

Table of Alternative Noise Limits and Corresponding Minimum Separations And Hypothetical Effect on Number of Turbines at Existing Champaign County California Ridge Wind Farm August 4, 2022

Noise Limit	Noise Limit Source	Corresponding Minimum Separation ¹	Effect if Applied Hypothetically to Existing California Ridge Wind Farm ²	Notes
51 dBA	Illinois Pollution Control Board (IPCB) nighttime maximum Class C to Class A land expressed as a single number • This is the current Champaign County requirement	Not clear ³ • Existing Champaign County requirement: 1,200 feet to a dwelling (highest predicted noise level in the California Ridge Wind Farm was 44.6 dBA)	30 turbines were approved that meet or exceed these requirements	McLean County has the same noise limit but a min. separation of 1,500 feet or 3 times the tower height; (highest predicted noise level for Sapphire Sky Wind Farm with 591 feet tall towers with a min. separation of 1,773 feet was 43.4 dBA)
45 dBL _{den}	World Health Organization (WHO) 2018 conditional recommendation	Estimated to be 1,700 feet to a dwelling ⁴	8 turbines (a 26% reduction) would not meet these requirements	See the discussion of this “annual average day-evening-night” level in the 6/20/22 letter from Hankard Environmental.
42 dBA	Illinois Pollution Control Board nighttime maximum Class A to Class A land expressed as a single number	Estimated to be 1,950 feet to a dwelling ⁴	9 turbines (a 30% reduction) would not meet these requirements	This is the noise limit from one dwelling to another.
40 dBA	World Health Organization (WHO) nighttime noise limit 2009- 2018	Estimated to be 2,360 feet to a dwelling ⁴	14 turbines (a 47% reduction) would not meet these requirements	
39 dBA		Estimated to be 2,800 feet to a dwelling ⁴	16 turbines (a 53% reduction) would not meet these requirements	The same noise limit recommended by ZBA but with less separation.
39 dBA	Recommendation of CCZBA (based on the work of Dr. Schomer)	3,250 feet to a property line Alternative: 3,250 feet to a dwelling	No turbines would meet these requirements (100% reduction) 19 turbines (a 63% reduction) would not meet these requirements	Livingston County requires 6 times height or this same separation <u>in some townships</u> (3.75 times height in others) but with the IPCB noise limit.

(see footnotes on back)

Notes

1. Corresponding Minimum Separation has been estimated based on noise modeling results reported in selected wind farm special use permit applications and therefore are only approximate.
2. The maximum noise level and minimum separation for the existing Champaign County California Ridge Wind Farm will not change. These hypothetical results illustrate what might have happened if these alternative noise limits and separations had been in place previously.
3. It is not clear what minimum separation would be required to only meet the IPCB noise limit.
4. Corresponding Minimum Separation has been estimated based on noise modeling results reported in the special use permit applications for the California Ridge Wind Farm in Champaign and Vermilion Counties and for the Sapphire Sky Wind Farm in McLean County.