

Examples of Commercial Wind Energy Setbacks

April 29, 2015

Selected examples of setbacks from various states:

Location	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 #
Polk Co., IA	55	1,320	1.1 x total height	1.1 x total height	Chapter 22
Sioux Co., IA	60 *	2 x total height or minimum 1,000'	Shall not encroach over property line	1.1 x total height	128
Emmet Co., IA	50 at property line	1,250	1.1 x total height	1.1 x total height	Ord. VI-III A
Mason City, IA	Separate section	1,000	1.1 x total height (350' is maximum height of any tower)	1.1 x total height	Title 12 Chapter 33
Boone Co., IA	50	750	1.25 x total height	1 x total height	Sec. 8.04
Perry City, IA	55	1,000 to property line	1.1 x total height	1.1 x total height	Chapter 159
Rock Island Co., IL	None	1,000	1.1 x total height	1.1 x total height	NREL
Doniphan Co., KS	55 at property line	1,320	Greater of 500 feet or 1 x total height	Greater of 500 feet or 1 x total height	Article 14
Riley Co, KS	65 at property line *	None listed, at least 1.5 x total height	1.5 x total height	1.5 x total height	NREL
Huron Co. MI	Greater of 50 or ambient + 5 dBA *	Greater of 2 x total height or 1,000	2 x hub height	Greater of 400 feet or 1.5 x hub height	NREL
Long Lake Township, MI	Ambient + 10 dBA at property line	None listed, at least 2 x total height	2 x total height	5 x total height	NREL
Fillmore Co., MN	State regulation	750	1.1 x total height	1.1 x total height	NREL
Nicollet Co., MN	State regulation	750	1.1 x total height	1.1 x total height	NREL
Swift Co., MN	State regulation	750	1.1 x total height	1 x total height	NREL
Hamlin, NY	Ambient + 6 dBA at wall *	1,200	600 or 500 feet to public property	600 feet	NREL
Brookings Co., SD	50	1,000	Greater of 500' or 1.1 x total height	Greater of 500' or 1.1 x total height	NREL
Door Co., WI	50 at property	Greater of 2 x total	1.1 x total height	1.1 x total height	NREL

Location	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 #
	line; 45 inside *	height or 1,000			
Iowa Co., WI	50 day/ 45 night	Lesser of 1,250 or 3.1 x total height	1.1 x total height	1.1 x total height	Ord. 400.17
Wisconsin State	50 day/ 45 night	Lesser of 1,250 or 3.1 x total height	1.1 x total height	1.1 x total height	PSC 128.13, 128.14

Notes: 1) Table displays many types of city and county regulations, but is not intended to be all inclusive of all jurisdictions in U.S. Multiple sources were used with some information summarized from “An Overview of Existing Wind Energy Ordinances” National Renewable Energy Laboratory (NREL) at <http://www.nrel.gov/docs/fy09osti/44439.pdf>

2) * = includes reductions and various qualifications on noise level.

3) 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.