

BEFORE THE BOARD OF COUNTY COMMISSIONERS  
OF LANCASTER COUNTY, NEBRASKA

COUNTY TEXT AMENDMENT NO. 18016:            )  
TEXT AMENDMENT TO THE LANCASTER        )  
COUNTY ZONING RESOLUTION, SECTION       )  
13.048, RELATING TO WIND ENERGY        )  
CONVERSION SYSTEMS, AS PROVIDED         )  
IN ATTACHMENTS A AND B                    )  
RESOLUTION NO. R-19-0010

WHEREAS, pursuant to Neb. Rev. Stat. § 23-114, the Lancaster County Board of County Commissioners (“Board”) is authorized to make amendments to the 1979 Zoning Resolution of Lancaster County, which are consistent with the County’s Comprehensive Plan and after receipt of specific recommendations from the Lincoln/Lancaster County Planning Commission (“Planning Commission”);

WHEREAS, Ann Post (“Applicant”) has requested a text amendment to the Lancaster County Zoning Resolution, Section 13.048 Commercial Wind Energy Conversion Systems, to reduce or eliminate trespass zoning, ensure a thorough review process for any special permit applications, and ensure ongoing compliance with the special permit terms and Lancaster County Zoning Regulations (“Amendment”), as provided in Attachment “A,” attached hereto and incorporated by this reference;

WHEREAS, the Lincoln-Lancaster County Planning Department (“Department”) recommended approval of an Alternative Proposal, as provided in Attachment “B,” attached hereto and incorporated by this reference, concluding that the Alternative Proposal, which includes staff changes, would clarify certain conditions, require post construction noise level measurements, help to ensure the noise levels are being met, and help meet the goals of the Comprehensive Plan for renewable energy sources, while protecting the public health. The

Department recommended approval of the Alternative Proposal over the Amendment because portions of the Amendment including the proposed change to setbacks and measuring noise levels at a property line instead of a dwelling were excessive and went beyond protecting property owners;

WHEREAS, on January 9, 2019, after public hearing, the Planning Commission voted 7-1 to recommend approval of said Alternative Proposal;

WHEREAS, on February 19, 2019, the Board conducted a public hearing regarding said Amendment and the Planning Commission’s recommended approval of the Alternative Proposal;

WHEREAS, on February 19, 2019, the Board during a public meeting voted to \_\_\_\_\_ the Amendment and \_\_\_\_\_ the Alternative Proposal;

NOW, THEREFORE, BE IT RESOLVED, by the Board, the Amendment, as provided in Attachment “A” is hereby \_\_\_\_\_ and the Alternative Proposal regarding amendments to the Lancaster County Zoning Resolution, as provided in Attachment “B,” is hereby \_\_\_\_\_ .

DATED this \_\_\_\_ day of \_\_\_\_\_, 2019, in the County-City Building, Lincoln, Lancaster County, Nebraska.

BY THE BOARD OF COUNTY  
COMMISSIONERS OF  
LANCASTER COUNTY, NEBRASKA

APPROVED AS TO FORM  
this \_\_\_\_ day of  
\_\_\_\_\_, 2019.

\_\_\_\_\_  
Deputy County Attorney  
for PAT CONDON  
County Attorney

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## ATTACHMENT A

### Proposed Amendments to County Zoning Regulations

#### Article 13 Special Permit

##### 13.048. Commercial Wind Energy Conversion System

A Commercial Wind Energy Conversion System (CWECS) may be allowed in the AG District by special permit under the conditions listed below:

- a. In cases where CWECS wind turbines are part of a unified plan, parcels which are separated from one another only by the presence of public right-of-way may be combined into one special permit application. When a special permit covers multiple premises, the lease or easement holder may sign the application rather than the lot owner.
- b. Turbines shall meet all FAA requirements, including but not limited to lighting and radar interference issues. Strobe lighting shall be avoided if alternative lighting is allowed. Color and finish shall be white, gray or another non-obtrusive, non-reflective finish. There shall be no advertising, logo, or other symbols painted on the turbine other than those required by the FAA or other governing body. Each turbine shall have onsite a name plate which is clearly legible from the public right-of-way and contains contact information of the operator of the wind facility.
- c. Each application shall have a decommissioning plan outlining the means, procedures and cost of removing the turbine(s) and all related supporting infrastructure and a bond or equivalent enforceable resource to guarantee removal and restoration upon discontinuance, decommissioning or abandonment. Each tower shall be removed within one year of decommissioning or revocation of the special permit. Upon removal of the tower, there shall be four feet of soil between the ground level and former tower's cement base.
- d. ~~Any proposed turbine which is within half mile of any non-participating dwelling shall provide shadow flicker modeling data showing the expected effect of shadow flicker on non-participating properties.~~ Shadow flicker shall not fall upon any non-participating dwelling, or other building which is occupied by humans, for more than a total of 30 hours per any calendar year. If shadow flicker exceeds these limits, measures shall be taken to reduce the effects of shadow flicker on buildings, which may include shutting the turbine down during periods of shadow flicker. ~~If a turbine violates this standard on a non-participating dwelling unit, constructed after the turbine is approved, then the turbine becomes a non-conforming use.~~
- e. Construction and operation shall not adversely impact identified State or Federal threatened or endangered species such as saline wetlands, or rare natural resources such as native prairie and grasslands.
- f. No turbine shall obstruct or impair an identified view corridor or scenic vista of public value, as mapped on the Capitol View Corridors map in the Lincoln/Lancaster County Comprehensive Plan. The views from prominent environmental areas, such as Nine Mile Prairie and Spring Creek Prairie, shall also be protected from adverse visual or noise impacts. Any application which, upon initial review, poses a possible impact to these views will be required to be

relocated or provide view shed mapping, and visual simulations from key observation points for review and approval by the Lincoln-Lancaster County Planning Department.

g. Setbacks to the turbine base:

1. For the purposes of this section, "turbine height" shall be equal to hub height plus the rotor radius.
2. For a non-participating lot, the setback shall be 5280 feet 2 times the turbine height measured to the property line, ~~or 3 1/2 times the turbine height, measured to the closest exterior wall of the dwelling unit, whichever is greater, but at a minimum 1,000 feet to the property line.~~
3. For participating dwelling units, the setback shall be 2 times the turbine height measured to the closest exterior wall of the dwelling.
4. The setback to any public right-of-way or private roadway shall be no less than the turbine height.
5. Setbacks to the external boundary of the special permit area shall be no less than as stated above, except that the owner of the adjacent property may sign an agreement allowing that setback to be reduced to the rotor radius plus the setback of the zoning district.

~~h. The turbine(s) shall not impact a non-participating lot, (vacant or occupied; of any size), to the extent that, because of the location of turbine(s), the lot owner is left with less than 3 acres of land outside of the CWECS setbacks and or the noise impact area in Section (i) below, unless they are part of an agreement with the CWECS owner/operator.~~

i. Noise: No CWECS or combination of CWECS turbine(s) shall be located as to cause an exceedance of the following as measured at the closest exterior wall of any dwelling located on the a participating property or at the property line of any non-participating property. ~~If a turbine violates a noise standard on a dwelling unit, constructed after the turbine is approved, then the turbine becomes a non-conforming use.~~ For both participating and nonparticipating properties:

1. From the hours of 7 am to 10 pm:
  - i. Forty (40) dBA maximum 10 minute Leq or;
  - ii. Three (3) dBA maximum 10 minute Leq above background level as determined by a pre-construction noise study. The background level shall be a Leq measured over a representative 15 hour period.
2. From the hours of 10 pm to 7 am:
  - i. Thirty-seven (37) dBA maximum 10 minute Leq or;
  - ii. Three (3) dBA maximum 10 minute Leq above background level as determined by a pre-construction noise study. The background level shall be a Leq measured over a representative 9 hour period.

For participating properties:

1. Fifty (50) dBA maximum 10 minute Leq for all hours of the day and night.

j. Each application shall include a professional pre-construction noise study ~~shall be conducted~~ which includes all property within one mile of a tower support base. The protocol and methodology for such studies shall be submitted to the Lincoln-

Lancaster County Health Department for review and approval. Such studies shall include noise modeling for all four seasons and include typical and worst case scenarios for noise propagation. The complete results and full study report shall be submitted to the Lincoln-Lancaster County Health Department for review and approval.

