TESTIMONY OF ERIC R. GLITZENSTEIN MEYER GLITZENSTEIN & CRYSTAL BEFORE THE HOUSE SUBCOMMITTEE ON FISHERIES, WILDLIFE AND OCEANS HOUSE COMMITTEE ON RESOURCES MAY 1, 2007

I appreciate the opportunity to testify before the subcommittee on the vitally important topic of the impact of wind turbines on wildlife, particularly migratory birds and bats. I am a partner with the Washington, D.C. public-interest law firm Meyer Glitzenstein & Crystal, which provides legal representation to non-profit environmental, conservation, and animal protection organizations. I am also the President of the Wildlife Advocacy Project, a non-profit organization dedicated to assisting grassroots activists in their efforts to educate the public concerning threats to wildlife. A brief Biographical Statement is being provided.

As requested by the subcommittee, my testimony will focus on the current legal and regulatory framework that applies to the impact of wind turbines on wildlife. As discussed below, while a number of federal environmental laws may come into play when wind turbines are being planned and constructed, there is, at present, no comprehensive, effective federal system for avoiding, minimizing, and mitigating the effects of wind power projects on migratory birds, bats, and other wildlife. In addition, some of the most important regulatory and legal tools that are available depend entirely on the willingness of officials in the Department of the Interior to threaten or bring appropriate enforcement actions. Because such officials have demonstrated that they are completely unwilling to bring such actions, even in the face of flagrant violations of federal laws, wind power companies have little incentive to avoid or minimize impacts on wildlife, including federally protected species.

Before turning to these issue s in greater detail, it is important to stress that wind power facilities, if properly sited, constructed, and monitored, can and should be a part of the answer to the global climate change crisis. At the same time, strenuous efforts must be made to avoid creating *new* ecological crises in the name of solving an existing one. By the same token, the fact that wind power may prove to be a piece of our energy puzzle does not mean that the wind power industry should get a free pass when it comes to safeguarding wildlife and other natural resources. Nor does it mean that the industry should have blanket

immunity from federal environmental laws. Just as the nation would not tolerate the nuclear, oil, or coal industries asking to be relieved of all obligations to protect wildlife and other resources, nor should that be an acceptable outcome for the wind power industry. As in most situations, it is crucial to find the appropriate balance between encouraging the construction of wind turbines in appropriate locations while, at the same time, ensuring that common-sense protections for wildlife are adopted and satisfied. After explaining the current untenable situation, my testimony will suggest appropriate legislative solutions for striking that balance.

THE INADEQUACY OF CURRENT CONSERVATION LAWS AND REGULATORY SYSTEMS TO ADDRESS THE ADVERSE IMPACTS OF WIND POWER PROJECTS ON WILDLIFE

To date, the federal government has played an extremely limited role in ensuring that wind turbines are sited and constructed in an environmentally sound and sustainable fashion. At present, all that is required for most wind power projects to begin construction and operation is a permit from the relevant state or local public service commission. These agencies have neither the expertise, the incentive, nor the legal mandate to fully evaluate the impact of wind power projects on wildlife and other natural resources. Most important, state and local agencies cannot reasonably be expected to evaluate, let alone to act upon, the potential *cumulative* effects of projects over which they have no jurisdiction – particularly impacts to migratory birds, which are a uniquely national (indeed, international) resource.

On the other hand, while several federal conservation laws may be used to reduce the impacts of wind turbines on birds, bats, and other wildlife under some circumstances, each of these statutes has proven to have severe limitations and deficiencies in addressing this issue. Taken together, they fall woefully short of the sort of comprehensive protection that will be necessary, particularly if wind power projects expand at the exponential rate presently being projected.

The Endangered Species Act only affords protections to the relatively few species that have been formally listed as endangered or threatened. Under the best of circumstances, it generally takes years to persuade the Fish and Wildlife Service ("FWS") to list a new species. Accordingly, while the ESA has afforded some

vital protections to listed species like the Indiana bat and Northern flying squirrel (which the FWS is now proposing to delist on highly dubious legal and factual grounds), it provides no protection at all for the vast majority of birds and bats that are killed, injured, and harassed by wind turbines. And even for listed species, the ESA can be a crude instrument for protecting wildlife from wind turbines. If projects are not being built on federal lands – as is the case with most projects – the FWS has no legal authority to secure access to sites even to ascertain whether listed species are present in the area, let alone to insist that siting or construction changes be made to protect such species. Accordingly, although the ESA makes it unlawful for any power company to build a turbine that kills, injures, or harms a listed species – including, in some circumstances, through habitat destruction – the companies presently have a perverse incentive to remain ignorant regarding such impacts and hoping that the safeguards of the ESA never come into play.

