

Bringing back the birds

July 31, 2017

Tristan Grimbert President and CEO EDF Renewables 15445 Innovation Drive San Diego, CA 92128

Dear Mr. Grimbert:

I am writing to express American Bird Conservancy's (ABC's) serious concern over EDF Renewable's proposed Vista Mountain Wind Power Project in the sensitive Texas Hill Country/Cross Timbers region (in Hamilton, Coryell, Lampasas and Mills Counties) and associated high voltage lines and towers to connect it to the existing grid.

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.

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 adverse 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). Careful wind generation siting is crucial in preventing unintended impacts to native bird and bat species, and ABC is concerned that the proposed Vista Mountain Wind Power Project and its associated power lines and towers pose an unacceptably high risk to protected U.S. wildlife.

This project will reportedly consist of 91 500-foot tall turbines set atop 1,400-foot vistas and spread out over four counties and with a four mile-long high voltage line and towers (and the possibility of additional lines) connecting it to the existing grid. All of the counties the project encompasses are located in the ecologically sensitive Texas Hill Country/Cross Timbers Region on the Edwards Plateau. The Edwards Plateau is a region of west-central Texas bounded by the Balcones Fault to the south and east, the Llano Uplift and the Llano Estacado to the north, and the Pecos River and Chihuahuan Desert to the west. The cities of San Angelo, Austin, San Antonio and Del Rio roughly surround the region.

The landscape of the plateau (eroded flat-topped buttes and escarpment capped by Edwards limestone) is mostly savanna covered primarily with juniper and live oak trees and a mesquite-acacia mix over short grasses, which grow well in the alkaline soils. Extensive grasslands are interspersed with valleys, with high, narrow wooded, mesa-like divides. The area is largely undeveloped, containing many ranches that raise cattle, sheep and goats. Wildlife is abundant. The region is a birder's paradise, with many species either residing in, wintering in, or moving through the area during their annual migrations. These include several Threatened and Endangered Species, such as the Black-Capped Vireo, Least Tern, Piping Plover, Red Knot and Whooping Crane (the location is within the whooping Crane Migratory Corridor). It is also home to many declining avian species of conservation concern, such as the Golden-Cheeked



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Warbler, Harris' Sparrow, Lark Bunting, Lewis's Woodpecker, Loggerhead Shrike, Orchard Oriole, Painted Bunting, Scissor-tailed Flycatcher. Mccowan's Longspur, Short-eared Owl, Prothonotary Warbler, Sprague's Pipit, Dickcissel, Fox Sparrow, Little Blue Heron, Chestnut-collared Longspur, Burrowing Owl, Le Conte's Sparrow, Bell's Vireo, and Hudsonian Godwit (FWS 2017). Federally protected Bald Eagles are also present and are being sighted with increasing regularity.

When it comes to wind energy, siting is everything, and turbines and their associated power lines and towers, need to be kept away from large concentrations of birds and bats, such as key migratory routes, and foraging and breeding areas (Arnett and May 2016, Hutchins et al, 2016). Wind turbines and their associated power lines and towers, are among the fastest growing threats to birds and bats in North America. Hundreds of thousands of birds are killed annually by the fast-spinning turbine blades (Smallwood and Thelander 2008, Loss et al. 2013, Smallwood, 2013, Erickson et al. 2014), and that number grows with each turbine built. Bats are affected too, with around 888,000 being lost annually at 2012 build-out levels (Smallwood 2013), possibly because tree-roosting species are attracted to turbines (Cryan et al. 2014). Fragile-bodied bats can even succumb to the pressures created when the turbine blades pass through the air (known as barotrauma) (Grodsky et al. 2011).

The actual numbers of birds and bats killed may be much higher because nearly all mortality data are collected by paid consultants to the wind industry—a direct conflict of interest (Hutchins et al. 2016), and sampling is often insufficient or non-standardized (Beston et al. 2015, Johnson et al. 2016). Based on the Smallwood (2013) and Loss et al. (2013) studies, ABC estimates that around 5 million birds and many more bats will be killed by wind turbines alone by 2050 or earlier when wind energy produces 35% of our electrical energy (Pyper 2015). This is especially true, since our native birds are already in serious trouble, with fully one-third of North America's species requiring concerted conservation action to ensure their continued existence (North American Bird Conservation Initiative 2016).

Yet the numbers are far higher, going into the tens of millions annually when collisions and electrocutions at power lines and towers are included (Loss et al. 2015). The generation of energy and its transportation cannot be separated as risks to wildlife, and many additional transmission lines are being built to accommodate renewable energy (Magill 2014).

Furthermore, these figures do not take into account the effects of habitat loss, road-building and other infrastructure construction that are associated with wind energy facilities, and that can have serious impacts on birds and bats, such as displacement, migratory impediments, reproductive failure, isolation and loss of genetic diversity, and increased predation (Schroeder 2010, Cryan 2011, Stevens et al. 2013, LeBeau et al. 2014, DeGregorio et al. 2015, Schaffer and Buhl, 2015, Winder et al. 2015, Associated Press 2016, Mahoney and Chalfoun 2016).

We understand that Fort Hood was contacted as a prospective buyer for energy produced by this project. Only some 19 miles away from the proposed Vista Mountain project, this facility has been an important center for Golden-Cheeked Warbler and Black-Capped Vireo conservation (Ferrell et al. 2013). Furthermore, two Endangered Whooping Cranes were sighted at Fort Hood during Spring, 2017 (<u>http://whoopingcrane.com/spring-migration-2017/</u>). The Department of Defense has an excellent record with regard to bird conservation and ABC would therefore be surprised if it would consider purchasing power from such a poorly placed wind energy facility. Responsible energy consumers should

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first assure that the wind energy facilities they buy from are bird and bat friendly. This was demonstrated most recently with ABC's and Black Swamp Bird Observatory's success in stopping a large wind turbine to be built at the Ohio Air National Guard's Camp Perry facility in one of the world's greatest concentrations of migratory birds and bats within 0.6 miles of Lake Erie (ABC 2017).

