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Coles County Planning & Development Committee:

REPORT ON APPLICATION OF COLES WIND, LLC

I am an Illinois licensed Professional Engineer with the engineering firm of Hampton, Lenzini and Renwick, Inc.

Our office has been retained by Coles County, Illinois to evaluate the application of Coles Wind, LLC, to construct and operate a commercial wind energy facility (CWEF). We specifically reviewed whether the application complies with the setback, sound and shadow flicker requirements of the Coles County Commercial Wind Energy Facility Ordinance ("Ordinance").

I have thoroughly reviewed the ordinance, and application of Coles Wind, LLC, and data provided by Coles Wind, LLC which included the following data:

- Coles Wind SUP Application;
- GE-158 Turbine Sound Emissions;
- Vestas V162 Turbine Sound Emissions;
- GIS Setback data; and
- A Decommissioning Plan For Coles Wind Project.

We used professional engineering standards to evaluate the proposed CWEF. Based on my review of the materials in the application and data provided I have made the following findings:

- The setbacks proposed in the application are compliant with the county's ordinance;
- We reviewed the proposal and models of the potential shadow flicker and found the shadow flicker compliant with the requirement of the county's ordinance;
- We reviewed the proposal and models of the sound for compliance with the Illinois Pollution Control Board standards and found the proposal compliant with the county's ordinance.

The applicant has requested permission to micro-site the turbines, meaning an allowable tolerance of up to 100 feet of movement in any direction from the layout provided in the application so long as the movement is compliant with the county's setback, sound and shadow flicker requirements. The Ordinance states that the applicant ". . . shall construct and operate the WECS Project in substantial conformance with the construction plans contained in a . . . Special Use Permit application(s) . . . and all applicable state, federal and local laws and regulations." *See Ordinance, Design and Installation provisions, Section R.* We recommend a condition limiting any movement of turbines to 100 feet to maintain "substantial conformance" with the Ordinance requirement. However, in the event a turbine is moved from its final site plan submitted in the application, we also recommend that the applicant ensure substantial compliance with renewed setback maps, sound modeling and shadow flicker modeling for each turbine that is moved.

The applicant has also suggested that warning signs pursuant to the Ordinance at the base of each turbine if the GE 6.1-158 turbine is selected, but not if the Vestas V162-6.0 turbine is selected. The rationale provided to this office for the discrepancy is that the Vestas V162-6.0 turbine locates the



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transformer in the nacelle as opposed to on a pad. The Ordinance states, "[a] reasonably visible warning sign concerning voltage shall be placed at the base of all pad-mounted transformers and substations, and at all entrances to Wind Towers." *See Ordinance, Operation provisions, Section E.* The applicant has not sought a variance to the requirement and accordingly should post the warning sign at the base of the turbine regardless of manufacturer.

This report is issued on behalf of Coles County and does not reflect any personal interest or bias.

Luke Hahn, P.E.

06/02/2025

Date

