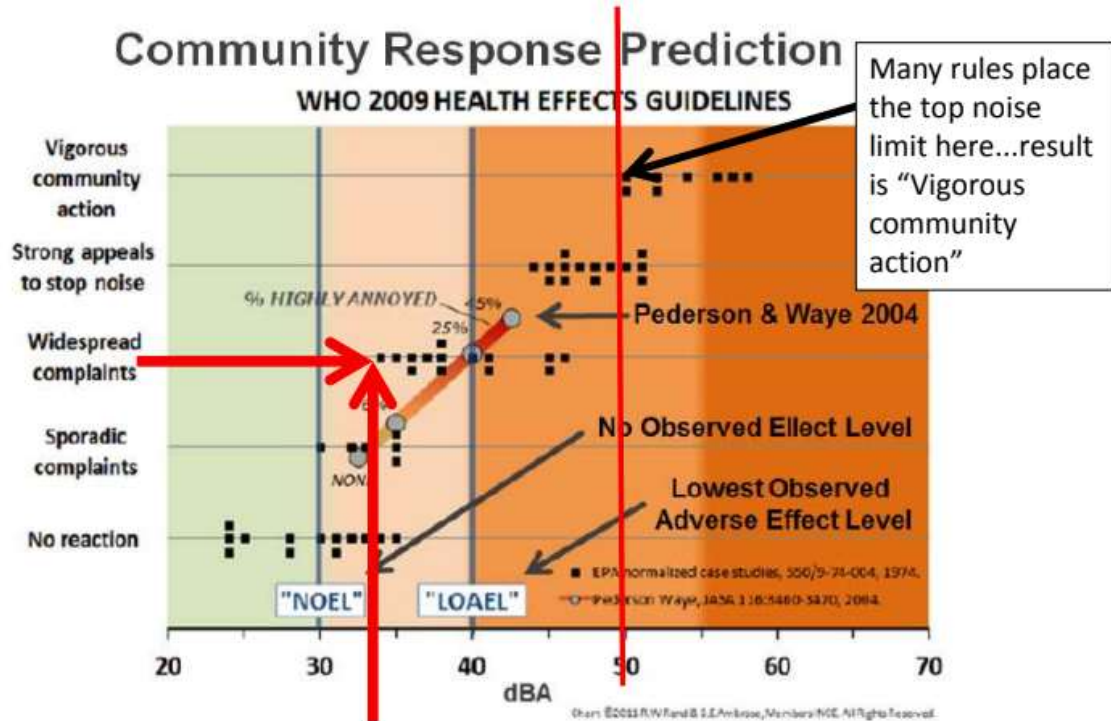


1.) If the solar farm does not make any noise, then why can't we put in a noise limit at the threshold where adverse health effects begin?

2.) Perhaps a noise limit established where "widespread complaints" begin?



Widespread Complaints Start at 33.5 dBA !!

Hartke abandoned home in Vermilion County....noise measurement at our property there was in the magnitude of 45 dBA.....just below the maximum legal limit in the Illinois Pollution Control Board standards.

Hartke recommends the following EITHER / OR correction to our solar farm inverter noise ordinance:

1.) Place inverters 800 feet from property lines if they are "industrial sized" and emit 66 dBA at 10 meters.

AND/OR

2.) Enforce a 39 dBA maximum noise limit at property lines.....with design limit being 33.5 dBA

For a project which is small and 800 feet is not possible separation from neighbors, require the noise limit. This is 100% predictable and feasible to construct a noise barrier around the inverters.

Remember: 1000 feet of solar panels feed into a single inverter.



Solar panel array occupies 5.8 acres.

GOVERNMENT

Solar Panels Create Noise Nuisance in Edgartown

Olivia Hull Thursday, September 25, 2014 - 6:30pm

Smith Hollow is a quiet neighborhood in Edgartown where the ambient sounds include distant traffic and breeze moving through the trees. But this past summer, the installation of a new municipal solar array added a new sound to the mix: incessant humming that all but drowns out the other sounds at some Smith Hollow residences. As soon as the solar project went live, inverters, the part of the system that converts direct current from the sun to alternating current, began emitting noise on sunny days. Neighbors complained, and the town hired an expert to investigate. The inspection revealed that the sound coming from the inverters exceeds ambient sounds in all eight octaves by a significant margin, according to a report discussed by the town selectmen Monday.

“The sound from the inverters is clearly in violation of the Mass. DEP Noise Policy, and also constitutes a noise nuisance, in my opinion, based on the sound level measurements reported here,” wrote Lawrence G. Copley, a sound engineer, in the noise assessment he presented to the town. Mr. Copley’s proposed solution is to install an acoustic screen at each inverter pad, deflecting sound away from the nearby residences. Town administrator Pam Dolby said this solution will exceed state standards and satisfy the neighbors. “He is guaranteeing there will not be an issue if it’s done the way he wants to do it,” she said. The array, the largest of two Edgartown town solar projects, is located in an area known as Nunnepog, a Wampanoag name for Edgartown. It was built as part of a series of municipal projects managed by the Cape and Vineyard Electrical Cooperative (CVEC), a group founded in 2007 to oversee renewable energy initiatives. The network of solar panels occupy 5.8 acres and required the removal of trees and other vegetation. Though mitigation plans are in place for the restoration of vegetation and fencing to obstruct the neighbors’ view of the panels, the CVEC says they did not anticipate a noise issue. “I feel a little bit embarrassed for not knowing that this was going to be a problem because they are classically not very noisy but we clearly have a noisy inverter or more than one that we need to remedy,” said Liz Argo, special projects coordinator at CVEC. “So I just wanted to let you know that there are situations where this is not a problem.” But resident James Cimeno said Monday that he and others did raise sound as a possible concern, but were assured that it would not be a problem. “Right from the start I suggested that they move them because of noise,” he said. “We were told they weren’t going to make any noise.”

Zac Osgood, project manager for the contractor American Capital Energy, said the inverter pads were placed in their present location, beside the residences instead of along the opposite treeline, because of its convenience to the grid. His company is also responsible for site maintenance, which neighbors and town officials said has lagged. The site is overgrown with weeds, they said. “It doesn’t appear that the property is actually being maintained,” Mrs. Dolby said.

Conservation agent Jane Varkonda said the same problems exist at the solar array at Katama, which ACE installed earlier this year. “We have been asking them to mow, to water the trees, to come in and mulch the trees a little better and also to plant the berm,” she said. Mr. Osgood said some site work had been done recently, and agreed to give a timeline for the dates of anticipated completion of each of the items on the punch list.

“Our plan is once the site is electrically complete...we bring back the civil guys, so that we make the site beautiful,” he said. “That is our end goal.”

Homer Illinois		
solar farm inverter noise		
dba	distance (feet)	Special Notes
69	33	OSHA ear protection needed at 85 dba
63	66	Sidney solar farm inverter predicted 66 dba
57	132	
51	264	
45	528	IPCB maximum property line noise 46 dba
39	1056	Adverse health effects begin at 40 dba
33	2112	Widespread complaints begin at 33.5 dba
27	4224	Quiet rural area noise levels are 25 dba.

Reference Sidney hearing zoning presentation dated 08/23/2018