The National Environmental Policy Act ("NEPA") requires all federal agencies to analyze – in Environmental Impact Statements – the environmental impacts of "major federal actions significantly affecting the quality of the environment." However, where – as is the case with most wind power projects – there is no necessary federal approval or other agency action, the EIS requirement is not triggered. Moreover, even where NEPA applies, the statute is purely procedural, <u>i.e.</u>, the NEPA analysis could disclose that a project will have massive adverse impacts on a project that involves federal action (such as a project being build on national forest land, or with federal funding), but NEPA would not prevent the project from going forward.

On their face, the two federal statutes with the greatest potential to ameliorate the adverse effects of wind turbines are the Migratory Bird Treaty Act ("MBTA") and the Bald and Golden Eagle Protection Act ("BGEPA). The MBTA, which implements various treaties between the U.S. and other countries to protect migratory birds, makes it "unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird protected by the treaties. Any person who "kills" or "takes" a migratory bird in violation of the Act may be fined or even imprisoned for up to six months. Similarly, the BGEPA generally prohibits the taking, wounding, killing, or disturbing of bald and golden eagles – species that are also protected by the MBTA – and provides for criminal penalties when there is "wanton disregard for the consequences" of actions on eagles. In addition, civil enforcement actions may be brought by the government

even when there is harm but no intent to harm eagles.

Unfortunately, while these statutes *should* be of enormous value in addressing the adverse effects of wind turbines on birds, their actual benefit has been negligible at best. This is because of two related problems – first, neither the MBTA nor the BGEPA contains a "citizen suit" provision; accordingly, citizen enforcement of the statutes directly against wind projects that are killing and injuring protected birds is, at present, legally impossible. Second, although enforcement of these statutes against private violators is *entirely* dependent on the willingness of federal officials to bring, or at least threaten, actions for civil or criminal penalties, Interior Department and other federal officials have consistently *refused* to do so with respect to wind turbines, although they have known for *decades* that these projects may – if not properly sited and constructed – result in rampant violations of the MBTA and BGEPA.

Unlike the Endangered Species Act and most other modern environmental laws – such as the Clean Water Act, Clean Air Act, and Toxic Substances Control Act – neither the MBTA nor BGEPA authorizes citizens to bring enforcement actions against statutory violators. Indeed, "citizen suit provisions are now fixtures in the landscape of federal environmental law," Fadil, *Citizen Suits Against Polluters: Picking Up the Pace*, 9 Harv. Env. L. Rev. 23, 24 (1985), precisely because Congress has repeatedly recognized that the enforcement of environmental laws will be lax to nonexistent unless vigilant and concerned citizens are empowered to bring suit.

That has certainly been the case with wind power projects. Interior Department officials have known since the early 1980's – when wind turbines were installed in the Altamont Pass in California – that such projects have the potential to maim, dismember, and otherwise destroy eagles, hawks, owls, falcons, and many other bird species. Indeed, in disturbing documents my firm obtained in a Freedom of Information Act lawsuit on behalf of Friends of Blackwater – a West Virginia conservation group – FWS enforcement officers documented that even single turbines were killing, every month, hundreds of such birds in the most horrific manner imaginable.

For example, according to one internal "Report of Investigation" documenting "Violations of the Migratory Bird Treaty Act" and "Violations of the

Eagle Act," the report explains that "[m]igratory bird mortalities at the wind farms usually occur by the birds being dismembered when they come into contact with the fully exposed spinning turbine blades," and that one "particular Golden eagle was found in four separate pieces," with the "left wing and one leg [] so badly twisted together, they could not be readily separated." According to the Report, other "[t]ypes of injuries observed are: severed beaks resulting in massive hemorrhage; decapitations, either mid-skull or complete; complete mid-body separation; wing amputations or fractures." (A copy of this Report and several similar internal FWS investigatory records are being submitted along with this testimony for the convenience of the Subcommittee). The Report also documented many "electrocution mortalities," while stressing that "[m]ost migratory bird electrocutions are preventable using current technology."

