIRMAN FINNIGAN: Here.
 17 MR. DICK: Chris Carlton?
 18 MS. CARLTON: Here.
 19 MR. DICK: Mary Beth Taylor?
 20 MS. TAYLOR: Here.
 21 CHAIRMAN FINNIGAN: We have six members,
 22 and that is a quorum. Our quorum is five. So, we
 23 can conduct business.
 24 Staff has been affirmed since the last

1 EXHIBITS
 2 APPLICANT'S EXHIBIT 6 - BRIGHT STALK STUDY PL293
 3 APPLICANT'S EXHIBIT 7 - GOOD PRESENTATION 240
 4 APPLICANT'S EXHIBIT 8 - DeCLARK CV 293
 5 APPLICANT'S EXHIBIT 9 - DeCLARK PRESENTATION 282
 6 APPLICANT'S EXHIBIT 10- POE PRESENTATION 295
 7
 8 PRESENTERS
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 10 QUESTIONS BY MS. ANTONIOLLI.....177
 11 QUESTIONS BY THE BOARD.....202
 12 QUESTIONS BY STAFF.....207
 13 QUESTIONS BY MR. ARMSTRONG.....208
 14 QUESTIONS BY MS. WINTERLAND.....217
 15 QUESTIONS BY TRAVIS TAYLOR.....228
 16 QUESTIONS BY JEFF POWELL.....233
 17 QUESTIONS BY DARYL HANEY.....237
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 24 QUESTIONS BY MR. TAYLOR.....289
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 QUESTIONS BY MS. WINTERLAND.....333

1 meeting, so we are not going to have to do that
 2 again.
 3 I think we are going to have counsel tell
 4 you where we are at in the procedures. This is a
 5 continuation of case SU-18-02, a continuation.
 6 MS. WALLEY: Good evening, ladies and
 7 gentlemen. My name is Samantha Walley. I am an
 8 Assistant State's Attorney with the Civil Division
 9 of McLean County State's Attorney's Office.
 10 We are currently -- as the chair stated,
 11 this is a reconvened hearing for SU-18-02. I
 12 believe the applicant is still in its case in chief.
 13 That means that the applicant will be putting on
 14 whatever evidence they deem necessary to meet their
 15 burden. All of their witnesses and evidence will be
 16 subject to cross examination. Friendly cross
 17 examination or bolstering will not be permitted.
 18 Once the applicant finishes their case in
 19 chief, anyone else that would like to provide
 20 evidence or public comment has the opportunity to do
 21 so.
 22 Any questions?
 23 And, Ms. Antonioli, are you ready?
 24 MS. ANTONIOLLI: I am.

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1 **MS. WALLEY:** First witness?
 2 **MS. ANTONIOLLI:** Mr. Rhett Good, and I'll
 3 just ask him a few questions. You need to swear us
 4 in.
 5 **CHAIRMAN FINNIGAN:** Yeah. You can just
 6 sit down. Push the button right there. We were
 7 kind of informal.
 8 (RHETT GOOD PLACED UNDER OATH.)
 9 **CHAIRMAN FINNIGAN:** State your name and
 10 address and spell your last name.
 11 **MR. GOOD:** My name is Rhett Good. Last
 12 name is spelled G-o-o-d. My address is 1915 North
 13 Ridgeway Drive, Ellettsville, Indiana.
 14 **CHAIRMAN FINNIGAN:** Okay. Go ahead.
 15 **MS. ANTONIOLLI:** Thank you.
 16 **MR. DICK:** Could you spell your first name
 17 and spell the address again, please?
 18 **MR. GOOD:** Sure. My first name is Rhett,
 19 R-h-e-t-t. And the address is 1915 North Ridgeway
 20 Drive, Ellettsville, Indiana.
 21 **MR. DICK:** Ellettsville?
 22 **MR. GOOD:** E-l-l-e-t-t-s-v-i-l-l-e.
 23 (QUESTIONS BY MS. ANTONIOLLI)
 24 **MS. ANTONIOLLI:** Mr. Good, where do you

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1 work?
 2 **MR. GOOD:** I work for Western Ecosystems
 3 Technology.
 4 **MS. ANTONIOLLI:** And what is your
 5 occupation or profession?
 6 **MR. GOOD:** My occupation is wildlife
 7 biologist.
 8 **MS. ANTONIOLLI:** And what is your
 9 educational background?
 10 **MR. GOOD:** I have a bachelor's degree in
 11 biology from Ball State University, and I have a
 12 master's degree in zoology from the University of
 13 Wyoming.
 14 **MS. ANTONIOLLI:** And what degrees,
 15 certificates, or licenses do you have?
 16 **MR. GOOD:** I hold a bachelor's degree from
 17 Ball State and a master's from the University of
 18 Wyoming.
 19 **MS. ANTONIOLLI:** Okay. And how many years
 20 have you worked in this field?
 21 **MR. GOOD:** I have been a research
 22 biologist for 20 years.
 23 **MS. ANTONIOLLI:** Okay. So, at this time,
 24 I present this witness as an expert in wildlife

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1 biology.
 2 **CHAIRMAN FINNIGAN:** Is there any
 3 objections to this?
 4 **MR. ARMSTRONG:** No.
 5 **CHAIRMAN FINNIGAN:** The board okay with
 6 that? We'll present him as an expert.
 7 **MS. ANTONIOLLI:** Okay. Thank you.
 8 And you may proceed.
 9 **MR. GOOD:** Okay. Thank you. So, first, I
 10 would like to just start out with a bit of
 11 background about myself and who West is.
 12 Like Amy said, I have 20 years of
 13 experience completing wind and wildlife research.
 14 It's been the primary focus of my career. I've
 15 completed numerous studies of impacts of wind energy
 16 on wildlife throughout the US, including over 40
 17 proposed and operating wind projects in Illinois.
 18 West is comprised of a team of biologists,
 19 it's statisticians, and we design or we specialize
 20 in designing and conducting ecological field
 21 studies. We have established working relationships
 22 with both the Fish and Wildlife Service, Rock Island
 23 office, as well as the Illinois Department of
 24 Natural Resources.

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1 Today I want to talk about the wildlife
 2 surveys that we've completed to date. The
 3 Lexington-Chenoa Wind Farm contracted us in 2016 to
 4 conduct pre-construction surveys to measure bird and
 5 bat use as well as use by sensitive species and
 6 assess the risk to those species.
 7 All of the surveys we completed followed
 8 the guidelines as described by the US Fish and
 9 Wildlife Service, Land-Based Wind and Energy
 10 Guidelines, the US Fish and Wildlife Services Eagle
 11 Conservation Plan Guidance, as well as the US Fish
 12 and Wildlife Service Range-Wide Indiana Bat Summer
 13 Survey Guidelines.
 14 An important part of this process was
 15 early and often coordination with both the Fish and
 16 Wildlife Service and the Illinois Department of
 17 Natural Resources.
 18 Our protocols were reviewed by both
 19 agencies. We received input and implemented any
 20 changes that were recommended.
 21 Today I want to give just a brief overview
 22 of the surveys we've completed. Today we'll be
 23 talking about an eagle risk assessment we completed,
 24 avian use surveys, eagle and raptor nest surveys,

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1 American golden-plover surveys, bat acoustic
 2 monitoring, bat habitat assessment, as well as
 3 Franklin's ground squirrel habitat assessment.
 4 I wanted to give you a high-level overview
 5 of the results from those surveys.
 6 Starting with the eagle risk assessment,
 7 the overall assessment showed there was a lack of
 8 potential nesting and foraging habitat in the
 9 project for bald eagles. The project is primarily
 10 comprised of corn and soybean and developed areas.
 11 There's a lack of no eagle nests, a lack of use
 12 areas, and low rates of use by bald eagles during
 13 avian use surveys.
 14 During avian use surveys, a rate of use
 15 was recorded that was similar to other wind projects
 16 in Illinois. There was low overall use by protected
 17 species. A few of the census species that were
 18 observed included one golden eagle, five bald
 19 eagles, 37 northern harriers, and eight
 20 upland-sandpipers. There were no other listed
 21 species that were observed. We'll talk a little bit
 22 more about those species and what the risk of those
 23 species are a bit later.
 24 Regarding the eagle and raptor nest

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1 surveys, there were no eagle nests observed within
 2 two miles of the project. There is one known bald
 3 eagle nest within five miles of the project located
 4 north of the layout.
 5 Golden-plover surveys were also completed
 6 at the project. Use by golden-plovers was lower
 7 than what has been recorded in important bird areas
 8 which are known as important stopover areas for the
 9 golden-plovers in Illinois. Approximately 1900
 10 individuals were observed in 33 groups during
 11 surveys. Most of those are foraging on the ground.
 12 Those that were observed within flight route were
 13 recorded below the intercept area of turbines.
 14 I'll briefly review the results of the bat
 15 surveys as well. We completed bat acoustical
 16 monitoring at two project met towers within the
 17 project area. Those surveys were completed from
 18 July 1 through the end of October. During the
 19 surveys -- and I should mention, the surveys are
 20 completed using Anna-bat (phonetic) acoustic
 21 monitors, which are a technology used at many wind
 22 energy projects to record bat use. A total of 2600
 23 bat passes were recorded during 469 detector nights,
 24 which resulted in a combined mean of 5.8 bat passes

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1 per detector night.
 2 The majority of the bat passes were
 3 comprised of silver-haired bats, eastern red bats,
 4 big brown bats, as well as hoary bats. There were
 5 no bat passes that were identified as recorded by a
 6 threatened or an endangered species.
 7 Activity during the fall migration period
 8 was 6.6 bat passes per detector night from the
 9 ground detector, 7.1 bat passes per detected night
 10 from the 50-meter raised detector, and 7.2 bat
 11 passes per detector night from the 80-meter raised
 12 detector. We had three different detectors on each
 13 met tower.
 14 Those overall rates of use were kind of
 15 meaningless unless we put those in context. Those
 16 rates of use were within a range of studies
 17 completed at other midwest wind energy projects
 18 where the rates of use have been recorded from 1.9
 19 bat passes per detector night up to 35 bat passes
 20 per detector night. So, within the range of other
 21 projects.
 22 Bat fatality rates are also expected to be
 23 in the range of other Midwest wind energy projects
 24 based on the bat activity recorded as well as the

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1 bat fatality rates recorded at nearby wind energy
 2 facilities.
 3 A bat habitat assessment was also
 4 completed to determine if there was potential
 5 occurrence for Indiana bat or northern long-haired
 6 bat, which are both listed as an endangered species
 7 in Illinois.
 8 The habitat assessment found there were
 9 seven small linear shelter belts totaling a total of
 10 7.7 acres of forest within 1000 feet of proposed
 11 turbines. 1000 feet is a standard used by the Fish
 12 and Wildlife Service as the distance which an
 13 Indiana bat or a northern long-haired bat is
 14 expected fly from forests during the summer. All of
 15 those shelter belts were greater than 1000 feet from
 16 wood lots and, therefore, were not considered
 17 suitable habitat for the Fish and Wildlife Service
 18 guidelines; therefore, there is no suitable habitat
 19 for Indiana or northern long-haired bats in the
 20 project area during the summer.
 21 We also completed a habitat assessment of
 22 the Franklin's ground squirrel. The majority of
 23 land cover in the habitat specified for the
 24 Franklin's ground squirrel was focused on two

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1 scales. One we focused within a half mile of
 2 proposed turbine locations, and as I described
 3 before, the vast majority of that area, as you know,
 4 is tilled agricultural, which is unsuitable habitat
 5 for Franklin's ground squirrel.
 6 We also looked at the potential habitat
 7 located within areas of disturbance, basically areas
 8 that will be affected by construction activities and
 9 found there are low amounts of suitable habitat for
 10 the Franklin's in the project area. The little
 11 habitat we did find included unmowed roadside
 12 right-of-ways, unmowed grasslands, shelter belts at
 13 trees, some mowed roadside right-of-ways, as well as
 14 some mowed grassland adjacent to suitable habitat,
 15 but those were all over very small amounts of
 16 suitable habitat.
 17 The remaining areas of non-cropland areas
 18 were considered unsuitable for the Franklin's ground
 19 squirrel, including mowed right-of-ways as well as
 20 mowed grassland. Based on the lack of habitat in
 21 the project and the lack of no records of Franklin's
 22 in the project area, we considered the potential for
 23 this species to occur very, very low.
 24 This is a map which might be a bit

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1 difficult to see from the back. The yellow areas
 2 are areas of unsuitable habitat where construction
 3 discernments overlap where construction disturbance
 4 is expected to occur. The red areas are areas of
 5 potentially suitable habitat. As you can see,
 6 there's very little red on the map.
 7 I wanted to give a little bit more detail
 8 of the risk assessment and what went into the risk
 9 assessment for eagles. As I described before, the
 10 project lacks potential nesting habitat and foraging
 11 habitat for bald eagles. It's 98 percent corn,
 12 soybean and developed areas.
 13 The nearest potentially suitable habitat
 14 for bald eagles is located approximately three and a
 15 half miles away on the Mackinaw River, which is
 16 outside the typical territory size for a bald eagle.
 17 The nearest known bald eagle nest is
 18 located five miles north of the turbine layout.
 19 During surveys at the project, which were
 20 completed over the course of a full year, there was
 21 very low use by bald eagles recorded in the project.
 22 Five total observations were recorded within the
 23 survey area, which included a much broader area
 24 including areas outside of the turbine layout.

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1 There were no bald eagles recorded within the
 2 layout. All five were recorded outside of the
 3 layout.
 4 There was one golden eagle recorded, which
 5 is a rare observation for McLean County. There's
 6 only two other golden eagle records that have been
 7 recorded in McLean County in the last 15 years. The
 8 golden eagle was observed outside the layout but
 9 within the survey area.
 10 However, the golden eagle's habitat is
 11 absent from the project, and there are no known
 12 nesting populations of golden eagles in the midwest.
 13 They do occur very rarely during migration in the
 14 winter seasons.
 15 Based on the low use recorded at the
 16 project, the following surveys that were recommended
 17 by the Fish and Wildlife Service and consistent with
 18 the Eagle Conservation Plan Guidelines we concluded
 19 the risk to eagles from the project is low based on
 20 the low use and lack of habitat.
 21 I mentioned earlier there were some other
 22 protected species observed in the project, and one
 23 of those was the northern harrier. The northern
 24 harrier is a rare nester in Illinois. It nests in

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1 wetlands and large grasslands, which have been
 2 removed in Illinois to a large extent.
 3 However, this species does migrate south
 4 in the winter, and is commonly seen in Illinois
 5 during the migration seasons and the winter, which
 6 is the seasons when we observed harriers. We see
 7 harriers at every wind project where we do a
 8 pro-construction survey.
 9 The project lacks suitable nesting
 10 habitat, which is large wetlands and grasslands for
 11 the northern harrier. Interestingly, there have
 12 been no fatalities recorded of the northern harrier
 13 in the midwest despite extensive post-construction
 14 monitoring in several projects. And the reason we
 15 believe that is true is this species hunts and flies
 16 low to the ground and outside of the typical rotor
 17 area. There are no fatalities in the western US,
 18 but it's typically a very low amount of fatalities
 19 relative to their use.
 20 The other species that was recorded during
 21 surveys is protected under the Illinois Endangered
 22 Species Act is the upland sandpiper. Use in the
 23 project was low. There were only eight observations
 24 recorded in over 346 hours of observation of which

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1 six were within the turbine layout. There's limited
 2 suitable nesting habitat in the project in the form
 3 of grasslands, pastures, grass erosion strips in
 4 fields. There's some limited habitat present.
 5 Interestingly, you know, we have recorded
 6 this species present at other wind energy projects
 7 in Illinois; however, today there has not been a
 8 recorded fatality of the upland sandpiper in
 9 Illinois. It is has been rarely recorded as a
 10 fatality in South Dakota and North Dakota and
 11 Nebraska where the species is much more common.
 12 Some studies in South Dakota have shown
 13 the upland sandpiper to be displaced from areas near
 14 turbines; however, in Illinois that has not been
 15 demonstrated to date. In fact, Keith, in his letter
 16 on the project, notes that he has still observed
 17 upland sandpipers using areas near the Twin Groves
 18 Wind Project.
 19 The risk of collision for upland
 20 sandpipers is expected to be low based on the low
 21 number of fatalities recorded in the midwest and the
 22 low recorded use of the project area.
 23 We also mentioned that we observed
 24 golden-plovers. So, the American golden-plover is

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1 not a species that is listed under the Threatened or
 2 Endangered Species Act in Illinois, but it is a
 3 species of concern that the Fish and Wildlife
 4 Service asked us to survey for.
 5 The results of our risk assessment showed
 6 that most of the plovers we observed were flying at
 7 low levels below the typical rotor type of turbines.
 8 To date, there's one project we can look
 9 at to give us an idea of the potential collision
 10 risk for plovers, and that is the Fowler Ridge
 11 Project in Indiana. That is a wind project located
 12 adjacent to a known important bird area where the up
 13 to a third of the world's population of
 14 golden-plovers stops over in the spring.
 15 During seven years of post-construction
 16 monitoring at that site, there has been only one
 17 fatality of the American golden-plovers recorded
 18 despite the high use of plovers near the project
 19 area. So, we know plovers are very low risk of
 20 collision, and the results of the pre-construction
 21 survey are consistent with that.
 22 Surveys at Fowler have also shown that
 23 plovers tend to avoid areas near turbines, which
 24 might be a large reason why we don't find them as

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1 fatalities.
 2 You know, plovers are likely to be
 3 impacted by displacement; but the plovers utilize
 4 harvested soybean fields, typically with some
 5 standing water, as their primary stopover habitat in
 6 the spring. They don't nest in Illinois. They just
 7 stop over in Illinois for a very brief period of
 8 time, refuel, and continue on north to their
 9 migration nesting grounds.
 10 Cut soybean fields are very common in
 11 Illinois. It's not a limited habitat. So, we would
 12 not expect this to be a significant impact of the
 13 species if it was displaced from turbines in the
 14 project area, and the risk of collision is expected
 15 to be low.
 16 Regarding bats, bats are found as
 17 fatalities at every wind energy project in the
 18 midwest, and they are a potential concern of
 19 scientists.
 20 EDPR is a leader in bat research and
 21 conservation in the wind industry. They are
 22 involved in the American Wind Energy Association Bat
 23 Working Group, and they have voluntarily implemented
 24 AWEA best management practices to reduce bat

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1 mortality at all of their projects, and they also
 2 develop Bird and Bat Conservation Strategies for all
 3 of their operating projects to help assess the risk
 4 and reduce potential bat mortalities.
 5 For this site, as we described previously,
 6 the project lacks suitable summer habitat for the
 7 federally endangered Indiana bat and northern
 8 long-eared bat. However, both species have
 9 potential to migrate through much of Illinois.
 10 Although they have the potential to migrate
 11 throughout much of Illinois, the risk is not equal
 12 across Illinois. To date, there's only one known
 13 Indiana bat and four known northern long-eared bat
 14 fatalities that have been documented at wind energy
 15 facilities in Illinois.
 16 There are no records of Indiana bats or
 17 northern long-eared bat fatalities that I am aware
 18 of in central Illinois at facilities that have
 19 operated at manufacturer cut-in speeds.
 20 There are documented fatalities in other
 21 regions in Illinois but not that I am aware of in
 22 central Illinois.
 23 No Indiana bat or northern long-eared bat
 24 fatalities are reported at post-construction

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1 monitoring projects at nearby facilities such as
 2 Twin Groves, Top Crop, Rail Splitter, Grand Ridge,
 3 and others. Bat fatality rates for non-listed bat
 4 species are expected to be similar to other Illinois
 5 wind projects. To date, within Illinois, the
 6 non-listed bat fatality rates have ranged from
 7 approximately 3.27 bat fatalities per megawatt at
 8 Crescent Ridge, Illinois, up to 12.6 bat fatalities
 9 per megawatt per year at the Top Crop wind energy
 10 facility.
 11 The project will implement the American
 12 Wind Energy Association's voluntarily best
 13 management practices to reduce bat mortality at the
 14 site, which includes feathering under manufactured
 15 cut-in speed. This measure has been shown to reduce
 16 bat mortality by approximately 30 percent at the
 17 Fowler Ridge wind farm in Indiana.
 18 So, that's a high level of review of the
 19 surveys we completed to date.
 20 I also wanted to review the
 21 recommendations that have been made by the Illinois
 22 Department of Natural Resources and how the project
 23 proposes to comply with those recommendations.
 24 The first recommendation is the department

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1 recommends the county considering imposing a
 2 requirement to the applicant to avoid siting
 3 turbines within one mile of the Weston Cemetery
 4 Prairie Nature Preserve. All turbine are currently
 5 sited at over one mile away from the cemetery proper
 6 and the cemetery nature reserve, so the project
 7 currently complies with this standard.
 8 The second recommendation, the department
 9 recommends the county consider imposing a
 10 requirement for the applicant to curtail turbine
 11 operations below wind speeds of 5.0 meters per
 12 second during the period from July 15 through
 13 October 15 to conserve endangered, threatened, and
 14 non-listed bats.
 15 As we previously described, the project is
 16 located within central Illinois where, to date, we
 17 are not aware of any threatened or endangered bats
 18 have been found. So, the risk in Illinois is not
 19 equal to every wind energy project.
 20 Bat fatality rates in Illinois have also
 21 been variable, raging from, as I described, 3 up to
 22 around 12 bat fatalities per megawatt within
 23 Illinois. Within the midwest, we've seen an even
 24 broader range. There's a great amount of variation

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1 in bat mortality reported from less than one bat per
 2 megawatt per year at the Buffalo Ridge project in
 3 South Dakota up to approximately 30 bats per year --
 4 per megawatt per year at the Cedar Ridge project in
 5 Wisconsin. So, wind projects that have a low bat
 6 fatality rate have a low impact on bat populations
 7 and, therefore, feathering up to 5.0 meters per
 8 second would have a very limited benefit for bats
 9 while adding a cost to energy production.
 10 The project proposes to address the
 11 concerns expressed by the Illinois Department of
 12 Natural Resources using an adaptive management
 13 framework in which the project will be studied
 14 intensely to determine what the bat fatalities rates
 15 are, to determine if threatened and endanger species
 16 are occurring in these fatalities. And then using
 17 that data, to determine what the appropriate
 18 minimization measures are for reducing risk.
 19 As I described earlier, the project
 20 will implement measures to reduce bat mortality
 21 during all years of operation, including -- and that
 22 measure is feathering below manufactured cut-in
 23 speed, which has been shown to reduce bat mortality
 24 by approximately 30 percent.

