

Burke Wind, LLC
Mitigative Measures
PU-18-344 & PU-18-302

General Environmental

1. Turbines, access roads, and associated facilities will not be placed on public recreational lands.
2. Light turbines in accordance with FAA requirements.
3. Provide contractors with static constraint maps.
4. Reduced the Project size from 300 MW to 200 MW to address concerns regarding proximity to the Lostwood National Wildlife Refuge. Distance from the southeast Project boundary to Lostwood National Wildlife Refuge is now 6.5 miles and the nearest wind turbine is located approximately 7 miles from the Refuge.

Cultural

1. Burke Wind utilizes an avoidance strategy and will avoid newly documented sites and previously documented archaeological sites within the Project Area that are recommended for avoidance by the SHSND and participating Tribal Historic Preservation Officers.

Wetlands

1. Avoid and minimize siting turbines and access roads in wetlands and waterbodies regardless of jurisdictional status.
2. Avoid impacts to all jurisdictional wetlands and WOUS and avoid or minimize disturbance to isolated wetlands or drainage systems.
3. Maintain appropriate water and soil conservation practices during construction through the implementation of construction BMPs. These practices include silt fencing, temporary reseeded, permanent seeding, mulching, filter strips, erosion blankets, grassed waterways and sod stabilization.
4. Removed all wetlands impacts regardless of jurisdictional status after second work session.
5. Voluntary offset package to address direct and indirect impacts to wetlands.

Native Prairie

1. Avoid and minimize siting turbines in native prairie and native plant communities to the greatest extent feasible.
2. Avoid or minimize placement of turbines in high quality grassland or pasture areas that may act as native grasslands for breeding grassland bird species.

3. Coordinate with local NRCS staff to revegetate non-cropland and pasture areas temporarily disturbed during construction or operation of the wind facility with locally sourced native seed mixes appropriate to the region.
4. Of the 76 turbines remaining, 5 are left on native prairie land and will impact 5.8 acres.
5. Removed 55 turbines from native prairie in the 300MW Project.
6. Burke Wind will coordinate with the North Dakota Department of Trust Lands on a locally sourced native seed mix for any Project impacts on their lands.
7. Temporarily disturbed areas will be reseeded or restored to crop, based on the conditions of the area prior to construction and based on landowner preference.
8. Implementation of noxious weed prevention BMPs.
9. Voluntary offset package to address direct and indirect impacts to native prairie.

Woodlands

1. Avoid or minimize placement of turbines in previously undisturbed shrub/scrub vegetation types that may provide additional habitat for breeding birds.
2. Protect existing trees and shrubs by avoiding tree removal for turbines, access roads and underground collector lines or if removal is necessary, replace following the Commission Tree and Shrub policy.

General Wildlife

1. Conduct one (1) year of Tier 4 post construction monitoring to better understand bird and bat impacts that are attributable to the Burke Wind operation.
2. Once turbine construction is completed, implement a Wildlife Response and Reporting System (WRRS). The WRRS will include reporting protocols to report and document bird and bat mortality during routine maintenance activities. If any dead or injured birds or bats are found, its location will be marked and reported to the Plant Lead/Site Supervisor. The dead or injured bird or bat will not be removed from the location it was found.
3. Prepare a voluntary Wildlife Conservation Strategy (WCS), which includes an adaptive management approach, so that information gathered during post-construction monitoring can be used to inform future management decisions at the Project.
4. Implement a 25 mph speed limit within the Project Area to minimize wildlife collisions.
5. Burke Wind is committed to the avoidance and minimization of impact practices for vegetation, wildlife, and federally-listed species as outlined in PU-18-344 Amended Application Sections 7.14, 7.15, and 7.17, respectively.
6. Voluntary offset package to address direct and indirect impacts to native habitats and their associated wildlife.

