Save Our Seashore Wellfleet, MA

U.S. Fish & Wildlife Service Federal Advisory Committee on Wind Turbine Guidelines

August 4, 2011

Re: Proposed Wind Turbine Guidelines

We are writing to you today to offer public comment on the proposed Guidelines for siting of industrial wind energy facilities on land.

Members of Save Our Seashore have studied the benefits and the adverse impacts of utility-scale wind turbines in great detail over the past two years in relation to several proposed projects on Cape Cod.

Specifically, our group was formed in 2009 to investigate, and to oppose, a proposal to install three 410-foot wind turbines on land owned by the Town of Wellfleet in the heart of the Cape Cod National Seashore.

By providing a wealth of information on wind turbines that had previously been unknown to them, we persuaded the selectmen in Wellfleet to reverse their prior endorsement of the project and to abandon the proposal in a unanimous vote of the select board.

Along the way, we also received the formal backing of the National Parks Conservation Association, after months of study, on behalf of its 350,000 members, of our position that the National Seashore was <u>not</u> an appropriate location for the installation of industrial wind turbines and that the implementation such a project in the national park might create a harmful precedent for other national parks and other sensitive areas in Cape Cod.

We are familiar with the various drafts of the Wind Turbine Guidelines and we object to many of the provisions in them, as proposed. A summary of some of the more important of these objections is as follows:

1. The Guidelines are voluntary, and not mandatory.

We believe that the Guidelines will have little, or no, impact upon the siting of land-based wind turbines if they continue to be voluntary, rather than mandatory. As proof, we offer our own experience on Cape Cod in which the Energy Committee in the Town of Wellfleet, Mass Audubon and even the superintendent of the National Seashore all ignored your draft Guidelines and, after months of insistence that they be considered, either continued to ignore them as irrelevant or reluctantly paid them lip service.

None of them ever committed to make the Guidelines part of their evaluative process in any meaningful way. To the extent that they acknowledged their existence, they proposed to consider them after the projects had been fully committed and funded, rather than as part of the planning process. To be blunt, their actions made a mockery of your core recommendation of a "Tiered" decision making process and they obviously felt no compunction to comply with your first principle to "choose an appropriate location."

If the superintendent of a national park -- which is also part of the U.S. Department of the Interior -- doesn't feel compelled to follow your Guidelines, how on earth can you expect any commercial developer to do so?

Please note, as well, that Mass Audubon -- the most prominent conservation organization in Massachusetts -- also steadfastly refused to offer any opinion as to whether a proposed wind turbine site, in the heart of a national park, in the middle of an area designated by Mass Audubon as an "Important Bird Area," might be unsuitable for such development.

Contrary to your advice -- even though Mass Audubon and the National Park Service both had representatives on your Federal Advisory Commission -- both of these entities insisted that they could not offer any opinion on the location until <u>after</u> numerous studies had been completed, including a complete Environmental Assessment.

As we are sure you can appreciate, such an approach flies completely in the face of your advice to avoid such costly endeavors and to consider the suitability and the nature of the location itself prior to conducting such expensive work and getting the sponsors more than "a little bit pregnant" with the project.

Our experience, like many others, is a cautionary tale that should be heeded by the Committee if you expect to accomplish anything useful after all of these years of effort.

2. <u>Environmental impacts</u>, noise assessments and "flicker" studies are all commissioned by, and <u>controlled by</u>, wind energy developers.

We are familiar, through numerous first-hand experiences, of such studies performed on behalf of wind energy developers, virtually all of which were very deeply flawed. As the Committee members must surely know, the object of these studies is not an impartial search for the truth, but the single-minded pursuit of a permit. The goal of all such studies commissioned by the developers is to gather and to present the requisite information in such a manner that it will motivate the appropriate authority to bless the project. We won't take the time to cite specific examples, but suffice it to say that such studies are easily, and shamelessly, manipulated -- and that the various "consultants" clearly know who butters their bread.

Such assessments should only be performed by experts that are contracted by the permitting authorities, rather than the developers. The Committee should take to heart a provision in the recently enacted Minimum Performance Standards for wind turbines on Cape Cod (at the recommendation of the Cape Cod Commission), which stipulates that the Cape Cod Commission will hire the acoustic engineer that performs the requisite study -- and the developer will be obligated to pay for it. This arrangement assures that the regulator -- the permitting authority -- has control over the scope of the study and the integrity of the information delivered.

3. The proposed Guidelines allow developers to procure a "take permit" to kill protected species and to offer "compensation" for such significant environmental damage.

We feel that the history of such "trade-offs" or "compensation" is not encouraging and that, more often than not, it demonstrates, yet again, that such a system is easily manipulated by developers to the detriment of the environment. The "take permit" allows the developer to destroy something of rare value and the "compensation" does not justify the damage.

Protected and endangered species should be protected -- not traded like a commodity with the permission and approval of the U.S. Fish and Wildlife Service.

4. The proposed Guidelines place unwarranted faith in the concept of "mitigation" which, in practice, amounts to little more than a face saving gesture to justify significant adverse impacts and/or direct and substantial harm to the environment.

For example, the Guidelines place great store in the idea of ongoing studies to survey the damage to bird and bat populations, or other elements of the environment, and to propose "mitigating" such impacts.