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1 If fatalities of threatened or endangered
 2 species are found during intensive post-construction
 3 monitoring, actions will be taken to minimize and
 4 mitigate for the impact. This may include applying
 5 for an Incidental Take Permit under Section 10 of
 6 the Endangered Species Act or in an Incidental Take
 7 Authorization through the Illinois Department of
 8 Natural Resources.
 9 If overall bat mortality of non-listed
 10 bats exceeds the number recorded at the nearby Twin
 11 Groves wind energy facility, which is the closest
 12 operating facility that has post-construction data,
 13 adaptive management measures such as increasing
 14 turbine curtailment, use of deterrents or use of
 15 other measures will be implemented to reduce overall
 16 bat mortality of non-listed bats to the level or
 17 below the level observed at Twin Groves.
 18 The adaptive management framework as well
 19 as the responses in the post-construction monitoring
 20 will be reviewed and coordinated with Illinois
 21 Department of Natural Resources.
 22 Recommendation 3: The department
 23 recommends the county consider imposing a
 24 requirement to conduct three years of mortality

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1 monitoring to statistically quantify bird and bat
 2 mortality by species due to turbine operations.
 3 The project is proposing to comply with
 4 this recommendation by conducting two years of
 5 intensive post-construction monitoring, the methods
 6 of which will be reviewed and coordinated with the
 7 Illinois Department of Natural Resources to measure
 8 impacts to birds and bats and to determine if
 9 additional measures are needed to reduce mortality.
 10 Two years of research at the Heartland
 11 wind turbine has shown a similar level of bat
 12 mortality and a similar species composition of bat
 13 mortality by Dr. Capparella from Illinois State
 14 University.
 15 The data we propose to collect during the
 16 first year of post-construction monitoring will be
 17 used to address the concerns expressed by the DNR.
 18 As described earlier, there are two
 19 potential outcomes that will trigger adaptive
 20 management, one is discovery of a threatened and
 21 endangered species, and two is estimation of bat
 22 mortality rate that exceeds that of the Twin Groves
 23 wind farm.
 24 One of the potential outcomes of adaptive

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1 management will be conducting a third year of
 2 post-construction monitoring as recommended by the
 3 Illinois DNR if a threatened or endangered species
 4 is found or mortality rates are higher than Twin
 5 Groves.
 6 The fourth recommendation of the Illinois
 7 Department of Natural Resources is: The department
 8 recommends that the county consider imposing a
 9 requirement for the applicant to perform and report
 10 fish and mussel surveys 100 meters up and downstream
 11 of any proposed physical disturbance of any
 12 perennial stream channel or drain associated with
 13 Rook's Creek prior to the disturbance of the
 14 channel.
 15 Currently there are no perennial instream
 16 impacts that are currently proposed by the project.
 17 If this does become necessary, the project does
 18 agree to conduct those surveys to determine if there
 19 will be impacts to fish or protected fish or
 20 mussels.
 21 Recommendation Number 5: The department
 22 recommends the county consider opposing a
 23 requirement for the applicant to avoid site
 24 disturbance within 500 feet of the perennial stream.

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1 We shortened this a bit. It has a lot of
 2 language in the letter, but at the end of the
 3 recommendation it does say: Alternatively, the
 4 applicant could consider sponsoring scientific
 5 research to measure and report the effects of
 6 turbine noise, vibration and flicker on aquatic
 7 organisms.
 8 Currently all but two of the turbines
 9 within the layout are sited outside of 500 feet from
 10 perennial streams. The two turbines that are sited
 11 within 500 feet include Turbine 15, which is
 12 249 feet from an unnamed tributary of Rooks Creek,
 13 as well as Turbine 101, which is 343 feet from Rooks
 14 Creek, and those are approximate.
 15 And we all heard, in the letter, the
 16 Illinois DNR has expressed concern over impacts to
 17 aquatic habitats from noise, vibration, and flicker;
 18 however, there have been no studies that have ever
 19 been conducted to look at is this an actual concern,
 20 are fish and mussels actually impacted by flicker or
 21 noise from turbines.
 22 We do know that some species are more
 23 sensitive to stimuli such as noise and such, but no
 24 study has ever looked at the impacts of wind

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1 turbines on fish and aquatics.
 2 The project proposes to leave these two
 3 turbines as is. These turbines are not impacted in
 4 any INAI sites. So the proponent proposed to leave
 5 those two turbines within 500 feet but conduct the
 6 research that needs to be conducted to determine is
 7 there really an impact or not. So, that plan is
 8 currently under development; but in broader terms, a
 9 before and after study is being proposed to be
 10 conducted. The methods will be reviewed and
 11 coordinated with the Illinois Department of Natural
 12 Resources to assess is this an impact, is this
 13 something that we need to worry about in Illinois or
 14 not. We submit this is a good study site to do that
 15 at. It's not an INAI site, and this will help with
 16 this issue or determine if it is a real impact.
 17 The last recommendation from the Illinois
 18 Department of Natural Resources is: The department
 19 recommends the county consider assuring no wind
 20 turbines are sited within a half mile of the
 21 Mackinaw River INAI site, which does include the
 22 Henline Creek, which is a contributory to the
 23 Mackinaw River.
 24 Currently there are no turbines located

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1 within 3 and a half miles of the main river or the
 2 main channel of the Mackinaw River. There are five
 3 turbines that are sited within half a mile of
 4 Henline Creek, which is part of the Mackinaw River
 5 INAI site. These turbines were cited at least 500
 6 feet away from the creek. So, they are at least 500
 7 feet from the creek but within a half mile.

8 The portion of Henline Creek that is
 9 within the project area, while connected to the
 10 Mackinaw River and providing potential aquatic
 11 habitat for protected species, is a constructed and
 12 maintained drainage ditch that lacks high-quality
 13 forest riparian habitat and significant habitat for
 14 terrestrial species.

15 The nearest turbine within the layout is
 16 located approximately two and a half miles from any
 17 forest riparian habitat along Henline Creek. Two
 18 and a half miles is a long way.

19 The project proposed to meet a minimum
 20 setback of 500 feet from Henline Creek where there
 21 is no forced riparian habitat, and that is a setback
 22 that is consistent with a commitment Invenergy has
 23 made with their project.

24 The project will also commit to the

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1 highest standards of protection to avoid impacts to
 2 Henline Creek, including implementing a robust Storm
 3 Water Pollution Prevention Plan with additional
 4 measures to ensure protection provisions are
 5 continuously intact, including weekly inspections
 6 and inspections after significant rain events.

7 With that, I'll take any questions you
 8 have.

9 (QUESTIONS BY THE BOARD)

10 **MR. DEAN:** I have a question on number 2
 11 from the IDNR. What is an incidental take
 12 authorization?

13 **MR. GOOD:** Sure. So an incidental take
 14 authorization is basically an incidental take permit
 15 that can be obtained from the Illinois Department of
 16 Natural Resources. They call it an authorization
 17 permit. It's a permit that you apply for that
 18 allows you to legally take endangered species.

19 **MR. DEAN:** And the purpose of that is?

20 **MR. GOOD:** The purpose of that is, if a
 21 project is reasonably certain to take an endangered
 22 species, those proponents would potentially want to
 23 apply for a permit to protect themselves in case
 24 they do, in fact, take an endangered species.

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1 **MR. DEAN:** Okay. I think I am more clear.
 2 It would be an accidental take. It wouldn't be a
 3 deliberate take?

4 **MR. GOOD:** Exactly. So, an incidental
 5 take means -- certainly the project isn't purposely
 6 built to take a bat or bird -- if, incidentally, one
 7 occurred when one was not expected.

8 **MR. DEAN:** Okay. Thank you. I thought
 9 you were harvesting them for some reason.

10 **MR. GOOD:** Oh, no. Sorry. Sorry I didn't
 11 make that more clear.

12 **MS. TURNER:** On number 4 you talk about
 13 the study that was done at Heartland that didn't
 14 change for two years as a reasoning for not doing
 15 the study for three years. The Heartland study is
 16 essentially with one turbine?

17 **MR. GOOD:** It is.

18 **MS. TURNER:** Can you extrapolate that out
 19 into an entire farm like this and assume that it's
 20 going to be the same thing?

21 **MR. GOOD:** Well, it's a single turbine and
 22 it has been a pretty intensive study by Dr.
 23 Capparella, but that is a good question. In my
 24 experience, you know, if we have two years of

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1 mortality that are at consistent levels, then that's
 2 a strong indication of what's going to happen in the
 3 future.

4 In my experience, I've never had a project
 5 that has been monitored where we see a wildly
 6 different result in year three. If we have
 7 consistent years in one and two, it's going to be
 8 representative of the life of the project. But you
 9 have a good point.

10 **MS. TURNER:** And do you state in there you
 11 would do the studies for two years or for three
 12 years if one and two were wildly different?

13 **MR. GOOD:** Yes. Thank you. I forgot to
 14 mention that. So, if mortality rates between the
 15 year one and two are statistically different from
 16 each other, then the applicant will commit to
 17 completing a third year as well as if they find a
 18 threatened or endangered species or if mortality
 19 rates are higher than expected. So, yes, there's
 20 that laid out in the management plan.

21 **MS. TURNER:** And then at the Twin Groves
 22 wind farm, you continually indicate that in your
 23 reasoning if any of the mortality rates come above
 24 the Twin Groves mortality rate, are they doing any

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1 mitigation for mortality there? Are they slowing
 2 anything down? Do you know what they are doing?
 3 And are their levels average compared to other wind
 4 farms?
 5 **MR. GOOD:** Sure. So, I think I can answer
 6 both of those. EDPR is implementing the AWEA
 7 standards fleet wide, so that is feathering up to
 8 manufacturing cut-in speed, which is shown to reduce
 9 bat mortality by 30 percent.
 10 The second question: Twin Groves is the
 11 in the middle of the range of what we've seen in
 12 midwest. So, bat mortality has ranged from
 13 approximately 0.16 in South Dakota up to 30 bat
 14 fatalities per megawatt per year in Wisconsin in
 15 Cedar Ridge. So, the estimate from Twin Groves is
 16 right there in the middle of that range. I feel
 17 like that's a reasonable standard to determine if
 18 bat mortality is unreasonably high here and requires
 19 further action.
 20 **MS. TURNER:** And, again, that would be
 21 only if you don't find endangered -- any bats on the
 22 endangered list and things like that?
 23 **MR. GOOD:** Exactly. Yeah. So, the
 24 project would have to meet two standards: 1.) The

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1 bat mortality is going to have to be lower than Twin
 2 Groves; and 2.) Threatened or endangered species
 3 would be found. Using a post-construction
 4 monitoring plan I do believe you have and you have
 5 reviewed, but that plan will be reviewed as well as
 6 adaptive management framework within the Illinois
 7 Department of Natural Resources.
 8 **MS. TURNER:** Final question: Do we have a
 9 map that shows where the towers are related in
 10 relation to streams? Do we have -- is there a map
 11 in our beautiful giant book that shows that?
 12 **MS. ANTONIOLLI:** The answer is: We can
 13 provide a more clear map, if you prefer.
 14 **MS. TURNER:** That would be great.
 15 And, actually, if you would include on
 16 that, while you are doing it --
 17 **MS. ANTONIOLLI:** I'll take notes.
 18 **MS. TURNER:** -- a map that shows the
 19 turbine, the streams, and the residences. Thank
 20 you.
 21 **MR. DICK:** Ms. Turner, there's one I found
 22 that shows where streams are and where turbines are,
 23 and it's in the jurisdictional appendix 12.
 24 **MS. TURNER:** Okay. I am there. Is it

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1 this one? What number? What figure number?
 2 **MR. DICK:** I looked at figure 3, which
 3 doesn't have the photo but it has where the turbines
 4 are and where the streams are.
 5 **MS. TURNER:** Okay. Thank you.
 6 **CHAIRMAN FINNIGAN:** Any other questions
 7 from the board?
 8 **MS. TURNER:** But it doesn't have the
 9 streams labeled, correct? Oh, yeah it does. I see
 10 it. Thank you.
 11 **CHAIRMAN FINNIGAN:** Questions from staff?
 12 (QUESTIONS FROM STAFF)
 13 **MR. DICK:** How many met towers did you
 14 check the bat fatalities on?
 15 **MR. GOOD:** We recorded bat activity, not
 16 fatalities, at two met towers, three stations at
 17 each met tower, one near the ground, one raised to
 18 50 meters, and one raised to 80 meters.
 19 **MR. DICK:** At the Twin Groves farm, do
 20 they feather the turbines at all to limit bat
 21 fatalities?
 22 **MR. GOOD:** It's my understanding EDPR
 23 feathers their turbines fleet wide to reduce bat
 24 mortality. That would include Twin Groves.

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1 **MR. DICK:** And what months, again, would
 2 they do that?
 3 **MR. GOOD:** That would be from late summer
 4 through mid-October. I don't have the exact dates
 5 in front of me. Typically, it's from the first of
 6 August through mid-October.
 7 **MR. DICK:** So, they would be doing that at
 8 this proposed wind farm as well?
 9 **MR. GOOD:** Yes. Correct.
 10 **MR. DICK:** That's all.
 11 **CHAIRMAN FINNIGAN:** Have you got some
 12 questions, Mr. Armstrong?
 13 **MR. ARMSTRONG:** Yeah.
 14 (QUESTIONS FROM MR. ARMSTRONG)
 15 **MR. ARMSTRONG:** Yeah. Could you put up
 16 IDNR recommendation number 2 again, please?
 17 Do I understand that the applicant is
 18 asking to not have to comply with IDNR
 19 recommendation number 2?
 20 **MR. GOOD:** The applicant is proposing an
 21 adaptive management framework to meet the
 22 regulations of the Illinois Department of Natural
 23 Resources that would include feathering under
 24 manufactured cut-in speed, studying the results

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1 intensely, and coordinating with the DNR on
 2 appropriate responses based on the triggers I
 3 described.
 4 **MR. ARMSTRONG:** So, IDNR recommendation
 5 number 2 recommends that the board impose a
 6 requirement that wind speeds or turbine speeds be
 7 curtailed to between 5 meters per second -- excuse
 8 me -- less than 5 meters per second between July 15
 9 through October 15, right?
 10 **MR. GOOD:** Yes. That is what their
 11 recommendation says.
 12 **MR. ARMSTRONG:** But the applicant is
 13 asking to not have to comply with that
 14 recommendation, correct?
 15 **MR. GOOD:** The applicant is asking to
 16 coordinate directly with the Illinois Department of
 17 Natural Resources to develop an adaptive management
 18 plan that would meet the intent of this
 19 recommendation.
 20 **MR. ARMSTRONG:** So, what you are really
 21 saying is that they don't want to comply with this
 22 requirement; they want to wait and see what happens
 23 and see if there is enough detrimental effect of not
 24 complying with the IDNR recommendation; and then, if

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1 there's enough detrimental effect, then maybe they
 2 would re-visit it, and then maybe they would comply
 3 with the IDNR recommendation, correct?
 4 **MR. GOOD:** Yeah. So, the bat fatalities
 5 within the state of Illinois have been quite
 6 variable, some have been very low, some have ranged
 7 up to approximately 14 bats per megawatt. So, the
 8 plan would be, if those fatality rates are below
 9 what has been recorded at the nearby Twin Groves
 10 wind energy facility or if an endangered species is
 11 found, then yes. If those rates are below those,
 12 no. 5.0 would not be reached.
 13 **MR. ARMSTRONG:** Okay. So, the applicant
 14 doesn't want to comply with recommendation number 2
 15 unless it turns out that it does no harm them and --
 16 **MS. ANTONIOLLI:** I object. He's
 17 mischaracterizing the testimony.
 18 **MR. ARMSTRONG:** Can you move to show
 19 number , please, IDNR recommendation number 3?
 20 **MR. GOOD:** Yeah. I'll add one other item.
 21 The approach proposed by the applicant is actually
 22 consistent with the US Fish and Wildlife Service
 23 land-based guidelines for adaptive management when
 24 assessing impact and determining appropriate

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1 responses.
 2 **MR. ARMSTRONG:** But it does not comply
 3 with the what the IDNR recommended to the county
 4 board; is that correct?
 5 **MR. GOOD:** It meets the intent, and the
 6 goal is to work with the DNR to ensure we have a
 7 plan that the Illinois Department of Natural
 8 Resources is comfortable with.
 9 **MR. ARMSTRONG:** I am not asking whether it
 10 meets their intent. I am asking whether it meets
 11 the recommendation that the IDNR made to the county
 12 board.
 13 **MS. ANTONIOLLI:** I object. He has asked
 14 and answered that question.
 15 **CHAIRMAN FINNIGAN:** I think we get the
 16 idea what is going on.
 17 **MR. ARMSTRONG:** Okay. Can you have
 18 number 3 up there? Can you put number 3 up there
 19 please?
 20 And IDNR recommendation number 3
 21 recommends that the county propose requiring three
 22 years of mortality monitoring, correct?
 23 **MR. GOOD:** Yes. That is what the letter
 24 says.

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1 **MR. ARMSTRONG:** And the applicant is
 2 proposing to conduct monitoring for the first two
 3 years of operation, correct?
 4 **MR. GOOD:** Yes, for the first two years,
 5 and a third year will be completed if mortality
 6 exceeds the triggers that were described in the
 7 plan.
 8 **MR. ARMSTRONG:** Okay. So, the applicant
 9 is asking the county board to not follow the IDNR --
 10 strike that -- it is asking the county board to
 11 amend IDNR's recommendation from a three-year
 12 monitoring plan to a two-year monitoring plan and
 13 see if the effects are detrimental enough that we
 14 should do a third year, correct?
 15 **MR. GOOD:** The plan is to do two years of
 16 intensive monitoring, coordinate with the DNR, and
 17 then conduct a third year if the triggers are met.
 18 **MR. ARMSTRONG:** And that's not what the
 19 IDNR recommends, correct?
 20 **MR. GOOD:** So the applicant is proposing
 21 to coordinate with the IDNR to come up with a plan
 22 that they are satisfied with.
 23 **MR. ARMSTRONG:** The IDNR recommends three
 24 years of monitoring, right?