Avian

1. Bury collection lines from the turbines to the collection substation to avoid collision risk in accordance with the Avian Power Line Interaction Committee (APLIC) suggested practices.
2. Design utility lines according to APLIC 2012 guidelines to prevent bird collision, as practicable (APLIC 2012).
3. Implement pad-mounted transformers to reduce risk of bird electrocution.
4. Site turbines at least .25 miles from active raptor nests and .5 miles from leks.
5. Avoid impacts to the extent practicable within 0.5 miles of known sharp-tailed grouse lek locations during the lekking and breeding season (April to July).
6. Avoid impacts to the extent practicable with 0.25 miles of active raptor nest locations during the nesting season (March to July).
7. Construct wind turbines using tubular, monopole towers as opposed to a lattice structure, to minimize perching opportunities for raptors and other birds.
8. If any raptor nests are discovered during the course of construction activities, the nests will be monitored to determine if there is a change in the nests activity status in order to avoid impacts that might have the potential to precipitate nest abandonment.

Threatened and Endangered Species (Whooping Cranes and Dakota Skipper)

1. Burke Wind will provide all construction and maintenance staff with training in the identification of all federally listed species in addition to the training provided through the WRRS.
2. Given the Project's location within the USFWS North American whooping crane corridor, Burke Wind will implement NextEra's internal guidance document determining whooping crane curtailment triggers during migratory periods as part of the WCS. These curtailment steps include shutting down all operational turbines when a whooping crane is identified within one (1) mile of the Project Area, with the turbines remaining shut down for 15 minutes following the departure of the whooping crane or until the whooping crane is observed moving away.
3. Burke Wind will provide the appropriate whooping crane identification guide materials to be in all Project maintenance and operations vehicles for reference.
4. Field-verified suitable Dakota skipper habitat has been and will continue to be avoided during Project design. High visibility fencing (e.g., snow fence) will be placed around field-verified suitable Dakota skipper habitat areas in close proximity to construction that are to be avoided to restrict construction equipment from disturbing these areas.
5. Burke Wind has reduced the width of the construction easement in portions of the Project Area which intersect with field-verified suitable Dakota skipper habitat.
6. Burke Wind will bore under field-verified suitable Dakota skipper habitat to avoid all surface impacts to Dakota skipper habitat.

7. In all areas where field-verified Dakota skipper habitat has been identified, no construction will occur between June 15 and July 18, i.e. during the Dakota skipper adult flight period.
8. Burke Wind will provide contractors with training, spatial data and static constraints maps that identify where field-verified suitable Dakota skipper habitat is located and where construction equipment is restricted.
9. Burke Wind will educate construction contractors about threatened and endangered species and associated mitigative measures being implemented for each respective species.
10. Overhead transmission lines within one (1) mile of the Watershed Institute's modeled whopping crane stopover habitat (Watershed Institute, Inc. 2018) will be marked with bird flight diverters in keeping with the Avian Power Line Interaction Committee guidelines (APLIC 2012). Shorten or lengthen transmission pole spans and adjust pole spacing to avoid field-verified suitable Dakota skipper habitat where feasible.
11. The route location and monopole structure spacing were adjusted to further avoid locations of field-verified suitable Dakota skipper habitat to the greatest extent feasible during Project design.
12. High visibility fencing (e.g., snow fence) will be placed around field-verified suitable Dakota skipper habitat areas that are to be avoided to restrict construction equipment from disturbing these areas.
13. All proposed construction in the WRA will bore under or route around suitable Dakota Skipper habitat within the construction easement. No power poles will be placed or other ground disturbing activities conducted within suitable Dakota Skipper habitat areas within the transmission line corridor.
14. Sediment fencing will be installed at the boundary of the suitable habitat within the WRA construction easement and transmission line corridor to restrict vehicle travel, avoid construction sedimentation impacts, and reduce dust.
15. High visibility fencing will be installed at the boundary of the suitable habitat within the WRA construction easement and transmission line corridor to provide construction personnel with clear boundaries of the no impact area. This fencing will be installed in conjunction with the sediment fencing.
16. The construction contractor will be provided with maps and details of the Dakota skipper suitable importance of following those measures and avoiding impacts.
17. Educate construction contractors about all threatened and endangered species and the associated mitigative measures being implemented for each respective species.