

12 September 2019

Mr. Jesse Hopkins-Hoel
% National Renewable Solutions, LLC
1907 Wayzata Blvd.
Suite 220
Wayzata, MN 55391

Ref: D5.0302
Marion County
KDWPT Track: 20180435

Mr. Hopkins-Hoel,

Thank you for providing additional information regarding proposed turbine locations requested in our initial comment letter dated 27 March 2018 as well as hosting a site tour on 09 July 2019. We have studied the submitted information and site notes for the proposed Expedition Wind Energy Project to be constructed by National Renewable Solutions. The project would develop a commercial-scale wind energy conversion facility within Marion County, Kansas. The project site encompasses an estimated 43,720 acres and up to 72 turbines are currently proposed for construction. Comments in this letter concern impacts to crucial wildlife habitats, current state-listed threatened and endangered species as well as species in need of conservation, and Kansas Department of Wildlife, Parks, and Tourism (KDWPT) managed areas for which this agency has administrative authority.

The project area does not contain Designated Critical Habitat for any state-listed species, but portions of the nearby Mud Creek have been designated as Critical Habitat for state- and federally-listed Topeka Shiner (*Notropis topeka*). The project will not occur with the Flint Hills Wind Development Moratorium Area, but the project area is within the KDWPT Flint Hills Ecological Focus Area as defined by the Kansas State Wildlife Action Plan (SWAP). Within this Focus Area, the Department notes that permanent loss or fragmentation of native grasslands may cause adverse impacts to wildlife.

KDWPT will not require an Action Permit for this project. With that said, we advocate for the avoidance of impacts to native grasslands, streams, wetlands, and riparian corridors. As such, we encourage design alternatives which avoid those areas. Several areas of high quality native grassland habitat where turbine construction is planned were highlighted during our site tour in July. Where possible, KDWPT encourages the project sponsors to consider siting that infrastructure in croplands not currently planned for development. We also recommend employing horizontal directional drilling techniques for collection line placement in areas where lines will span Catlin Creek and other direct tributaries of the Cottonwood River to avoid potential impacts to Kansas-listed Species in Need of Conservation noted in our initial comment letter. Where impacts to native habitats are unavoidable, we recommend the implementation of habitat impact minimization practices such as using non-improved access roads and restoring all disturbed soils with native grasses and forbs. We also offer the following general recommendations and request they be included within the construction and operations plans for the project.

- **Avoid or minimize the disturbance and removal of native upland prairie or riparian hardwood timber and herbaceous vegetation during construction and operation of the wind energy facility and associated infrastructure.**
- **Avoid/Minimize impacts to existing wetlands, springs or areas that pond water (e.g. filling).**

- **Avoid instream and stream bank disturbances including stabilizing the banks with foreign materials (e.g. riprap).**
- **Avoid encroachment or development in floodplains.**
- **If access roads require construction of culverts, we advocate for span or bottomless type designs. If bottomless designs are infeasible, culvert bottoms should be buried at least 12 inches below the streambed. Avoid working in streams during the general fish spawning season (March 1 – Aug. 31). Planned culvert installations should be submitted to KDWPT Ecological Services Section for further review as updates to this project.**
- **We recommend using Horizontal Directional Drilling techniques to bore under streambeds when laying collection lines. If a dry stream is open trenched, restore any stream crossings to the original substrate configuration and composition.**
- **Replant temporary grassland disturbances with native grasses and forbs, we recommend using a diverse seed mix and are willing to provide technical advice for seed mix development, or simply recommend using the local seed mix for USDA-NRCS conservation practice 643 - Rare and Declining Habitat Restoration.**
- **Implement and maintain standard erosion control Best Management Practices during all aspects of construction by installing sediment barriers (wattles, filter logs, rock check ditches, mulching, or any combination of these) across the entire construction area to prevent sediment and spoil from entering aquatic systems. Barriers should be maintained at high functioning capacity until construction is completed and vegetation is established. For more information on erosion BMPs go to: <http://www.kdheks.gov/stormwater/#construct>.**
- **Consult the Avian Power Line Interaction Committee Marking Guidelines for mitigating avian collisions by marking the incoming/outgoing transmission line(s) appropriately.**
- **Consult KDWPT and the U.S. Fish and Wildlife Service to develop and implement a Bird and Bat Conservation Strategy and post-construction monitoring protocols. Track avian and bat mortality, and use collected data to modify BBCS plans as appropriate.**
- **To the extent possible, eliminate non-natural light sources, dead animal carcasses, and other features that might serve to attract wildlife to the project area.**

Results of our review cannot confirm adverse impacts to Designated Critical Habitat for state-listed wildlife species. Therefore, no special mitigation measures are required. The project will not impact any public recreational areas, nor could we document any potential direct impacts to currently-listed threatened or endangered species. No Department of Wildlife, Parks, and Tourism permits or special authorizations are needed if construction is started within one year, and no design changes are made in the project plans. Permits may be required from other agencies. We recommend consultation with all other applicable regulatory authorities which, among others, may include Kansas Department of Health and Environment, Kansas Department of Agriculture-Division of Water Resources, U.S. Fish and Wildlife Service, and the U.S. Army Corps of Engineers.

Since the Department's recreational land obligations and the State's species listings periodically change, if construction has not started within one year of this date, or if design changes are made to the project plans, the project sponsor must contact this office to verify continued applicability of this assessment report. For our purposes, we consider construction started when advertisements for bids are distributed.

Please consider this email our official review for this project. Thank you for the opportunity to provide these comments and recommendations. Please let me know if you have any questions about the preceding information.

Please direct all review materials electronically to kdwpt.ess@ks.gov to streamline the review process for all parties.

Thank you.

A handwritten signature in black ink, appearing to read 'Zac Eddy', is positioned above the contact information.

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