Mass Audubon and others freely admit that there are no reliable methods of estimating the extent of the damage to such populations. Why then, does the Committee believe that the developers will voluntarily resolve this problem by devoting resources to surveys under their supervision that are incapable of measuring the damage under the best of circumstances?

The fact of the matter is that for all, or most, of these impacts the only "mitigation" that truly serves the purpose is to sharply curtail, or to cease, operations of the wind energy power plant. The reality is that, given the stupendous sunk costs of the environment, there is no political will to actually enforce the "mitigation" provisions.

We are intimately acquainted with this phenomenon as it is currently playing out in Falmouth, Massachusetts -- and countless other locations around the world -- where residents are suffering terrible consequences from the operation of expensive wind energy power plants.

After a time, the authorities reluctantly acknowledge the fact that a certain population of humans may

be suffering, but they insist the the towns, or other operators, simply cannot afford to turn the machines off or significantly curtail operations -- because they "can't afford to."

It is not difficult to imagine how little success any authority will have at forcing wind energy developers to "mitigate" the damage that they swore would never occur in the first place when it cuts directly into their stream of revenue -- or threatens the solvency -- of their multimillion dollar projects because they are killing a few too many birds or bats.

To date, authorities in the United States -- and all over the world -- have failed to offer any "mitigation" or relief to any of the human subjects of these colossal open air industrial experiments in Falmouth or anywhere else.

<u>No method currently exists</u> -- or is likely to exist -- to mitigate the adverse impacts of industrial wind turbine noise or the strobe-like "flicker" effect that they produce -- other than to place them in areas that we are willing to subject to such impacts.

Wind turbines are the largest mechanical devices ever installed upon the landscape in the history or mankind. They are completely unique in their scale, in their physical properties and in their location relative to the environment and the activities of humans.

Even jet engines are "point sources" of noise moving across the sky, but not so wind turbines. Instead, the business end of a wind turbine is a source of noise that is over 300 feet in diameter located 500 feet in the sky located a fixed location and producing unrelenting, unnatural, rhythmic, mechanical noise for 24 hours a day, seven days a week.

The noise signature of a wind turbine is unlike any other industrial noise, because of the high energy output of low frequency sound that does not attenuate over distance, and because of the placement of the machines in rural areas, and because of the repetition and the persistence of the noise.

Wind turbines also transmit vibration through the ground -- seismically -- because of their massive foundations and the low frequency sound waves that they produce. As one acoustic engineer has put it, when he saw a glass of water visibly vibrating on a table in a house at some considerable distance from a wind turbine, he suddenly realized that the wind towers were nothing less than a series of gigantic tuning forks planted in the landscape.

It is empirically true -- from the experience of thousands of individuals who are now living with wind turbines -- that ambient noise does not "mask" the idiosyncratic noise from these devices.

Similarly, planting a few 20 or 30 foot trees does not "mitigate" the strobe like impact produced by wind turbines for hours on end as they cast intermittent shadows across the landscape anymore than placing an object in front of a lamp "mitigates" the effect of turning it on, and off, at one second intervals while one is trying to read a book. This is nothing more than another fantasy promoted by the wind energy

developers to give the appearance of solving the problem, without doing anything of the kind.

If the adverse effects of noise and "flicker" upon human populations are incapable of "mitigation" by any means, how then does the Committee propose that developers will "mitigate" such impacts upon the innumerable species of wildlife that will be subjected to such impacts, 24 hours a day, and whose very survival depends upon their ability to hear their prey, or their predators, rustling through the leaves or to perceive them approaching, or within range of capture?

How can the Committee endorse the construction of such large outdoor installations the extent of whose adverse impacts are essentially unknown, and unknowable?

And how can the Committee then place such great store in the concept of "mitigation" of adverse impacts that are inescapable byproducts of the production of electricity from these sources and for which there is no possible "mitigation," other than to cease operating them?

We fear that the Committee has sidestepped the most consequential and obvious questions -- whether the adverse impacts of such installations can ever be justified or resolved and whether the vast scale of their operations -- their enormous footprint -- may ultimately do ten times more damage to the environment -- both the natural and the human environments -- than can ever be justified by their relatively paltry, and volatile, output of electrical energy.

We fear that the crowning achievement of the blue ribbon panel of "experts" on the Federal Advisory Committee will be to co-opt all of its member institutions into a sort of insidious "groupthink" that ignores the main question -- does this technology actually do anything useful? -- and produces the mother of all "take permits" that endorses the appropriation of private and public lands on a massive scale for the exclusive benefit of a handful of commercial developers.

So many PhD's -- and so little common sense.

Regrettably, after all of these years of effort under the direction of the U.S. Fish and Wildlife Service, it appears that none of the constituent members of the Committee has learned to differentiate the forest from the trees.

We don't doubt that most of the members of the Committee labored on this project with noble intentions -- which makes it all the more tragic that the product of your labors will ultimately be to bless the fundamentally bankrupt idea of wind energy as a solution to our environmental challenges, even as every developer in the world ignores your "voluntary guidelines," or exploits the myriad of loopholes you have incorporated that allow them to do as they please.

We are deeply disappointed by these aspects of your recommendations and we urge you to think more deeply about the core issues, rather than to continue expending additional effort on the two-dimensional facade of a regulatory framework that avoids the hard questions and accomplishes nothing

useful.

Sincerely,

Eric Bibler President