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1 **MR. GOOD:** This is what the letter says.
 2 Yeah, the applicant has made the case that bat
 3 mortality can be quite variable and to use
 4 scientific methods as outlined in the Fish and
 5 Wildlife Services guidelines and use a plan that's
 6 coordinated with the DNR to satisfy this
 7 recommendation.
 8 **MR. ARMSTRONG:** I won't belabor the point.
 9 I will make the point that was a yes or no question.
 10 Can you put up recommendation number 5,
 11 please? Recommendation number 5, the department
 12 recommends that the county impose a requirement to
 13 avoid sited turbines within 500 feet of a perennial
 14 stream, correct?
 15 **MR. GOOD:** The recommendation goes on to
 16 describe, alternatively, the applicant could
 17 consider sponsoring scientific research to measure
 18 and record the effects of turbine noise, vibration,
 19 and flicker on aquatic organisms.
 20 **MR. ARMSTRONG:** Okay. And there are two
 21 turbines within 500 feet of perennial streams,
 22 correct?
 23 **MR. GOOD:** Yes, sir. You are correct.
 24 **MR. ARMSTRONG:** So, does that mean that

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1 the applicant is asking the county board to not
 2 follow the recommendation by the department to avoid
 3 siting turbines within 500 feet and, instead, asking
 4 the county board to make the alternative requirement
 5 that the applicant sponsor scientific research to
 6 measure and report the effects of the turbines?
 7 **MR. GOOD:** So, yes. The applicant is
 8 proposing to be consistent with this recommendation
 9 by completing scientific research and answering
 10 questions that have not been answered at wind
 11 projects to date, are turbine flicker, vibration and
 12 noise having impacts on aquatic species.
 13 **MR. ARMSTRONG:** So, the applicant wants
 14 the county board to approve the applicant being the
 15 research area for this unknown issue; is that right?
 16 **MR. GOOD:** So, as I said, the project is
 17 proposing to be consistent with this recommendation
 18 by sponsoring a scientific research to determine if
 19 there are impacts to aquatic species.
 20 **MR. ARMSTRONG:** Right. And we don't know
 21 if there will be impacts or not, right?
 22 **MR. GOOD:** To date, no one has researched
 23 this with wind energy projects.
 24 **MR. ARMSTRONG:** So, obviously, we don't

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1 know whether there will be any impacts?
 2 **MR. GOOD:** That correct. We would need to
 3 do the research.
 4 **MR. ARMSTRONG:** And the applicant wants
 5 the McLean County Board to be the guinea pig for
 6 that research or to approve the applicant being a
 7 guinea pig?
 8 **MS. ANTONIOLLI:** That question I object
 9 to.
 10 **CHAIRMAN FINNIGAN:** I think we've got the
 11 point.
 12 **MR. ARMSTRONG:** Can you put up
 13 recommendation number 6, please? Recommendation
 14 number 6 recommends that the county board impose a
 15 requirement that no wind turbines be sited within a
 16 half of a mile of the Mackinaw River INAI site,
 17 correct?
 18 **MR. GOOD:** That is correct.
 19 **MR. ARMSTRONG:** And the Henline or --
 20 excuse me. The Henline Creek is part of the
 21 Mackinaw River INAI site, right?
 22 **MR. GOOD:** That is correct. It is a
 23 tributary to the Mackinaw River.
 24 **MR. ARMSTRONG:** And the applicant is

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1 proposing to place five turbines within half a mile
 2 of the Henline Creek, correct?
 3 **MR. GOOD:** Yes.
 4 **MR. ARMSTRONG:** So the applicant is asking
 5 the county board to approve the application
 6 notwithstanding that it doesn't comply with this
 7 IDNR recommendation, right?
 8 **MR. GOOD:** So, the applicant is asking the
 9 board to consider a setback that is consistent with
 10 what Invenergy committed to. Henline Creek is a
 11 constructed and maintained drainage ditch that is
 12 connected to the Mackinaw River and it does provide
 13 potential habitat for aquatic species, but it does
 14 not provide for terrestrial species. The project is
 15 also at least two and a half miles from any forestry
 16 areas along Henline Creek.
 17 **MR. ARMSTRONG:** I'll move to strike the
 18 answer as nonresponsive.
 19 **CHAIRMAN FINNIGAN:** I thought he answered
 20 your question, but I don't know.
 21 **MR. ARMSTRONG:** In any event, five
 22 turbines are proposed to be placed within half a
 23 mile of Henline, correct? Is that true?
 24 **MR. GOOD:** This is correct.

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1 **MR. ARMSTRONG:** That's all I have.
 2 **CHAIRMAN FINNIGAN:** Thank you. Would you
 3 turn that button off, please?
 4 Would anyone else in the audience have
 5 questions of this witness? If they do, come
 6 forward.
 7 **MS. WINTERLAND:** Amy Winterland, 22825
 8 North 3075 East Road, Colfax.
 9 **CHAIRMAN FINNIGAN:** Just for a point of
 10 reference, you are represented by Mr. Armstrong
 11 tonight?
 12 **MS. WINTERLAND:** I am.
 13 **CHAIRMAN FINNIGAN:** Okay. The way we are
 14 going to do it: You can ask him. Don't ask any of
 15 the same questions. Different ones is fine, but try
 16 not to be redundant. Thanks.
 17 (QUESTIONS BY MS. WINTERLAND)
 18 **MS. WINTERLAND:** So, you mentioned there
 19 is a known eagle nest five miles north of the
 20 project site, correct?
 21 **MR. GOOD:** That is correct.
 22 **MS. WINTERLAND:** And when you did your
 23 eagle nesting survey, did you go ten miles beyond
 24 the project footprint?

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1 **MR. GOOD:** No. We surveyed within two
 2 miles of the boundary, which ended up being larger
 3 than the actual footprint. We surveyed an area much
 4 larger than the turbine layout, but we did not go to
 5 ten miles. We surveyed within two miles, which is
 6 consistent with the recommendations of the eagle
 7 conservation plan guide which suggest surveys should
 8 be conducted within the inter-nest distance of
 9 eagles, and these survey protocols were reviewed
 10 with the Rock Island Fish and Wildlife Service prior
 11 to conducting the surveys.
 12 **MS. WINTERLAND:** So, you are saying that
 13 the Eagle Conservation Guidelines say not to do
 14 ten-mile eagle nest surveys because -- is that what
 15 you said?
 16 **MR. GOOD:** Yeah. So, the Eagle
 17 Conservation Plan Guides document says surveys
 18 should be conducted out to a distance equivalent to
 19 the inter-nest distance. If you do not know the
 20 inter-nest distance for bald eagles, then it
 21 recommends going to ten miles.
 22 We proposed a two-mile survey buffer,
 23 which actually exceeds typical inter-nest distances,
 24 but it's roughly equivalent to what has been

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1 observed in Iowa. Those methods were reviewed with
 2 the Fish and Wildlife Service in Rock Island, and
 3 they approved of those.
 4 **MS. WINTERLAND:** Is that District 3 Fish
 5 and Wildlife Service?
 6 **MR. GOOD:** That is the field office within
 7 Region 3 of the US Fish and Wildlife Service.
 8 **MS. WINTERLAND:** The field office within
 9 Region 3?
 10 **MR. GOOD:** Yes.
 11 **MS. WINTERLAND:** When you reviewed that
 12 with the US Fish and Wildlife Service, did you
 13 mention that there was a known eagle nest five miles
 14 north of your project?
 15 **MR. GOOD:** No. At the time, we had
 16 quarried all of the known nest records. At the time
 17 the Illinois Department of Natural Resources said
 18 there were no known records within ten miles. Since
 19 then, Dr. Capparella has let us know there's one
 20 known nest closer than ten miles, and that was the
 21 five-mile nest.
 22 **MS. WINTERLAND:** Knowing that now, would
 23 the US Fish and Wildlife Service change their
 24 recommendations?

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1 **MR. GOOD:** If you asked the Fish and
 2 Wildlife Service, what they will tell you is, if you
 3 want to apply for an eagle take permit, we recommend
 4 that you survey out to ten miles to be consistent
 5 with our assessment. The Fish and Wildlife Service
 6 will also tell you, and they have told us, that what
 7 we have done is sufficient to assess risk, but they
 8 recommend going to ten miles if you want to apply
 9 for a permit to avoid additional analysis.
 10 **MS. WINTERLAND:** So, wouldn't they say
 11 what you have done is sufficient to reduce risk
 12 because you thought there were no nesting eagles in
 13 the area and you thought that the area was low risk?
 14 **MR. GOOD:** No. You know, the Fish and
 15 Wildlife Service, we review those protocols with the
 16 service. In our conversations with them, they
 17 indicated what we have done they feel is sufficient
 18 to assess risk. But if the applicant decides the
 19 risk is high enough that they want to apply for an
 20 Eagle Take Permit, they recommend surveying to ten
 21 miles.
 22 **MS. WINTERLAND:** Can you define what
 23 "take" means?
 24 **MR. GOOD:** "Take" is under the Endangered

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1 Species Act. It is basically killing an eagle or
 2 harm or harassment. I believe there's some exact
 3 terms, but in general terms, harm or harassment.
 4 **MS. WINTERLAND:** Does it include disturb,
 5 such as disturbing the hunting grounds or
 6 abandonment of a nest?
 7 **MS. ANTONIOLLI:** Are you reading from a
 8 section of the rules and regulations?
 9 **MS. WINTERLAND:** I am reading from my own
 10 notes. I am asking the expert if "take" includes
 11 disturbing as well as disrupting hunting grounds or
 12 abandonment of the nest.
 13 **MS. ANTONIOLLI:** I just want to clarify
 14 whether you are asking for a legal definition.
 15 **MS. WINTERLAND:** What does "take" mean?
 16 **MS. ANTONIOLLI:** He can answer in his
 17 expert opinion.
 18 **MR. GOOD:** Okay. So, your question is
 19 does "take" include disturbance to -- you mentioned
 20 a couple different areas. Can you clarify which
 21 one? You mentioned foraging and --
 22 **MS. WINTERLAND:** Yeah. Destruction of
 23 their hunting ground or abandonment of nest.
 24 **MR. GOOD:** Yes. They have defined "take"

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1 as, you know, if there's sufficient disturbance that
 2 caused the nest to be abandoned. That is an
 3 interpretation that the service has been consistent
 4 with. As far as hunting grounds, I have not seen
 5 that applied to date.
 6 Yeah. For this project, there were no
 7 eagles observed within the turbine layout as low-use
 8 throughout the rest of project area. So, that would
 9 not apply to this project.
 10 **MS. WINTERLAND:** I thought you said you
 11 saw a golden eagle in the project land?
 12 **MR. GOOD:** That is right. We said we
 13 reported low use, but the risk -- observation of a
 14 single eagle does not equate to the idea that eagles
 15 will incur fatalities. We believe the risk to be
 16 very low at the site based on the observation of one
 17 golden eagle over 346 hours of observation.
 18 **MS. WINTERLAND:** And a known nest within
 19 five miles of your site?
 20 **MR. GOOD:** That's correct. There is one
 21 known nest within five miles; however, typical bald
 22 eagle home ranges during the nesting season are much
 23 smaller than that.
 24 **MS. WINTERLAND:** You also -- is this

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1 correct? Did I get it down right, that you had
 2 eight observations of an upland-sandpiper?
 3 **MR. GOOD:** That is correct.
 4 **MS. WINTERLAND:** And is an
 5 upland-sandpiper endangered?
 6 **MR. GOOD:** Yes. I believe it is listed
 7 endangered under the Illinois Endangered Species
 8 Act.
 9 **MS. WINTERLAND:** But didn't you go further
 10 and say you have something about adaptive management
 11 strategies in place if threatened or endangered
 12 species were found?
 13 **MR. GOOD:** That's right. So, during
 14 carcass monitoring, if there's an endangered species
 15 found as a carcass, that will trigger an adaptive
 16 management response in coordination with the
 17 Illinois Department of Natural Resources.
 18 **MS. WINTERLAND:** So, only if a dead one is
 19 found?
 20 **MR. GOOD:** That's correct. That is the
 21 purpose of the post-construction monitoring, to
 22 determine whether they are occurring. To date,
 23 there have been no upland-sandpipers found in
 24 Illinois, despite their occurrence at wind projects.

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1 **MS. WINTERLAND:** So, does that also apply
 2 to "take" as in disrupting? Because now I am going
 3 to switch gears from the upland-sandpiper to the
 4 harrier because, in the IDNR report, I believe I saw
 5 it said that you always see harriers
 6 pre-construction and never see them
 7 post-construction. Is that true? Because they are
 8 disrupted.
 9 **MR. GOOD:** What that report says or what
 10 that letter says is there have been no fatalities
 11 found post-construction in Illinois. There are
 12 fatalities found in other states, but to date none
 13 have been found in Illinois.
 14 **MS. WINTERLAND:** I think what that report
 15 said was that you don't find them post-construction
 16 because they hunt by sound and the turbine noise
 17 disrupts their ability to hunt.
 18 **MR. GOOD:** That is Illinois DNR's theory.
 19 There's one study in Europe that has documented some
 20 potential avoidance, I believe a study in Wisconsin.
 21 However, I believe the main reason they are not
 22 found as fatalities is they are very low -- they
 23 have a very low course in flight. They rarely fly
 24 within the area of the rotor swept area. They hunt

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1 very low to the ground.
 2 **MS. WINTERLAND:** So, I am not talking
 3 about dead harriers. I am talking about live
 4 harriers being seen pre-construction and never seen
 5 post-construction in the same project.
 6 **MS. ANTONIOLLI:** What is the question?
 7 **MS. WINTERLAND:** So my question is: Are
 8 they being disrupted from their hunting ground?
 9 **MS. ANTONIOLLI:** Are you asking before or
 10 after construction?
 11 **MS. WINTERLAND:** Post-construction. Given
 12 that the IDNR says they are never seen
 13 post-construction, are they being disrupted from
 14 their hunting ground due to the noise?
 15 **MS. ANTONIOLLI:** That is a speculative
 16 question. I object.
 17 **CHAIRMAN FINNIGAN:** If you can answer the
 18 question, answer it. If you can't, say you can't.
 19 **MR. GOOD:** It's certainly possible. You
 20 know, another theory is they fly too low so they
 21 never encounter the rotor swept area.
 22 I think, regardless, the project lacks
 23 nesting habitat, an important habitat for the
 24 northern harrier. So, even if theoretically

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1 something was displaced from the project, it's not
 2 being displaced from important habitat.
 3 **MS. WINTERLAND:** How far do harriers roam?
 4 **MR. GOOD:** It depends on the season. In
 5 the nesting season they are tied, you know, much
 6 closer to their nests. I don't have the range off
 7 the top of my head.
 8 During migration seasons, they can fly
 9 hundreds and hundreds of miles between summer areas
 10 and winter areas. The season that they are observed
 11 in Illinois are, at least at this project, were in
 12 the migration seasons in the winter, when they
 13 typically have a much broader home range.
 14 **MS. WINTERLAND:** So, given that, did you
 15 not say the Mackinaw is three miles from your
 16 project? Is it not feasible that they could roam
 17 that far? That that habitat would not be suitable?
 18 **MR. GOOD:** I believe there is suitable
 19 habitat along the Mackinaw River. I do. I don't
 20 believe there would be any impact on the project to
 21 harriers at that distance.
 22 **MS. WINTERLAND:** Okay. So you mentioned
 23 the Heartland wind turbine, and that is one wind
 24 turbine that has been studied. How tall is that

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1 wind turbine?
 2 **MR. GOOD:** I don't know.
 3 **MS. WINTERLAND:** Is it 550 feet?
 4 **MR. GOOD:** I don't know the answer to
 5 that.
 6 **MS. WINTERLAND:** Have you studied -- have
 7 there been any studies around 550 feet tall
 8 turbines?
 9 **MR. GOOD:** What type of studies are you
 10 referring to?
 11 **MS. WINTERLAND:** Any of these -- I guess
 12 there haven't been any environmental studies around
 13 these turbines. Is that what you are saying?
 14 **MR. GOOD:** No. There has been over 300
 15 post-construction monitor studies completed across
 16 the US. As far as if you are referring to
 17 mortality monitoring, none of the projects that I
 18 have worked on that are publicly available are up to
 19 550 feet. There currently are some studies going on
 20 some turbines but none that have research results
 21 that are available; although, I wouldn't expect the
 22 results be vastly different.
 23 **MS. WINTERLAND:** Last question or last
 24 topic: The half mile setbacks from the Henline

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1 Creek, did you provide any credible evidence as to
 2 why that setback should not be imposed credible
 3 evidence as in data?
 4 **MS. ANTONIOLLI:** This is the same question
 5 that her counsel asked.
 6 **CHAIRMAN FINNIGAN:** That is true.
 7 **MS. WINTERLAND:** Did he mention credible
 8 evidence as in our ordinance?
 9 **CHAIRMAN FINNIGAN:** We cannot -- we went
 10 through the Henline Creek thing, so I think we are
 11 going to pass on that. That was kind of talked
 12 about and answered and everything.
 13 **MS. WINTERLAND:** Thank you.
 14 **CHAIRMAN FINNIGAN:** Any other questions?
 15 Come forward.
 16 (QUESTIONS BY TRAVIS TAYLOR).
 17 **MR. TAYLOR:** Travis Taylor, 28686 North
 18 3050 East Road, Chenoa, Illinois.
 19 A couple questions I have: You commonly
 20 referred to the typical rotor or turbine path and
 21 the risk analysis to that. I was just wondering
 22 what are the heights and distances off the ground
 23 that we would be looking at?
 24 I mean these particular turbines are

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1 larger than many of the others that you referred to
 2 in McLean County. So I guess when you say typical
 3 rotor path, is it referring to ones that are
 4 pre-existing in the county, or is it referring to
 5 the ones that are proposed in this particular
 6 project?
 7 **MR. GOOD:** Sorry. Are you referring to
 8 the northern area of potential risk?
 9 **MR. TAYLOR:** I have mean I am not very far
 10 away from where one of the monitoring stations are
 11 at my house itself. So, I don't know -- the bat
 12 study was kind of interesting to me, too, because
 13 you were talking about the 50 feet mark, and based
 14 off what I saw from the pictures and what is on the
 15 county Web site, they are normally like 47 feet off
 16 the ground. So, at the 50-foot mark on the
 17 meteorologist tower, or whatever you guys refer to
 18 it as, those would be affected. So, I guess not
 19 necessarily any particular bird or animal, but I
 20 mean there's a larger span on these than what the
 21 others. There is a lot of reference to other ones
 22 in Illinois.
 23 **MS. ANTONIOLLI:** So, could you clarify the
 24 question? Just re-ask the question.

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1 **MR. TAYLOR:** Is there a particular -- the
 2 reference on the slides referred to a typical rotor
 3 turbine path in many of the -- so what is the height
 4 and width of a typical rotor turbine path that you
 5 are referring to?
 6 **MR. GOOD:** Sure. So, I guess maybe to go
 7 back, you asked the questions about bats and how
 8 high we've monitored, we actually monitored at
 9 50 meters, not 50 feet, so roughly three times the
 10 amount of feet.
 11 We recognize that turbines are getting
 12 taller, so we asked the EDPR to install a pulley
 13 that would allow to us get a monitor up to
 14 80 meters, which is higher than is typically done in
 15 most wind projects. We recognize that is a
 16 potential concern. And we monitor bat activity at
 17 three different heights to compare to previous
 18 studies and we also try to get closer up to that
 19 height. Those rates of use, it recorded all three
 20 of those stations within the range recorded at other
 21 wind energy projects.
 22 **MR. TAYLOR:** I guess another question that
 23 I have: There was a lot of talk about the northern
 24 flight harrier. What is the flight height of --

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1 since you said it is a lower flying or references to
 2 that, what is -- I mean I figure you guys study
 3 them, so you probably know what that height is. And
 4 with these being so big and low to the ground, is
 5 that something you could share?
 6 **MR. GOOD:** Sure. Sure. So, when I am
 7 watching harriers, most of those flights are
 8 typically within five, maybe up to ten meters at
 9 most above the ground. They fly very low to the
 10 ground looking for rodents, lizards, other
 11 ground-dwelling prey. So, pretty low, much lower
 12 than other raptors.
 13 **MR. TAYLOR:** So, 10 meters, 3 times, so
 14 you are still looking 30 feet. So, it would still
 15 be below it.
 16 Have you conducted studies on wind
 17 turbines in this size? Like, I was referring to
 18 again, like, the size of turbines. Have you guys
 19 done a lot of analysis and then later done the
 20 studies after they have been put in for wind
 21 turbines that are this big?
 22 **MR. GOOD:** I am trying to think here as
 23 you are asking me questions. What is the tallest
 24 turbine I've ever researched? I am not very good

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1 pulling those numbers off the top of my head. I'd
 2 say the tallest we've looked at has a mass of around
 3 80 to 100 meters in height. So, it's in the
 4 ballpark.
 5 **MR. TAYLOR:** A big thing that was talked
 6 about at previous meetings was the kind of turbines
 7 that are being used with the blades and perspective
 8 to it, and we talked about how some of the
 9 technology is newer coming out. So, I guess, have
 10 you noticed a difference in the turbines taking more
 11 or less, based off of the newer versus older, like
 12 were your studies with the older turbines that were
 13 smaller have you noticed there being more or less as
 14 it progressed to being larger or bigger turbines?
 15 Do you know what I mean? In comparison, is that
 16 something? Because they are the newer, bigger, it
 17 would be a good comparison.
 18 **MR. GOOD:** Yeah. So, there's kind of two
 19 factors. We have seen variation in similar size
 20 turbines, variation in fatality rates in similar
 21 size. Some projects kill a lot. Some have very low
 22 amounts. There's some research that has shown bat
 23 fatality rates may have a general trend of being
 24 higher in bigger turbines. That may be related to

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1 its turbine size. It may be related to the cutting
 2 speed of the turbines. Bird mortality has not shown
 3 a similar trend from what the researchers have done.
 4 But you also have, again, there is the size
 5 correlation, but there's also this geographic
 6 variation, and some projects kill more than others.
 7 We wish we had better prediction tools, but we
 8 don't. That is why we do post-construction
 9 monitoring, to verify is this site in the range that
 10 we think it will be.
 11 **MR. TAYLOR:** I think that concludes my
 12 questions.
 13 **CHAIRMAN FINNIGAN:** Thank you. Any other
 14 questions?
 15 (QUESTIONS BY JEFF POWELL).
 16 **MR. PAUL:** Jeff Powell, 32897 East 2700
 17 North Road, Chenoa.
 18 I heard a lot of talk about bats and
 19 birds. What I haven't heard about is insects. Are
 20 there any requirements on endangered insects? I am
 21 sure a lot of us heard the flight of the monarch
 22 butterfly. What do these do to the monarch
 23 butterfly?
 24 **MR. GOOD:** That is a good question. So,

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1 if a species is listed, it doesn't, under the
 2 Endangered Species Act, it doesn't matter if it's an
 3 insect or a bird in the path, it receives
 4 protection.
 5 Currently the monarch butterfly is not
 6 listed under the Endangered Species Act, although
 7 the biologists are certainly monitoring populations,
 8 but it's currently not listed.
 9 **MR. POWELL:** So, as of right now, you are
 10 not required to make studies on how many they kill?
 11 It's just not required yet?
 12 **MR. GOOD:** That is right.
 13 **MR. POWELL:** Okay. How about -- there's a
 14 lot of talk about the bats and the killing of bats.
 15 How about the effect of -- you know, I sit out in
 16 the evening in the summertime and watch these things
 17 eat the mosquitoes at my house. Is there any
 18 requirements or studies that need to be done about
 19 the bats that are taken, what effect does that have
 20 on the health of residents around as far as mosquito
 21 control?
 22 **MS. ANTONIOLLI:** Are you asking a health
 23 effects question? Because he is not a health
 24 effects expert. Just rephrase.

