AMERICAN BIRD CONSERVANCY

Shaping the future for birds

September 27, 2016

To Whom It May Concern:

I am writing to express the American Bird Conservancy's (ABC's) concerns about Charlotte, VA-based Apex Clean Energy's plan to build the Timbermill Wind Energy Project (WEP) in Chowan and Perquimans Counties, North Carolina, just northeast of the town of Edenton. The project, which would be comprised of 105 600-foot tall wind turbines extended over 15,000 acres of mixed forest land near Albermarle Sound, just north of Pamlico Sound. Most importantly, the proposed site is almost completely surrounded by designated Important Bird Areas (IBAs) and national wildlife refuges, including Holy Shelter-Angola Bay IBA, Lake Mattamuskeet-Swanquarter IBA, Croatan Forest IBA, Alligator River lowlands IBA, Pungo-Pocosin Lakes IBA, Cedar Island Marsh IBA, Chowan River Bottomlands IBA, Great Dismal Swamp National Wildlife Refuge and others. This project would be located in the Atlantic Flyway, a major migratory route for vast numbers of ecologically important birds, many either federally protected or of conservation concern.

ABC is a 501(c) (3) not-for-profit membership organization whose mission is to conserve native birds and their habitats throughout the Americas (https://abcbirds.org/). 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.

ABC is a proponent of Bird Smart Wind Energy, which is described in some detail in Hutchins et al. (2016). In the case of wind energy, careful wind generation siting is crucial in preventing the unintended impacts to America's native bird species, and ABC is concerned that the proposed site for this project, so close to so many protected areas and in a major migratory route for birds, poses an unacceptably high potential risk to protected wildlife species.

This risk can be substantial, with hundreds of thousands of birds and bats being killed annually, at minimum, through collisions with the fast-moving turbine blades (Erickson et al. 2015, Smallwood, 2013, Loss et al. 2013). This estimate balloons into the tens of millions when collisions and electrocutions at their associated infrastructure, notably power lines and towers, is included (Loss et al. 2015). Wind turbines are also known to cause displacement and reproductive failure in declining grassland breeding birds (e.g., Shaffer and Buhl 2015, Stevens et al. 2013).

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Vast numbers of migratory waterfowl, including Snow Geese, and a wide variety of duck species, such as Northern Pintail and Green-wing Teal move through this area during their spring and fall migration. All of these species are protected under the Migratory Bird Treaty Act (MBTA), as are various species of songbirds. This could put the project in violation of the Endangered Species Act (ESA), Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) as well as open it up to potential legal action under ESA and BGEPA.

Federally protected Bald Eagles are abundant in the area. According to the American Wind and Wildlife Institute (AWWI), "Generating electricity from wind can wound or kill eagles when they collide with turbine blades, and can also disturb eagles during construction and operation of the wind energy facility resulting in nest abandonment or displacement from breeding territories."

The Bald and Golden Eagle Protection Act precludes the killing of even a single eagle without an incidental take permit issued by the FWS. There is currently no incidental take permit available for federally protected migratory birds under MBTA; however, there could be soon, and FWS may still take discretionary prosecutorial action when appropriate. It should be noted that local siting boards which decide to give permission for poorly sited wind energy projects to be built based on questionable scientific information (e.g., limited daytime visual surveys or non-advanced radar studies that cannot measure volume and altitude) may also be legally liable for their actions. Local elected officials should also take note that a recent survey found that a majority of U.S. voters support measures to protect wildlife from energy development, including renewable energy (National Audubon Society 2016).

Wind energy developers are supposed to assess the risks associated with their projects to sensitive, protected wildlife. However, there is a problem with such studies being conducted by paid consultants to industry—a direct conflict of interest. Hiring paid consultants to collect this data preordains the result and is a clear violation of the first principle of scientific integrity, that is, that data should not be collected by individuals with a vested interest in the outcome:

"Scientists with conflicts of interest are viewed as being at least partially integrity-compromised, and, even with complete and open disclosure, are regarded, at least to an extent, as of suspect scientific credibility" (Rowe and Alexander 2012).

It is therefore not surprising that independent researchers have found a very poor correlation between pre-construction risk studies at wind energy facilities and actual number and type of birds killed post-construction (Ferrer et al, 2011).

We note that paid consultants would not be in business very long if their findings and testimony did not support the goals of their employers. This conflict of interest calls into question the validity of any studies they conduct. Hawaii is currently the only state in the union where bird

and bat kill data are collected by independent, third-party experts and reported directly to regulatory agencies (Hutchins 2016).

Similarly, transparency of bird and bat kill data has been a continuing and serious problem with wind energy development in the United States, and at least two wind developers have sued to keep their data secret (ABC 2016, Associated Press 2015, Jackson 2016). If this project is eventually built despite widespread opposition, then all post-construction bird and bat fatality data should be collected by independent, third party experts using standardized methods and reported directly to regulatory agencies.

