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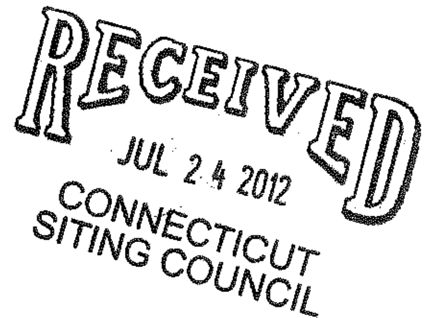

Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

July 24, 2012

RE: Proposed Industrial Wind Turbine Regulations

The proposed regulations contain big loopholes and would not be good law for the State of Connecticut if adopted as is.

The Council has written these regulations to cover its June 2011 approvals of the two Colebrook projects for six 492-foot industrial wind turbines in residential neighborhoods. By proposing to give itself the power of "waiver of requirements" for noise, setbacks, and shadow flicker, the Council justifies those approvals, which allowed wind turbine blades to be 9 feet from an abutter's property line in one project, and 14 feet away in the other. The Council would not site a cell tower that close to a property line, but has shown they would site a moving blade, long enough to sweep almost 2 acres with each rotation, that close to property lines. The loopholes need to come out of the proposed regulations -- which should be clear and fair for those who live in Connecticut -- with no waiver of requirements permitted for the Council.

Terms used in the proposed regulations that are not defined:
nearest receptors, nearest receptor locations (Sec. 16-50j-94 c)
off-site occupied structure (Sec. 16-50j-94 f)
off-site occupied structure location (Sec. 16-50j-94 c (1))
occupied residential building (Sec. 16-50j-95 a (2) (A))
occupied residential receptor (Sec. 16-50j-95 b (2) (A))
non-buildable configurations (Sec. 16-50j-95 (a) (2) (B); (b) (2) (B); (c) (2) (B))
intervening topographical barriers (Sec. 16-50j-95 (a) (2) (B); (b) (2) (B); (c) (2) (B))
parcels subject to development restrictions (Sec. 16-50j-95 (a) (2) (B); (b) (2) (B); (c) (2) (B))

The proposed waivers of requirements would allow the Council to ignore noise levels at property lines, bypassing current State law. Noise levels at homes should never be the industrial zone to residential zone maximum of 51 dBA nighttime and 61 dBA daytime. Why should Connecticut begin by approving higher noise levels than those in use elsewhere? Public health needs are the same worldwide.

The Council ignored testimony submitted to them on noise limits and setbacks used by other states and countries with experience in industrial wind turbines.

The State of Maine lowered the allowed nighttime noise limit for industrial wind turbines from 45 dBA to 42 dBA (measured 500 feet from a residence) earlier this year. Maine has the highest number of installed industrial wind turbines of any state in New England.

In Massachusetts (Title 310, Section 7.10, amended September 1, 1972), a source of sound will be considered to be violating the noise regulation if the source (1) increases the broadband sound level by more than 10 dBA above ambient, or (2) produces a "pure tone condition," when any octave-band center frequency sound pressure level exceeds the two adjacent frequency sound pressure levels by 3 decibels or more.

Quiet rural towns in Connecticut have an ambient sound level of under 30 dBA at night, so allowing 51 dBA at night would be an increase of almost 20 dBA. Because sound follows a log scale, a change of 10 dBA is perceived as a doubling of sound. A change of 20 dBA would be perceived as four times as loud. Preventing sleep at night is among the biggest complaints again wind farms.

Oregon and California have extensive experience with wind farms and noise standards.

A setback of 1.1 times the height of an industrial turbine (Sec. 16-50j-95) is inadequate to protect health, given the experience in other states and countries. Why knowingly install industrial wind turbines so close to housing? Why force citizens into court for a remedy? Some examples are given below.

A dozen or so residents of Mars Hill, Maine, all within 3,500 feet of 28 turbines standing 262 feet tall, settled a lawsuit this year against the owner of the wind farm there. The Mars Hill facility was the first one built in Maine and began operation in 2006.

Just this month, Iberdola Renewables, owner of 37 476-foot-tall wind turbines in Fairfield and Norway, NY, gave residents complaining of lack of sleep noise-making machines to put by their beds to mask the noise from the turbines. The minimum setback in Fairfield is 1,250 feet and the noise limit in Fairfield is 50 dBA.

