



Shaping the future for birds

American Bird Conservancy

Institutional Contact: Michael Hutchins, Ph.D., National Coordinator, Bird Smart Wind Energy Program

Address, phone number and e-mail address: 1731 Connecticut Ave., NW, 3rd Floor, Washington, EDC 20009, (202) 888-7485, mhutchins@abcbirds.org

Request for Information: Wind Energy Bat and Eagle Minimization Technologies and Field Testing Opportunities

Thank you for the opportunity to comment on this RFI. The American Bird Conservancy (ABC) is a 501(c) (3) not-for-profit membership organization whose mission is to conserve native birds and their habitats throughout the Americas. ABC acts by safeguarding the rarest species, conserving and restoring habitats, and reducing threats, while building capacity in the bird conservation movement.

ABC supports the development of clean, renewable sources of energy such as wind power, but also believes that it must be done responsibly and with minimal impact on our public trust resources, including native species of birds and bats, and particularly threatened, endangered and other protected species, such as Bald and Golden Eagles.

ABC supports Bird Smart Wind Energy, which is described in some detail on our web site (http://www.abcbirds.org/abcprograms/policy/collisions/wind_developments.html). In the case of wind energy, careful siting and mitigation is crucial in preventing the unintended impacts to America's native bird and bat species. This risk to birds and bats can be substantial, depending on the circumstances (see below).

ABC has the following comments regarding the DOE's EERE's Request for Information: Wind Energy Bat and Eagle Minimization Technologies and Field Testing Opportunities:

ABC strongly agrees with the RFI's statement that "...technologies to minimize impacts at operational facilities for most species are either in early stages of development or simply do not exist." ABC has, in fact been saying this for some time, while the wind industry and its trade organization, the American Wind Energy Association (AWEA), has been incorrectly touting the industry's current ability to effectively mitigate the impact of wind energy on birds and bats, at the same time that hundreds of thousands of birds and bats are being killed annually, many of them federally-protected species (<http://onlinelibrary.wiley.com/doi/10.1002/wsb.260/abstract>; <http://www.sciencedirect.com/science/article/pii/S0006320713003522>). Note also that these analyses do not include birds killed at associated transmission towers and lines, which could substantially increase those estimates.



Shaping the future for birds

In addition, ABC questions the RFI's statement that effective wind siting guidelines currently exist. Indeed, we have found little compliance with the FWS' current voluntary guidelines for wind energy development by both public and private entities. For example, ABC was able to shut down a proposed wind site at Camp Perry, Ohio after it was determined that the Ohio Air National Guard ignored FWS' advice on the need for an EIS and Section 7 consultation under the Endangered Species Act. Once ABC and the Black Swamp Bird Observatory threatened to sue, the Air National Guard's legal counsel agreed that they had not followed the voluntary rules and shut the project down. Similarly, the Lake Erie Business Park has built a large turbine and plans five more near Camp Perry on private land with absolutely no environmental assessment being conducted what-so-ever. Both of these projects are located within one of the most important migration corridors for neo-tropical breeding birds in North America, extending along the south shore of Lake Erie to Point Pelee in Ontario and also has the largest Bald Eagle population in the state of Ohio. There are numerous other examples, including the proposed Mill Creek facility that will be located adjacent to Squaw Creek National Wildlife Refuge and surrounding habitats in Missouri, one of only 500 sites in the U.S. designated as Important Bird Conservation Areas by ABC.

