

Examples of Commercial Wind Energy Setbacks

April 29, 2015

Selected Nebraska Counties from Nebraska Wind Energy and Wildlife Project for Commercial Wind Energy Systems

COUNTY	NOISE LIMIT AT OCCUPIED RESIDENCE(dBA)	SETBACK FROM OCCUPIED RESIDENCE	SETBACK FROM NON PARTICIPATING PROPERTY LINES	SETBACK FROM ROAD RIGHT OF WAY	County Reg. Page #
Adams	50	1,000	150 feet (or less w/ adjoining participating property owners)	1X total tower height	127
Antelope	50	1,000	1.1 x rotor blade length	1.1 x rotor blade length	76
Cass	Documented attempt at minimization	Not specific; at least 2 x total height	2 x total height	2 x total height	127
Cedar	50	None listed; at least 1 x total height	1 x total height	1 x total height	52
Clay	50	1,000	150 (or less w/ adjoining participating property owners)	1/2 rotor diameter	76
Fillmore	50	1,000	150 (or less w/ adjoining participating property owners)	1 x total height	89
Frontier	50 *	1,000	Rotor Diameter plus applicable building setback	Blades shall not encroach on ROW	66
Gage	60 *	1,320	1.5 x total height	1.1 x total height	6
Hayes	50	see property line setback	1/2 blade diameter or 150 feet (whichever is greater)	1/2 blade diameter or 150 feet (whichever is greater)	58
Hitchcock	50	1,000	1/2 blade diameter	1/2 blade diameter	62
Holt	60	2,640	1/2 blade diameter	1/2 blade diameter	13
Howard	50 *	1,000	Rotor diameter plus applicable building setback	Blades shall not encroach on ROW	222
Kearney	50	1,000	150 feet (or less w/ adjoining participating property owners)	1 x total height	49
Keith	50	None listed; at least 1/2 blade diameter or 150'	1/2 blade diameter or 150 feet (whichever is greater)	1/2 blade diameter or 150 feet (whichever is greater)	Article 20 section 14
Kimball	50	1,000	1.1 x total height	1.1 x total height	46

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Knox	50 *	1,500	Rotor diameter plus applicable building setback	Blades shall not encroach on ROW	99
Lancaster	35 at property line within mile	1,000 feet to property line	1 x total height	1 x total height	Article 13 p. 17
Lincoln	50	2,000	Rotor diameter plus applicable building setback	1 x total height	108
Madison	50 *	1,000	Rotor diameter plus applicable building setback	Blades shall not encroach on ROW	Section 603 p. 2
Perkins	50	2,000	150 feet	1/2 blade diameter	55
Polk	60	1 x total height	Rotor diameter plus applicable building setback	1 x total height	47
Seward	50	1,000	150 (or less w/ adjoining participating property owners)	1 x total height	99
Webster	55	2 x total height or minimum 1,000 feet	2 x blade length for S, E, and W property lines; 1.1 x total height for north property lines	2 x blade length	54
York	50	1,000	1/2 rotor diameter	1/2 rotor diameter	100

Notes: 1) Source for links to zoning regulations from <http://snr.unl.edu/renewableenergy/wind/windenergydevelopment.asp#zoning>.

Table displays many types of county regulations, but is not intended to be all inclusive of all jurisdictions in Nebraska.

2) * = In the event of periods of severe weather, as defined by the United States Weather Service, a CWECs may exceed dBA level."

3) Most setbacks to occupied dwelling units were reciprocal in that no dwelling unit shall be constructed within the same distance of CWECs.

4) WECS Setback Examples:

Total Tower Height	Rotor Diameter	Resulting setback based on:			
		1 x total height	2 x total height	½ blade diameter	Diameter + Setback
325	235	325	650	117.5	285
400	300	400	800	150.0	350
465	355	465	930	177.5	405

Table is generalized for comparison purposes only. Assumes a 50 foot building setback for comparison purposes.