AMERICAN BIRD CONSERVANCY

Bringing back the birds

Governor Rick Snyder
P.O. Box 30013
Lansing, Michigan 48909

May 8, 2017

Dear Governor Snyder:

I am writing on behalf of the American Bird Conservancy (ABC) to express serious concern about Heritage Sustainable Energy's plans to build additional large-scale commercial wind turbines close to Lake Michigan, within a major flyway and close to existing state forests and parks, important stopover areas for migratory birds. ABC opposes the construction of any wind turbines either in or within 5-10 miles of the Great Lakes shorelines due to the risks it poses to our Nation's irreplaceable and economically and ecologically important migratory birds and bats (Hutchins 2017).

ABC is a 501(c) (3) not-for-profit membership organization whose mission is to conserve native birds and their habitats throughout the Americas (www.abcbirds.org). ABC acts by safeguarding the rarest species, conserving and restoring habitats, and reducing threats, while building capacity in the bird conservation movement.

As you probably know, the Great Lakes are one of the world's greatest confluences of migratory birds and bats making their way to and from the boreal forests of Canada to breed. Birds and bats use the shorelines to feed and rest as they move around and over these large freshwater barriers during their north-south migrations (Archibald et al. 2016).

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 unintended impacts to native bird and bat species, and ABC is concerned that the proposed site for this project poses an unacceptably high risk to protected and shared Canadian and U.S. wildlife. In the United States, the second leading wind power producer in the world, 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; Smallwood and Thelander 2008). This estimate balloons into the tens of millions when collisions and electrocutions at their associated infrastructure, notably power lines and towers, are 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). Displacement could also occur in marine and freshwater birds as well. Conversely, some migratory raptors are attracted to offshore wind turbines, thus increasing their danger (Skov et al. 2016).

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

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breeding areas for birds and bats in the United States (Casey 2015) and Canada, 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 will not have the same destructive impacts on wildlife as poorly sited, large, commercial wind energy projects. Even the U.S. Fish and Wildlife Service (FWS) 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 shared continent's ecologically important birds and bats justifies building any large, commercial wind energy facility or associated power lines and towers in areas with high concentrations of birds and bats, like near the Great Lakes' shorelines or in 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 et al. 2016). Bird watching also brings millions of dollars through travel and recreational equipment purchases (Kaufman 2016). Unfortunately, many of North America's bird species are already in precipitous decline, with over one third in need of concerted conservation action in order 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 have a similar profile. 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.

Siting additional large, commercial wind energy turbines in a major migratory route and against the recommendations of the FWS (see attached letter) would be a mistake of epic proportions, and ABC urges you and Michigan State Government to give careful consideration to this ill-conceived project, which has already places turbines close to the Lake in defiance of FWS recommendations.

Industry consultants and owners, such as those promoting this project, frequently claim that large, commercial wind projects pose little threat to migratory birds as they fly far above the rotor swept areas of the turbines. However, recent advanced radar studies conducted by the U.S. Fish and Wildlife Service (FWS) on Lake Erie, Lake Michigan and Lake Ontario show this to be patently false. Horton et al (2016), Rathbun et al. (2016) and Bowden et al. (2015) all found vast numbers of birds and bats moving along

the shorelines and over the lakes, and furthermore, that they frequently flew within the rotor-swept area of wind turbines, thus placing them at great risk of collision.

Recognizing this threat, the FWS currently recommends that no wind turbines be built within three miles of the Great Lakes shorelines. Nature Conservancy recommends five miles. These new studies suggest that the setbacks should be extended to 5-10 miles (Miner 2016). Furthermore, these studies essentially invalidate the findings of paid consultants who typically base their conclusions on limited daytime visual observations or inadequate radar studies, while the vast majority of songbird and bat migration occurs at night and many radar studies do not measure altitude. Bird behavior and flight height can also vary by weather, particularly wind speed and direction and cloud cover or fog, which could also place some species at great risk under the right conditions (Ainley et al. 2015).

Wind energy developers are supposed to assess the risks associated with this development to sensitive wildlife, especially birds and bats. However, there is a problem with such studies being conducted by paid consultants to industry. 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 the people collecting the data should not have a stake in its 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 and bats killed post-construction (Ferrer et al. 2011, Lintott et al. 2016). 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.

Similarly, transparency of bird and bat kill data has been a continuing and serious problem with wind energy development in the United States and Canada (Associated Press 2015, Jackson 2016, Wrightman 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. These are public trust resources being taken and the public has a right to know (ABC, 2015, Clarke 2014, Wrightman 2016).

Should Heritage Sustainable Energy be allowed to move forward with this project, a plan for compensating the public for any loss of state and 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 data show that large numbers of birds and bats are killed by the project when it begins operation, especially 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 the only proven mitigation methods to date are proper siting and curtailment (Arnett and May 2016). Curtailment of the wind turbines is not a popular solution for wind energy companies, as it cuts into their profit margins.