Yet although such killing and injuring of eagles, hawks, and other birds has now been going on for decades and this constitutes a patent violation of the MBTA and the BGEPA, federal officials have *never* even initiated civil or criminal enforcement actions against any of the Altamont (or any other) facilities. Unfortunately, the same pattern of official abdication of enforcement responsibilities is now being repeated on the East Coast. For example, soon after a 44-turbine project called the Mountaineer Wind Energy Center became operational in December 2002 in the West Virginia Appalachian highlands, dozens of migrating songbirds – including blackpoll, magnolia, and Canada warblers and other species on the FWS's list of migratory birds of "special concern" – were killed in a single night after colliding with turbines during foggy conditions characteristic of the Appalachian ridges. Once again, although this was the largest single bird kill ever recorded at a wind power facility in the U.S., Interior Department officials again took no enforcement action against the company for this flagrant violation of the MBTA,

It has become painfully apparent that, without further direction from Congress, the situation facing wildlife will become even more ominous as Interior Department officials adhere to their "hands off" policy. Indeed, in an effort to prompt a change in approach, in June 2003, over thirty national and regional conservation groups – including Defenders of Wildlife and the National Audubon Society – along with concerned scientists and citizens wrote to the Secretary of the Interior and the Director of the FWS uring them to exercise their authority under the MBTA to take "immediate steps to ensure that appropriate biological

information is gathered and considered before an expansive series of large-scale wind power projects is constructed throughout the Appalachian Mountain ridges, with potentially devastating and irreversible impacts on the hundreds of migratory bird species that funnel through those ridges each year." The conservation groups and scientists urged the Interior Department to establish appropriate siting and construction criteria and, equally important, in order to "ensure that these criteria are followed by the wind power industry," to "us[e] the threat of MBTA enforcement as leverage if necessary, so that illegal 'takes' of migratory birds are avoided or minimized."

In a September 2003 response, the Department made clear that it had no intention of enforcing the MBTA or even using the threat of such enforcement to ameliorate the impact of wind turbines. Thus, while acknowledging that "impacts on birds, bats, other wildlife, and [] disruption and fragmentation of habitats are of concern," the Department stated that it would merely "encourage" compliance with "voluntary" siting and monitoring "guidelines," and that it hoped that a "spirit of partnership and cooperation" would prompt power companies to comply with the guidelines. In other words, the Department made clear that it would continue to rely on the same laissez-faire approach that has already proven to be woefully inadequate in preventing bird kills at the Altamont pass and other wind turbines.

Finally, as bad as the present regulatory situation is for birds, it is, if possible, even worse for bats. Except for the few bat species that are presently listed as endangered or threatened, bats have no substantive protection under any federal conservation law, although the projected wind facilities may well decimate bat populations. The FWS has estimated that the Nedpower Mount Storm Wind Project in West Virginia could alone "kill approximately 9,500 bats a year," which is a "significant level of fatalities which local populations would have a difficult time sustaining." (9/15/07 letter from FWS West Virginia Field Office to Newpower).

Likewise, scientists with Bat Conservation International ("BCI") found that 66 turbines at two wind power sites in West Virginia and Pennsylvania killed as many as 2,900 bats in just a six-week study period – an alarming rate that the organization said was simply not "ecologically sustainable." Yet FPL Energy – which owns the plants – reneged on a commitment to allow further monitoring of

bat impacts because it might put pressure on the company to shut down turbines. In the absence of further legal safeguards, it is inevitable that bat populations will be decimated by the ever-expanding wind power operations, and that additional bat species may eventually have to be listed as endangered or threatened as a direct result of wind power.

In sum, there are, at present, gaping holes in the protection of wildlife — and birds and bats in particular — from poorly sited, constructed, and monitored wind turbines. While migratory birds are ostensibly protected by the MBTA and BGEPA, that protection has proven illusory because federal officials simply refuse to enforce those statutes against even the most egregious violations in connection with wind turbines. Except for a handful of listed bat species, bats lack even theoretical protection under federal law. And, even in the rare instances where federal regulatory tools are being brought to bear on individual projects — such as projects on federal lands or where the FWS knows that an endangered or threatened species is present — no agency is even evaluating the *cumulative* effects of present and planned wind turbines on at-risk wildlife species, let alone incorporating such analysis into a precautionary regulatory regime. Accordingly, in the absence of further federal safeguards, it is inevitable that the nation will, perversely, wind up creating a new ecological crisis in the guise of addressing another one. Now is clearly the time for Congress to act, before it is too late.

PROPOSED LEGISLATIVE RESPONSE TO THE LOOMING WILDLIFE CRISIS POSED BY EXPANDING WIND TURBINES

Fortunately, relatively modest measures can afford wildlife invaluable protections, while still allowing wind power projects to expand into ecologically appropriate locations.

First, Congress should require the FWS, based on recommendations of an independent committee of scientific experts (*i.e.*, experts who have not served as consultants for, and have no other financial connection with wind power companies) to (1) evaluate the likely cumulative effects of present and planned wind turbines on birds, bats, and other wildlife populations, and (2) devise appropriate measures for minimizing and mitigating such cumulative effects to the greatest extent practicable. A temporary moratorium on the construction of new turbines should be imposed while this analysis – which could probably be

completed within six to twelve months – is conducted.

