

June 11, 2025

COLES COUNTY, ILLINOIS
PLANNING & DEVELOPMENT COMMITTEE
FINDINGS OF FACT AND RECOMMENDATION (approved by Committee on 6/11/2025)
REGARDING THE SPECIAL USE PERMIT APPLICATION OF:
COLES WIND, LLC

I. APPLICANT

The Applicant, Coles Wind, LLC, a subsidiary of Apex Clean Energy Holdings, LLC (collectively the "Applicant"), seeks approval of a Special Use Permit for a Wind Energy Conversion System ("WECS") pursuant to the Wind Energy Conversion Systems Siting Ordinance ("WECS Ordinance"), which was adopted by Coles County, Illinois ("Coles County") on May 9, 2023.

II. PROJECT SUMMARY

The proposed project ("Coles Wind Project" or the "Project") consists of a WECS and substation approximating 311 megawatts ("MW") in nameplate capacity, with a maximum of 51 wind turbines, to be located in the northern portion of Coles County. The Project is to be bounded by the Douglas County line to the North, the Seven Hickory-Humboldt Township line to the West, State Highway 2 to the East, and E CR 1200N to the South, in portions of Seven Hickory Township and Morgan Township (the "Project Area"). The Project Area is approximately 20,000 acres of private land with approximately 250 individual participating parcels, which are currently largely utilized for agricultural crops of corn and soybeans.

III. APPLICATION

Applicant filed its Special Use Permit Application ("Application") in January of 2025. Following review and comment by Coles County and its consultants, the Application was supplemented, deemed complete and ready for public hearing. On file with the office of the Coles County Regional Planning and Development Commission are copies of the notification and publication.

IV. HEARING PROCESS

In accordance with Section 5/5-12020 of the Illinois Counties Code (55 ILCS 5/5-12020), the Planning and Development Committee ("Committee") of the Coles County Board ("County Board") held a public hearing on this case at the Coles County Courthouse located at 651 Jackson Street, Charleston, Coles County, Illinois. These proceedings occurred on: March 17, 19, April 10, 14, 15, 16, 17, 22, 23, 24, May 19, 20, June 9 and 11, 2025. Applicant and all those in attendance for said proceedings were given the opportunity to present evidence and cross-examine witnesses. The record of proceedings, including all admitted exhibits and the stenograph record are retained by the Coles County Regional Planning and Development Commission.

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V. APPLICABLE STANDARDS

The Coles County WECS Ordinance governs the County Board's deliberation and consideration of the Application, as well federal and state law.

VI. TESTIMONY AND DOCUMENTARY EVIDENCE

On Behalf of the Applicant:

- Alan Moore of Apex Clean Energy, Director of Development
- Brie Anderson of Apex Clean Energy, Director of Project Permitting
- Adam Carlson of Apex Clean Energy, Senior Project Manager
- Goni Iskali of Apex Clean Energy, Director of Environmental
- Jason Conley of Apex Clean Energy, Director of Health and Safety
- David G. Loomis of Strategic Economic Research, LLC, President
- Kenneth Kaliski of RSG, Principal
- Jacob Runner of Environmental Design & Research, Practice Leader
- Andrew Lines of CohnReznick, Partner
- Kelly McKeough of Westwood Professional Services, Construction Permitting Lead

In Support of the Project:

- Bruce Thompson (called by Applicant)
- Joe Riley (called by Applicant)
- Mike Litteken (called by Applicant)
- Paul Komada (called by Applicant)

In Opposition to the Project:

- Nathaniel Phipps
- Jim Allen
- Rita Rogers
- Terry Smith
- Davon Yoder
- Tina Green
- Connie Winslow
- Clint Shaw
- Tom Sherman
- Arthur Cronkhite
- Becky Miller
- Katherin Shaw, PhD
- Alva Miller
- Phil Borgman
- Kelly Clark
- Katina Smith
- James Di Naso

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- Ted Hartke
- Jason Helmuth

Applicant Exhibits:

Applicant Group Exhibit 1	Applicant Coles Wind, LLC's Special Use Permit Application and Appendices
Applicant Exhibit 2	Presentation of Alan Moore
Applicant Exhibit 3	Presentation of Brie Anderson
Applicant Exhibit 4	Presentation of Kelly McKeough
Applicant Exhibit 5	Presentation of Adam Carlson
Applicant Exhibit 6	Presentation of Dr. David Loomis
Applicant Exhibit 7	Presentation of Andrew Lines
Applicant Exhibit 8	Presentation of Jason Conley
Applicant Exhibit 9	NTIA February 2025 Letter of No Concern
Applicant Exhibit 10	Revised Appendix D.1 – Decommissioning Plan and Reclamation Costs (March 12, 2025)
Applicant Exhibit 11	CV of Kelly McKeough
Applicant Exhibit 12	Journal Gazette Newspaper Notice
Applicant Exhibit 13	Declaration of Mailing and Mailed Notice of Hearing to Landowners
Applicant Exhibit 14	Presentation of Goni Iskali
Applicant Exhibit 15	S. Voicescu, et al., <i>Estimating annoyance to calculated wind turbine shadow is improved when variables associated with wind turbine noise exposure are considered</i> (Mar. 31, 2016)
Applicant Exhibit 16	R. McCunney, et al., <i>Wind Turbines and Health: A Critical Review of Scientific Literature</i> (Nov. 2014)
Applicant Exhibit 17	T. Ryan Haac, et al., <i>Wind turbine audibility and noise annoyance in a national U.S. survey: Individual perception and influencing factors</i> (Aug. 14, 2019)
Applicant Exhibit 18	R. Haac, et al., <i>In the shadow of wind energy: Predicting community exposure and annoyance to wind turbine shadow flicker in the United States</i> (Feb. 15, 2022)
Applicant Exhibit 19	C. Baliatsas, et al., <i>Health problems near wind turbines: A nationwide epidemiological study based on primary healthcare data</i> (Mar. 26, 2025)
Applicant Exhibit 20	P. Maijala, et al., <i>Annoyance, perception, and physiological effects of wind turbine infrasound</i> (Apr. 02, 2021)
Applicant Exhibit 21	B. Hoer, et al., <i>Effects of land-based wind turbine upsizing on community sound levels and power and energy density</i> (Mar. 16, 2023)
Applicant Exhibit 22	Apex Clean Energy OSHA Form 300A for 2024 and 2025
Applicant Exhibit 23	Preliminary Site Plan – Display Board

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Opposition Party Exhibits:

Rogers Exhibit A	Ursula Maria Bellut-Staeck, <i>Impairment of the Endothelium and Disorder of Microcirculation in Humans and Animals Exposed to Infrasound due to Irregular Mechano-Transduction</i> (June 13, 2023)
Yoder Group Exhibit A	Four (4) Photographs of Yoder Property
Sherman Exhibit A	Illinois Department of Revenue Illinois Property Tax System Guide
Sherman Exhibit B	Key Terms – County Clerk Tax Extension Instructions from the Property Tax Extension Limitation Law Technical Manual
Di Naso Exhibit A	McCann Report to Adams County, Illinois

County Exhibits:

County Exhibit A	Report of Luke Hahn, dated June 2, 2025
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Public Comment:

Public Group Exhibit A	Various public comments in favor and against the Project
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VII. FINDINGS OF FACT

The Committee, having reviewed the Application, the testimony of the Applicant and all interested parties, and all evidence presented during the public hearing process, issues the following Findings of Fact and Recommendation to the full County Board, as memorialized herein.

VII(A). ASSESSMENT OF TECHNICAL ORDINANCE REQUIREMENTS:

SPECIAL USE PERMIT APPLICATION.

- A. To obtain siting approval, the Applicant must first submit a Special Use Permit application to the County.**

Applicant submitted its Application on or about January 17, 2025. Supplemental materials were provided on or about January 24, 2025. The Application was then set for public hearing.

- B. The Special Use Permit application shall contain or be accompanied by the following information:**

- 1. A WECS Project Summary, including, to the extent available: (a) a general description of the project, including (i) its approximately overall name plate generating capacity, (ii) the potential equipment manufacturer(s), (iii) type(s) of WECS(s), (iv) the number of WECS, and name plate generating capacity of each WECS, (v) the maximum height of the WECS Tower(s) and maximum diameter of the WECS(s) rotor(s), (vi) the number of Substations, (vii) a project site plan, project phasing plan and project construction timeline plan, and (viii) the general location of the project;**

and (b) a description of the Applicant, Owner and Operator, including respective business structures.

The proposed Project is an approximately 311.1 MW nameplate capacity WECS and Substation. The Project will be located on over approximately 19,500 acres of privately-owned agricultural land in the northern portion of Coles County, Illinois, and is generally described as being bounded by the Douglas County line to the North, the Seven Hickory-Humboldt Township line to the West, State Highway 2 to the East, and E CR 1200N to the South, in portions of Seven Hickory Township and Morgan Township (the "Project Area"). The Project will deliver up to 300 MW of electricity to a single point of interconnection on the existing Ameren Kansas West to Faraday transmission line running east-west between CR 1500N and CR 1600N, and west of N CR 1400E in the west-central portion of the Project Area.

The Project description consisted of the following:

- The Application seeks approval of 62 turbines sites, with a maximum of 51 wind turbines being constructed. The maximum tower height of 644 feet when the blade is in the up-most position, and a maximum blade rotor diameter of 532 feet
- Models proposed are the Vestas V162-6.0 MW or GE 6.1-158 turbines
 - V162 – 6.0 MW (tip height – 611 feet; rotor diameter – 532 feet);
 - GE 6.1-158 (tip height – 644 feet; rotor diameter – 519 feet);
- Access roads to each turbine;
- Underground electrical collection lines connecting the turbines to the Project Substation and associated facilities;
- Underground fiber-optic cable for turbine communications co-located with the collection lines;
- Two temporary and one permanent Light Detection and Ranging ("LiDAR") Sensors to detect wind speed;
- One Aircraft Detection Lighting System ("ADLS") radar tower;
- An O&M facility; and
- Temporary construction facilities such as a laydown yard and a concrete batch plant (if needed).