Health complaints about a 400-foot wind turbine in Falmouth, Mass. have resulted in it being turned off at night. One resident with complaints lives 1,320 feet away. A dozen families there have retained a lawyer. The Falmouth Board of Health recently requested that "the state Department of Public Health immediately initiate a health assessment of the impacts of the operation of wind turbines in Falmouth. This appeal is compelled by two years of consistent and persistent complaints of health impacts during turbine operation. . ." Is this the future for residents of Connecticut?

The Council's proposed regulations would allow it to create Class C industrial emitters in residential zones (Sec. 16-50j-95 b), without regard to the State Plan of Conservation and Development or each of the 169 towns' mandated 10-year Plans of Conservation

and Development. This is spot zoning without a long-term, overarching vision of land use. The State and local plans all recognize that residential neighborhoods, historic properties, and conserved lands enhance the quality of living and working in Connecticut. The Council should include these in its Considerations for Decision (Sec. 16-50j-95).

The Noise Evaluation Report (Sec. 16-50j-94 (c)) only specifies "the nearest receptors" without taking into account that most complaints about industrial wind turbine noise come from those living within a radius of 0.5 to 0.75 miles away. Depending on the terrain, noise can be a problem a mile or more away. The Council should consider the total number of people at risk.

The Council's proposed regulations allow projects with a name-plate capacity up to 65MW to apply under a petition for declaratory ruling (Sec. 16-50j-93). This means a project with 40 1.5MW industrial wind turbines could be sited onshore or offshore without a certificate of public need.

The Council's proposed regulations invoke "a showing of good cause" to justify the complete waiver of requirements it could make regarding noise, setbacks, and shadow flicker (Sec. 16-50j-95 a, b, c). How "good cause" is shown and who shows it is vague enough to allow the Council to justify any decision it wishes. The Council is silent about how an abutter would know that "good cause" was being invoked and how an abutter could challenge it.

The Council's proposed regulations define "a showing of good cause, which includes, but is not limited to, abutting parcels with non-buildable configurations, abutting parcels with intervening topographical barriers and abutting parcels subject to development restrictions." (Sec. 16-50j-95 a, b, c)
This open-ended string of undefined terms would allow the Council to do whatever it likes from project to project, and from year to year, depending on who is a member of the Council.
What are "non-buildable configurations" -- properties that cannot meet local Planning and Zoning requirements for a home?
What are "intervening topographical barriers?" What does an intervening barrier protect -- a home, school, road? What must a topographical feature do to be a barrier to an industrial wind turbine? Block the noise, block the view, block the shadow flicker? Block these totally, or by some percent?
What are "parcels subject to development restrictions?" This could include many properties owned by land trusts, conservation and historic organizations, and even the State of Connecticut. These are held in the public trust. Does public trust have any weight in the Council's perception of "good cause?"

A decommissioning bond, as well as a Decommissioning Plan should be required to protect local towns. (Sec. 16-50j-94 h)

A commissioning plan and host town impact analysis should be part of the application/ petition. A host community agreement should be required to protect local towns.

A number of reports are required, but not specifically included in the Council's Considerations for Decision (Sec. 16-50j-95), such as the State Historic Preservation Office Review.

A transmission analysis, including the impact on the grid and local towns, should be required as part of the application/petition.

The cumulative amount of shadow flicker from all turbines should be restricted, rather than allowing 30 hours of shadow flicker per year from each turbine (Sec. 16-50j-95 c). The effect of shadow flicker on roads, intersections, and properties in their entirety should be considered, not just the shadow flicker landing on homes. Property rights begin at the property line and the Siting Council should not be given the authority to say some property rights begin inside a home.

No date for a public hearing should be set until the Council's minutes indicate that the application or petition is complete. (Sec. 16-50j-18)

The distance between turbines should follow the manufacturer's best recommendation to decrease turbulence and noise, and to provide the best efficiency (estimated at 30% or below in Connecticut).

In short, there is no indication that the Council did sufficient research in drafting these proposed regulations. The Council has effectively ignored the records from the public hearing held by the Connecticut Legislature's Energy and Technology Committee on February 3, 2011; the public hearings and proceedings held on Petitions 980, 983, and 984 in 2011; and the public hearing for Public Act 11-245 on wind regulations, held on October 13, 2011.

Sincerely,

Joyce C. Hemingson