ABC considers the poorly sited Heritage Garden Peninsula Wind Energy Project another example of the wind industry's blatant disregard for Canadian and U.S. protected wildlife. ABC notes that the United States and Canada share their migratory wildlife and have a legal and moral obligation to protect our ecologically important birds, both being signatories of the 100 year-old Migratory Bird Treaty Act, one of the most important, but least enforced pieces of environmental legislation on our continent (Clarke 2014b). This is precisely why ABC recently sued the Ohio Air National Guard's Camp Perry facility for trying to build a large turbine within one mile of the southern Lake Erie shoreline (ABC 2017b)--an area well known to be within a major migratory route for both birds and bats.

Thank you for your consideration. ABC will be watching the outcome of wind energy development in the Great Lakes' region very carefully, including this attempt to expand the Garden Peninsula Project. .

Respectfully Yours,

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Director, Bird Smart Wind Energy Campaign

Cc: J. Ford

References

ABC 2015. Bird conservation group calls for changes in collection of data at wind developments. https://abcbirds.org/article/bird-conservation-group-calls-for-changes-in-collection-of-data-at-wind-developments/

ABC 2017a. Wind turbines on the Great Lakes threaten migratory birds. https://abcbirds.org/article/wind-turbines-on-the-great-lakes-threaten-migratory-birds/

ABC. 2017b. Bird groups sue to stop Lake Erie wind project. https://abcbirds.org/article/bird-groups-sue-stop-lake-erie-wind-project/

Archibald, K.M., Buler, J.J., Smolinsky, J.A., and Smith, R.J. 2016. Migrating birds reorient toward land at dawn over the Great Lakes, USA. The Auk 134: 193-201.

Arnett, E.B. and May, R.F. 2016. Mitigating wind energy impacts on wildlife: Approaches for multiple taxa. Human-Wildlife Interactions 19: 28-41.

http://www.berrymaninstitute.org/files/uploads/pdf/journal/spring2016/MitigatingWindEnergyArnettMay.pdf

Ainley, D.G., Porzig, E., Zajanc, D., and Spear, L.B. 2015. Seabird flight behavior and height in response to wind strength and direction. Marine Ornithology 43: 25-36.

Associated Press. 2015. PacifiCorp sues to block release of bird-death data at wind farms. Oregonlive.com: http://www.oregonlive.com/business/index.ssf/2014/11/pacificorp_sues_to_block_relea.html

Bowden, T.S., Olson, E.C., Rathburn, N.A., Nolfi, D.C., Horton, R.L., Larson, D.J., and Gosse, J.C. 2015. Great Lakes Avian Radar Technical Report Huron and Oceana Counties, Michigan. U.S. Department of Interior, Fish and Wildlife Service, Biological Technical Publication FWS/BTP-2015. https://www.fws.gov/radar/documents/AvianRadarTechnicalReportFall2011.pdf

Casey, M. 2015. 30,000 wind turbines located in sensitive areas for birds. CBSNews.com: http://www.cbsnews.com/news/30000-wind-turbines-located-in-critical-bird-habitats/

Clarke, C. 2014 a. It's time for independent monitoring of wildlife kills at renewable energy sites. KCET: https://www.kcet.org/redefine/its-time-for-independent-monitoring-of-wildlife-kills-at-renewable-energy-sites

Clarke, C. 2014 b. Expert: There is a problem with Fish and Wildlife's enforcement of bird law. https://www.kcet.org/redefine/expert-theres-a-problem-with-fish-and-wildlifes-enforcement-of-bird-law

Erickson , W.P., Wolfe, M.M.,. Bay, K.J., Johnson, D.H., and Gehring, J.L. 2014. A comprehensive analysis of small-passerine fatalities from collision with turbines at wind energy facilities. Plos One: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0107491

Ferrer, M., de Lucas, M., Janss, G.F., Casado, E., Munoz, A.R., Bechard, M.J., and Calaqbuig, C.P. 2011. Weak relationship between risk assessment studies and recorded mortality in wind farms. Journal of Applied Ecology 49: 38-46.

FWS. 2016. Draft Programmatic Environmental Impact Statement for the Eagle Rule Revision. Washington, DC: U.S. Fish and Wildlife Service.

Horton, R., Rathbun, N., Bowden, T., Nolfi, D., Olson, E., Larson, D.J., and Gosse, J.C. 2016. Great lakes Radar technical Report Lake Erie Shoreline: Erie County, Ohio and Erie County, Pennsylvania, Spring 2012. U.S. Department of the Interior, Fish and Wildlife service, Biological technical Publication FWS/BTP-R3012-2016. https://www.fws.gov/radar/documents/Avian%20Radar%20Sp2012%20Erie%20Full.pdf

Howard, B.C. 2016. River revives after largest dam removal in U.S. history. National Geographic.com: http://news.nationalgeographic.com/2016/06/largest-dam-removal-elwha-river-restoration-

environment/?utm_source=Facebook&utm_medium=Social&utm_content=link_fb20160602news-elwhariver&utm_campaign=Content&sf27752028=1