2. The name(s), address(es), and phone number(s) of the Applicant(s), Owner and Operator, and all property owner(s), if known, and documentation demonstrating land ownership or legal control of the property.

The Applicant, Coles Wind, LLC, is a Delaware Limited Liability Company and a wholly owned subsidiary of Apex Clean Energy Holdings, LLC.

Contact Information:

Alan Moore, Director of Project Development
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The names of property owners with lease agreements for the Project have been provided. (*Application, Appendix B.1*). Contact information for said property owners was provided separately to counsel for Coles County and is available through the office of the Coles County Regional Planning and Development Commission.

- 3. *A site plan for the WECS Project showing the planned location of each WECS Tower, including legal descriptions for each site, guy lines and anchor bases (if any), Participating and Non-participating Residences, Occupied Community Buildings parcel boundary lines (including identification of adjoining properties), setback lines, public access roads and turnout locations, Substation(s), operations and maintenance buildings and permanent Meteorological Towers, electrical cabling from the WECS Tower to the Substation(s), ancillary equipment, third party transmission lines, the location of any wetlands, flood plain, drainage structures including surface ditches and subsurface drainage lines, underground mines, scenic and natural areas within one thousand five hundred (1,500) feet of the proposed WECS, the location of all known communications towers within two (2) miles of the proposed WECS, and the layout of all structures within the geographical boundaries of any applicable setback.***

The Application provides a “Preliminary Site Plan” showing the locations of all facilities for the Project, including each turbine location with respective legal descriptions, access roads, collection lines, the Project’s Substation, Operations & Management Facility, ADLS Radar Tower, LiDAR Systems/Sensors, and location of the laydown/staging area and concrete batch plant. The Preliminary Site Plan also shows the locations of all participating and non-participating residences, occupied community buildings, parcel boundary lines, setback lines, public access roads and turnout locations, third-party above-ground transmission lines, wetlands, flood plans, and drainage structures. (*Application, Appendix A.4*).

Applicant acknowledges that the “Final Site Plan” shall be submitted with its application for a building permit and that no turbine locations shall be moved more than 100 feet from the locations depicted in the Site Plan.

- 4. *The Applicant for the WECS shall comply with all applicable FAA requirements.***

Applicant has had the Project reviewed by the FAA and has received Determinations of No Hazard (DNH) previously for various locations within the Project footprint. As some locations have changed from the original submittal Coles Wind submitted locations for 62 turbine sites and an ADLS radar location in December 2024. Applicant admits all DNH documents will be provided for each turbine for which it seeks a Building Permit.

- 5. *A proposed Decommissioning Plan for the WECS Project including cost estimations.***

Applicant submitted a proposed “Decommissioning and Site Reclamation Plan” which was prepared by an Illinois-licensed engineer and includes information on decommissioning and site restoration activities and associated costs for both the GE 6.1-158 and V162.6.0 turbine models. (*Application, Appendix D.1*).

At public hearing, the Applicant provided testimony from Kelly McKeough as to its means and methods of calculation for the provided cost estimate for Project decommissioning.

6. All required studies, reports, certifications, and approvals demonstrating compliance with the provisions of this Ordinance.

The Applicant has provided the following studies, reports and approvals:

Project Summary (Appendix A.1), Preliminary Site Plan (Appendix A.4), Topographic Map (Appendix A.5), Protected Lands Map (Appendix A.6), Landowner Names and Addresses (Appendix B.1), DNHs for turbines (Appendix C.1), Decommissioning Plan and Draft Financial Assurance (Appendix D.1), Illinois Department of Natural Resources Review Results (Appendix D.2), U.S. Fish and Wildlife Service Review Results (Appendix D.2), Telecommunications Studies (Appendix D.4), Sound Modeling Report (Appendix D.5), Avian and Wildlife Impact Study (Appendix D.6), Emergency Action Plan (Appendix D.7), Shadow Flicker Report (Appendix D.8), Farmland Drainage System Repair and Remediation Plan (Appendix D.9), Economic Impact Analysis (Appendix E.2), Property Value Impact Report (Appendix E.3), Agricultural Impact Mitigation Agreement (Appendix F.1), Coles County Public Roads Identified and Approved by Road Authorities (Appendix F. 2), Morgan Township Public Roads Identified and Approved by Road Authorities (Appendix F.3), Seven Hickory Township Public Roads Identified and Approved by Road Authorities (Appendix F. 4), and Structural Engineer's Certificate.

7. Pursuant to 505 ILCS 147/15(a), the Applicant, at its expense shall enter into an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture prior to any public hearing required before a siting decision on the WECS Project application. All impacted agricultural land, whether impacted during construction, operation, or decommissioning activities, must, at a minimum, be remediated by the Applicant pursuant to the terms of the Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture. The Applicant shall submit the executed Agricultural Impact Mitigation Agreement to the County as part of the Special Use Permit application.

A fully executed AIMA between the Applicant and the Illinois Department of Agriculture was provided. (Application, Appendix F.1).

8. The topographic map shall include the WECS Project site and the surrounding area;

Applicant submitted a topographic map of the Project facilities and surrounding area. (Application, Appendix A.5).