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1 **MR. POWELL:** Would you say that bats being
 2 killed would have an effect on the mosquito
 3 population?
 4 **MS. ANTONIOLLI:** This question is not
 5 directly related to his testimony. It's up to the
 6 board whether you will allow him to proceed.
 7 **CHAIRMAN FINNIGAN:** I don't think he can
 8 answer that question. I mean I would say let's move
 9 on.
 10 **MR. POWELL:** Okay. I've been on my
 11 property for about five years. I kind of have a
 12 little bit of surrounding wooded area. I have
 13 observed the first bald eagle that I have seen
 14 within the past few months. Is it safe to say that
 15 the project accounts for future bald eagle nests
 16 being developed in the area?
 17 **MR. GOOD:** Right. Good question. So,
 18 there were no found bald eagle nests within two
 19 miles of the project. Could there be one that pops
 20 up in the future? I think, at the Mackinaw River,
 21 we would expect eagle nests to potentially occur
 22 there in the future. But the nearest habitat is
 23 located at least three and a half -- the nearest
 24 suitable habitat is located along the Mackinaw,

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1 which is three and a half miles away. So, if bald
 2 eagle nests were to nest there in the future, we
 3 would not expect that to influence use of the site
 4 during their nesting season because it's so far
 5 away, and the project lacks high-quality foraging
 6 habitat such as larger lakes and rivers.
 7 **MR. POWELL:** Okay. I don't know if you
 8 can answer this, but what happens if a bald eagle
 9 does decide to build a nest close to one of these
 10 things?
 11 **MR. GOOD:** So, what if a nest is built in
 12 the future?
 13 **MR. POWELL:** Yeah.
 14 **MR. GOOD:** Developers have some options.
 15 They can coordinate with Fish and Wildlife Services
 16 to determine the next appropriate steps of action.
 17 I have seen this happen at other projects. I don't
 18 expect it to be a problem at this project just based
 19 on the proximity of the project to the highly
 20 suitable habitat. But when that happens, you know,
 21 they can coordinate with Fish and Wildlife Services.
 22 There's options to study to see if those birds are
 23 actually flying near turbines or not, or there's
 24 options for developers to apply for permits in the

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1 future if there is a nest that appears near a
 2 turbine.
 3 **MR. POWELL:** By permits in the future, you
 4 mean future turbines or permits as far as taking or
 5 --
 6 **MR. GOOD:** A potential take permit; but,
 7 again, I don't expect that to be an issue here given
 8 how far we are from suitable habitat.
 9 **MR. POWELL:** Okay. Thank you.
 10 **CHAIRMAN FINNIGAN:** Any other questions?
 11 (QUESTIONS BY DARYL HANEY).
 12 **MR. HANEY:** Daryl Haney, 31631 East 3100
 13 North Road, Chenoa. H-A-N-E-Y.
 14 I am one of the commissioners on the
 15 drainage district. Rooks Creek is our primary
 16 concern.
 17 You quoted while ago you measured the
 18 distance for T-101 to the stream at 343 feet; is
 19 that correct?
 20 **MR. GOOD:** Yeah. Yep. That was the
 21 approximate measurement.
 22 **MR. HANEY:** Okay. Is that to the edge of
 23 the stream or the center stream?
 24 **MR. GOOD:** Again, that's an approximate

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1 measure to probably around the center of stream. It
 2 was maybe using Google Earth, so there's some error
 3 there, plus or minus a few feet.
 4 **MR. HANEY:** Okay. I have been having
 5 problems getting accurate figures from the project
 6 manager on this very subject. Every turbine I ask
 7 for I get a different number every time. She told
 8 me the other day that stream was 470 feet away. So,
 9 why all these variables?
 10 **MS. ANTONIOLLI:** Was your question why all
 11 these errors? Did I hear you correctly?
 12 **MR. HANEY:** Yes. Because neither one of
 13 them is acceptable by our standards as a drainage
 14 district.
 15 **MS. ANTONIOLLI:** Do you have a question
 16 about wildlife for him?
 17 **MR. HANEY:** The turbine is too close to
 18 the perennial stream and is a potential for problems
 19 according to DNR. So, what figure is correct? Or,
 20 do I have to measure it myself?
 21 They are recommending 500 feet, and that
 22 is why I am trying to figure out, because we've got
 23 our own standards beyond that. Because we do have
 24 an easement of 200 feet, 100 feet each side of

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1 center.
 2 So, I know what's going on here with this
 3 turbine. I know why it's 343 feet from the stream,
 4 because you can't move it the other two directions.
 5 According to the zoning board, they recommended
 6 500 feet. So, why are you putting it so close and
 7 going to cause issues with life in that perennial
 8 stream?
 9 **MR. GOOD:** Yeah. Well, I guess, first
 10 off, I am not the developer. My job is to study the
 11 impacts. But all I can say is that that's the
 12 distance that we estimated based on the layout we
 13 received.
 14 **MR. HANEY:** Okay. That's all I have.
 15 **CHAIRMAN FINNIGAN:** Thank you.
 16 Any other questions? I think we are in
 17 the clear.
 18 (FURTHER QUESTIONS BY MS. ANTONIOLLI)
 19 **MS. ANTONIOLLI:** Just one follow-up
 20 question. We heard a question about what would
 21 happen after the project is completed and if the
 22 nest is found. And, Mr. Good, can you tell us about
 23 the post-construction monitoring plan?
 24 **MR. GOOD:** Sure. So, as part of the

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1 project, you know, there would be a bird and bat
 2 conservation strategy that includes live project
 3 monitoring. If a carcass is found near 15 and it's
 4 an eagle, it would be reported. And it also
 5 includes provisions to coordinate with the Fish and
 6 Wildlife Service if a new nest or new information
 7 becomes available.
 8 **MS. ANTONIOLLI:** Okay. Thank you.
 9 And I also have exhibits of copies of his
 10 presentation to enter into the record as exhibits.
 11 So, we move the PDF copy of his presentation today
 12 into the record as Applicant's Exhibit I think we
 13 are at 7.
 14 **MR. DICK:** Yes.
 15 **CHAIRMAN FINNIGAN:** We'll put that on the
 16 record.
 17 (APPLICANT'S EXHIBIT 7 ADMITTED.)
 18 **MS. ANTONIOLLI:** Okay. That's all I have
 19 for now.
 20 **CHAIRMAN FINNIGAN:** I am trying to decide
 21 if we want to take a break now.
 22 **MR. DEAN:** Do you have a number for that
 23 exhibit?
 24 **CHAIRMAN FINNIGAN:** It's 7. I think we

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1 are going to take a ten-minute break.
 2 (BREAK TAKEN.)
 3 **CHAIRMAN FINNIGAN:** Back to order. Do you
 4 have your next witness ready?
 5 **MS. ANTONIOLLI:** I do. Mr. Gary DeClark
 6 is here.
 7 **CHAIRMAN FINNIGAN:** Would you like to be
 8 sworn in?
 9 (GARY K. DeCLARK SWORN IN.)
 10 **CHAIRMAN FINNIGAN:** Would you state your
 11 name and address and spell your last name?
 12 **MR. DeCLARK:** Gary DeClark. Spelled
 13 G-a-r-y D-e-C-l-a-r-k. And my residence is 133
 14 Clyde Avenue, in Evanston, Illinois.
 15 **MR. DEAN:** Mr. Chairman, would it be
 16 possible to get the handout prior so that we can
 17 kind of mark it up?
 18 **MS. ANTONIOLLI:** The handout is on its
 19 way. We are going to deliver a copy shortly. So,
 20 we'll give you one as soon as they are here.
 21 **MR. DEAN:** Thank you.
 22 (QUESTIONS BY MS. ANTONIOLLI.)
 23 **MS. ANTONIOLLI:** Mr. DeClark, where do you
 24 work?

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1 **MR. DeCLARK:** I work with a company called
 2 Valbridge Property Advisors in Chicago.
 3 **MS. ANTONIOLLI:** And what is your
 4 profession?
 5 **MR. DeCLARK:** I am a professional real
 6 estate appraisal counselor.
 7 **MR. DICK:** What is your educational
 8 background?
 9 **MR. DeCLARK:** I hold a master's of arts
 10 from the University of Georgia in real estate
 11 development and urban analysis, and I also have a
 12 bachelor's of finance from the University of
 13 Illinois.
 14 **MS. ANTONIOLLI:** And what professional
 15 organizations do you belong to?
 16 **MR. DeCLARK:** I am a member of the
 17 Appraisal Institute. I hold the MAI designation. I
 18 am a member of the Counselors of Real Estate, the
 19 CRE designation. I am a fellow with the Royal
 20 Institution of Chartered Surveyors, and that would
 21 be under the FRICS designation. And I am also a
 22 member of the International Right of Way Association
 23 and have the AC designation for appraisal
 24 consulting.

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1 **MS. ANTONIOLLI:** Okay. And have you
 2 testified on impacts to property values before?
 3 **MR. DeCLARK:** Yes, I have.
 4 **MS. ANTONIOLLI:** Okay. And how many years
 5 have you worked in this field?
 6 **MR. DeCLARK:** This is my 37th year.
 7 **MS. ANTONIOLLI:** Okay. Thank you.
 8 So, at this time, I would present this
 9 witness as an expert on property values.
 10 **MR. ARMSTRONG:** No objection.
 11 **CHAIRMAN FINNIGAN:** He will be an expert.
 12 **MS. ANTONIOLLI:** Thank you.
 13 **MR. DeCLARK:** Good evening, ladies and
 14 gentlemen. My comment and remarks tonight will deal
 15 with the wind farms with regard to property and
 16 adjacency issues having to do with pricing and
 17 value. The objective here is to present concepts
 18 and consider potential impact of wind turbines on
 19 rural land values. In so doing, we are going to
 20 define market value and the conditions implicit in
 21 determining the sales price. We are going to
 22 comment on the buyer preferences in addition to
 23 market value. We are going to describe the
 24 characteristics that impact rural land prices. We

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1 are also going to introduce current sales trends of
 2 rural land in Illinois and in Region 4, a section of
 3 Illinois. And we'll talk about Region 4 later,
 4 which includes McLean County.
 5 We'll also consider the impact of wind
 6 turbines on rural land values, consider the
 7 opponent's view of wind turbines as a stigma. We'll
 8 provide an analysis of recent sales activities for
 9 McLean County and determine if existing wind
 10 turbines have impacted properties and then have some
 11 conclusionary commentary.
 12 So, the next step is what is market value.
 13 Market value is commonly defined as follows: The
 14 most probable price which a property should bring in
 15 a competitive and open market under all conditions
 16 requisite to a fair sale, the buyer and seller each
 17 acting prudently, knowledgeably and assuming the
 18 price is not affected by undue stimulus.
 19 Implicit in this definition are several
 20 other items, one of which is the consummation of a
 21 sale as of a specified date and the passing of title
 22 from seller to buyer under conditions that are such
 23 that the buyer and seller are prudent and
 24 knowledgeable, and they are typically motivated and

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1 each one acts in its own best interests. A
 2 reasonable time is allowed for exposure on the open
 3 market and payment is made in terms of cash in US
 4 dollars or in terms of financial arrangements
 5 comparable to US dollars. And, lastly, the price
 6 involved represents the normal consideration for the
 7 property sold unaffected by special or creative
 8 financing or sales associated with anyone with the
 9 sale.

10 The next flag deals with the issues of
 11 market value versus home buyer preferences. A home
 12 can be thought about as a bundle of characteristics.
 13 We all have experienced this with the size of the
 14 home, what is the square footage, how many bedrooms,
 15 how many bathrooms are there, what is the number of
 16 fireplaces, the land acreage, many criteria come
 17 into play. When a price is agreed upon between
 18 seller and buyer, there's an implicit understanding
 19 that those characteristics have value to them.

20 There are a myriad of home buyer
 21 preferences, some of which we discussed, the size
 22 and location are prime, number of square feet of
 23 living area, number of bathrooms or bedrooms, the
 24 presence of air-conditioning, neighborhood

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1 characteristics, in other words, where the school
 2 districts are relative to or how the school
 3 districts are relative to the property, whether or
 4 not there are any surrounding environmental
 5 conditions proximate to an amenity or a disamenity,
 6 what the view might be, and the list can go on
 7 depending on property type and specificity.

8 It's important to note the differences
 9 between buyer preferences and market value. Buyer
 10 preferences, although considered implicitly in the
 11 negotiated sales price, can be entirely or
 12 partially subjective.

13 Appraisers in the market analyze sale data
 14 based on the typical buyer's preferences by property
 15 type or market area as an example.

16 As appraisers, all of us attempt to
 17 correlate the data to determine which
 18 characteristics are most important to the market
 19 purchase.

20 First off, let's talk about rural
 21 landowners and what drives market value. According
 22 to the most recent Farm Journal publication released
 23 in December 2017, farmland values are currently
 24 affected by the following key factors:

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1 They are affected by available cash that
 2 the farmer has, the supply of land on the market,
 3 commodity and grain pricing, global and US policy
 4 changes centered around trade, tax, and ethanol as
 5 examples. Other issues are interest rates, global
 6 demand for food, optimism in rural America and, of
 7 course, the number of interested land buyers.

8 McLean County is situated in Region 4 of
 9 the North Central Region as defined by the Illinois
 10 Society of Professional Farm Managers and Rural
 11 Appraisers. We touched on this in a previous slide.

12 In Region 4, as in many other regions,
 13 farmland is classified by productivity. We'll talk
 14 about productivity later. But given the quality of
 15 productivity from excellent down to fair and then,
 16 in addition to that, initial categories of
 17 recreational land, really land that is not suitable
 18 for agricultural use and simply other, which is
 19 leftover as I'll call it, there have been some
 20 general ranges in property values and purchase
 21 prices per acre.

22 Excellent productivity land can and has
 23 traditionally run between 10,000 and 11 and a half
 24 thousand dollars an acre. And you can see from the

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1 chart that as you get down to productivity level,
 2 the price has a tendency to drop.

3 But, in addition to that, the change,
 4 percentage change in dollars per acre from the prior
 5 year for excellent and good productivity land has
 6 dropped slightly.

7 The level of transactions according to
 8 this report has remained the same as a general
 9 study, but the change from the prior year suggests a
 10 downward trend.

11 For a large percentage of the territory,
 12 land values dipped throughout the beginning of 2016
 13 but seemed to level off thereafter.

14 Although the number of 1031 tax deferred
 15 exchange buyers tends to be low, when a property has
 16 1031 funds that need to be reinvestigated, those
 17 sales can see higher values, and I think that holds
 18 regardless of where you are and the property type
 19 you are considering.

20 We found that recent in -- the study found
 21 recent activities for sales vary by county in
 22 Region 4. Marshall, Putnam, Tazwell and Mason
 23 Counties all saw slightly steady to slightly lower
 24 levels of land for sale. McLean, Livingston, and

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1 Woodford Counties all continued to have a steady
 2 number of sales when compared to the prior year.
 3 And then, Region 4 is described as having
 4 adequate demand to meet most of the supply, but some
 5 farms, not all farms, some farms sat on the market
 6 for an extended period of time.
 7 The next slide is the first slide relating
 8 to a chart and a graph that we have in our packet,
 9 and this chart just is a depiction of how the price
 10 per acre has changed over the course of time.
 11 Starting in the left at the Y axis of 2001 on this
 12 chart going up to 2016 you can generally see that
 13 most specifications of land have escalated over time
 14 and seem to have peaked in 2013 and '14, given the
 15 particular type you are looking at, and then, after
 16 that, have dropped slightly.
 17 But one thing we need to zero in on the
 18 next slide, as we touched on prior, is the
 19 productivity index. Productivity, generally
 20 speaking, is what can be expected to be yielded out
 21 of a particular partial of ground. These are
 22 determined locally by the University of Illinois
 23 under Bulletin 811. Geologically speaking, there
 24 are some 800 soils in Illinois and these soils have

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1 ratings between a low of 47 generally with the
 2 highest rating being 147, again, by the University
 3 of Illinois classifications.
 4 Tracts in communities, in desirable
 5 communities, good transportation and market access
 6 score the highest. No surprise there.
 7 Soil topography, erosion, fertility loss,
 8 improper drainage or noxious weed infestations also
 9 contribute to tracts having a lower index rating.
 10 Overall, the study suggests that the
 11 farmland value trends are that supply of farmland in
 12 the region has been relatively tight, indicating
 13 neither an overabundance nor lack of supply of
 14 available tracts of land, and that in recent timing
 15 we have seen in that chart land values have softened
 16 in recent times due to several issues, some of which
 17 are federal reserve opting to increase interest
 18 rates, which we've all experienced, consistently
 19 dropping and lowering of commodity prices, grain
 20 prices, and then as a result of that tightening cash
 21 flow that farmers may have.
 22 Another situation, according to a 2017
 23 Illinois Land Values and Lease Trends Report, the
 24 wind power industry has had a positive impact on

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1 land values according to this report.
 2 It is said that some of the best wind at
 3 50 to 80 meters high exists in the region of this
 4 state.
 5 Wind turbines provide areas of Livingston,
 6 McLean, Tazwell, and Woodford Counties with income
 7 diversification beyond agricultural which makes
 8 these tracts more attractive to an investor.
 9 But some people say, well, wind turbines
 10 can be a detrimental condition. Some opponents have
 11 argued that. They tend to be a -- they suggest
 12 there tends to be a rural property diminution based
 13 on the perception that it creates stigma, area
 14 stigma, scenic vista stigmas, nuisance stigma.
 15 Although there have been many studies in
 16 particular recent times, the past few decades have
 17 had no studies that have suggested that there's a
 18 correlation to property values and wind turbines.
 19 There's clearly not a detriment here as they state.
 20 We will consider in our further analysis
 21 here the actual recent sales data provided by the
 22 McLean County Assessor's records to determine
 23 whether the areas have been affected. So, if we
 24 drill down to a microlevel analysis on recent McLean

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1 County sales data, we note the following:
 2 Although literature mentioned previously
 3 indicates that there's unlikely to be a
 4 statistically measurable change in sales prices due
 5 to proximity to wind turbines, we attempted to find
 6 such a trend using the best publicly available data.
 7 This effectively was a hypothesis.
 8 We used McLean County Assessor's data from
 9 August of 2017 that went back several years and
 10 attempted to normalize sales of property for larger
 11 and smaller houses by dividing the property sales
 12 price by the area of the house to get a dollars per
 13 square foot of the house including land.
 14 We also eliminated properties we found
 15 that had no sales price data. We can't use that.
 16 It doesn't tell you anything.
 17 We eliminated properties with a sales
 18 price of less than \$5,000. We eliminated as a
 19 result of that token sales of money through \$100 or
 20 \$1 that might be seen on a deed. I will say, after
 21 looking at that data, inclusion of the properties
 22 within sales prices of less than \$5,000 did not
 23 significantly change the results in any way, but we
 24 left it out.

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1 And on the other side of the coin, now we
 2 also eliminated properties with sales prices over a
 3 million dollars and with more than 25 acres in an
 4 attempt to focus more on typical house sales for the
 5 area.
 6 Sales prior to 2004 were eliminated to
 7 focus on recent trends. Inclusion of all county
 8 data back to the earliest sales records reinforces
 9 that property values near turbines as has increased,
 10 although slightly, has increased over time.
 11 But then, we now took a look at a
 12 graph/chart of the information that we were able to
 13 gather from the McLean County Assessor, and in this
 14 chart we have on the vertical access, the Y access,
 15 dollars per square foot of residence, and on the X
 16 access we have 13 years of information.
 17 Effectively what we are looking at is
 18 distance of property from any wind turbines and on
 19 the McLean County level to begin with, anywhere in
 20 the county on this first chart.
 21 Getting back to our hypothesis, if
 22 turbines have an impact on property values, we would
 23 expect to see a downward trend once Twin Groves 1
 24 and 2 and the White Oak Projects, the wind turbines

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1 projects were built in 2007, 2008, and 2011,
 2 respectively.
 3 In a statistical since, the R-squared
 4 value which is the coefficient determination in a
 5 statistical linear regression analysis indicates
 6 that there's no statistically significant trend of
 7 the data presented on the previous chart and that
 8 99.8 percent of the data variation is not explained
 9 by the trendline that has been put into that chart.
 10 Trendline is a coefficient of
 11 determination effectively, as I said before, which
 12 usually is a minimization of the differences between
 13 any one spot on the graph and the trendline itself.
 14 Those are attempted to be minimized statistically
 15 speaking.
 16 However, if we were to assume that the
 17 trendline were significant, then countywide homes
 18 have increased at an average of \$3.60 per square
 19 foot per year looking at that data.
 20 But then we took it a step further. In
 21 the next chart we looked at properties that were
 22 within ten miles of turbines, and that was, again,
 23 over the same timeframe and same dollars of per
 24 square foot of residence.

