



EDPR Environmental Affairs

Bright Stalk Wind Farm

February 20, 2018

EDPR Is an Industry Environmental Leader

- Leadership roles in American Wind Energy Association (AWEA) Siting Committee and various other organizations
- Leadership role on the development and industry support of the first ever industry-wide wildlife Best Management Practice - turbine feathering below cut-in
- Developed one of the first company-wide environmental policies in 2009
- Built one of the first departments directed at environmental affairs
- Founding member and current participant of the American Wind Wildlife Institute
- All operating U.S. wind farms have developed Bird and Bat Conservation Strategies in accordance with the U.S. Fish and Wildlife Service guidelines
- First company to develop a company-wide Carcass Removal Standard Operating Procedure
- Registered under ISO 14001 and implemented a robust Environmental Management System

Project Environmental Components

- **Agency coordination**
- **Wildlife**
- **Wetlands and Cultural Resources**
- **Construction Management**
- **Operational Management**

Development Wildlife Assessment Strategy

- Tiered Process (USFWS Land-based Wind Energy Guidelines)
 - Tier 1 - High level screening
 - Tier 2 - Site Characterization (initial agency coordination)
 - Tier 3 - Wildlife Surveys
- Continued Agency Coordination
- Risk Assessment
 - Avoid, minimize, and mitigate, if needed
 - Documentation in Project Bird and Bat Conservation Strategy and Environmental Risk Matrix
 - Decision Framework for obtaining wildlife permits
- **Define Best Management Practices**
 - Carcass removal program
 - Recommendations for overhead distribution lines
 - Lighting practices to minimize avian impacts
 - Unguyed permanent met towers

Bird and Bat Conservation Strategy (BBCS)

- A written record of actions taken to avoid, minimize and compensate for potential adverse impacts
- Survey record
- Agency coordination record
- Record of best management practices to be implemented during construction and operation
- Detail adaptive management measures

Wetlands

- Wetland delineation (Fall 2017)
 - Delineated areas with potential ground disturbances
 - Desktop analysis identified potential locations of wetlands and waterbodies
 - Wetlands were delineated using the methods described in the 1987 USACE Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region
 - 463 square feet (sq. ft.) of permanent impacts; 822 sq. ft. of temporary impacts
 - As currently designed, the maximum permanent impacts (0.01) are below the 0.10 acre notification threshold of USACE NWP #12 for Utility Line Activities.
 - All appropriate erosion control measures will be implemented

Cultural Resources

- Desktop analysis (July, 2017)
- Field surveys (November, 2017)
- Two resources identified will be avoided
- Coordination with State Historic Preservation Office (SHPO)
- Based on the lack of sites identified from the pedestrian survey and the ongoing agricultural activity within the Project Area the Project is unlikely to have an adverse effect on archaeological sites or historic properties.

Table ES-1. Cultural Resources Identified within the Survey Area and NRHP Eligibility Recommendations.

Temporary Resource #	SHPO #	Time Period	Description	NRHP Eligibility Recommendation	Management Recommendation
BS-SA-01	Pending	Prehistoric	Lithic and Tool Scatter	Not Eligible	No further management.
BS-SA-02	Pending	Historic	Crib Barn	Potentially Eligible	Avoid

NRHP – National Register of Historical Places; SHPO – State Historic Preservation Office

Construction Environmental Strategy

Primary Focus

Ensure that the project is adhering to regulatory requirements, permit conditions, and voluntary commitments (collectively referred to as “obligations”)

- Environmental Obligations Database “EOD” → Project Obligations Tracker

- Stakeholder Consultation
- Stormwater Pollution Prevention Plan (SWPPP) and National Pollutant Discharge Elimination System (NPDES)
- Environmental Construction Monitoring/BioMonitoring
 - Ensure compliance with obligations
 - Training, wildlife considerations
- Defines Best Management Practices
 - Identify sensitive habitat areas (e.g., raptor nests, wetlands, etc.) near proposed areas of construction activity and designate such areas as “off limits” to all construction personnel.
 - Where feasible, modify construction timing and activities to avoid impacts on nesting raptors
 - Monitor nests during construction to minimize risk of disturbance.

Operations Environmental Strategy

- Tiered Process
 - Tier 4 - Post-Construction Monitoring
 - Tier 5 - Adaptive Management
- Environmental compliance tracked through a robust Environmental, Health, and Safety Management System (EHSMS).
- Stakeholder Consultation
- Implementation of BBCS, WIRS and Carcass Removal Procedures
- **Defines Best Management Practices**
 - Bat best management practice
 - Environmental visitor orientation