9. Waivers from the setback requirements executed by the occupied community building owners and/or the non-participating property owners bearing a file stamp from the County Recorder of Deeds Office confirming that the waiver was recorded against title to the affected real property.

All non-participating residences and occupied community buildings are compliant with the minimum setback requirements and no waivers are required. Brie Anderson provided testimony as to the setback compliance, and Applicant has provided setback siting maps to show available locations for construction of turbines. Additionally, the County's independent third-party engineer (Luke Hahn of Hampton, Lenzini, and Renwick, Inc.) reviewed the setbacks and confirmed compliance with the setback requirements.

10. Waivers from the shadow flicker mitigation requirements executed by the occupied community building owners and/or the non-participating property owners bearing file stamp from the County Recorder of Deeds Office confirming that the waiver was recorded against title to the affected real property.

Two participating residences are modeled to receive more than 30 hours per year. Coles Wind includes shadow flicker mitigation waivers for these Project participants (See Appendix B.1 – Agreement numbers IL-CLW-141 and IL-CLW-168). These agreements are recorded with a stamp from the County Recorder of Deeds Office. A form waiver is included in Appendix B.4.

11. Results and recommendations from the Illinois Department of Natural Resources obtained through the Ecological Compliance Assessment Tool or a comparable successor tool.

Applicant provided the required IDNR ECOcat dated 2/24/2024. The ECOcat provided a number of recommendations which, if the Project is approved, shall become operation requirements.

12. Results of the United States Fish and Wildlife Service's Information for Planning and Consulting environmental review or a comparable successor tool that is consistent with the United States Fish and Wildlife Service's Land-Based Wind Energy Guidelines.

Coles Wind utilized the USFWS's Information for Planning and Consultation (IPaC) tool to generate a current list of federally listed species that have the potential to be affected by activities within the Project Area (See Appendix D.3).

13. Information demonstrating that the WECS Project will avoid protected lands.

Applicant submitted a map demonstrating there are no Protected Lands in the Project Area, and therefore, the Project will avoid Protected Lands. (SUP Application Appendix A.6 – Protected Lands).

14. Any other information requested by the County or the County consultants that is necessary to evaluate the siting application and operation of the WECS Project and to demonstrate that the WECS Project meets each of the regulations in this Ordinance, including the Special Use Permit standards set forth below.

The Application and its appendices contain all studies, reports, certifications, and approvals required to demonstrate compliance with the applicable provisions in the Coles County WECS Ordinance, except as noted herein related to the sound overage modeled for one specific occupied community building.

DESIGN AND INSTALLATION.¹

The following requirements within the “Design and Installation” section of the Ordinance requires documents and/or evidence as part of the Special Use Permit application process. The requirements and findings related to those sections are as follows (letter designations are as set forth in the Ordinance):

- ***Setback Requirements (Design and Installation, paragraph G)***

WECS Towers shall be sited as follows, with setback distances measured from the center of the base of the WECS Tower;

- 1. Occupied Community Buildings: 2.1 times the maximum blade tip height of the WECS Tower to the nearest point on the outside wall of the structure;***
- 2. Participating Residences: 1.1 times the maximum blade tip height of the WECS Tower to the nearest point on the outside wall of the structure;***
- 3. Nonparticipating Residences: 2.1 times the maximum blade tip height of the WECS Tower to the nearest point on the outside wall of the structure;***
- 4. Boundary Lines of Participating Property: None.***
- 5. Boundary Lines of Nonparticipating Property: 1.1 times the maximum blade tip height of the WECS Tower to the nearest point on the property line of the nonparticipating property.***
- 6. Public Road Rights-of-Way: 1.1 times the maximum blade tip height of the WECS Tower to the center point of the public road right-of-way.***
- 7. Overhead Communication and Electric Transmission and Distribution Facilities (Not Including Overhead Utility Service Lines to Individual Houses or Outbuildings): 1.1 times the maximum blade tip height of the WECS Tower to the nearest edge of the property line, easement, or right of way containing the overhead line.***
- 8. Overhead Utility Service Lines to Individual Houses or Outbuildings: None.***
- 9. Fish and Wildlife Area and Illinois Nature Preserve Commission Protected Lands: 2.1 times the maximum blade tip height of the WECS Tower to the nearest point on the property line of the fish and wildlife area or protected land.***

Based on the evidence presented, the proposed turbine layout for the Project meets the setbacks prescribed under the County’s Ordinance. All setback distances are calculated using the tip height of the taller turbine under consideration, the GE 6.1-158MW turbine at 117m hub height and 196m tip height (644 feet). By doing so, the Applicant ensures that the proposed turbine layout included in this Application meets the setbacks for both of the turbine models being considered. (SUP Application Section 4.7 – Setbacks)(SUP Application Appendices A.1, A.3, A.4, A.6).

Importantly, the County retained the services of Luke Hahn of Hampton, Lenzini, and Renwick, Inc. to evaluate the setback compliance. His report is included as County Exhibit A. The report reviewed the Project and found the setbacks compliant with the Ordinance (County Ex. A – Hahn Report).

¹ *note – all other provisions of the Design and Installation section of the Ordinance are requirements to be met during the Building Permit phase and/or Construction phase and not during the Special Use Permitting phase, and accordingly, are not relevant to this Committee’s review.