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1 In this particular instance, for
 2 properties within ten miles of turbines, the
 3 R-squared value indicates that there's no
 4 statistically significant trend and that
 5 98.6 percent of the data is not explained by this
 6 trendline, not explained.
 7 Alternatively, if we were to assume that a
 8 trendline is significant, then homes within 10 miles
 9 of turbines have increased in value at an average of
 10 \$2.68 per square foot per year.
 11 And then we kept going. Now we looked at
 12 5 miles, 5 miles out from the placements. For
 13 properties within 5 miles, the R-squared value
 14 indicates that there's no statistically significant
 15 trend. 98.9 percent of the data is not explained by
 16 trendline data. Again, however, if we were to
 17 assume that the trendline were significant, then
 18 homes within 5 miles of turbines have increased in
 19 value at an average of \$2.49 per square foot per
 20 year.
 21 If you look down one more time or an
 22 additional time, within 2 miles of a turbine the
 23 same analysis was done. The R-squared value
 24 indicates that there was no statistically

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1 significant trend and that 99.1 percent of the data
 2 not explained by this trendline. However, if we
 3 were to assume that the trendline were significant,
 4 then homes within 2 miles of turbines have increased
 5 in value at an average of \$2.16 per square foot in a
 6 year.
 7 And then, lastly, within 1 mile of
 8 turbines, again, the same analysis was conducted.
 9 The R-squared value indicates that there's no
 10 statistically significant trend and that
 11 94.2 percent of the data is not explained by this
 12 trendline. However, if we were to assume that the
 13 trendline were significant, then homes within 1 mile
 14 of turbines have increased at an average of \$7.25
 15 per square foot per year.
 16 So where does that leave us? We can take
 17 from this that farmland, because of its expanse and
 18 relatively low unit values compared to urban
 19 properties, has seldom been found to be affected by
 20 wind structures so long has no material damage can
 21 be shown. We all understand that.
 22 The value of large parcels and
 23 agricultural use, being multiple acreage seem far
 24 more likely to be affected by soil quality, crop

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1 production, and transaction factors like
 2 availability of water and the cost of mortgage
 3 financing than any indirect impacts from wind
 4 turbines and that property values in rural areas
 5 will be most affected by local employment and the
 6 presence of recreational opportunities such as
 7 summer homes, open space, golf courses and the like.
 8 Lastly then, given this, where do we go?
 9 There was a recent study conducted, the notification
 10 of this is noted on this slide, but an excerpt of
 11 this study is that, as I noted here, we find that
 12 the developer being open and transparent, a
 13 community being able to influence the outcome and
 14 having a say in the process are all statistically
 15 significant predictors of a process perceived as
 16 being fair with an open and transparent developer
 17 having the largest effect. We also find developer
 18 transparency and ability to influence outcomes to
 19 have statistically significant relationships to a
 20 more positive attitude, with those findings holding
 21 when anesthetics, landscape, and wind turbine sound
 22 consideration are controlled for.
 23 And that concludes my commentary.
 24 **CHAIRMAN FINNIGAN:** Questions from the

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1 board?
 2 (QUESTIONS BY THE BOARD).
 3 **MR. BANGERT:** Gary, does your data
 4 differentiate between the participating and
 5 nonparticipating landowners in your study as to
 6 property values?
 7 **MR. DeCLARK:** No, it does not.
 8 **MR. BANGERT:** Thank you.
 9 **MS. TURNER:** Can we go back to one of your
 10 graphs, maybe the second-to-least one? There you
 11 go. All right.
 12 I am not a math person or a statistics
 13 person or anything like that, so I need you to walk
 14 me through what you are saying here. And you said
 15 it on all of them, so that is why I said it doesn't
 16 matter which one.
 17 So, what you are saying is the trend up
 18 you are finding, or the line that is indicated there
 19 by the dots, the little dots, what you are saying is
 20 there's no significant difference statistically in
 21 value from 2004 to 2018?
 22 **MR. DeCLARK:** Yeah. What I am saying --
 23 yes. Because you should have seen, if there was a
 24 negative effect in the county attributable to the

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1 wind farms that were installed, there should have
 2 been a drop in pricing, if there, in fact, is a
 3 detrimental condition.
 4 **MS. TURNER:** Okay.
 5 **MR. DeCLARK:** But the statistics don't say
 6 that. The statistics suggest that there doesn't
 7 exist such a condition.
 8 **MS. TURNER:** Okay. Was there anything
 9 else that you noticed? And we kind of buzzed
 10 through this. As you are looking at statistics, are
 11 there more houses that are selling below or above
 12 the line as you are any closer or farther away?
 13 You know, because the more expensive
 14 houses can impact that.
 15 So, were there any here things that you
 16 noticed or that we could notice if we looked at this
 17 a little bit closer that would indicate?
 18 **MR. DeCLARK:** Well, by statistics, again,
 19 the theory should be that this line is the best fit.
 20 So that should mean that all of them above equal all
 21 of them that are below as far as numbers go. It
 22 doesn't always hold, but that is generally the case.
 23 **MS. TURNER:** Right. Right. And that is
 24 what I am asking, if you noticed anything that

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1 wasn't generally the case.
 2 **MR. DeCLARK:** I did not. Because we
 3 attempted to take the outliers out that clearly were
 4 no good, the \$100 sales, \$1 sales that were there
 5 for purposes other than arm's length maneuvers.
 6 This is really information that was provided by the
 7 assessor and we just looked at it.
 8 **MS. TURNER:** Okay. One last question:
 9 What is considered statistically significant?
 10 **MR. DeCLARK:** Well, if you go back to the
 11 days of college statistics, math class, whatever,
 12 whatever the case may be, I think the correlation is
 13 that, if you're coefficient of determination, your
 14 R-squared factor, is 100 percent or 1.0, that says
 15 that every time there's a 1 to 1 correspondence that
 16 every time this occurs this will occur.
 17 **MS. TURNER:** And what you are saying is
 18 this never got above 97 or got below 97?
 19 **MR. DeCLARK:** Because we are down to less
 20 than 1 percentage in some instances, 2 percentage
 21 points in others.
 22 **MS. TURNER:** Okay.
 23 **CHAIRMAN FINNIGAN:** Questions from the
 24 staff?

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1 (QUESTIONS BY THE STAFF)
 2 **MR. DICK:** Do you think it's odd that
 3 there's such a difference between some of the prices
 4 of these homes as far as being under 50,000 in 2016
 5 and then some of them 340,000?
 6 Does that -- couldn't one of those change
 7 your trendline significantly if they weren't there?
 8 **MR. DeClark:** Well, I suppose, if you
 9 start plucking data out, the trendline will vary.
 10 But then the question becomes: Well, why are you
 11 plucking anything out and if you are plucking it out
 12 for good reason, there should be a good reason for
 13 it, and I don't know what that good reason might be.
 14 **MR. DICK:** Do you think this is unique in
 15 the terms of the value of these homes in an area?
 16 **MR. DeCLARK:** I did no appraisal work nor
 17 did I value any homes here. I just went with what
 18 the assessor put out and looked at that
 19 specifically.
 20 **MR. DICK:** Thank you.
 21 **MR. DeCLARK:** These are purchase prices
 22 according to the assessor.
 23 **MS. TURNER:** I got one more. Did you take
 24 into consideration any contested assessments? In

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1 other words --
 2 **MR. DeCLARK:** Assessments? No, because,
 3 again, these were transactions. They were sales.
 4 **MS. TURNER:** So, these were what they
 5 landed on. Oh, they were sales?
 6 **MR. DeCLARK:** Sales.
 7 **MS. TURNER:** So not just pure assessment
 8 data, but they were the assessed value of the sales,
 9 correct?
 10 **MR. DeCLARK:** These were transactions that
 11 occurred during these timeframes for these prices.
 12 **MS. TURNER:** Okay.
 13 **CHAIRMAN FINNIGAN:** Mr. Armstrong? You
 14 have to state your name again.
 15 (QUESTIONS BY MR. ARMSTRONG)
 16 **MR. ARMSTRONG:** My name is Brian
 17 Armstrong. I represent the objectors or some of the
 18 objectors.
 19 Can you explain exactly what you were
 20 asked to do here for this project?
 21 **MR. DeCLARK:** I was asked to take a look
 22 at what was occurring in the general area with
 23 regard to pricing and to do a literature review
 24 related to it.

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1 **MR. ARMSTRONG:** And you stated you did not
 2 perform an actual appraisal on any of the
 3 properties, correct?
 4 **MR. DeCLARK:** Correct.
 5 **MR. ARMSTRONG:** And you didn't appraise
 6 any property anywhere in the county for this
 7 project, correct?
 8 **MR. DeCLARK:** Correct.
 9 **MR. ARMSTRONG:** And that is something you
 10 professionally are certainly capable of doing,
 11 correct?
 12 **MR. DeCLARK:** Yes.
 13 **MR. ARMSTRONG:** In fact, you've done that
 14 throughout your career, right?
 15 **MR. DeCLARK:** Yes.
 16 **MR. ARMSTRONG:** Obviously -- not
 17 obviously. You didn't visit any of the properties
 18 that appear in any of your graphs, did you?
 19 **MR. DeCLARK:** Not directly, no; but I did
 20 drive in the rain many days in the general area to
 21 get a feel of what we had.
 22 **MR. ARMSTRONG:** Okay. You, obviously,
 23 didn't go into any of the properties?
 24 **MR. DeCLARK:** I did not.

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1 **MR. ARMSTRONG:** Did you walk any of the
 2 properties?
 3 **MR. DeCLARK:** No. I drove by and observed
 4 from the car, from the road.
 5 **MR. ARMSTRONG:** And you did that with some
 6 of the properties but not all of the properties,
 7 correct?
 8 **MR. DeCLARK:** Pardon?
 9 **MR. ARMSTRONG:** And you did that with some
 10 of the properties but not all of the properties,
 11 correct?
 12 **MR. DeCLARK:** Correct.
 13 **MR. ARMSTRONG:** You know colloquially what
 14 we refer to as a before-and-after appraisal study
 15 is?
 16 **MR. DeCLARK:** Yes.
 17 **MR. ARMSTRONG:** What is that?
 18 **MR. DeCLARK:** When you are taking look at
 19 a property in the before scenario, you are
 20 estimating a market value for that property but
 21 there's some sort of qualifier or issue or condition
 22 that you need to address that either has occurred or
 23 is assumed to have occurred to then allow you to
 24 value the property after this date, this occurrence,

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1 this whatever.
 2 **MR. ARMSTRONG:** So, a plausible
 3 before-and-after study would be appraising a piece
 4 of property before a wind turbine is constructed on
 5 it and then appraising that same piece of property
 6 after the wind turbine is constructed on it,
 7 correct?
 8 **MR. DeCLARK:** That would be a before and
 9 after, yes.
 10 **MR. ARMSTRONG:** And you didn't do that
 11 here, correct?
 12 **MR. DeCLARK:** I did not.
 13 **MR. ARMSTRONG:** And it would also be
 14 plausible, an appraisal study, you would also
 15 appraise a property that does not have any wind
 16 turbine or wind farm facilities on it but is
 17 adjacent to or near a property that has such
 18 facilities on it and compare the value of that
 19 property before the wind facilities were constructed
 20 and after the wind facilities were constructed?
 21 **MR. DeCLARK:** That could be done.
 22 **MR. ARMSTRONG:** And you didn't do that
 23 here either, correct?
 24 **MR. DeCLARK:** Correct.

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1 **MR. ARMSTRONG:** And you haven't done that
 2 for the White Oak wind farm, correct?
 3 **MR. DeCLARK:** I did not.
 4 **MR. ARMSTRONG:** And you haven't done that
 5 for either the Twin Groves wind farms, have you?
 6 **MR. DeCLARK:** Correct.
 7 **MR. ARMSTRONG:** You testified that in the
 8 past few decades there have been no studies that
 9 have correlated the presence of wind turbines and
 10 reduction in property values, correct?
 11 **MR. DeCLARK:** I think I said that. Yes.
 12 **MR. ARMSTRONG:** I take then that you are
 13 not familiar with the study by Steven Gibbons from
 14 the London School of Economics that was done in
 15 2014?
 16 **MR. DeCLARK:** Not that I recall.
 17 **MR. ARMSTRONG:** Did you know that Gibbons
 18 found a loss of property value of 5 to 6 percent for
 19 property from which a wind turbine was visible?
 20 **MS. ANTONIOLLI:** I object. He just said
 21 he is not aware of that report.
 22 **MR. ARMSTRONG:** It's cross examination.
 23 **CHAIRMAN FINNIGAN:** If he doesn't know
 24 what the study is, I don't think he can answer the

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1 question.
 2 **MR. ARMSTRONG:** Well --
 3 **CHAIRMAN FINNIGAN:** If you want to offer
 4 that later on in your testimony, you can do that.
 5 **MR. ARMSTRONG:** If I showed you that study
 6 right now, would you review it and reevaluate your
 7 statement?
 8 **MR. DeCLARK:** I think that would be
 9 inappropriate. I could take a look at it. But to
 10 render an opinion right now I think would be
 11 improper.
 12 **MR. ARMSTRONG:** Well, I am going to hand
 13 you the study, and I've even highlighted it for your
 14 convenience, if you look at page 29.
 15 **MS. ANTONIOLLI:** Okay. I am going to
 16 object because we just went over this.
 17 **MR. ARMSTRONG:** Well, he said he is not
 18 aware of it. I am now going to make him aware of
 19 it.
 20 **CHAIRMAN FINNIGAN:** It's up to you. If
 21 you want to look at the study, you can do that. If
 22 you don't, that's okay.
 23 **MR. DeCLARK:** I'll not do it.
 24 **CHAIRMAN FINNIGAN:** Because I think we

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1 said we are going to let you enter that as evidence
 2 when you present your case.
 3 **MR. ARMSTRONG:** I am sorry. I just want
 4 -- did you say you will not do it right now?
 5 **MR. DeCLARK:** Right. Right. Right.
 6 **MR. ARMSTRONG:** Okay. Will you allow an
 7 offer of proof?
 8 **CHAIRMAN FINNIGAN:** In general, that is
 9 not what we do here. Most of the time, when we have
 10 something like this, we need to have the person that
 11 is presenting the evidence here, and not that we
 12 wouldn't take it as for what the worth of the study,
 13 but we don't have anyone here to verify it.
 14 **MR. ARMSTRONG:** I think the objector
 15 should be permitted reasonable cross examination
 16 under Klaeren, and I think this is a reasonable
 17 cross examination. It's going to be two questions.
 18 **CHAIRMAN FINNIGAN:** If you make them
 19 short, do it.
 20 **MR. ARMSTRONG:** Again, Mr. DeClark, since
 21 you are not aware of the study, I assume you are not
 22 aware tat Gibbons found a loss of property value of
 23 5 to 6 percent for properties where a wind turbine
 24 is visible?

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1 **MS. ANTONIOLLI:** He doesn't have the study
 2 in front of him.
 3 **MR. ARMSTRONG:** Because he just said he
 4 didn't want to look at it. I'll happy to hand it to
 5 him.
 6 **MS. ANTONIOLLI:** I object. He can do this
 7 during his testimony.
 8 **MR. ARMSTRONG:** Are you offering to bring
 9 Mr. DeClark back or we can bring him back, or we can
 10 do it now?
 11 **MS. ANTONIOLLI:** No.
 12 **CHAIRMAN FINNIGAN:** I don't think we are
 13 going to get anywhere with this testimony because he
 14 is not going to answer your question, and I don't
 15 think he has to. So, we are going to go back to
 16 what we told you originally. You can present your
 17 evidence later.
 18 **MR. ARMSTRONG:** In one of your slides, you
 19 mentioned that -- you talk about some of the
 20 preferences that home buyers have such as lot size,
 21 square foot of living, etc., correct?
 22 **MR. DeCLARK:** I did.
 23 **MR. ARMSTRONG:** And you also mentioned
 24 surrounding environmental conditions in proximity to

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1 an amenity or disamenity, right?
 2 **MR. DeCLARK:** I did.
 3 **MR. ARMSTRONG:** And you mentioned that a
 4 disamenity could we something that interferes with a
 5 view from the property, right?
 6 **MR. DeCLARK:** That is a possibility. That
 7 is the next line.
 8 **MR. ARMSTRONG:** Right. And some home
 9 buyers could consider a wind turbine a disamenity,
 10 correct?
 11 **MR. DeCLARK:** Apparently that is true.
 12 **MR. ARMSTRONG:** And you mentioned also in
 13 one of your slides stigma, right?
 14 **MR. DeCLARK:** I did.
 15 **MR. ARMSTRONG:** And you are familiar with
 16 the International Association of Assessing Officers,
 17 correct?
 18 **MR. DeCLARK:** Yes.
 19 **MR. ARMSTRONG:** And that body drafts
 20 standards for making appraisals of property,
 21 correct?
 22 **MR. DeCLARK:** For assessment purposes,
 23 that is correct.
 24 **MR. ARMSTRONG:** And one of the standards

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1 that they publish is a standard on environmental
 2 contamination, correct?
 3 **MR. DeCLARK:** I believe that to be true.
 4 **MR. ARMSTRONG:** And that standard defines
 5 a stigma as an intangible factor that affects market
 6 value, right?
 7 **MR. DeCLARK:** There are many definitions,
 8 but that seems like a reasonable one.
 9 **MR. ARMSTRONG:** Okay. Is there another
 10 definition that you think is better?
 11 **MR. DeCLARK:** I am not reciting it, but I
 12 am sure a wordsmith would.
 13 **MR. ARMSTRONG:** And when you do
 14 appraisals, you follow the standards promulgated by
 15 that association, correct?
 16 **MR. DeCLARK:** Yes. You generally do. You
 17 are right.
 18 **MR. ARMSTRONG:** One of the -- the
 19 standards about environmental contamination, the
 20 association doesn't limit that type of issue to
 21 strictly chemical contamination, correct?
 22 **MR. DeCLARK:** I don't remember exactly how
 23 it was defined, but I would say generally it's not
 24 only chemicals.

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1 **MR. ARMSTRONG:** Do you recall that it can
 2 include things such as airport noise and traffic
 3 noise?
 4 **MR. DeCLARK:** That could be.
 5 **MR. ARMSTRONG:** Could it include things
 6 like power lines?
 7 **MR. DeCLARK:** Yes.
 8 **MR. ARMSTRONG:** And that association
 9 recognizes that environmental contaminants can be a
 10 stigma on property, correct?
 11 **MR. DeCLARK:** It can be.
 12 **MR. ARMSTRONG:** And a stigma can reduce
 13 property values, correct?
 14 **MR. DeCLARK:** It can.
 15 **MR. ARMSTRONG:** The intangible effect of a
 16 stigma can actually even be greater than the cost to
 17 remove that stigma, right?
 18 **MR. DeCLARK:** Again, that is possible.
 19 **MR. ARMSTRONG:** And if you are appraising
 20 a property that has a stigma, you have to adjust the
 21 value, the appraised value of that property, to
 22 reflect the typical cost of overcoming the stigma,
 23 correct?
 24 **MR. DeCLARK:** That is one of the

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1 considerations typically considered. It's not
 2 exclusive.
 3 **MR. ARMSTRONG:** And each stigma can affect
 4 each individual property differently, correct?
 5 **MR. DeCLARK:** Possibly, yes.
 6 **MR. ARMSTRONG:** A wind turbine could be a
 7 visual stigma, correct, a scenic stigma?
 8 **MR. DeCLARK:** It might be.
 9 **MR. ARMSTRONG:** A wind farm could also
 10 constitute an area stigma, correct?
 11 **MR. DeCLARK:** Again, I am sure some people
 12 think so.
 13 **MR. ARMSTRONG:** And it could even
 14 constitute a nuisance stigma, correct?
 15 **MR. DeCLARK:** I think I stated nuisances
 16 are possible.
 17 **MR. ARMSTRONG:** Regarding the properties
 18 that you selected for inclusion in your graphs in
 19 your report, your report doesn't provide any details
 20 about those properties, does it?
 21 **MR. DeCLARK:** It does not.
 22 **MR. ARMSTRONG:** So no information about
 23 the size of the house?
 24 **MR. DeCLARK:** Not in the report, no.

