# BEFORE THE BOARD OF COUNTY COMMISSIONERS OF LANCASTER COUNTY, NEBRASKA

COUNTY TEXT AMENDMENT NO. 15009:	)	
TEXT AMENDMENT TO THE LANCASTER	)	A
COUNTY ZONING RESOLUTION, TO AMEND	)	RESOLUTION NO. $4-5-006$
SECTION 13.018, COMMERCIAL WIND	.)	
ENERGY CONVERSION SYSTEMS,	)	
AS PROVIDED IN ATTACHMENT A	)	

WHEREAS, pursuant to Neb. Rev. Stat. § 23-114 (Reissue 2012), the Lancaster County Board of Commissioners 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"); and

WHEREAS, the Acting Director of the Lincoln-Lancaster County Planning Department has requested a text amendment to the Lancaster County Zoning Resolution by amending Section 13.018, Commercial Wind Energy Conversion Systems, to revise the special permit conditions for wind turbine projects regarding decommissioning, shadow flicker, impact on environmental resources and view corridors, setbacks, noise, noise studies and other conditions, as provided in Attachment "A," attached hereto and incorporated by this reference; and

WHEREAS, the Lincoln-Lancaster County Planning Department has recommended approval of this amendment concluding the goal of the changes is to allow alternative energy development in the County but also to provide protection for nearby property owners; and

WHEREAS, on August 19, 2015, after public hearing, the Lincoln-Lancaster County Planning Commission voted 5 to 4 to recommend approval of said text amendments as a whole with changes from the staff recommendations regarding shadow flicker and noise standards;

WHEREAS, on October 20, 2015, the Board of Commissioners of Lancaster County conducted a public hearing regarding said text amendment; and

WHEREAS, on October 27, 2015, the Board of Commissioner of Lancaster County during a public meeting voted to amend subsections (c), (g), and (i) of the proposed text amendment regarding noise standards, setbacks, and decommissioning soil levels;

NOW, THEREFORE, BE IT RESOLVED, by the Board of Commissioners of Lancaster County, Nebraska, that the amendments to Section 13.018 of the Lancaster County Zoning Resolution, as provided in Attachment "A," are hereby adopted and approved; and

BE IT FURTHER RESOLVED, that any other references in said Resolution which may be affected by the above specified amendments be, and they hereby are, amended to conform to such specific amendments.

DATED this <u>/ Ø</u> day of November, 2015, in the County-City Building, Lincoln, Lancaster County, Nebraska.

BY THE BOARD OF COUNTY COMMISSIONERS OF LANCASTER COUNTY, NEBRASKA

APPROVED AS TO FORM this <u>IO</u> day of November, 2015.

Deputy County Attorney

for JOE KELLY Lancaster County Attorney Avery Voted Nay

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## 13.018 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.
- (a) Each CWECS machine shall be no less than 1,000 feet from any property line of a dwelling unit not associated with the project.
- (b) The distance from all external boundary lot lines and/or right-of-way lines of the special permit to any tower support base of the CWECS shall be equal to the height of the tower plus the rotor radius.
- (c) Each CWECS machine, including all equipment, shall have a sound emission rating of no more than 35 dBA. Noise levels caused from the CWECS turbine(s) shall not exceed 35 dBA at the property line of any dwellings within a one mile radius of a CWECS turbine. A noise study, incorporating both A and C weighted noise impacts on property within one mile may be required. Noise rating shall conform to International Electrotechnical Commission (IEC) standards unless otherwise directed by a government agency.
- (d) (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.
- (e) All applicable electrical, building, utility tie in codes and other government regulations shall apply.
- (f) The distance from any tower base of a CWECS to any tower support base of another CWECS under other ownership shall be spaced a minimum of five (5) rotor diameters distance figured by the size of the largest rotor.
- (g) (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 a minimum of five feet of soil between the average surrounding ground level and former tower's cement base.

- (h) Said CWECS shall meet all Federal, State and local rules and regulations.
- (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 30 minutes in any one day, nor 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.

#### (g) Setbacks to the turbine base:

- 1) For the purposes of this subsection, "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) Any single 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 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:

- o Forty (40) dBA maximum 10 minute Leq or;
- o 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:

- o Thirty-seven (37) dBA maximum 10 minute Leg or;
- o 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.
- (j) A professional pre-construction noise study shall be conducted which includes all property with a dwelling 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.
- (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.
- (1) 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 be performed in accordance with procedures acceptable to the Lincoln-Lancaster County Health Department.

(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 shall be required to determine whether a violation has occurred.