- ***Use of Public Roads (Design and Installation, paragraph H)***

To the extent an Applicant must obtain a weight or size permit from the County . . . Any proposed public roads that will be used for construction purposes shall be identified and approved in writing by the respective Road District Commissioner and the County Engineer prior to the granting of the Special Use Permit. (H.2(b))

Coles Wind has identified public roads that it may use for Project turbine and equipment deliveries in Coles County, Morgan Township, and Seven Hickory. The road authorities for Coles County, Morgan Township, and Seven Hickory Township, have approved the use of these public roads, subject to execution of a Road Use Agreement. (SUP Application Section 4.9- Use of Public Roads)(Appendix F.2, F.3, F.4).

To the extent an Applicant must obtain a weight or size permit from the County . . Applicant shall submit a draft form of said financial assurance with application for Special Use Permit. (H.2(b))

Applicant provided a “Draft Financial Assurance Form – Road Use” as part of its Application (SUP Appendix F.5).

- ***Communications Analysis; Interference (Design and Installation, paragraph K)***

The Applicant, at its expense, shall have a third party, qualified professional (after submission of resume and relevant work experience) conduct an appropriate analysis of the television reception documenting the television stations that are received within one and one-half (1 ½) miles of the footprint of the WECS Project. The results of said study shall be public record and will serve as a baseline reading for television reception conditions prior to the construction of the WECS Project and shall be submitted as part of the Special Use Permit application. (K.1)

The Applicant, at its expense, shall have a third party, qualified professional (after submission of resume and relevant work experience) conduct a communications analysis that indicates that the E9-1-1 communications, emergency communications or official County and local municipal communications reception shall not be negatively impacted or influenced by the proposed wind power facility. Said communication analysis shall be a public record and shall be submitted as part of the Special Use Permit application. (K.2)

Applicant submitted Appendix D.4 which included all telecommunications studies required by the Ordinance (SUP Application Appendix D.4).

Coles Wind contracted with ComSearch to conduct telecommunication studies on television reception, land mobile and emergency services (E-911), AM/FM radio towers, FCC-licensed communication towers, and microwave beam paths. The analysis indicates steps that may be taken should interference occur due to operations of the Project. The land mobile analysis found that no FCC-licensed land mobile or public safety transmitting

stations are expected to be adversely affected. The AM and FM Radio Report concludes that there are no AM stations within 30 kilometers (18.6 miles) of the Project and the closest distance to an FM station is 7.55 kilometers (4.7 miles). The microwave beam path study demonstrates that all turbines are sited to avoid interference with microwave beam paths in the Project Area, regardless of the turbine model. Coles Wind submitted a notification letter to the NTIA describing the Project to determine potential impacts and received a response indicating that no reviewing federal agencies had concerns with wind turbine construction in the Project Area. Coles Wind commits to undertaking commercially reasonable steps to respond to a written complaint related to interference caused by the Project as is required by the WECS Ordinance. The Project will also take immediate actions to mitigate or minimize interference with communications that impact local government public safety as required in the WECS Ordinance. (SUP Application Section 4.11 – Communications Analysis; Interference and Appendix D.4)

- ***Noise Levels (Design and Installation, paragraph L)***

Noise levels from each WECS or WECS Project shall be compliance with applicable Illinois Pollution Control Board (“IPCB”) regulations. The Applicant shall submit manufacturer’s wind turbine sound power level characteristics and other relevant data regarding wind turbine noise characteristics necessary for a competent noise analysis. The Applicant, through the use of a qualified professional, shall appropriately demonstrate compliance with the applicable noise requirements in its Special Use Permit application.

Coles Wind hired RSG to perform a sound modeling analysis for the proposed Project turbines and Project Substation. The study demonstrates that the Project will comply with the Illinois Pollution Control Board’s noise regulations, regardless of the turbine model to be constructed, with one notable exception. Pursuant to the testimony of expert witness Kaliski an occupied community building (a church per testimony of witness Brie Anderson) was modeled for sound emission by the GE model proposed and was over the proscribed IPCB limit for the relevant land classification. *See Kaliski testimony, 4/16/2025, pages 124-125; See Brie Anderson testimony, 3/19/2025, pages 155-157.*

The County retained the services of Luke Hahn of Hampton, Lenzini, and Renwick, Inc. to evaluate the Project for compliance with this provision. His report is included as County Exhibit A. The report reviewed the Project and found the noise modeling compliant with the Ordinance (County Ex. A – Hahn Report).

- ***Agricultural Impact Mitigation (Design and Installation, paragraph M)***

Pursuant to 505 ILCS 147/15(a), the Applicant, at its expense, shall enter into an Agricultural Impact Mitigation Agreement with the Illinois Department of Agriculture prior to any public hearing required before a siting decision on the WECS Project application. The Applicant shall submit the executed Agricultural Impact Mitigation Agreement to the County as part of the Special Use Permit application.

The Applicant received a fully executed AIMA on October 31, 2024. (SUP Application Section 4.13 – Agricultural Impact Mitigation Agreement and Appendix F.1).