If proper siting is the most effective form of wind power mitigation, then FWS' current non-regulatory paradigm is not producing the intended results. ABC has developed a Google Earth-based wind energy risk assessment map (http://www.abcbirds.org/extra/index_wind.html), showing important bird conservation areas across the United States, and drawing upon numerous existing databases. Red areas on the map designate areas where wind should not be developed due to the substantial risk to federally-protected birds and orange areas on the map designate areas of significant concern, where great caution must be taken through pre-construction risk assessment. The red areas make up only about 6% of the total land area in the U.S. In 2014, ABC supported a research project, which overlaid the ABC map with that of the USGS and FAA maps showing both existing and proposed wind turbines. The results clearly show that the voluntary guidelines are not working. There were 8,400 existing turbines in red areas and over 10,000 planned. This is precisely why ABC and 75 other organizations recently wrote to DOI Secretary Sally Jewell requesting a national programmatic wind Environmental Impact Statement (EIS) that would designate certain areas off limits for wind energy development and require careful risk assessments in others before new wind energy developments are approved (<http://www.abcbirds.org/newsandreports/releases/140424.html>). We continue to await the courtesy of a response to our request. There is precedence for this with the recent Bureau of Land Management (BLM) Solar EIS for public lands in the west, which may provide a better roadmap for solar energy development, while also helping to protect our precious and irreplaceable natural resources.

ABC believes that methods for collecting post-construction bird kill data should be standardized and automated using new technologies that can deliver independent, real-time, accurate data on the numbers of bird strikes and kills at wind energy turbines and also at the associated



Shaping the future for birds

transmission lines and towers. ABC has become aware of new, cost-effective technologies involving high-resolution digital photography, paired with change-detection software and thermal imaging paired with audio-recording devices that could provide this data in the near future. These technologies, once tested, could be a game changer when it comes to collecting accurate, real time data on bird kills associated with wind energy development, and wind energy sites should be required to use them as a condition of receiving an incidental take permit under the Endangered Species Act (ESA) and Bald and Golden Eagle Protection Act (BGEPA). ABC also hopes that the FWS moves forward quickly to develop a permitting system under the Migratory Bird Treaty Act (MBTA), as we had requested in our petition for rulemaking (http://www.abcbirds.org/abcprograms/policy/collisions/pdf/wind_rulemaking_petition.pdf). All of this would make it less likely that bad players, hoping to avoid substantial fines, obligatory mitigation, or prosecution, would dig holes in the back forty and fill them with dead federally-protected birds—something that is entirely possible under the current self-monitoring and self-reporting system. It could also help collect data on bird and bat kills at offshore wind energy facilities, where being over open water will make it impossible to use traditional methods of carcass detection.

Along these lines, data on bird mortalities at specific wind energy facilities and the models used to predict bird (and bat) mortality need to be more transparent. Right now, these data are being treated as “proprietary information.” Yet, these are public trust resources that are being taken and the public has a right to know, so it can be an informed partner in mortality avoidance and minimization discussions. While ABC believes that appropriate siting is the best and most effective form of mitigation, there are currently several other mitigation methods—though largely untested—that the wind industry has inappropriately promoted as “effective” ways to reduce bird and bat mortality at existing facilities, including use of radar to detect birds, combined with temporary or seasonal shutdowns (e.g., during migration), lighting adjustments to reduce attraction, deterrents (e.g., audio deterrents for bats), habitat management (e.g., removal of standing water and vegetation under turbines), prey population management (e.g., for raptorial birds), and retrofitting of the associated transmission lines and towers to reduce the risk of collisions and electrocution. This, of course, can also include burying the lines.

All of these mitigation techniques have potential—under the right circumstances—to reduce bird and bat kills at wind energy sites. However, as the DOE EERE RFI points out, before they can be promoted as “effective”, they must be tested experimentally using scientifically valid methods. ABC also believes that mitigation methods should be systematically tested for their efficacy under a wide range of circumstances, including in different seasons, time of day, landscapes and weather conditions before their efficacy can be appropriately evaluated. For example, it is well known that weather conditions, such as cloud cover and strong wind, can significantly alter the migratory pathways of birds and also influence how often they come to the ground and at what height they fly. All of these factors can influence the risk of wind energy development to federally-protected birds and bats.



Shaping the future for birds

ABC believes that mitigation methods that have proven effective through independent scientific studies, such as audio deterrents for bats, transmission tower and line retrofitting and habitat management should be mandatory, not voluntary, as a condition for receiving an incidental take permit for federally-protected birds and bats. In addition, when public trust resources are taken incidentally after all of these safeguards are in place, then any losses of federally-protected birds and bats should be compensated. This could involve a wind energy company supporting needed conservation research, purchasing and setting aside habitat elsewhere and other appropriate compensatory actions, such as directly addressing other anthropogenic causes of bird and bat mortality, including feral cats, pesticides, and building collisions.

