

New study disputes Cape noise levels

DEVELOPERS STAND BY REPORTS: Consultant says other studies showed higher background noise in town

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CAPE VINCENT — The background noise in the town is not as loud as studies in two wind developers' statements say, according to a new study commissioned by the Wind Power Ethics Group.

But the developers stand by their studies.

The new study was done by Paul D. Schomer of Schomer & Associates Inc., Champaign, Ill. Mr. Schomer is chairman of the International Organization for Standardization working group on environmental noise and chairman of the American National Standards committee on noise, among other leadership roles in noise measurement.

The finding contradicts the studies done by Hessler Associates Inc., Haymarket, Va., for the draft environmental impact statement of BP Alternative Energy's Cape Vincent Wind Farm and supplemental draft environmental impact statement of Acciona Energy North America's St. Lawrence Wind Farm.

"The studies they've done have shown higher ambient background noise levels," said John L. Byrne, a member of WPEG. "That allows them to put more turbines in a smaller area and closer to homes."

With quieter conditions, the noise from wind turbines is more noticeable. If the Planning Board were to require siting according to state Department of Environmental Conservation guidelines of less than 5 decibels above ambient, the turbines would be forced farther away from residences.

Mr. Byrne said WPEG decided to hire Schomer & Associates because the group wanted noise measurements from a nationally recognized, independent acoustic engineering firm.

"Hessler was hired by the developer, not the town or citizens," he said. "Our report was done by somebody hired by citizens to give us a nonbiased report. He who pays the piper picks the tune."

The report specifically argued against the BP study, but says the Acciona study has similar problems.

"Clearly, they are trying to attack Hessler's study," said James H. Madden, project manager for BP. "But they've stretched the truth here."

In the BP study, Hessler concluded that in summertime conditions, ambient noise is about 47 decibels. The study estimated that in winter ambient noise would be 37 to 42 decibels. In the Acciona study, Hessler found an average of 44 decibels during the summer and 37 decibels during the winter when the wind is blowing.

But Schomer found the noise levels averaged at 30 decibels, with the quietest nighttime hours at 20 decibels and the entire night at 25 decibels.

"Using an inaccurate, elevated A-weighted ambient level ... allows wind developers to place wind turbines much closer to non-participating residents," Schomer's report said.

The difference is because "Hessler's BP study for the Cape Vincent Wind Power Facility appears to have selected the noisiest sites, the noisiest time of year and the noisiest positions at each measurement site," the Schomer report said.

Mr. Madden said that claim is false and misleading.

"There's enough room for debate on how you measure noise that they can come up with something that has different results," he said.

The Schomer report found that Hessler consistently sampled at the noisiest time of year and chose sampling positions near roads or machinery and sites that were industrial instead of residential.

Site No. 2 in the Hessler BP study was a farm. The Schomer report noted, "This position actually is right in the middle of noisy farm machinery and two sheds, and not as near to the house where people reside."

Mr. Madden said the farm is inactive — only horses are raised — and no heavy machinery is used.

In the BP study, Hessler took noise measurements in late August and early September, at the "peak of insect noises," the Schomer report said. Schomer said insect noises are at higher frequencies, while wind turbine noise is at lower and mid-level frequencies.

"So even if insect noise was present year round instead of for a few weeks, it should still not be included in the ambient because it provides little or no masking of the wind turbine sound," he said.

Mr. Madden said the Hessler study always was acknowledged as the summer study. The winter study, completed in December 2007, will be released with other reports as part of the supplemental draft environmental impact statement, he said.

The measurements in the Schomer report were taken in June.

"The only time of the summer when there is no insect noise is at the time of their study," Mr. Madden said.

In BP's study, Hessler threw out the measurements from a site that was consistently quieter than the rest.

Schomer's optimal position — near property lines at a rural residence and dairy farm — always garnered quieter measurements. The average result from a weeklong measurement was up to 10 decibels quieter than at a similar position in Hessler's study nearer to roads and residences.

Mr. Madden said Hessler's measurement locations were out of concern for where people live. While Schomer sites "Planning Board guidelines," Mr. Madden said the town does not have any wind ordinance and the assertion the Schomer study is more compatible with town guidelines is "incorrect."

In a footnote, the report says the Acciona study "is very similar to the first report in scope and approach, and it suffers from the same deficiencies."

Peter E. Zedick, Acciona's project manager, said Acciona also will stand by its study.

"The ambient levels in Acciona's study were representative of living conditions in Cape Vincent because we chose to conduct the study from areas of the site with an average community sound level — not the loudest or the quietest, neither of which is an accurate representation," he said in an e-mail. "The difference in location choice of the studies explains the minor difference in the findings."

Mr. Byrne said using the lower measurements when configuring setbacks will give greater protection to nonparticipating residents.

"We are hoping the town board will go ahead and do the right thing and create real setbacks and protect the citizens," he said.