- ***Avian and Wildlife Impact Study (Design and Installation, paragraph N)***

The Applicant, at its expense, shall have a third party, qualified professional (after submission of resume and relevant work experience) conduct an avian and wildlife impact study and submit said study to the County as part of the Special Use Permit application. Each WECS or WECS Project shall be located, designed, constructed, and operated so as to avoid and if necessary, mitigate the impacts to wildlife.

Applicant hired Western EcoSystems Technology, Inc. (WEST) to conduct wildlife studies in the Project area. Coles Wind has been coordinating with the USFWS and IDNR regarding the potential impact of the Project on flora and fauna since Spring 2020. This early coordination included data requests and database reviews regarding the potential presence of federal and state threatened and endangered species and other protected species like eagles in the Project Area. In coordination with USFWS and IDNR, Coles Wind conducted a series of wildlife surveys and habitat assessments for species of concern with the potential to occur in the Project Area. Coles Wind used the results from the studies, along with recommendations from the USFWS and IDNR, to inform appropriate impact avoidance, minimization, monitoring, and adaptive management measures for the Project. (SUP Application Section 4.14 – Avian and Wildlife Impact Study).

Mr. Borgman testified to saying he's observed bald eagles and bats in the project area, but offered no testimony or evidence that the Project will negatively impact the population of such wildlife.

- ***Engineer's Certificate (Design and Installation, paragraph P)***

The WECS Project engineer's certificate shall be completed by a structural engineer registered in the State of Illinois or by a Professional Engineer with a certification from a structural engineer registered in the State of Illinois and shall certify that the WECS tower and foundation design is compatible with and appropriate for each turbine design proposed to be installed and that the specific soils and subsurface conditions at the site can support the apparatus, given local soil, subsurface and climate conditions. All commercially installed wind turbines must utilize self-supporting, tubular towers. The WECS Project engineer's certificate shall be a public record and shall be submitted as part of the Special Use Permit application.

The Applicant will submit an engineering assessment and certification in the Building Permit submittal after the turbine model has been selected and the site-specific geotechnical investigation is completed and a form version was provided in the Application. (SUP Application Section 4.16 – Engineer's Certificate)

- ***Additional Terms and Conditions (Design and Installation, paragraph S)***

All technical submissions as defined in the Professional Engineering Practice Act of 1989 (225 ILCS 325/4(w)) and contained in the Special Use Permit Application shall be

prepared and signed by an Illinois Professional Engineer (or structural engineer) for the relevant discipline.

All technical submissions contained in the Application were properly affixed with an engineer's seal. Future submissions for the Building Permit must also be prepared and signed by an Illinois Professional Engineer or structural engineer for the relevant discipline.

OPERATION:²

The following requirements within the "Operation" section of the Ordinance requires documents and/or evidence as part of the Special Use Permit application process. The requirements and findings related to those sections are as follows (letter designations are as set forth in the Ordinance):

- ***Shadow Flicker***

The Applicant must present the County Board a model study on potential shadow flicker. The Applicant shall demonstrate to the County Board through industry standard modeling that no occupied community building or non-participating residence will experience an expected duration of 30 hours or more per year. An occupied community building owner or a non-participating participating (sic) residence owner may waive this shadow flicker mitigation requirement. Each waiver of the above shadow flicker mitigation requirement shall be set forth in a written waiver executed by the occupied community building owner or non-participating residence owner and filed with the County Recorder of Deeds Office against title to the affected real property.

Application provided a shadow flicker study from Environmental Design & Research which modeled the shadow flicker utilizing WindPRO analysis (SUP Application Appendix D.8). The modeling indicated that no occupied community building or non-participating residence will receive in 30 hours or more of shadow flicker in a given year (Appendix D.8). There were two receptor sites RE00013 and RE00121. Both receptor sites modeled over the allowable shadow flicker limit for both proposed turbine models (Appendix D.8). However, both properties are participating properties that have waived the shadow flicker requirements of this provision.

The County retained the services of Luke Hahn of Hampton, Lenzini, and Renwick, Inc. to evaluate the Project for compliance with this provision. His report is included as County Exhibit A. The report reviewed the Project and found the shadow flicker modeling compliant with the Ordinance (County Ex. A – Hahn Report).

² *note – all other provisions of the Operations section of the Ordinance are requirements to be met during the Building Permit phase and/or Construction phase and not during the Special Use Permitting phase, and accordingly, are not relevant to this Committee's review.

VII(B) – ASSESSMENT OF HEARING FACTORS:

The County Board may approval a Commercial Wind Energy Facility Special Use Permit application if it finds the evidence complies with state, federal and local law and regulations, and with the standards of this zoning code including the factors listed below. The factors below are applied as a balancing test, not individual requirements to be met.

- (a) The establishment, maintenance or operation of the Commercial Wind Energy Facility will not be detrimental to or endanger the public health, safety, morals, comfort or general welfare;***

Health

The Project will generate renewable energy, though the Applicant did not provide any evidence on whether the renewable energy increases the overall health of the community. The Applicant did provide evidence in the form of various papers (Applicant Hearing Exhibits 15-20) suggesting that the presence of wind turbines may not be a detriment to the health or general welfare, though they may cause annoyance. *See Kaliski testimony*. Kaliski did state, however, that annoyance could lead to stress which could lead to a medical condition if the stress is high enough. *See Kaliski testimony, 4/16/2025 transcript, page 52*. However, in looking at the studies of the population, one could have annoyance, but “at the levels of sound that this project is limited to, you don’t get that link between . . . annoyance and health effects.” *Id. at 52-53*.