These data should also be made available to the public and concerned conservation organizations. Our native birds and bats are not owned by wind energy companies, regardless of whether they are on public or private land. They are owned by the American people and held in trust for this and future generations. These are public trust resources being taken and the public has a right to know (ABC, 2015, Clarke 2014). Sadly, Hawaii is currently the only state in the union that makes bird and bat fatality data available to the public and concerned conservation organizations on request (Hutchins 2016).

If there are threatened and endangered species in the area—none of which can be taken without incidental take permits authorized by FWS—then the presence of listed species, such as Kirtland's Warbler and Bachman's Warbler , will, in our opinion, necessitate an Environmental Impact Statement (EIS) and Section 7 consultation with the FWS to comply with the Endangered Species Act (ESA). State Species of Concern in North Carolina could also inhabit the area during some portion of the year. The presence of eagles will also will mean that the developer will need to apply for an incidental take permit under BGEPA.

Should this controversial project be approved, a plan for compensating the public for any loss of federally protected species should be worked out before any construction takes place, and should include setting aside or rehabilitating additional lands outside the project area for bird and bat conservation purposes. If and when data show that large numbers of birds and bats are killed by the project when it begins operation, especially federally and state protected species, then the option of total shut down and dismantlement of the turbines must be considered – and that should be made clear at the outset.

The developer will also claim that they know how to mitigate for bird kill at wind energy facilities, but, according to a recent review, the only proven mitigation methods to date are proper siting and curtailment (Arnett and May 2016). Curtailment of the wind turbine blades is not a popular solution for wind energy companies, as it cuts into their profit margins.

The wind energy industry publically claims to be concerned about bird and bat mortality, but continues to try to build large, commercial wind energy facilities in major migratory corridors

and sensitive breeding areas for birds and bats in the United States (Casey 2015), thus placing our continent's ecologically important wildlife at great risk.

Some segments of the public, and even some mainstream conservation organizations, seem to be treating large scale, commercial wind energy as if it were our only hope to address global climate change. In fact, there are many other alternative approaches, such as forest, soil, ecosystem, and biodiversity conservation, energy efficiency, reduction in meat consumption, and distributed solar on our already-built environment, that would be just as effective, but not have the same destructive impacts on wildlife as large, commercial wind energy projects. Even the U.S. Fish and Wildlife Service recognizes that the contribution of wind energy to addressing climate change will be minimal at best:

"If the volume of development increases over what it would have been without the new permit regulations, then the increased amount of fossil fuel emissions that are replaced by wind energy production could provide a greater beneficial impact of the proposed action, although in the context of planetary emissions the impact on climate change would still be minor." (FWS 2016, page xiii).

ABC questions whether the sacrifice of hundreds of thousands, if not millions, of our nation's ecologically important birds and bats justifies building any large, commercial wind energy facility in areas with high concentrations of birds and bats, like the Great Lakes. The ecological services—pest control, pollination, and seed dispersal--that birds and bats provide are worth billions to the Canadian and U.S. economies (Sekercioglu, 2015, Sekercioglu et al. 2016). Bird watching also generate tens of millions of dollars in income through travel and recreational equipment purchases (Kaufman 2016). Yet, many of North America's bird species are in precipitous decline, with over a third currently in need of concerted conservation action to ensure their future (North American Bird Conservation Initiative 2016).

We should remember that hydroelectric dams were once touted as the answer to clean, renewable energy, but are now being torn down due to their unexpected negative impacts on wildlife (e.g., salmon) and their habitats (Howard 2016, Yaggi 2016). Poorly sited large, commercial wind facilities could share a similar fate. Furthermore, a recent study has shown that more immediate threats to wildlife are the traditional ones, including agriculture, over-exploitation and development, not climate change (Maxwell et al 2016). Despite its benefits, poorly sited wind energy is another form of development, altering wildlife habitat and directly killing large numbers of birds and bats.

As a bird conservation organization, our primary concern is ensuring a future for native bird populations, particularly threatened, endangered and other federally-protected species. Poorly-sited wind energy development is just another human-caused factor leading to bird fatalities, one that can be avoided with proper planning. The cumulative impact of numerous major human-caused sources of bird mortality, notably feral domestic cats, building and vehicle

collisions, pesticides, energy development and habitat loss is unsustainable. We have lost over 1.5 billion birds in North America in the past decades alone and cannot continue down this path. All major sources of bird and bat mortality must be addressed at some level.

This particular project appears to be very poorly sited from the perspective of bird (and possibly bat) conservation and we would urge that alternative sites be considered. The fact that this wind energy developer is trying to build here demonstrates their complete distain for the well-being of our nation's and the state of North Carolina's wildlife. Should you have any questions regarding our comments, please do not hesitate to contact me.

Sincerely,

Michael Hutchins, Ph.D.
Director, Bird Smart Wind Energy Campaign

Cc: D. Ashe, j. Ford, C. Dohner, G. Myers

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