Hutchins, M., Parr, M. and Schroeder, D. 2016. ABC's bird smart wind energy campaign: protecting birds from poorly sited wind energy development. Human Wildlife interactions 10 (1): 71-80. http://www.berrymaninstitute.org/files/uploads/pdf/journal/spring2016/ABCsBird-SmartHutchinsEtal.pdf

Hutchins, M. 2017. Commentary: Wind turbines around the Great Lakes? A terrible idea for birds, bats. Chicago Tribune: http://www.chicagotribune.com/news/opinion/commentary/ct-wind-turbines-birds-bats-great-lakes-perspec-0410-md-20170407-story.html

Jackson, T. 2016. Wind farm sues to block bird death data release. Sandusky Register: http://www.sanduskyregister.com/Environment/2016/06/24/Wind-farm-sues-to-block-bird-death-data-release

Kaufman, K. 2016. Economic impact: Why birds and birding matter. Toledo Chamber of Commerce: http://www.toledochamber.com/blog/economic-impact-why-birds-and-birding-matter

Lintott, P.R., Richardson, S.M. Hosken, D.J., Fensome, S.A., and Mathews, F. 2016. Ecological impact assessments fail to reduce risk of bat casualties at wind farms. Current Biology 26 (21): http://www.cell.com/current-biology/pdf/S0960-9822(16)31188-5.pdf

Loss, S.R., Will, T., and Marra, P.P. 2013. Estimates of bird collision mortality at wind facilities in the contiguous United States. Biological Conservation 168: 201–209.

Loss, S.R., Will, T., and Marra, P.P. 2015. Refining estimates of bird collision and electrocution mortality at power lines in the United States. PLoS ONE 9(7): e101565. doi:10.1371/journal.pone.0101565.

Maxell, S.L., Fuller, R.A., Brooks, T.M., and Watson, J.E.M/ The ravages of guns, nets and bulldozers. Nature 536: 143-145.

Minor, J. 2016. Study calls for 16-km turbine setback. The London Free press: http://www.lfpress.com/2016/08/15/study-calls-for-18-km-turbine-setback

North American Bird Conservation Initiative. 2016. State of the Birds, 2016. http://www.stateofthebirds.org/2016/wp-content/uploads/2016/05/SotB_16-04-26-ENGLISH-BEST.pdf

Ontario Ministry of Natural Resources. 2011. Bird and Bird Habitats: Guidelines for Wind Power Projects. Ontario, Canada.

Rathbun N. A., T. S. Bowden, R. L. Horton, D. C. Nolfi, E. C. Olson, D. J. Larson, and J. C. Gosse. 2016. Great Lakes Avian Radar Technical Report; Niagara, Genesee, Wayne, and Jefferson Counties, New York; Spring 2013. U.S. Department of Interior, Fish and Wildlife Service, Biological Technical Publication

FWS/BTP-301 2016.
https://www.fws.gov/radar/documents/Avian%20Radar%20Sp2013%20Ontario%20Full.pdf

Rowe, S. and Alexander, N. 2012. Ensuring Scientific Integrity: Guidelines for Managing Conflicts. International Union of Food Science and Technology Bulletin 1:
http://iufost.org/iufostftp/IUF.SIB.Ensuring%20Scientific%20Integrity.pdf

Saskatchewan Ministry of the Environment. 2016. Wildlife Siting Guidelines for Saskatchewan Wind Energy Projects. Fish and Wildlife lands Branch, Saskatchewan Ministry of the Environment.

Sekercioglu, C. H., D. G. Wenny, and C. G. Whelan, editors. 2016. Why birds matter: avian ecological function and ecosystem services. University of Chicago Press, Chicago, Illinois, USA.

Shaffer, J. A., and D. A. Buhl. 2015. Effects of wind energy facilities on breeding grassland bird distributions. Conservation Biology 30:59–471.

Skov, H., Desholm, M., Heinänen, S., Kahlert, J.A., Laubek, B., Jensen, E.N., Žydelis, R., and Jensen, B.P. 2016. Patterns of migrating soaring migrants indicate attraction to marine wind farms. Biology Letters 12 (12: DOI: 10.1098/rsbl.2016.0804.

Smallwood, S.K. 2013. Comparing bird and bat fatality rate estimates among North American wind-energy projects. Wildlife Society Bulletin 37 (1): 19–33.

Smallwood, K. S. and Thelander, C. G. 2008. Bird mortality in Altamont Pass Wind Resource Area California. J. Wildl. Manage.72: 215–223.

Stevens, T. K., Hale, A.M., Karsten, K.B. and Bennett, V. J. 2013. An analysis of displacement from wind turbines in a wintering grassland bird community. Biodiversity and Conservation 22:1755–1767.

Yaggi, M. 2016. Removal of 4 dams to reopen 420 miles of historic salmon habitat on Klamath River. EcoWatch: http://ecowatch.com/2016/04/07/dam-removal-klamath-river/

Wrightman, E. 2016. The right to know: Releasing wind turbine bird & bat death data. http://ontario-wind-resistance.org/2016/08/04/the-right-to-know-releasing-wind-turbine-bird-bat-death-data/