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1 **MR. ARMSTRONG:** And no information about
 2 the condition of the house, correct?
 3 **MR. DeCLARK:** Correct.
 4 **MR. ARMSTRONG:** No information about how
 5 many acres the house sits on, correct?
 6 **MR. DeCLARK:** Correct.
 7 **MR. ARMSTRONG:** Can you tell us what
 8 percentage of the sales you included in your report
 9 were purchased by people who intended to actually
 10 live on the property as opposed to, say, just farm
 11 the property?
 12 **MR. DeCLARK:** No.
 13 **MR. ARMSTRONG:** And I think one of the
 14 board members asked you this, but I want to make
 15 sure. You did not separate participating property
 16 owners from nonparticipating property owners in any
 17 of your review of any of the properties, correct?
 18 **MR. DeCLARK:** Correct.
 19 **MR. ARMSTRONG:** And you understand, when I
 20 say participating property owner, that means someone
 21 who is participating in the wind farm in the form
 22 of, for example, easement to allow construction of a
 23 turbine on the property?
 24 **MR. DeCLARK:** I understand.

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1 **MR. ARMSTRONG:** And a nonparticipating
 2 property owner is, obviously, someone who is not
 3 going to have any facility on their property?
 4 **MR. DeCLARK:** Again, understood.
 5 **MR. ARMSTRONG:** If a property owner has
 6 entered into an agreement with a wind energy company
 7 and the wind energy company is going to pay the
 8 property owner for say 25 years for a right to use
 9 some portion of the property owner's land, that
 10 increases the value of that property because it
 11 creates an income stream for that property, right?
 12 **MS. ANTONIOLLI:** I object. This is beyond
 13 his testimony.
 14 **CHAIRMAN FINNIGAN:** We never talked about
 15 that in his testimony I don't think.
 16 **MR. ARMSTRONG:** If we had two exact
 17 replicas of property, and one had a lease on it
 18 where a wind farm was going to pay the property
 19 owner for 25 years, and the other property did not
 20 have a lease on it, the property with the lease on
 21 it that was going to be paid for 25 years would be
 22 appraised at a higher value than the other property,
 23 correct?
 24 **MR. DeCLARK:** If everything else is equal?

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1 **MR. ARMSTRONG:** Correct.
 2 **MR. DeCLARK:** I suppose that might exist.
 3 However, it would also depend on the circumstances
 4 of the lease on the other property.
 5 **MR. ARMSTRONG:** There's a lease on only
 6 one property.
 7 **MR. DeCLARK:** Okay. I see. All right.
 8 So then, the answer is you are looking at the lease
 9 payments as an indicator or supporter of value.
 10 **MR. ARMSTRONG:** And everything else being
 11 equal, between those two parcels, but one having a
 12 lease with an income stream and one not with an
 13 income stream, the property with the lease with the
 14 income stream you would appraise at a higher value,
 15 correct?
 16 **MS. ANTONIOLLI:** Again, I object. This is
 17 getting beyond his discussion.
 18 **MR. ARMSTRONG:** We discussed it.
 19 **MS. ANTONIOLLI:** It's going further beyond
 20 this.
 21 **CHAIRMAN FINNIGAN:** If you want to answer
 22 the question, you can.
 23 **MR. DeCLARK:** The answer is yes, and it
 24 would be reflected in a higher price ultimately if

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1 that property were to have transacted.
 2 **MR. ARMSTRONG:** You testified that you
 3 eliminated properties with no sales price data,
 4 correct?
 5 **MR. DeCLARK:** Yes.
 6 **MR. ARMSTRONG:** How many properties did
 7 you eliminate for that reason?
 8 **MR. DeCLARK:** Fifteen or 20.
 9 **MR. ARMSTRONG:** How many of those 15 or 20
 10 were within two miles of the wind turbine?
 11 **MR. DeCLARK:** I think, out of 15 or 20, it
 12 was the entire McLean County area. So, a fraction
 13 of that.
 14 **MR. ARMSTRONG:** So you don't know?
 15 **MR. DeCLARK:** I don't know specifically,
 16 but I suggest it's a fraction of it.
 17 **MR. ARMSTRONG:** Since you eliminated those
 18 properties from the study, you have no idea how
 19 those properties might have affected the results of
 20 your study, correct?
 21 **MR. DeCLARK:** Well, if they were at a \$0
 22 or \$100 purchase price, they were clearly anomalies
 23 that shouldn't be statistically included anyway, so
 24 I didn't.

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1 **MR. ARMSTRONG:** Excuse me?
 2 **MR. DeCLARK:** I said I didn't.
 3 **MR. ARMSTRONG:** I am sorry. Just because
 4 a deed reflects a nominal amount doesn't mean that
 5 is the actual transaction amount; you are aware of
 6 that, correct?
 7 **MR. DeCLARK:** Well, I've seen it that that
 8 is the case. I've also seen it where it is not the
 9 case. However, the baseline information we were
 10 working with was sales data provided to us by the
 11 assessor.
 12 **MR. ARMSTRONG:** You know what green sheets
 13 are, what we refer to as green sheets?
 14 **MR. DeCLARK:** Correct.
 15 **MR. ARMSTRONG:** Those are reports on file
 16 with the state that reflect the actual sales price
 17 of a parcel of property, correct?
 18 **MR. DeCLARK:** Yes.
 19 **MR. ARMSTRONG:** You didn't review any
 20 green sheets for any of these properties that you
 21 eliminated?
 22 **MR. DeCLARK:** I did not.
 23 **MR. ARMSTRONG:** That is something you
 24 could have done, correct?

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1 **MR. DeCLARK:** Could have.
 2 **MR. ARMSTRONG:** But you chose not to?
 3 **MR. DeCLARK:** Statistically it's
 4 insignificant.
 5 **MR. ARMSTRONG:** Well, wouldn't that have
 6 allowed you to exclude some properties that you
 7 eliminated because they are no longer token sales as
 8 you referred to them as?
 9 **MR. DeCLARK:** But I said it was 15 or so
 10 properties that were taken away; but out of several
 11 hundred that is a very, very small amount.
 12 **MR. ARMSTRONG:** Your graph with all the
 13 property sales for McLean County --
 14 **MS. TURNER:** Can you give us a slide
 15 number?
 16 **MR. ARMSTRONG:** He didn't number his
 17 pages. I numbed them myself as 22. I think that is
 18 right.
 19 **MR. DeCLARK:** The one entitled McLean
 20 County?
 21 **MR. ARMSTRONG:** Right. There are not
 22 hundreds of sales reported on that graph, are there?
 23 **MR. DeCLARK:** Less than 200 in my
 24 estimate.

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1 **MR. ARMSTRONG:** You also said that you
 2 eliminated properties that sold for over a million
 3 dollars and properties over 25 acres?
 4 **MR. DeCLARK:** Correct.
 5 **MR. ARMSTRONG:** Did they have to meet both
 6 of those criteria for you to eliminate them, or just
 7 one of those?
 8 **MR. DeCLARK:** One of them.
 9 **MR. ARMSTRONG:** So, if a property sold for
 10 over a million dollars but it was only 20 acres you
 11 eliminated it, correct?
 12 **MR. DeCLARK:** Yes.
 13 **MR. ARMSTRONG:** And if a property was over
 14 25 acres but sold for \$800,000 you eliminated it,
 15 correct?
 16 **MR. DeCLARK:** Yes.
 17 **MR. ARMSTRONG:** Do you know how many
 18 parcels you eliminated from your study for those
 19 reasons?
 20 **MR. DeCLARK:** No. I think it was all
 21 involved in that 15 estimate to begin with.
 22 **MR. ARMSTRONG:** Do you know how many
 23 parcels are in the footprint of the wind farm area
 24 that are over 25 acres?

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1 **MR. DeCLARK:** No.
 2 **MR. ARMSTRONG:** Do you think there are a
 3 lot of parcels over 25 acres in McLean County?
 4 **MR. DeCLARK:** I don't know.
 5 **MR. ARMSTRONG:** How many times have you
 6 studied properties in McLean County in your career?
 7 **MR. DeCLARK:** Half a dozen.
 8 **MR. ARMSTRONG:** And I assume also, for
 9 these properties that you eliminated, because they
 10 were over a million dollars or they were more than
 11 25 acres, you don't know how many of those
 12 properties were within one mile of a wind turbine or
 13 proposed wind turbine, do you?
 14 **MR. DeCLARK:** Off the top of my head, I do
 15 not.
 16 **MR. ARMSTRONG:** And you don't know how far
 17 any of them were from any wind turbines in terms of
 18 distance, correct?
 19 **MR. DeCLARK:** Of those subcategories, no.
 20 **MR. ARMSTRONG:** Would you turn to your
 21 graph of reports within two miles of wind turbines?
 22 I think it's number 26.
 23 **MR. DeCLARK:** I have it.
 24 **MR. ARMSTRONG:** Are you aware that the

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1 White Oak wind farm opened in 2011?
 2 **MR. DeCLARK:** '11, correct.
 3 **CHAIRMAN FINNIGAN:** We have the copies
 4 now. We are going to distribute those if that is
 5 all right.
 6 **MS. ANTONIOLLI:** Yes. Let's do that. So
 7 Wind Farms and Rural Property Values, a copy of
 8 Mr. DeClark's presentation, would be submitted into
 9 the record as Applicant's Exhibit 9.
 10 (APPLICANT'S EXHIBIT 9 ADMITTED.)
 11 **MR. DICK:** This one was 8, the West one
 12 that you hadn't distributed yet. We are looking at
 13 9.
 14 **MS. ANTONIOLLI:** Okay.
 15 **MR. ARMSTRONG:** Just to get our place
 16 again, do you recall that the White Oak wind farm
 17 opened in 2011, correct?
 18 **MR. DeCLARK:** Yes.
 19 **MR. ARMSTRONG:** Now, looking at your graph
 20 of sales within two miles of turbines, since 2012,
 21 you show 12 sales of property, correct?
 22 **MR. DeCLARK:** Correct.
 23 **MR. ARMSTRONG:** And ten of those sales you
 24 show are below your trendline, correct?

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1 **MR. DeCLARK:** They are.
 2 **MR. ARMSTRONG:** And only two of those
 3 sales are above your trendline, correct?
 4 **MR. DeCLARK:** They are.
 5 **MR. ARMSTRONG:** And if you turn to the
 6 next page, your graph of properties sold within one
 7 mile of the turbine, your chart there shows nine
 8 property sales since 2012, correct?
 9 **MR. DeCLARK:** Correct.
 10 **MR. ARMSTRONG:** And seven of those sales
 11 are below your trendline, correct?
 12 **MR. DeCLARK:** Correct.
 13 **MR. ARMSTRONG:** And two of those sales are
 14 above your trendline, correct?
 15 **MR. DeCLARK:** Yes.
 16 **MR. ARMSTRONG:** And those two sales above
 17 the trendline on this page, within one mile of a
 18 turbine, are somewhere between 300 and \$350 per
 19 square foot?
 20 **MR. DeCLARK:** Yes.
 21 **MR. ARMSTRONG:** Those are the same two
 22 sales that were shown on your previous graph of
 23 sales within two miles of a turbine, correct?
 24 **MR. DeCLARK:** Yes.

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1 **MR. ARMSTRONG:** Do you know anything about
 2 those two properties?
 3 **MR. DeCLARK:** No.
 4 **MR. ARMSTRONG:** You didn't visit those
 5 properties?
 6 **MR. DeCLARK:** I did not.
 7 **MR. ARMSTRONG:** Do you know if those
 8 properties are properties that participate in a wind
 9 farm?
 10 **MR. DeCLARK:** No.
 11 **MR. ARMSTRONG:** So, you don't know if
 12 those properties are receiving income from a wind
 13 farm, do you?
 14 **MR. DeCLARK:** I don't.
 15 **MR. ARMSTRONG:** If those properties were
 16 receiving income from a wind farm, and you were to
 17 appraise those properties, would that increase your
 18 appraised value of those properties as compared to
 19 if they did not have a wind farm or if they were not
 20 receiving income from a wind farm?
 21 **MR. DeCLARK:** If they were paying higher
 22 rent, then certainly.
 23 **MR. ARMSTRONG:** If we were to eliminate
 24 those two properties, all of your sales within two

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1 miles and within one mile are below your trendline,
 2 correct?
 3 **MR. DeCLARK:** That is true.
 4 **MR. ARMSTRONG:** Since 2012.
 5 **MR. DeCLARK:** That is true. But if you
 6 start taking statistics out of here your trendline
 7 changes.
 8 **MR. ARMSTRONG:** Now, your trends show that
 9 the increases in property values decrease the closer
 10 the property gets to a wind turbine, correct?
 11 **MR. DeCLARK:** I am sorry. Repeat that.
 12 **MR. ARMSTRONG:** Your graphs show that the
 13 closer a property gets to the wind turbine the
 14 smaller the increase in value?
 15 **MR. DeCLARK:** No. I don't think so,
 16 because in the one-mile radius, I show the average
 17 increase over the course of time being seven and a
 18 quarter square foot per year, and that is the
 19 highest amongst them of the previous several charts.
 20 **MR. ARMSTRONG:** Let's go through it. So,
 21 within ten miles of a turbine, you have an average
 22 value of the -- the average increase in value is
 23 \$2.68 a square foot, correct?
 24 **MR. DeCLARK:** That's correct.

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1 **MR. ARMSTRONG:** If you go to your
 2 five-mile chart, the average increase in value goes
 3 down to \$2.49 a square foot, right?
 4 **MR. DeCLARK:** 2.68 down to 2.49, correct.
 5 **MR. ARMSTRONG:** So, at least according to
 6 your chart, when one moves to five miles closer to a
 7 wind turbine, the square foot value is 19 cents less
 8 per square foot, correct?
 9 **MR. DeCLARK:** Yes. It's increased,
 10 increased, lesser dollar amount.
 11 **MR. ARMSTRONG:** Yeah, but it's a smaller
 12 increase the closer you get. We'll get to that.
 13 That is my premise, the closer you get to the wind
 14 farm the smaller the increase in value.
 15 **MR. DeCLARK:** But except for the last one,
 16 which is triple what the others.
 17 **MR. ARMSTRONG:** Exactly. Exactly.
 18 Now, when you go to two miles within a
 19 wind farm, the increase in value is only \$2.16 a
 20 square foot, correct?
 21 **MR. DeCLARK:** Yes.
 22 **MR. ZIMMERMAN:** And, obviously, that is
 23 three miles closer than the five-mile graph but 33
 24 cents per square foot less, correct?

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1 **MR. DeCLARK:** Yes.
 2 **MR. ARMSTRONG:** And then, when you get
 3 within one mile of a wind turbine, your increase in
 4 value jumps up to \$7.25 per square foot, correct?
 5 **MR. DeCLARK:** On an average basis,
 6 correct.
 7 **MR. ARMSTRONG:** Correct. Now, this
 8 increase in value is due to property owners
 9 receiving income from a wind farm, isn't it?
 10 **MR. DeCLARK:** I don't know that.
 11 **MR. ARMSTRONG:** But you can't rule that
 12 out here, can you?
 13 **MR. DeCLARK:** I don't know that.
 14 **MR. ARMSTRONG:** You don't know whether you
 15 can rule that out?
 16 **MR. DeCLARK:** I don't know the background
 17 of the specific sales. I didn't investigate that.
 18 I only had the assessor's information.
 19 **MR. ARMSTRONG:** Because you didn't
 20 investigate; is that correct?
 21 **MR. DeCLARK:** I looked at statistics.
 22 **MR. ARMSTRONG:** And you weren't asked to
 23 investigate it, were you?
 24 **MR. DeCLARK:** Correct.

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1 **MR. ARMSTRONG:** Do you know of any reason
 2 why the two properties that are over \$300 a square
 3 foot would be over \$300 a square foot when the other
 4 properties sold in the same years were down below
 5 \$150 a square foot?
 6 **MR. DeCLARK:** No.
 7 **MR. ARMSTRONG:** If you go to the page
 8 containing your conclusions, you say the farmland is
 9 seldom found to be affected by wind structure. Do
 10 you see that?
 11 **MR. DeCLARK:** Correct.
 12 **MR. ARMSTRONG:** What is your source for
 13 that statement?
 14 **MR. DeCLARK:** By the statistics we have
 15 presented here, there's no significant or material
 16 diminution of value, and from what I read in other
 17 studies.
 18 **MR. ARMSTRONG:** Excluding the Gibbons
 19 study that I cited to you, correct?
 20 **MR. DeCLARK:** I know nothing about the
 21 Gibbons study.
 22 **MR. ARMSTRONG:** You also say that the
 23 value of large parcels of agricultural use are more
 24 affected by soil quality than wind turbines,

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1 correct?

2 **MR. DeCLARK:** Yes.

3 **MR. ARMSTRONG:** Again, this doesn't tell

4 us anything about how the wind turbines effect

5 nonparticipating properties, does it?

6 **MR. DeCLARK:** Correct.

7 **MR. ARMSTRONG:** And you also conclude the

8 property values in rural areas will be most affected

9 by local employment and recognize recreational

10 opportunities can, correct?

11 **MR. DeCLARK:** Yes.

12 **MR. ARMSTRONG:** Again, this doesn't tell

13 us anything about what the effect of the wind

14 turbines are on the values of nonparticipating

15 properties, does it?

16 **MR. DeCLARK:** Correct.

17 **MR. ARMSTRONG:** Just a minute. I think

18 that is all I have. That's all I have. Thank you.

19 **CHAIRMAN FINNIGAN:** Thank you. Anyone

20 else have questions of this witness? Come forward.

21 (QUESTIONS BY MR. TAYLOR)

22 **MR. TAYLOR:** Travis Taylor, 28686 North

23 3015 East Road, Chenoa, Illinois.

24 I have a couple questions. All of the

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1 home values refer to not incorporated within the

2 county, correct? Or, were they taking into account

3 any of the incorporated area into it?

4 **MR. DeCLARK:** Generally all unincorporated

5 areas as I recall.

6 **MR. TAYLOR:** I was just -- because I know

7 specifically in some of the years mentioned there's

8 quite -- you know, like 2007 and 2008 there's more

9 development in subdivisions and stuff like that, and

10 I was just curious if any of those -- you know, you

11 get more houses on the market at the same time in an

12 incorporated area, it could vary some of the

13 statistics there as well, is my main thought there.

14 Because lately there doesn't seem to be as many

15 undeveloped incorporated housing areas.

16 Was there a big difference in transactions

17 before and after? Like, has there been a boom in

18 transactions of houses selling more frequently? Do

19 you know? Before the turbines or after or one

20 versus the other?

21 **MR. DeCLARK:** I think the charts suggest

22 no.

23 **MR. TAYLOR:** Did you notice before the

24 turbines were built, did some of the houses change

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1 hands more times than after? Like, after they were

2 constructed, did houses more often sell, or was it

3 something that was consistent all the way through?

4 Like, the number of sales I guess is what I was

5 trying to figure out because I don't know

6 specifically what years the other turbines were

7 constructed, so it's hard for me to understand.

8 This year was there more sales because they were

9 constructed or not constructed, or overall was it a

10 more consistent sales from year to year? I mean I

11 didn't get a chance to count them all.

12 **MR. DeCLARK:** In the years between 2004

13 and roughly 2010, it looked like maybe nine on

14 average sold per year in the McLean County chart, is

15 what I tally. And then, 2010 and after, it looks

16 like maybe an average of 11.

17 **MR. TAYLOR:** So maybe a little bit more.

18 Not a significant amount but a little more.

19 Do you know if any of the houses that you

20 have in the survey or in your graphs were the same

21 houses resold later?

22 **MR. DeCLARK:** No, I don't.

23 **MR. TAYLOR:** You don't, okay. Have you

24 ever done any studies on properties after they have

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1 be decommissioned, on the value of houses or

2 property once they have been taken down?

3 You know, let's say 25 to 30 years down

4 the road, I was just curious if he has ever done

5 anything or if that is in the studies he has

6 provided.

7 **MS. ANTONIOLLI:** And just to clarify, by

8 decommissioned, you are talking about the wind

9 turbines?

10 **MR. TAYLOR:** Yeah, that have been removed

11 or taken down or something.

12 **MR. DeCLARK:** I have not.

13 **MR. TAYLOR:** Okay. I think that is all my

14 questions. I appreciate it.

15 **CHAIRMAN FINNIGAN:** Any other questions?

16 I think that is it.

17 **MS. ANTONIOLLI:** Thank you.

18 **CHAIRMAN FINNIGAN:** Thank you.

19 **MS. ANTONIOLLI:** We have a few outstanding

20 exhibits that we discussed earlier that I would like

21 to enter into the record now. We had -- I had

22 presented the post-construction monitoring study

23 plan for the Bright Stalk wind project at the last

24 hearing, the night of hearings, and we did not enter

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1 it into the record then, but I would like to do so
 2 now as Applicant's Exhibit 6.
 3 (APPLICANT'S EXHIBIT 6 ADMITTED.)
 4 **CHAIRMAN FINNIGAN:** We can do that.
 5 **MS. ANTONIOLLI:** Okay. And next is the CV
 6 of Mr. Rhett Good who testified earlier tonight on
 7 wildlife. I would like to move that into the record
 8 as Applicant's Exhibit 8.
 9 (APPLICANT'S EXHIBIT 8 ADMITTED.)
 10 **CHAIRMAN FINNIGAN:** Okay.
 11 **MS. ANTONIOLLI:** So next, we have with us
 12 today Allison Poe from EDP Renewables to talk about
 13 environmental affairs. Would you like to proceed
 14 with her presentation now?
 15 **CHAIRMAN FINNIGAN:** That would be fine.
 16 Would you like to be sworn in?
 17 **MS POE:** Yes.
 18 (ALLISON POE PLACED UNDER OATH.)
 19 **CHAIRMAN FINNIGAN:** State your name and
 20 address and spell your last name.
 21 Ms. POE: Allison Poe, P-o-e. 808 Travis
 22 Street, Suite 700, Houston, Texas.
 23 **MR. DICK:** Could you spell your first
 24 name?