Other witnesses of the Applicant also testified that they do not believe there is a negative health effect from wind turbines. However, it is notable that the Applicant did not provide a medical doctor to provide testimony as to this issue.

There was testimony from some objectors indicating they had felt poorly while in the presence of other wind farms, though no evidence was provided establishing a causal link to wind turbines and the physical feeling(s). *See testimony from 5/19/2025 and 5/20/2025*. There was also public comment provided that suggested potential health effects, but likewise, there was no causal link or even foundation for the statements. *See Public Exhibit A, written public comments*. Katherine Shaw, PhD, provided testimony indicating the Committee should be skeptical of the studies that were provided by the Applicant. *See testimony from 5/20/2025*. Shaw stated she could “come up with six peer-reviewed journal articles that would speak to the negative impacts of wind farms” and that she came up with “a list of 33 in the matter of two days.” *See Shaw testimony, 5/20/2025, page 145*. However, no specific studies were provided to the Committee by Dr. Shaw.

Rita Rogers provided a study on the potential negative health effects from sound emissions from mechanical devices, particularly infrasound, including wind turbines. *See Rogers Ex. A, Impairment of the Endothelium and Disorder of Microcirculation in Humans and Animals Exposed to Infrasound due to Irregular Mechano-Transduction* (June 13, 2023). The paper does indicate the information may be helpful in informing determinations of safe distances from such devices. *Id.* The paper does not reflect a specific distance that would be safe or unsafe. *Id.* It is important to note that this is not a text amendment hearing and the state has mandated specific setbacks which the county cannot control. *See 55 ILCS 5/5-12020*.

Safety

There concerns expressed about potential safety issues at the Project, particularly during construction. One of the primary concerns raised was related to the potential presence of histoplasmosis on participating parcels. Though not caused by the Applicant, the safety concern is noted by the Committee as a possible health concern. *See Smith testimony, 5/20/2025*. It is unknown to the Committee the potential health risk. If the Project were to be approved, the Committee recommends a condition of approval to include further evaluation of the potential issue.

Other concerns were expressed related to the increase in traffic related to the construction, and potential crime increases related to the presence of the construction workers. These concerns are not without potential concern, but they are speculative in nature.

The potential impacts of the presence of the turbines on weather radar was also raised as a concern. *See Rogers testimony, 5/19/2025*. However, the applicant has provided the Department of Commerce response letter dated 2/20/2025, which states:

“Commerce has completed our review of the subject wind farm, Coles Wind Energy Project and found it is 110.5 km SE of the Lincoln, IL NEXRAD. Based upon distance and terrain this project appears to be radar neutral. No further contact with the developer requested at this time.”

See Applicant Exhibit 9, NTIA Response Letter, 2/20/2025.

Phillip Borgman testified that he spoke to a weather person at a Champaign, IL news station indicating that a weather person told him that wind turbines mask the rotation of storms on weather radar. *See Borgman testimony, 6/9/2025*. However, Mr. Borgman did not provide any testimony that this particular Project will impact weather radar. *See id.*

Kelly Clark testified that Illinois is home to largest population of wintering eagles. She also testified that wind farms account for approximately 600+ bald eagle deaths. *See Clark testimony, 6/9/2025*. She indicated painting a turbine blade black, according to the US Fish and Wildlife Service, would reduce the bird/bat deaths. *See Clark testimony, 6/9/2025*. Her testimony did not address whether this specific project would have a negative impact on the population of eagles.

Morals, Comfort, General Welfare

There was testimony from Tom Sherman indicating the Project participants that are Coles County residents makeup a small percentage of overall Coles County residents. However, such evidence is not relevant to the Committee’s determination.

The Applicant did provide significant information on the overall economic impact of the Project via the testimony David Loomis, PhD. According to Loomis’ testimony, the Project could provide up approximately \$81,000,000 in tax revenue over its anticipated life. The majority of that tax

revenue (approx.. \$48.6 million) could go to school districts, specifically Arcola CUSD 306, Charleston CUSD 1, and Oakland CUSD 5. There is estimated to be approximately \$13 million in property taxes for Coles County over the life of the Project. *See Loomis testimony, and Applicant Ex. 6.* There was testimony from members of the public that the tax benefits may not comport with the testimony provided by Mr. Loomis.

According to Loomis' testimony, the Project will also create construction related jobs and operations jobs. Of those onsite construction jobs were estimated to be 286 new local jobs during construction, though only 3 long term jobs over operations period of the Project. However, Loomis did not investigate whether certain jobs, such as aerial applicators, could be impacted negatively by the presence of the Project. *See Loomis testimony.*

Ted Hartke testified how he and his family were impacted by wind turbines in Vermilion County.