Second, Congress should amend the MBTA by authorizing citizens to bring appropriate enforcement actions for violations of the statute. There is no sensible policy reason why citizens should be able to enforce the ESA and other major environmental laws, but may not do so with regard to MBTA violations; rather, the lack of a citizen suit provision is merely an historical artifact, *i.e.*, the MBTA was enacted long before it became routine for Congress to look to citizen enforcement as a critical supplement to enforcement efforts by perennially underfunded and frequently indifferent federal officials. A citizen suit provision in the MBTA could be modeled after the ESA's citizen suit provision (section 11(g) in that Act), which has generally worked well in helping to curb egregious violations of that law.

Third, Congress should require the FWS to adopt, following public notice and comment procedures, mandatory siting, construction, monitoring, and adaptive management standards that are designed to avoid, minimize, and mitigate wildlife (and particularly bird and bat) impacts, and with which all wind turbines must comply. These standards should be informed by and consistent with the cumulative impacts analysis conducted by the FWS and independent scientists. Many such standards could parallel the voluntary "guidelines" on which the FWS is now relying and which are sound in principle but largely ignored by the wind power industry – which, once again, has no incentive to comply with such guidelines and concrete financial reasons not to do so.

Turbines should not be permitted to operate unless the FWS expressly certifies that they are in compliance with the standards; to ensure that they remain in compliance, such certifications should be renewed periodically. In addition, as with other major energy facilities – such as nuclear and hydroelectric plants – the public should have an opportunity to comment on the adequacy of a company's plans for complying with standards designed to avoid, minimize, and mitigate environmental impacts.

For example, as with the present guidelines, such standards should provide that turbines must be sited so as to minimize wildlife impacts, including by avoiding ecologically sensitive areas such as known bird migration routes, wetlands where birds and other wildlife are known to congregate, and all

hibernation, breeding, and maternity/nursery colonies of bats. In addition, turbines should be sited and configured so as to avoid landscape and other features that are known to attract wildlife (*e.g.*, because eagles, falcons, and other raptors are known to use cliffs and ledges for perching, turbines should be set back from such features).

To ensure that appropriate information is brought to bear on such siting and configuration decisions, the standards should require comprehensive preconstruction site surveys that are of sufficient scope and duration to reasonably evaluate the extent to which a particular site is used by migratory birds, bats, and other wildlife. Congress should make clear that the FWS has authority to oversee all such surveys and, of critical importance, to obtain access to all sites under consideration so that the Service can evaluate for itself the value of a particular site for wildlife.

Consistent with the present voluntary guidelines, mandatory standards should also require wind companies to monitor impacts of turbines on wildlife, to ensure that predictions of acceptable impact are not exceeded. All monitoring plans should be approved by the FWS, and all data produced as a result of the monitoring efforts should be made available to the Service and, in turn, the public. Where monitoring reveals that turbines are exceeding anticipated wildlife impacts, the standards should require that adaptive management measures be brought to bear to reduce such impacts to the "baseline" conditions predicted by the turbine operator. Where companies fail to comply with the standards for siting, constructing, monitoring, and reducing unanticipated impacts, both the FWS and interested citizens should be authorized to bring appropriate enforcement actions to ensure such compliance.

With regard to turbines already in existence, while it may be impractical to relocate them, they should not be relieved of all obligations to monitor for wildlife impacts, and to make appropriate technological and other adjustments to reduce such impacts. Accordingly, Congress should direct that the FWS should adopt specific standards – again, with public notice and comment – regarding the appropriate means to minimize and mitigate impacts at turbines already in operation. Because impacts on bats have already proven to be an enormous concern at such facilities, Congress should make clear that the standards should specifically focus on appropriate measures for reducing such impacts, including by

requiring plant operators to retrofit turbines with newly available technologies for reducing impacts and/or to compensate for them by, *e.g.*, offsetting any unavoidable impacts by purchasing and preserving in perpetuity mitigation habitat. Of course, all such turbines should remain fully subject to preexisting conservation laws, such as the ESA and MBTA.

If common-sense measures such as these are adopted to conserve precious wildlife resources, wind power will be worthy of the "green energy" and "environmentally friendly" labels that its promoters and supporters use to describe it. Without them, those labels will, over the coming years and decades, be increasingly viewed as tragically ironic, as birds, bats, and other wildlife are needlessly killed and maimed in ever-increasing numbers.