We realize that these projects are in their early stages of development. However, we wanted to record our concerns before the process proceeds any farther. Both the turbines and associated power transmission lines appear to be poorly sited with regard to bird and bat conservation. At the very least, these projects will require extensive, independent surveys of the birds and bats that inhabit the region, as well as an Avian and Bat Conservation Plan, a compensatory mitigation plan (including a plan for installing APLIC-approved mitigations for the new power lines and towers, APLIC 2012), and plan for the independent, standardized monitoring of bird and bat mortality post-construction. Applications for incidental take permits under the Endangered Species Act and Bald and Golden Eagle Protection Act are also warranted.

ABC would be pleased to consult with you as this project proceeds. We also intend to monitor this project very closely for adherence to all state and federal guidelines, to communicate with local residents concerned about the project, and to raise our concerns with elected officials, state and federal wildlife authorities, and any prospective buyers of energy.

Thank you for your consideration of ABC's views.

Sincerely,

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

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References

American Bird Conservancy (ABC). 2017. Bird conservation groups win fights against Great Lakes wind project. ABC press release: <u>https://abcbirds.org/article/bird-conservation-groups-win-fight-great-lakes-wind-project/</u>

Agha, M., Smith, A.L., Lovich, J.E., Delaney, D., Ennen, J.R., Briggs, J., Fleckenstein, L.J., Tennant, L.A., Puffer, S.R., Walde, A., Arundel, T.R., Price, S.J. and Todd, B.D. 2017. Mammalian mesocarnivore visitation at tortoise burrows in a wind farm. Journal of Wildlife Management, DOI: 10.1002/jwmg.21262.



Agnew, R.C.N., Smith, V.J., and Fowkes, R.C. 2016. Wind turbines cause chronic stress in badgers (Meles meles) in Great Britain. Journal of Wildlife Diseases 52(3): 1-9. DOI; 10.7589/2015-09-231.

APLIC (Avian Power Line Interaction Committee). 2012. Reducing Avian Collisions with Power Lines. Washington, DC: Edison Electric Institute.

Beston, J.A., Diffendorfer, J.E., and Loss, S. 2015. Insufficient sampling to identify species affected by wind turbine collisions. Journal of Wildlife Management 79 (3): 513–517.

Farrell, S.L., Ciollier, B.A., Snow, K.L., Long, A.M., Campomizzi, A.J., Morrison, M.L., and Hays, K.B. 2013. Using LiDAR-derived vegetation metrics for high-resolution, species distribution models for conservation planning. Ecosphere 4(3):1-18. <u>http://dx.doi.org/10.1890/ES12-000352.1</u>

FWS. 2017. IPac resource list for Mills Country, TX. <u>http://ecos.fws.gov/ipac/location/QG56A2NDHRGZHAQQQEDPTA3BVY/resources</u>

Cryan, P. M. et al. 2014. Behavior of bats at wind turbines. PNAS. doi: 10.1073/pnas.1406672111.

Cryan, P.M. 2011. Wind turbines as landscape impediments to the migratory connectivity of bats. Environmental Law: <u>https://www.lclark.edu/live/files/8520-412cryan</u>

DeGregorio, B.A., Weatherhead, P.J., and Sperry, J.H. 2014. Power Lines, roads and avian nest survival: Effects on predator identity and predation intensity. Ecology and Evolution 4(9): 1589-1600.

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

Grodsky, S.M., Behr, M.J., Gendler, A., Drake, D., Dieterle, B.D. and Rudd, R.J., and Walrath, N.L. 2011. Investigating the causes of death for wind turbine-associated bat fatalities. Journal of Mammalogy 92 (5): 917-925.

Hutchins, M., Parr, M. and Schroeder, D. 2016. ABC's bird smart wind energy campaign: protecting birds from poorly sited wind turbines. Human Wildlife interactions 10 (1): 71-80.

Johnson, D.H., Loss, S.R., Smallwood, K.S., and Erickson, W.P. 2016. Avian fatalities at wind energy facilities in North America: a comparison of recent approaches. Human-Wildlife Interactions 10 (1):7–18.

Lebeau, C.W., Beck, J.L., Johnson, G.D., and Holloran, M.J. 2014. Short-term impacts of wind energy development on Greater Sage-grouse fitness. The Journal of Wildlife Management 78(3): 522-530.

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.

Magill, B. 2014. Wind, solar boosting investment in power lines. Climate Central, Sept. 14, 2014: <u>http://www.climatecentral.org/news/wind-solar-boosting-investment-in-power-lines-17949</u>

Mahoney, A. and Chalfoun, A.D. 2016. Reproductive success of Horned Lark and McCown's Longspur in relation to wind energy infrastructure. The Condor 118 (2): 360-375.

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

Pyper, J. 2015. Energy Department says wind could make up 35% of US electricity generation by 2050. GreenTech Media: <u>https://www.greentechmedia.com/articles/read/wind-could-make-up-one-third-of-us-electricity-generation-by-2050</u>

Schroeder, M.A. 2010. Greater Sage-grouse and power lines: Reasons for concern. Washington Dept. of Fish and Wildlife report: <u>http://wdfw.wa.gov/publications/01303/wdfw01303.pdf</u>

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

Smallwood, S.K. 2013. Comparing bird and bat fatality rate estimates among North American windenergy 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.

Winder, V.L., Gregory, A.J., McNew, L.B., and Sandercock, B.K. 2015. Responses of male Greater Prairie-Chickens to wind energy development. Condor 117: 284-296.