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1 **MS. POE:** A-l-l-i-s-o-n.
 2 (QUESTIONS BY MS. ANTONIOLLI).
 3 **MS. ANTONIOLLI:** Ms. Poe, what is your
 4 role with EDP Renewables?
 5 **MS. POE:** I am an environmental manager
 6 and I work primarily in the eastern and central
 7 states.
 8 **MS. ANTONIOLLI:** What is your educational
 9 background?
 10 **MS. POE:** I have a bachelor's degree from
 11 University of Transylvania and master's from the
 12 University of Western Ontario in zoology and
 13 evolution.
 14 **MS. ANTONIOLLI:** Okay. Thank you. What
 15 professional organizations are you involved with?
 16 **MS. POE:** I am involved with the American
 17 Wind Energy Association Siting Committee and the
 18 American Wind Wildlife Institute.
 19 **MS. ANTONIOLLI:** What are your roles or
 20 responsibilities with the American Wind Energy
 21 Association?
 22 **MS. POE:** I participate in various
 23 strategy groups, specifically the bat working group
 24 as well as just the general siting group.

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1 **MS. ANTONIOLLI:** Okay. At this time I
 2 present Allison as an expert in wildlife as well as
 3 environmental policy at EDPR.
 4 **MR. ARMSTRONG:** No objection.
 5 **CHAIRMAN FINNIGAN:** No objection. It
 6 okay. We can do that.
 7 **MR. ARMSTRONG:** Do you have a copy of that
 8 I can have?
 9 **MS. ANTONIOLLI:** Yes. Actually, if
 10 there's no objection, I can go ahead and move a copy
 11 of her presentation into the record now.
 12 **CHAIRMAN FINNIGAN:** Yeah, we would like to
 13 have that.
 14 (APPLICANT'S EXHIBIT NUMBER 10 ADMITTED.)
 15 **MS. ANTONIOLLI:** Okay. Great.
 16 **MS. POE:** So, tonight I'll be giving a
 17 general overview of EDP Renewables Environmental
 18 Affairs Team and environmental corporate culture
 19 that we promote at EDPR.
 20 Well, I would like to go through and
 21 introduce the EDPR as an industry environmental
 22 leader. As you know, wind energy is considered a
 23 green energy source. It's renewable clean energy
 24 and does not burn fossil fuels to provide energy.

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1 We take pride in that and strive to be leaders in
 2 the industry as far as minimizing environmental
 3 impacts from our development.
 4 So, EDPR, as I mentioned earlier, we
 5 participate in leadership roles or are a siting
 6 committee and other organizations.
 7 We also have leadership roles in the
 8 development and industry support of the first ever
 9 industry-wide wildlife best energy practice, which
 10 is turbine feathering below cut-in speed. Rhett
 11 Good discussed that practice in the earlier
 12 presentation.
 13 We developed one of the first companywide
 14 environmental policies in 2009, and we continue to
 15 improve that as new technologies and advancements
 16 come to light.
 17 We built one of the first departments
 18 directed at environmental affairs. We have a team
 19 of seven people that are directly dedicated to
 20 working on environmental practices and affairs at
 21 the company.
 22 We are a founding member and a current
 23 participant of AWWI.
 24 All of our operating US wind farms have

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1 developed bird and bat conservation strategies in
 2 accordance with US Fish and Wildlife Service
 3 guidelines, and that includes operating wind farms
 4 that were installed before 2012 when those
 5 guidelines came out.
 6 We are also the first company to develop a
 7 companywide carcass removal standard operating
 8 procedure. That carcass removal operating procedure
 9 is to minimize impacts to eagles or turkey vultures,
 10 etc., that may be attracted to the site. Let's say
 11 if there was a cow carcass or something like that, a
 12 deer carcass onsite that would attract scavengers.
 13 So, we've implemented a removal program.
 14 And we are also registered under ISO
 15 14,001 and have implemented a robust environmental
 16 management system.
 17 Next, I would like to go through just an
 18 overview of the components of developing a project
 19 from an environmental standpoint.
 20 First, we start with agency coordination.
 21 And I say we start with agency coordination, we
 22 start, we hit that in the middle, and then we end
 23 with agency coordination.
 24 Our philosophy is that working with the

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1 agencies early and often is really our best road to
 2 developing a project successfully that will have
 3 minimal impacts to wildlife and other environmental
 4 resources.
 5 From there, we discuss any potential
 6 wildlife issues with the agencies as well as use our
 7 consultants to help us determine what risks there
 8 may be to wildlife through surveys and other
 9 research.
 10 We also conduct wetland delineations and
 11 investigate the occurrence of cultural resources.
 12 After we've done all of these things at
 13 the pre-construction level, then, during
 14 construction, we have an environmental management
 15 plan, and also during operation we have a management
 16 plan that guides those practices.
 17 First, I'll go through a pretty high level
 18 of what is involved in developing a wildlife
 19 assessment strategy. I am not going to really focus
 20 a lot on wildlife since Rhett also provided that to
 21 us earlier. In general, we follow a tiered process
 22 from the US Fish and Wildlife Service as land-based
 23 wind energy guidelines.
 24 The tiered process starts with Tier 1

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1 which really a high-level screening. So, when the
 2 project is just, you know, coming to light, usually
 3 we are looking at a larger area for the potential
 4 development, and we'll do kind of a high-level
 5 screening, and oftentimes that is at the county
 6 level. So, we'll use publicly available data, GIS
 7 data, the Wetland's Inventory data to do kind of a
 8 high-level assessment of whether or not there are
 9 any big, obvious triggers that might deter us from
 10 developing in that area.
 11 If there are no obvious triggers, then we
 12 will move on to Tier 2, which is a site
 13 characterization study, and that's when our
 14 potential project is narrowed down to a particular
 15 site. So, for this project, we started with McLean
 16 County as kind of a larger area and then that was
 17 narrowed down to a larger project area. And then,
 18 from there, then the turbine layout is established,
 19 usually later on. So, during Tier 2 we'll also look
 20 at publicly available data. This is when we start
 21 our agency coordination through letters and reaching
 22 out to the agency to ask for feedback and provide
 23 any information that they may have on any issues
 24 that they might see for developing this area.

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1 Moving on from there, we move into Tier 3
 2 which are the specific wildlife surveys. Again,
 3 from, the initial agency coordination, we determine
 4 what species may need some additional surveys, so
 5 those are implemented through consultants.
 6 Once we've collected the Tier 3 data, we
 7 go back to the agencies and present the results and
 8 get any sort of feedback that they may have on
 9 potential risk and any additional surveys that may
 10 be needed.
 11 From there, we continue with our risk
 12 assessment. During this, we implement measures to
 13 avoid, minimize, and mitigate risk, if needed. We
 14 document this entire process in our bird and bat
 15 conservation strategy as well as an environmental
 16 risk matrix that we make for each individual
 17 project.
 18 We also have decision framework for
 19 obtaining wildlife permits. So, if there's a high
 20 risk for a protected species or eagles, sensitive
 21 species, etc., we'll weigh the risk and determine
 22 with the agencies whether or not a permit is
 23 appropriate to pursue for this project.
 24 From there, we define best management

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1 practices. As I mentioned earlier, we have the
 2 carcass removal program. We may provide some
 3 recommendations if there are going to be any
 4 overhead distribution lines. And, also, lighting
 5 practices to minimize avian impact, so lighting at
 6 the substation also.
 7 We also, when possible, install unguided
 8 permanent bat towers, and that minimizes the risk to
 9 birds as well.
 10 So, I mentioned bird and bat conservation
 11 strategies, so I'll explain a bit more what
 12 this entails. It's really a written record of
 13 actions taken to avoid, minimize, and compensate for
 14 potential adverse impacts to both birds and bats and
 15 then also other nonflying species. This document is
 16 specific to the project. So, we create a new
 17 document for every project that has the specific
 18 issues to that project. This document serves as a
 19 survey record so we'll have every report or survey
 20 that was conducted for the project in one place so
 21 that we can look at the information there. We'll
 22 also record the agency coordination record here. So
 23 any e-mail, phone conversation, meeting notes that
 24 we have with the agencies will be included in this

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1 document.
 2 This document also contains a record of
 3 best management practices that will be implemented
 4 during construction and operation, so things like
 5 lighting, speed limits to minimize any impact to
 6 terrestrial animals, etc.
 7 And in the BBCS, there's also a detailed
 8 adapted management measure. So, specifically for
 9 this project, we will include any adaptive
 10 management measures that may be appropriate similar
 11 to what Rhett reviewed in his presentation on the
 12 adaptive management for bat curtailment, endangered
 13 species, etc. I will note that this document is
 14 usually prepared before construction, so we are
 15 beginning that process now, and it is a living
 16 document. So, as developments occur in the project,
 17 say there's an endangered species take, we would
 18 update the BBCS to reflect any changes to what is
 19 going on with the project.
 20 As I mentioned earlier, we do investigate
 21 the occurrence of wetlands in the project area,
 22 specifically within areas of potential ground
 23 disturbance. So, any turbine areas, roads,
 24 collection lines, etc., any infrastructure, those

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1 areas are investigated for wetlands.
 2 The consultants begin this work by
 3 performing a desktop analysis to identify potential
 4 wetlands and water bodies in the project, and then
 5 they go out and do a field delineation using methods
 6 described in the Army Corps Wetland Delineation
 7 Manual and the Regional Supplement to the Corp of
 8 Engineers Wetland Delineation Manual for the
 9 Midwest.
 10 The wetlands delineations for this project
 11 were conducted during the fall of 2017, and the
 12 total impacts for the current layout of the project
 13 are 463 square feet of permanent impacts -- so,
 14 those are impacts from roads primarily -- and 822
 15 square feet of temporary impacts. So, as currently
 16 designed, the maximum permanent impacts, which are
 17 0.01 acres, are below the tenth of an acre
 18 notification threshold of the US Army Corp of
 19 Engineers Nationwide Permit 12 for Utility Line
 20 Activities.
 21 And, of course, all appropriate erosion
 22 control measures will be implemented to protect any
 23 wetlands that aren't necessarily or aren't going to
 24 be impacted but may be in the limits of disturbance.

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1 So, those measures will be implemented and enforced.
 2 In addition to wetland delineation, we
 3 also had a cultural resources investigation
 4 completed for the project. This started with a
 5 desktop analysis in July of 2017. Field surveys
 6 were completed in November of 2017; that was
 7 primarily a pedestrian field visit.
 8 Two additional resources were identified
 9 from the original resources that were identified in
 10 the desktop analysis. Two additional were
 11 identified and can easily be avoided from impact
 12 from the construction and operation of the wind
 13 project.
 14 We've coordinated with the State Historic
 15 Preservation Office, and that is ongoing. Based on
 16 the lack of sites identified from the pedestrian
 17 survey and the ongoing agricultural activity within
 18 the project area, it's determined that the project
 19 is unlikely to have any adverse effects on
 20 archeological sites or historic properties.
 21 Shifting gears a little bit to
 22 construction. So, once we've done all of our
 23 pre-construction studies, we shift gears to ensure
 24 that the project is adhering to regulatory

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1 requirements, any permit conditions that we have,
 2 and any voluntarily commitments that we've set
 3 forth. Those are tracked in our environmental
 4 obligations database and through our project
 5 obligations tracker. So, we often have a long list
 6 of things that we want to do to minimize the impacts
 7 and we keep track of those through that.

8 We continue with stakeholder consultation.
 9 We also develop a SWPPP as part of the National
 10 Pollutant Discharge Elimination System.

11 During construction, we have an
 12 environmental construction monitoring consultant as
 13 well as a biomonitor, if necessary, if there are
 14 sensitive species that need to be avoided during
 15 construction.

16 This third-party consultant ensures
 17 compliance with obligations and also provides
 18 training and wildlife considerations to the
 19 construction crew.

20 During this time we also define best
 21 management practices and communicate those to our
 22 construction crew. Any sensitive habitat areas such
 23 as raptor nests or wetlands that have been
 24 identified during the pre-construction phase are

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1 avoided or impact is minimized, and that is
 2 communicated to construction personnel either
 3 through flagging or fencing that, you know, kind of
 4 cordons off those areas.

5 Where feasible, we may modify construction
 6 timing activities to avoid impact on nesting raptors
 7 to avoid disturbing them during that sensitive time.

8 Additionally, during bird nesting season,
 9 we will minimize risk of disturbance and avoid
 10 clearing any treed areas that may contain nests.

11 So, that is usually during the time, you know,
 12 spring through early summer.

13 All right. Moving on to operations, I had
 14 mentioned the tiered process previously stopping at
 15 Tier 3 for the pre-construction wildlife surveys.

16 Tier 4 starts during operation, which is
 17 post-construction monitoring. We talked a little
 18 bit about that earlier, so I won't go into extreme
 19 detail there.

20 But through the post-construction
 21 monitoring we collect data for this project over the
 22 course of at least two years with the potential to
 23 add a third year if warranted.

24 Depending on what we identify during

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1 post-construction monitoring, we may implement an
 2 adaptive management strategy if certain events
 3 happen that we didn't necessarily anticipate from
 4 the Tier 3 pre-construction surveys.

5 Our environmental compliance is also
 6 tracked through our environmental health and safety
 7 management system. It's a Web-based system that our
 8 operation folks can enter any health and safety
 9 issues or any environmental issues like such as
 10 spills onsite, etc.

11 We continue with stakeholder consultation.
 12 Once we collect the post-construction monitoring
 13 data, we circle up with the agencies and present
 14 those results to them and work with them on any
 15 adaptive management that may be necessary.

16 We implement the BBCS for the best
 17 management practices that we defined in that
 18 document.

19 We also have a WIRS, which is a wildlife
 20 instant reporting system. That is something that we
 21 voluntarily implement at all of our operating
 22 projects. We train our operational folks, if they
 23 see a dead bird or bat or anything near the turbines
 24 when they are going out to work on the turbines, we

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1 ask them to report that to us, and then we usually
 2 follow up with them to identify what the animal may
 3 be and take any appropriate actions if needed. And
 4 it's also just a great way for us to really keep
 5 track of what is going on at our projects.

6 Additionally, we implement our carcass
 7 removal procedures when necessary.

8 Another part of the operations
 9 environmental strategy is we do an environmental
 10 visitor orientation in addition to the safety
 11 orientation that all of the crews must undergo, we
 12 also have environmental awareness orientation.

13 And with that, I'll take questions.
 14 (QUESTIONS BY THE BOARD)

15 **MS. TURNER:** I have a few. Has EDP ever
 16 not proceeded with a project purely due to
 17 environmental reasons, you know, on your first --
 18 even on your high view or the next tier.

19 **MS. POE:** I would say from a high view,
 20 yes. Usually at Tiers 1 and 2, you know, if we're
 21 reviewing a database and see that there's a national
 22 park nearby or a large bat hibernaculum or something
 23 like that, we would likely provide that information
 24 to our development team and make a decision from

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1 there; but we have walked away from an area very
 2 early on.
 3 **MS. TURNER:** Okay. What is wildlife
 4 training or training on wildlife considerations?
 5 Can you give me some examples of you said
 6 you do some training with your staff on that?
 7 **MS. POE:** Sure. So, during construction,
 8 we focus primarily on things like storm water,
 9 pollution, wetland disturbance, things like that.
 10 But, also, you know, we'll train them on speed limit
 11 enforcement so that they are less likely to injure
 12 an animal by driving too quickly. We also go over
 13 some of the issues that, you know, they may get
 14 questions, you know, from interested folks about
 15 what are some of the issues with wind farms. So, we
 16 kind of do a general environmental training, but for
 17 our construction folks we like to really focus on
 18 things that they may impact, like erosion control,
 19 things like that.
 20 **MS. TURNER:** You state that you do studies
 21 for two years and then take adaptive measures if
 22 need be, or that influences your adaptive measures.
 23 What happens after the adaptive measures are taken?
 24 **MS. POE:** So, usually we'll do additional

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1 evaluations to make sure that those adaptive
 2 measures were appropriate and effective, and then
 3 continue to follow up and coordinate with the
 4 agencies.
 5 **MS. TURNER:** That was my next question.
 6 So, you continue to communicate with the agencies on
 7 that?
 8 **MS. POE:** Yes.
 9 **MS. TURNER:** Do the agencies have
 10 reporting requirements for you at those years? Do
 11 they follow up with you if you don't get in touch
 12 with them?
 13 **MS. POE:** It really depends on the office.
 14 So, we at EDPR really value our relationship with
 15 the agencies and we work in a lot of different
 16 states, but we often work repeatedly in states. So,
 17 we are very proactive at following up and making
 18 sure that we continue that good working relationship
 19 and trust with the agencies.
 20 **MS. TURNER:** Okay. How often does EDP
 21 review your WIRS reports that you have?
 22 **MS. POE:** So, I personally get an e-mail
 23 every time a WIRS incident is submitted from the
 24 operations. So, I'll get an e-mail, I review the

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1 report. If it's an endangered species or an eagle
 2 or a sensitive species, then I would immediately
 3 contact the agencies at work to figure out the next
 4 step. So, I would say, you know, within a day
 5 usually of a report being submitted.
 6 **MS. TURNER:** How many days are reports
 7 submitted? I mean you guys have a lot of different
 8 things out there. I would imagine this would be a
 9 common occurrence.
 10 **MS. POE:** It's fairly common depending on
 11 the time of year. Certain times of the year in
 12 different parts of the country there may be more
 13 reported carcasses, also depending on how long the
 14 wind farm has been in operation. So, if it's a
 15 brand new project, there are crews at the turbines
 16 more frequently. That said, all turbines are
 17 typically visited once a month at least for some
 18 sort of maintenance or check.
 19 **MS. TURNER:** Have any of these reports
 20 ever resulted or indicated a need for adaptive
 21 measures to be taken on the turbines?
 22 **MS. POE:** To my knowledge, no. These
 23 measures, it's a little bit different than
 24 post-construction monitoring in that

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1 post-construction monitoring is a standardized
 2 search. Consultants are going out at specific
 3 intervals.
 4 The WIRS is more -- it's kind of random.
 5 So, unless we are finding a threat to an endangered
 6 species or an eagle or something like that, it's not
 7 really likely to trigger adaptive management.
 8 Although, we do typically keep an eye, and if we are
 9 starting to get a lot of incidental reports, then
 10 we'll keep an eye on that project and be aware that
 11 there may be a problem. But so far, to my
 12 knowledge, there hasn't really been much adaptive
 13 management.
 14 **MS. TURNER:** Okay. Thank you.
 15 **MR. BANGERT:** So would it be your office
 16 that responds to the Illinois Department of Natural
 17 Resources and their recommendations?
 18 **MS. POE:** Yes.
 19 **MR. BANGERT:** And so does your opinion
 20 differ from the earlier testimony that we had today
 21 from Rhett Good?
 22 **MS. POE:** So, no.
 23 **MR. BANGERT:** So, you collaborate with him
 24 on that? Because that -- on that report from the

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1 Illinois Department of Natural Resources, on the
 2 recommendation pages, you helped develop those with
 3 Rhett, or did he do those on his own?
 4 **MS. POE:** Help develop the recommendations
 5 or responses?
 6 **MR. BANGERT:** Responses.
 7 **MS. POE:** We work together.
 8 **MR. BANGERT:** That brings up another
 9 question. When I was -- and this may be for staff
 10 or maybe you. When we were looking at those
 11 responses earlier on the -- ours look abbreviated.
 12 There's two of them.
 13 **MR. DEAN:** We just got the other one
 14 later.
 15 **MR. BANGERT:** Okay. I think I am missing
 16 that one. We were looking at a different sheet,
 17 something that we got last week. Okay. Thank you.
 18 **CHAIRMAN FINNIGAN:** Questions from the
 19 staff?
 20 (QUESTIONS BY THE STAFF)
 21 **MR. DICK:** Have you been involved with the
 22 feathering of the turbines in the wind farms over
 23 the years, and are you involved in developing a
 24 policy to change that feathering process?

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1 **MS. POE:** I've been involved with
 2 implementing our best management practice,
 3 feathering below manufacturer's cut-in speed. We
 4 just started that. That MMP came out from AWEA in
 5 2015 I believe.
 6 **MS. ANTONIOLLI:** Allison, can you say the
 7 long form of BMP?
 8 **MS. POE:** Yeah. Best management practice.
 9 AWEA is American Wind Energy Association.
 10 I am sorry. What was the second part of
 11 your question?
 12 **MR. DICK:** Have you noticed a trend in how
 13 that feathering is taking place in terms of how you
 14 are adjusting it over time?
 15 **MS. POE:** We are just starting to look at
 16 that. So, no. So far we have not done any
 17 statistical comparison of the data yet.
 18 **MR. DICK:** Have you noticed, since you
 19 started doing that, that there are less carcasses?
 20 **MS. POE:** Not specifically, but I haven't
 21 really looked at that.
 22 **MR. DICK:** That's all I have.
 23 **CHAIRMAN FINNIGAN:** Any questions,
 24 Mr. Armstrong?

