Rocky Forge Wind LLC C/o Apex Clean Energy, Inc. 310 4th St. NE, Suite 200 Charlottesville, VA 22902 August 3, 2016

Virginia Dept. of Environmental Quality Attn: Ms. Mary E. Major P.O. Box 1105 Richmond, VA 23218

Additional comments on the proposed Rocky Forge Wind Energy Project in Botetourt County, VA

To Whom It May Concern:

Thank you for the opportunity to submit additional comments on Apex Clean Energy's proposed Rocky Forge Wind Energy Project in Botetourt, VA. This proposed development would place 25 500-foot-plus tall wind turbines, along with associated roads and other infrastructure, along the ridgeline of North Mountain in Botetourt County, Virginia. The American Bird Conservancy (ABC) has expressed its opposition to this project on several occasions.

Here are a few additional points we would like to make:

(1) The project is to be located in a nationally known Important Bird Area (IBA), a key source area for neotropical migrants including the Wood Thrush, Worm-eating, Canada, Black-throated Blue, Golden-winged, and Swainson's Warblers. Several subspecies have breeding ranges confined to the Southern Appalachians, including races of the Ruffed Grouse, Northern Saw-whet Owl, and Black-capped Chickadee.

Yet, pre-construction risk assessments conducted by Apex's consultants suggest that the impacts on birds will be minimal (Tyrell 2016, Western Ecosystems Technology 2016). This is unfortunately consistent with every such assessment we have ever reviewed from industry paid consultants. Not once have we seen such studies recommend moving a project based on threats to wildlife. That's to be expected: consultants would not stay in business very long if they did not produce positive results for the contractor. Employing individuals who have a stake in the outcome to conduct these studies violates a key principle of scientific integrity:

"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).

Researchers have found a very poor correlation between pre-construction risk studies and actual number and type of birds killed post-construction (Ferrer et al, 2011), especially since the only proven methods of mitigation for bird deaths are proper siting and curtailment (Arnett and May 2016).

- (2) The only proper way to assess the potential risks of the Rocky Forge Project would be to employ radar studies like those used by the U.S. Fish and Wildlife Service to observe the movements and altitudes of migrating birds and bats (e.g. Horton et al 2016, Rathbun et al. 2016). Pre-construction surveys at Rocky Forge have been based solely on visual observations (Tyrell 2016, Western Ecosystems Technology 2016), which are notoriously inaccurate and fail to include risks to nighttime migrants, such as small songbirds, many of which are of conservation concern. These new FWS studies have also shown the weaknesses in many current industry-consultant visual surveys and radar studies that do not take flight altitude, or density of targets into account. Furthermore, they have shown that the real risks of wind energy facilities to birds and bats is often far greater than the consultant's studies have suggested. Once again, this could explain the very poor correlation between pre-construction risk assessments and post-construction bird and bat fatalities (Ferrer et al. 2011).
- (3) The project should not be approved for the additional reason that it allows withholding of post-construction bird and bat fatality data from the public and concerned conservation organizations. This data will be collected by paid consultants to the wind industry—another direct conflict of interest—who then report it to regulatory agencies. The fact that wind energy companies are presumably subject to substantial fines, expensive mitigation, and even criminal prosecution, almost ensures that underreporting of bird and bat fatalities will occur.

Our ecologically important birds and bats do not belong to the wind energy industry, whether they occur on private or public lands. Instead, they are owned by the American people and held in trust for this and future generations. In addition, they are federally protected under the Migratory Bird Treaty Act, the Bald and Golden Eagle Protection Act and the Endangered Species Act. The ecological services performed by birds and bats, which include pollination, pest control and seed dispersal are worth billions of dollars to the U.S. economy (Sekercioglu 2006, Sekercioglu et al. 2016)

ABC opposes the poorly sited Rocky Forge Wind Energy Project and believes that it should be moved to a more suitable location. If it is approved, however, then the approval should stipulate that bird and bat fatality data will be collected by third party, independent experts using standardized methods and reported directly to state and federal regulatory agencies, and that these data will be made available to the citizens of Virginia and to concerned Virginia-based conservation organizations, like ABC. Otherwise, there will be no opportunity for an independent judgement about whether proper siting has occurred, whether mitigation is effective and whether compensation for "unavoidable" losses of birds and bats is appropriate? A developer with nothing to hide and interested in the truth would readily accept these conditions. We note that two wind energy companies (PacifiCorp and Iberdrola) recently sued to hide their fatality data from public scrutiny (Associated Press 2015, Jackson 2016). Accountability is possible only with true scientific integrity in the collection, analysis and transparency of bird and bat fatality data at wind energy projects and their associated infrastructure, notably power lines and towers. If the impact turns out to be minimal as the developer predicts, then the developers should welcome an independent confirmation of their claims.

Respectfully submitted,

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