- k. Each application shall include ~~Prior to the commencement of construction of any turbine,~~ a pre-construction noise monitoring ~~may be conducted~~ study to determine ambient sound levels in accordance with procedures acceptable to the Lincoln-Lancaster County Health Department. The complete results and full study report shall be submitted to the Lincoln-Lancaster County Health Department for review and approval.
- l. Prior to the commencement of construction of any turbine, the applicant shall enter into an agreement with the County Engineer regarding use of County roads during construction.
- m. ~~At the discretion of the County Board,~~ Post-construction noise level measurements may be required to shall be performed in accordance with procedures acceptable to the Lincoln-Lancaster County Health Department within one year of completion of construction and every two years thereafter to determine if the permittee is in compliance with this title and the terms of its special permit. Noise level measurements shall be taken by parties and in accordance with procedures as approved by the Lincoln-Lancaster County Health Department and shall be performed at the expense of the holder of the Special Permit. Any report, information or documentation produced in accordance with such study or measurements shall be provided directly from the parties or party or parties conducting the study or measurements to the Lincoln-Lancaster County Health Department and shall be a public document subject to Nebraska's public records laws.
- n. All noise complaints regarding the operation of any CWECS shall be referred to the County Board. The County Board shall determine if noise monitoring in addition to that required under the paragraph above shall be required to determine whether a violation has occurred. If the Lancaster County Board of Commissioners determines that such noise monitoring shall be required, it shall be done at the expense of the holder of the special permit in accordance with procedures and by parties approved by the Lincoln Lancaster County Health Department. The results of such monitoring shall be provided directly from the party or parties conducting the monitoring to the Lincoln Lancaster County Health Department for review and reporting to the Lancaster County Board of Commissioners.
- o. Agreements entered into between participating property owners and an applicant regarding any CWECS, before and after the issuance of a special permit shall be provided to the Lincoln-Lancaster County Planning Department and shall be public documents subject to Nebraska's public records laws.

## ATTACHMENT B

### RECOMMENDED ALTERNATIVE PROPOSAL

#### 13.048. Commercial Wind Energy Conversion System (CWECS)

A Commercial Wind Energy Conversion System (CWECS) may be allowed in the AG District by special permit under the conditions listed below:

- a. In cases where CWECS wind turbines are part of a unified plan, parcels which are separated from one another only by the presence of public right-of-way may be combined into one special permit application. When a special permit covers multiple premises, the lease or easement holder may sign the application rather than the lot owner.
- b. Turbines shall meet all FAA requirements, including but not limited to lighting and radar interference issues. Strobe lighting shall be avoided if alternative lighting is allowed. Color and finish shall be white, gray or another non-obtrusive, non-reflective finish. There shall be no advertising, logo, or other symbols painted on the turbine other than those required by the FAA or other governing body. Each turbine shall have onsite a name plate which is clearly legible from the public right-of-way and contains contact information of the operator of the wind facility.
- c. Each application shall have a decommissioning plan outlining the means, procedures and cost of removing the turbine(s) and all related supporting infrastructure and a bond or equivalent enforceable resource to guarantee removal and restoration upon discontinuance, decommissioning or abandonment. Each tower shall be removed within one year of decommissioning or revocation of the special permit. Upon removal of the tower, there shall be four feet of soil between the ground level and former tower's cement base.
- d. Any proposed turbine which is within half mile of any non-participating dwelling shall provide shadow flicker modeling data showing the expected effect of shadow flicker on non-participating properties. Shadow flicker shall not fall upon any non-participating dwelling, or other building which is occupied by humans, for more than a total of 30 hours per any calendar year. If shadow flicker exceeds these limits, measures shall be taken to reduce the effects of shadow flicker on buildings, which may include shutting the turbine down during periods of shadow flicker. If a turbine violates this standard on a non-participating dwelling unit, constructed after the turbine is approved, then the turbine becomes a non-conforming use.
- e. Construction and operation shall not adversely impact identified State or Federal threatened or endangered species such as saline wetlands, or rare natural resources such as native prairie and grasslands.
- f. No turbine shall obstruct or impair an identified view corridor or scenic vista of public value, as mapped on the Capitol View Corridors map in the Lincoln/ Lancaster County Comprehensive Plan. The views

from prominent environmental areas, such as Nine Mile Prairie and Spring Creek Prairie, shall also be protected from adverse visual or noise impacts. Any application which, upon initial review, poses a possible impact to these views will be required to be relocated or provide view shed mapping, and visual simulations from key observation points for review **and approval by the Lincoln-Lancaster County Planning Department.**