ABC strongly agrees with DOE's EERE's statement that: "More research, development, field testing, and validation of impact minimization will therefore be needed in order for the industry to grow while managing the impacts that increased wind energy development may cause to sensitive wildlife." ABC believes that our nation's headlong rush to wind energy development has gotten way out ahead of both the science and regulatory framework. This needs to change. Our nation cannot afford to begin losing important populations of birds and bats on which many of our ecological services depend. Indeed, wind energy cannot be considered "green" if it is killing hundreds of thousands of birds and bats annually, including threatened and endangered species. Our nation's native birds and bats are not "collateral damage" in our war on climate change, especially since much of the current conflict could be addressed through better science and regulation.

One of the biggest challenges ABC sees going forward is the assessment of the cumulative impacts of all anthropogenic and natural causes of bird and bat mortality to obtain an accurate picture of the potential impact of energy development, including wind and solar, on native bird and bat populations. Indeed, we do not see how the goal of "no net loss" of Eagle populations can effectively be obtained in the absence of this information. In our discussions with federal agency personnel, it has become quite clear that the models used for these predictive assessments are also largely untested, thus making the maximum take limits established by incidental take permits highly questionable. This is one of the reasons that ABC opposes the FWS' establishment of 30-year incidental take permits for Golden and Bald Eagles. Given the uncertainty involved, we do not see how the FWS could have established such a guideline without first conducting a detailed analysis of the potential implications of a 30-year permit on Eagle populations, as is required by NEPA. Furthermore, if the FWS is counting on untested mitigation methods to resolve high levels of bird and bat mortality post-construction, then we also find the entire process that has been developed for the siting and mitigation of wind energy facilities highly problematic. This is especially concerning given the fact that no wind energy facility has ever been shut down post-construction, even if high levels of bird and bat mortality have been confirmed, including federally-protected species (e.g., Altamont, CA, Criterion, MD). In addition, to date, only one wind energy company (i.e., Duke Energy) has so far been prosecuted for killing large numbers of federally-protected birds. In summary, the



Shaping the future for birds

BGEPA, ESA and MBTA are simply not being enforced when it comes to wind energy development.

The willingness of wind energy companies to engage in the proposed studies and to use the monitoring and mitigation technologies once they are developed will tell us a lot about how serious they are about working with the conservation community and regulators to make things better. ABC remains skeptical as we have so far seen little interest in adopting Bird Smart Wind Energy Principles as defined by ABC

(http://www.abcbirds.org/abcprograms/policy/collisions/wind_policy.html). We sincerely hope that this changes and that industry will not only embrace the need for better siting, mitigation and compensation, but will also push for and adopt mandatory, not voluntary siting guidelines and support a national programmatic wind EIS for both public and private lands.

While ABC would support an extension of a Production Tax Credit (PTC) to assist with wind energy development, this should only be done under a mandatory (not voluntary) permitting process that ensures that our nation's irreplaceable and ecologically critical native birds and bats are sufficiently protected. ABC also notes that some of these PTC awards have gone to projects being sited in areas that have low wind resources. ABC also believes that PTC credits should only be given to projects that are in areas that have high wind resources, so that the investment makes sense from an economic viewpoint.

Please do not hesitate to contact us if you need any further information. ABC stands ready to assist DOE EERE as it moves forward to effectively balance the development of alternative energy with the risks posed to our nation's wildlife and their habitats. In particular, the current system of voluntary permitting and self-reporting of bird and bat deaths is not working to protect our nation's public trust resources, and is in need of significant change. You can contact me by phone at 202-888-7485 or by e-mail at mhutchins@abcbirds.org. Thank you for your consideration.

Sincerely,

Michael Hutchins, Ph.D.
National Coordinator, Bird Smart Wind Energy Campaign