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1 (QUESTIONS BY MR. ARMSTRONG)
 2 **MR. ARMSTRONG:** Of course.
 3 Were you here when Mr. Haney from the
 4 drainage district spoke?
 5 **MS. POE:** Earlier this evening?
 6 **MR. ARMSTRONG:** Yes.
 7 **MS. POE:** Yes.
 8 **MR. ARMSTRONG:** He expressed some
 9 inability to get information about the distance from
 10 a wind turbine to the creek that his district is
 11 responsible for?
 12 **MS. POE:** I did hear them.
 13 **MR. ARMSTRONG:** Are you able to provide
 14 him with the correct information that he is seeking?
 15 **MS. POE:** The information I have is that
 16 T-15 is 249 feet from an unnamed -- from unnamed
 17 tributary Rooks Creek, and Turbine 101 is 343 feet
 18 from Rooks Creek.
 19 **MR. ARMSTRONG:** Thank you. You would
 20 agree with me that EDPR is generally concerned with
 21 potential for harm to a wildlife from the wind
 22 turbines, correct?
 23 **MS. POE:** That is correct.
 24 **MR. ARMSTRONG:** And you would agree with

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1 me that you do whatever you can, you meaning EDPR,
 2 does whatever it can to minimize that harm, correct?
 3 **MS. POE:** Within reason, correct.
 4 **MR. ARMSTRONG:** What does within reason
 5 mean?
 6 **MS. POE:** I mean specifically, you know,
 7 we also want to develop wind projects to minimize
 8 our carbon emissions, etc., And so we weigh the
 9 pros and cons of developing a wind project with how
 10 high a risk may be to a wildlife, and also we
 11 consider population impacts, things like that.
 12 **MR. ARMSTRONG:** So, the potential harm to
 13 wildlife, for example, is acceptable to EDPR up to a
 14 certain level?
 15 **MS. POE:** We acknowledge that some
 16 wildlife risk may result from the operation of a
 17 wind project.
 18 **MR. ARMSTRONG:** And apart from wildlife
 19 there may be some -- there's potential for
 20 environmental harm as well, correct?
 21 **MS. POE:** Specifically what do you mean?
 22 **MR. ARMSTRONG:** Well, for example, you do
 23 wetland studies before they construct a wind farm?
 24 **MS. POE:** That is correct.

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1 **MR. ARMSTRONG:** And the purpose of that is
2 to try to minimize any potential harm to those
3 wetlands; is that correct?
4 **MS. POE:** That is correct.
5 **MR. ARMSTRONG:** Besides wetlands, are
6 there other environmental studies that you do in
7 preparation for designing and building a wind farm?
8 **MS. POE:** Do you mean in addition to the
9 Tier 3 wildlife surveys that I indicated?
10 **MR. ARMSTRONG:** Excluding the wildlife
11 surveys.
12 **MS. POE:** Wetlands would be the primary
13 environmental impact survey that we do.
14 **MR. ARMSTRONG:** And, again, the
15 environmental studies and wildlife study is to try
16 to minimize the harm that would result from the
17 operation of the wind turbines?
18 **MS. POE:** Correct.
19 **MR. ARMSTRONG:** And do you understand that
20 the Illinois Department of Natural Resources has a
21 part of its role to protect wildlife and to protect
22 the environment?
23 **MS. POE:** I do.
24 **MR. ARMSTRONG:** But you don't consider it

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1 necessary to comply with all of the recommendations
2 that the IDNR has made to the board in order to
3 construct the wind farm, correct?
4 **MS. POE:** I had a very positive call with
5 Keith Shanks of IDNR a few weeks ago asking him
6 specifically about some of the recommendations that
7 he was likely to make for this project and expressed
8 some concern that we may not be able to comply with
9 some of those due to restrictions with site layout,
10 etc. We had a very candid, open conversation, and
11 he indicated to me that he would likely make these
12 recommendations because those were his opinions but
13 he would be open to discuss and asked us to discuss
14 and offer alternative solutions to the county.
15 **MR. ARMSTRONG:** The recommendations that
16 he made to the county board are the ones that
17 Mr. Good showed in his presentation tonight; is that
18 correct?
19 **MS. POE:** That is correct.
20 **MR. ARMSTRONG:** At least four of those
21 recommendations are recommendations that EDPR is
22 asking the board to allow them to deviate from,
23 correct?
24 **MS. POE:** That is correct.

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1 **MR. ARMSTRONG:** So the desire to avoid
2 potential harm to wildlife and the environment is
3 only as good as EDPR can make money on a wind farm,
4 correct?
5 **MS. ANTONIOLLI:** I object. This, about
6 making money, is not part of her testimony.
7 **CHAIRMAN FINNIGAN:** If you can rephrase
8 the question a little bit, I think she can answer
9 it.
10 **MR. ARMSTRONG:** The stated desire to
11 minimize the potential harm doesn't trump the IDNR's
12 recommendation for this board, does it?
13 **MS. POE:** Can you repeat the question?
14 **MR. ARMSTRONG:** Yeah. The desire to
15 construct the wind farm is greater than the IDNR's
16 recommendation to this board as far as EDPR is
17 concerned, isn't it?
18 **MS. POE:** There are some recommendations
19 that we don't fully agree with, but I do feel, from
20 my conversation with Keith Shank, that those
21 recommendations are up for discussion as he
22 indicated in our conversation.
23 **MR. ARMSTRONG:** Okay. But we haven't seen
24 anything from him to that effect, correct?

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1 **MS. POE:** Not in writing.
2 **MR. ARMSTRONG:** We've only seen what was
3 presented tonight, correct?
4 **MS. POE:** That is correct.
5 **MR. ARMSTRONG:** Do you expect Mr. Shank to
6 present you with revised recommendations any time in
7 the next week or two?
8 **MS. POE:** We are continuing to coordinate
9 with him. I can't speak to whether or not he will
10 provide that or not.
11 **MR. ARMSTRONG:** That's all I have.
12 **CHAIRMAN FINNIGAN:** Thank you.
13 Thank you.
14 Anyone in the audience have questions of
15 this witness? Come forward.
16 (QUESTIONS BY TIM JOLLY.)
17 **MR. JOLLY:** Tim Jolly, 26759 East 2700
18 North Road, Chenoa.
19 Does it take fossil fuels to create the
20 turbines?
21 **MS. POE:** Some. Yep.
22 **MR. JOLLY:** Do they use actual fossil
23 fuels within the turbine itself during operations?
24 **MS. POE:** I am not a turbine technician,

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1 but I do believe there's some lubricant oil that is
 2 used.
 3 **MR. JOLLY:** Do those lubricant oils have
 4 the possibility of leaking and affecting the
 5 surrounding farm ground?
 6 **MS. POE:** I would say there could be some
 7 potential. To that, we do have a spill prevention
 8 counter -- sorry -- spill prevention control
 9 countermeasure in place that allows us to act if
 10 there's a problem and to correct that problem.
 11 **MR. JOLLY:** Have you had problems in the
 12 past with that conversation?
 13 **MS. POE:** To my knowledge, no. But, you
 14 know, I can't --
 15 **MR. JOLLY:** There has been no oil leakage
 16 of any turbine in any of your projects?
 17 **MS. POE:** That I have specifically worked
 18 on, no. That said, I don't work on every project
 19 that we have.
 20 **MR. JOLLY:** Are you aware of any of the
 21 history of the project?
 22 **MS. POE:** Off the top of my head, no.
 23 **MR. JOLLY:** Would it be fair so say that
 24 there has been oil leakage?

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1 **MS. POE:** It would be reasonable to say
 2 that.
 3 **MR. JOLLY:** Okay. Thank you. Are there
 4 other hazardous materials in the construction of
 5 these wind turbines?
 6 **MS. POE:** Things like gasoline in
 7 vehicles, again, oil, and we do have measures in
 8 place and spill prevention plans in place if there
 9 are spills to go with those.
 10 **MR. JOLLY:** Does that include the vehicles
 11 that transport, service vehicles, service and things
 12 like that?
 13 **MS. POE:** Yes.
 14 **MR. JOLLY:** Have you had any instances
 15 where those have spilled gasoline, diesel on the
 16 farm ground or even roadways?
 17 **MS. POE:** Yes.
 18 **MR. JOLLY:** Same principles apply as far
 19 as cleanup?
 20 **MS. POE:** Yes.
 21 **MR. JOLLY:** How about the paint on all the
 22 turbines and everything. There's hazardous
 23 materials in those as well; would that be fair to
 24 say?

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1 **MS. POE:** I don't know.
 2 **MR. JOLLY:** But you are the environmental
 3 person for this project, correct?
 4 **MS. POE:** That is correct.
 5 **MR. JOLLY:** Would you be aware of any
 6 hazardous materials like that or should you be aware
 7 of them?
 8 **MS. POE:** When our SBCC and SWPPPs
 9 prepared, then those will be identified by the
 10 consultant that prepares those, so we will be aware
 11 of it then.
 12 **MR. JOLLY:** Have you had any -- well, I
 13 won't ask that.
 14 You are not aware of any other hazardous
 15 materials in construction of, say, the blades or
 16 anything else? There is no hazardous materials in
 17 anything else; are you willing to say that?
 18 **MS. POE:** I am unaware of any.
 19 **MR. JOLLY:** Okay. Thank you.
 20 (QUESTIONS BY MS. WINTERLAND.)
 21 **MS. WINTERLAND:** Amy Winterland, 22825
 22 North 3075 East Road, Colfax.
 23 So you guys have Twin Groves, right, 1 and
 24 2?

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1 **MS. POE:** That is correct.
 2 **MS. WINTERLAND:** So, would it be possible
 3 for you guys to give us a report on the spills or
 4 the oil leakage that has happened at Twin Groves,
 5 say, an average over a year or something?
 6 **MS. POE:** I could check into that.
 7 **MS. WINTERLAND:** And let us know when?
 8 Like, at tomorrow's meeting or something?
 9 **MS. POE:** I can check into that and let
 10 you know by tomorrow.
 11 **MS. WINTERLAND:** I think that is kind of
 12 what we are getting to, is kind of get an idea of
 13 how often those spills would happen. And you would
 14 have actual data of that?
 15 **MS. POE:** Yeah.
 16 **MS. WINTERLAND:** So, you talked a little
 17 bit about wetlands. I went through the materials.
 18 I did not see a turbine siting on 100-year
 19 floodplain map of any kind. Have you guys done
 20 something like that?
 21 **MS. POE:** I believe that the consultants
 22 typically look at that. I don't know at this time.
 23 **MS. WINTERLAND:** Would it be possible for
 24 you guys to put your proposed turbines on a

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1 floodplain map so that we could look at that
 2 visually to make sure that there are no turbines
 3 near that?
 4 **MS. POE:** I could look into that for you.
 5 **MS. WINTERLAND:** And, like, bring that
 6 tomorrow, too, or the next day?
 7 **MS. ANTONIOLLI:** Yeah, I don't know if we
 8 can guarantee it tomorrow, but we'll take that back.
 9 **MS. WINTERLAND:** I think you spoke very
 10 briefly about some of the archeological artifacts
 11 and said that there was low potential for unearthing
 12 anything. I guess I don't know if that is the right
 13 word to use or not. Could you speak a little bit to
 14 what would happen if you ran into an archeological
 15 significant something?
 16 **MS. POE:** Sure, and this is part of -- I
 17 did mention this earlier. This is part of
 18 environmental training that we do for our
 19 construction and operations folks. It's called an
 20 unanticipated discoveries plan. So, if, during
 21 construction, the crew unearths either an artifact
 22 or some sort of burial ground or things like that,
 23 there are protocols in place. The first being to
 24 stop work immediately and contact myself, and then I

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1 would work with the State Historic Preservation
 2 Office to determine our next steps. So, we are
 3 definitely sensitive to that and don't want to
 4 disturb anything that we didn't anticipate was
 5 there.
 6 **MS. WINTERLAND:** I just want to go on the
 7 record and say I appreciate that. I don't know what
 8 you might run into, but there are historical Indian
 9 tribes in that area, and I think that is good. That
 10 is it.
 11 **CHAIRMAN FINNIGAN:** Any other questions?
 12 (QUESTIONS BY MR. TAYLOR)
 13 **MR. TAYLOR:** Travis Taylor, 28686 North
 14 30350 East Road, Chenoa, Illinois.
 15 Has your company ever just -- I came to
 16 some of the meetings, past meetings, and now I feel
 17 like the IDNR has a lot of rules and regulations
 18 that everybody has to follow and kind of go with.
 19 Has your company ever just taken their suggestion
 20 and done it, I mean without trying to alter
 21 anything?
 22 I mean I feel like that has been a bit of
 23 a problem. It has been a big discussion on green
 24 energy. So, I mean my big question is: Have they

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1 ever just taken it and go, oh, if we move this, this
 2 and this and just go forward or remove this just to
 3 make it -- has that ever happened in a project, just
 4 take what they say and just okay and do the next
 5 step or not?
 6 **MS. POE:** That is a good question. You
 7 know, I think that most of the agencies that we work
 8 with understand that project development is pretty
 9 complex and that they can provide guidance to us,
 10 but unless there's absolute legal jurisdiction, say
 11 over an endangered species or something like that,
 12 it is just that, it's guidance, and we definitely
 13 take it into consideration, but we have to balance
 14 that with some of the other considerations of
 15 development.
 16 **MR. TAYLOR:** So, long and short, no as the
 17 whole.
 18 Have you guys ever done a study on the
 19 fossil fuel usage for construction and
 20 deconstruction? Because we are looking -- it's not
 21 a onetime. It's an in and out, and I could see
 22 maybe going in it's not too bad, but when you are
 23 bulldozing and moving a lot of earth and dirt, is
 24 that a study that has ever been done or something

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1 considered?
 2 **MS. POE:** So, looking at the amount of
 3 fossil fuel actually involved in building a project?
 4 **MR. TAYLOR:** Yeah, and in deconstruction.
 5 And he brought up a valid point about the oil usage
 6 I would never have thought about, but I have been
 7 around equipment my whole life in central Illinois
 8 and we use quite a bit of grease just greasing up
 9 the equipment every day, so I imagine that is there,
 10 too. Is that something you do studies on?
 11 **MS. POE:** I am unaware of that, but I can
 12 look into that and get back to you.
 13 **MR. TAYLOR:** You guys were talking a lot
 14 about safety and animals. Do you make sure --
 15 because you talked about having meetings about like
 16 if you come across animals and carcasses and such
 17 like that, when a lot of construction projects
 18 happen there's a lot of subcontractors in and out.
 19 So, are those meetings that you have with each
 20 individual subcontractor, is that something that you
 21 send out an e-mail saying, like, make sure your
 22 drivers do this and that, and there isn't an actual
 23 safety meeting and meetings like this, like,
 24 regularly before the contractors are allowed to

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1 commence work, or is it just something that happens?
 2 **MS. POE:** So, that is a good question, and
 3 that is something that is a bit difficult to manage.
 4 So what we do for our environmental trainings, we
 5 don't do it just once. At the beginning of
 6 construction we'll have kind of a big construction
 7 kickoff, and then, as subcontractors are coming on
 8 board, we'll have additional trainings as well as we
 9 provide the training to the construction manager and
 10 we task him with insuring that that is being
 11 implemented.
 12 Additionally, we do have the third-party
 13 consultant that visits the site regularly and
 14 inspects all of the construction activities to
 15 ensure that those are in compliance with all of our
 16 permits and our best management practices. If they
 17 aren't, then he does additional trainings or kind of
 18 debriefs with the construction crew if there are any
 19 problems.
 20 **MR. TAYLOR:** That makes sense. Is there
 21 anybody assigned to the project, start to finish,
 22 that is, you know, like going into it, like, now
 23 even to the end of -- like, I say the end of the
 24 project, but that is twenty years and not a real

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1 good example. I understand that. But is there,
 2 generally speaking, somebody that start to finish
 3 stays with the project all the way through, or is
 4 that only -- does it -- for example, when she was up
 5 here she was, like, well I had transitioned as the
 6 construction happened and then transitioned and it's
 7 going. Once it's active and going, is that going to
 8 be a different person? Is there anybody that stays
 9 with the project that is going to be accountable
 10 from not tomorrow but, you know, as soon as you guys
 11 or everything goes through, from start to finish I
 12 guess?
 13 **MS. POE:** In an ideal world, yes. That
 14 said, you know, depending on workloads, projects
 15 that I am managing that are going into construction,
 16 etc., our team may shift it around. We do have our
 17 EDPR corporate environmental policy that we all
 18 consistently follow. So, one could expect that the
 19 way I do things would be the same as a colleague
 20 does things.
 21 But, again, ideally we would like to do
 22 that. I mean, for this project I started it a
 23 couple years ago, and then I was on maternity leave
 24 for a while, and I just got back, so we are kind of

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1 shifting it around again. But we try to have that
 2 consistency, again, because of our relationship with
 3 the agencies and local people, etc.
 4 **MR. TAYLOR:** On other wind projects, have
 5 you had that in the past?
 6 **MS. POE:** We have. Uh-huh.
 7 **MR. TAYLOR:** Have you ever had to move a
 8 wind turbine because you have come across artifacts?
 9 There was a question that you have a policy for it,
 10 but has that ever actually occurred?
 11 **MS. POE:** To any knowledge, no.
 12 **MR. TAYLOR:** Okay. On the application, I
 13 noticed that there was, like, at least one
 14 alternative wind turbine. To comply with the IDNR,
 15 could that possibly be used to remove one from
 16 another creek? Have studies been done on that one
 17 as well as others, or is that one that is something
 18 just -- do you know what I am referring to?
 19 **MS. ANTONIOLLI:** I am not sure which
 20 recommendation you are referring to, or is there --
 21 or are you saying generally?
 22 **MR. TAYLOR:** Well, there's one in
 23 particular that is closest to the creek. I don't
 24 have my map with me.

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1 **UNIDENTIFIED VOICE:** 15.
 2 **MR. TAYLOR:** 15, that is in the triangle
 3 essentially. I mean is it something that has been
 4 considered that you could remove that one and put
 5 one in an alternative spot to reduce impact? Is
 6 that something that you've looked at?
 7 **MS. ANTONIOLLI:** Are you familiar with the
 8 alternatives spots?
 9 **MS. POE:** I am not familiar with the
 10 alternative spots.
 11 **UNIDENTIFIED VOICE:** Yes, it is.
 12 **MR. TAYLOR:** Does it actually say that?
 13 Oh, yeah, I think it's T-15 Rooks Creek, but if you
 14 are not familiar with the alternative.
 15 **MS. POE:** And I do believe we've looked at
 16 that.
 17 **MR. TAYLOR:** I just noticed that that
 18 seems to be a big impact, and I am familiar with the
 19 area around there. Thank you. I think is all my
 20 questions for now.
 21 **MS. POE:** Thanks.
 22 **CHAIRMAN FINNIGAN:** Counsel says no.
 23 **MS. WINTERLAND:** Can I ask one question?
 24 **CHAIRMAN FINNIGAN:** Counsel says no. Come

1 on. Make it quick.
 2 (QUESTIONS BY MS. WINTERLAND)
 3 **MS. WINTERLAND:** Just one, I promise. Amy
 4 Winterland. So, I have one more question. As we
 5 were talking about monitoring carcasses and deaths
 6 underneath turbines, would you guys be open to
 7 allowing a group, say a group of biologists or
 8 something, access to the turbines to periodically
 9 monitor under the turbines?
 10 **MS. POE:** That is something I can look
 11 into. We have in the past had the visitors to the
 12 wind farm to, you know, follow the consultant's
 13 around there doing the carcass monitoring to kind of
 14 see how they are doing it. So, that is something I
 15 could check on.
 16 **MS. WINTERLAND:** Or they could do it at a
 17 different time than your consultants as opposed to
 18 the same time? That way you could, like, kill two
 19 birds with one stone. Do you know what I mean? I
 20 really didn't mean it like that. I am sorry.
 21 **MS. POE:** That is something that I could
 22 look into for you.
 23 **MS. WINTERLAND:** Okay. I know that there
 24 are people that would love to volunteer to do that.

CERTIFICATE OF REPORTER

I, Holly Wingstrom, CSR #84-003888, reported
 in machine shorthand the proceedings had in the
 above-entitled cause and transcribed the same by
 computer-aided transcription, which I hereby certify to
 be a true and accurate transcript of the proceedings had.

HOLLY WINGSTROM, CSR, CRR, RPR

1 **MS. POE:** Thanks.
 2 **CHAIRMAN FINNIGAN:** Any other questions?
 3 I don't see anybody, and that is going to
 4 be it for tonight. So, we are going to reconvene
 5 tomorrow night at 6:00 in this room. Tomorrow night
 6 at 6:00. See you then.
 7 (MEETING ADJOURNED AT 9:49 P.M.)
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