(b) The Commercial Wind Energy Facility will not be injurious to the uses and enjoyment of other property in the immediate vicinity for the purposes already permitted, nor substantially diminish and impair property values of surrounding properties;

Some particular evidence referenced in paragraph (a) above is relevant to this particular issue as well.

There was no evidence that any current permitted use in the vicinity of the Project will be unable to continue or otherwise impeded due to or as a consequence of the presence of the Project, though one property (a church) was modeled to receive sound levels greater than that permitted by the Illinois Pollution Control Board. *See Kaliski testimony, 4/16/2025, pages 124-125.* Agricultural uses of surrounding properties will be able to continue, as well as residential uses. the Project will utilize only a small fraction of agricultural ground for each wind energy turbine and access road (approximately up to 0.25 acre, which comprises less than 0.1% of the total Project Area).

The Application states that the Project will comply with the noise standards of the Illinois Pollution Control Board, and the Project will meet industry standards and limit shadow flicker on occupied community buildings and non-participating residences to less than the maximum allowable levels in the WECS Ordinance and permitted by the State of Illinois. (SUP Application Appendix D.5 – Sound Modeling Report and Appendix D.8 – Shadow Flicker Report). However, it is notable that Applicant's witness Kaliski testified that at least one occupied community building (a church) would receive higher sound levels than is permissible by the IPCB. *See Kaliski testimony, 4/16/2025, pages 124-125.*

As to property values, Andrew Lines of CohnReznick, analyzed the impact of wind projects and other energy projects on real estate values around the country. He provided a Property Values Analysis Report included in Appendix E.3, "the vast majority of studies with large-scale data sets concluded existing wind facilities have had no negative impact on adjacent property values." *See Group Exhibit 1, Appendix E.3.*

There was a letter provided by James Di Naso which was from Michael McCann. *See Di Naso Exhibit A.* The letter provides an opinion of Mr. McCann that property values may decrease from

the presence of a wind farm. *See Di Naso Exhibit A*. However, Mr. McCann himself did not testify and is difficult for this committee to evaluate his claims. There are several items within the McCann report which are not applicable particularly suggestions which are in derogation of the state of Illinois siting statute (55 ILCS 5/5-12020).

(c) The establishment of the Commercial Wind Energy Facility will not impede the normal and orderly development and improvement of the surrounding properties;

There was no evidence to indicate the Project will or will not impede the normal and orderly development and improvement of the surrounding properties. Arguably road upgrades could improve such issues though there was not sufficient evidence on this factor.

(d) Adequate public utilities, access roads, drainage and/or necessary facilities have been or will be provided;

The Project will include the construction of all access roads necessary for the Project. The Applicant will enter into a Road Use Agreement with Coles County and other affected road jurisdictions to ensure that the existing roadways are sufficient for the development of the Project, and the Applicant must make all road improvements necessary.

Coles Wind has executed an AIMA with the Illinois Department of Agriculture which requires that the Project minimize impacts upon the agricultural uses, repair any damage to drain tiles, and further state statutory protections also provide protection of the drainage structures currently in place.

There are several necessary facilities which will be needed to construct the Project. For example, the Project will need a concrete batch plant (unless concrete could be sourced locally elsewhere) and a substation. While those facilities do not currently exist, those facilities will be the sole responsibility of Applicant to construct and operate.

(e) Adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets;

The SUP Application shows that all parcels in the Project have access via public roads. Accordingly, the Project has sufficient ingress and egress. Further, Applicant will need to enter into Road Use Agreements with the necessary authorities to account for construction and operation of the Project. Importantly, any upgrades to the local roads, or repairs thereto, will be at Applicant's expense.

(f) The proposed Commercial Wind Energy Facility is not contrary to the objectives of the current comprehensive plan of the County (if any); and

Coles County Comprehensive Plan (2006, updated 2012) is included by reference. The Plan includes among its concerns for the County the "preservation of prime agricultural land". *See Coles County Comprehensive Plan, 2006, updated 2012, generally*. The Plan also references potential for private sector investments in Coles County, including "wind energy systems" as reasons for needing a Plan. The Plan does not specifically reference a position in favor of or against such development. *See id.*

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Regardless, the Project will utilize a small fraction of agricultural ground for each wind energy turbine and access road (approximately up to 0.25 acre, which comprises less than 0.1% of the total Project Area). Accordingly, nearly all of the land within the Project area will continue to be utilized for agricultural purposes, consistent with the current use and goals of the plan for preserving prime agricultural land.

(g) The Commercial Wind Energy Facility shall, in all other respects, conform to the applicable regulations of this Ordinance and the zoning district in which it is located except as such regulations may, in each instance, be modified pursuant to the recommendations of and approved by the County Board.

Coles County is not zoned under the authority provided in Division 12 of the Illinois Counties Code. Accordingly, the Project will not reside in a zoning district. Regardless, the general character of the community within the Project area is agricultural.

VIII. RECOMMENDATION

Based on the evidence in the record, the Planning and Development Committee finds and hereby recommends to full Coles County Board that the Special Use Permit Application of Coles Wind, LLC be:

_____ Approved

_____ Denied

 X Approved, subject to the Recommended Conditions attached hereto

Mike Watts
Chair, Planning and Development Committee
of the Coles County Board

Date

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