- g. Setbacks to the turbine base:
  - 1. For the purposes of this section, “turbine height” shall be equal to hub height plus the rotor radius.
  - 2. For a non-participating lot, the setback shall be 2 times the turbine height measured to the property line, or 3 ½ times the turbine height, measured to the closest exterior wall of the dwelling unit, whichever is greater, but at a minimum 1,000 feet to the property line.
  - 3. For participating dwelling units, the setback shall be 2 times the turbine height measured to the closest exterior wall of the dwelling.
  - 4. The setback to any public right-of-way or private roadway shall be no less than the turbine height.
  - 5. Setbacks to the external boundary of the special permit area shall be no less than as stated above, except that the owner of the adjacent property may sign an agreement allowing that setback to be reduced to the rotor radius plus the setback of the zoning district.
- h. The turbine(s) shall not impact a non-participating lot, (vacant or occupied; of any size), to the extent that, because of the location of turbine(s), the lot owner is left with less than three (3) acres of land outside of the CW ECS setbacks and the noise impact area in Section (i) below, unless they are part of an agreement with the CW ECS owner/operator.
- i. Noise: No CW ECS or combination of CW ECS turbine(s) shall be located as to cause an exceedance of the following as measured at the closest exterior wall of any dwelling located on the property. If a turbine violates a noise standard on a dwelling unit, constructed after the turbine is approved, then the turbine becomes a non-conforming use. For nonparticipating properties:
  - 1. From the hours of 7 am to 10 pm:
    - i. Forty (40) dBA maximum 10 minute Leq or;
    - ii. Three (3) dBA maximum 10 minute Leq above background level as determined by a pre-construction noise study. The background level shall be a Leq measured over a representative 15 hour period.
  - 2. From the hours of 10 pm to 7 am:
    - i. Thirty-seven (37) dBA maximum 10 minute Leq or;
    - ii. Three (3) dBA maximum 10 minute Leq above background level as determined by a pre-construction noise study. The background level shall be a Leq measured over a representative 9 hour period.

For Participating Properties:

1. Fifty (50) dBA maximum 10 minute Leq for all hours of the day and night.
- j. **Each application shall include a** A professional pre-construction noise study ~~shall be conducted~~ which includes all property within **at least** one mile of a tower support base **and must be able to demonstrate compliance with the noise standards in paragraph (i).** The protocol and methodology for such studies shall be submitted to the Lincoln-Lancaster County Health Department for review and approval. Such studies shall include noise modeling for all four seasons and include typical and worst case scenarios for noise propagation. The complete results and full study report shall be submitted to the Lincoln-Lancaster County Health Department for review **and approval.**
- k. Prior to the commencement of construction of any turbine, pre-construction noise monitoring may be conducted to determine ambient sound levels in accordance with procedures acceptable to the Lincoln-Lancaster County Health Department.
- l. Prior to the commencement of construction of any turbine, the applicant shall enter into an agreement with the County Engineer regarding use of County roads during construction.
- m. ~~At the discretion of the County Board, p~~ Post-construction noise level measurements ~~may be required to shall~~ be performed in accordance with procedures acceptable to the Lincoln-Lancaster County Health Department. **within one year of completion of construction to determine if the permittee is in compliance with this title and the terms of its special permit. Noise level measurements shall be taken by third party professional acousticians or engineering firms specializing in noise measurements and in accordance with procedures as approved by the Lincoln-Lancaster County Health Department and shall be performed at the expense of the holder of the Special Permit. Any report, information or documentation produced in accordance with such study or measurements shall be provided to the Lincoln-Lancaster County Health Department and shall be a public document subject to Nebraska's public records laws.**
- n. All noise complaints regarding the operation of any CWECs shall be referred to the County Board. The County Board shall determine if noise monitoring **in addition to that required under the paragraph above** shall be required to determine whether a violation has occurred. **If the Lancaster County Board of Commissioners determines that such noise monitoring shall be required, it shall be done at the expense of the holder of the Special Permit in accordance with procedures and by third party professional acousticians or engineering firms specializing in noise measurement approved by the Lincoln-Lancaster County Health Department. The results of such monitoring shall be provided directly from the party or parties conducting the monitoring to the Lincoln-Lancaster County Health Department for review and reporting to the Lancaster County Board of Commissioners.**