Appendix H: Best Management Practices and Mitigation Measures Committed to by the Applicant
Appendix H. Best Management Practices and Conservation Measures

## Soil, Paleontological, and Geologic Resources

- Avoiding the placement of wind energy facilities in areas with unsuitable seismic, liquefaction, slope, subsidence, settling, and flooding conditions.
- Ground-disturbing construction activities would be minimized during rainy periods.
- The extent of the Proposed Project footprint would be minimized, including improved roads and construction staging areas.
- Existing roads and disturbed areas would be used to the extent possible.
- New roads would be surfaced with aggregate materials, wherever appropriate.
- Heavy vehicles and equipment would be restricted to improved roads to the extent practicable.
- Vehicle and equipment speeds would be controlled on unpaved surfaces.
- As feasible, construction and maintenance activities would be conducted when the ground is frozen or when soils are dry and native vegetation is dormant.
- Disturbed areas not actively under construction would be stabilized using methods such as erosion matting or soil aggregation, as site conditions warrant.
- Topsoil from all excavation and construction activities would be salvaged to reapply to disturbed areas once construction is completed.
- Excess excavation materials would be disposed of in approved areas to control erosion.
- Excavation areas and soil piles would be isolated from surface water bodies using silt fencing, bales, or other accepted appropriate methods to prevent sediment transport by surface runoff.
- Earth dikes, swales, and lined ditches would be used to divert local runoff around the work site.
- Drainage patterns and surface topography would be restored to pre-existing conditions. The original grade and drainage pattern would be re-established to the extent practicable.
- New roads would be sited to follow natural land contours, excessive slopes should be avoided.
- New roads would avoid stream crossings and wetlands and minimize the need to cross drainage bottoms.
- A Spill Prevention, Control and Countermeasure Plan (SPCC Plan) for the Proposed Project would be developed prior to construction to manage an accidental release, including implementation of BMPs associated with the SPCC Plan to minimize potential impacts to groundwater. BMPs for spillrelated effects would include storing fuels within secondary containment devices, checking vehicles and equipment for leaks, performing refueling and equipment maintenance away from wells, maintaining a spill response kit, and appropriate reporting protocols for any spills.
- Avoidance of surface disturbance in areas with "severe" erosion hazard to the extent practicable in the final design and configuration of wind turbines and their associated pads.
- A paleontological resource management plan would be developed for areas where there is a high potential for paleontological materials.
- Wetland and riparian buffer zones would be established to reduce impacts to these resources.
- New roads would avoid stream crossings and wetlands to the greatest extent practicable and minimize the need to cross drainage bottoms.
- As recommended by the USEPA, facility siting and design would avoid aquatic resource impacts
  where practicable and include mitigation measures to minimize unavoidable impacts to water
  quality, stream functions and aquatic habitats from surface disturbance, road-stream crossings,

and storm water runoff. Such measures would include locating roads away from streams and riparian areas, steep slopes, landslide prone areas or erosive soils, and providing special protections, such as setbacks or non-motorized zones for areas with high quality or high value water resources.

- A Storm Water Pollution Prevention Plan (SWPPP) would be developed and certified prior to the start of construction. A copy of the SWPPP would be retained on-site and made available for inspection upon request. Implementation of the SWPPP would minimize construction activity disturbance to land and water sources nearby.
- The Proposed Project would comply with Section 404 of the CWA, likely through the nationwide permitting process, prior to construction to reduce Proposed Project layout impacts and develop BMPs that would reduce wetland and waterbody impacts.
- The Proposed Project would implement conditions from the CWA Section 401 WQC for NWPs, as applicable. This would be completed prior to construction to reduce Proposed Project layout impacts and develop BMPs that would reduce wetland and waterbody impacts.
- Equipment to be used in WOTUS would be cleaned before arriving on site. The discharge of wash water into any wetland, waterway, or any other surface water conveyances would be avoided.
- Side slopes of new channels would be constructed no steeper than 2:1 and planted with permanent, perennial, native vegetation if not armored.
- Mats for heavy equipment would be used when working in wetlands or mudflats during wet periods when soils are highly compactable, or other measures would be taken to minimize soil disturbance.
- Temporary structures would be removed after their use has been discontinued, to the maximum extent practicable.
- Standard erosion control BMPs would be applied to all construction activities and disturbed areas (e.g., sediment traps, water barriers, erosion control matting), as applicable, to minimize erosion and protect water quality.
- Erosion controls would be applied relative to possible soil erosion from vehicular traffic.
- Drainage ditches would be constructed only where necessary and would use appropriate structures at culvert outlets to prevent erosion.
- The Proposed Project would avoid altering existing drainage systems, including drain tile in cultivated fields, to the extent practicable, especially in sensitive areas, such as erodible soils or steep slopes.
- Catch basins, drainage ditches, and culverts would be cleaned and maintained regularly, as needed, from stormwater runoff from the Proposed Project during construction.
- Herbicide and pesticide use would be limited to non-persistent, immobile compounds and would be applied using a properly licensed applicator in accordance with label requirements.
- Unstable slopes and local factors that can cause slope instability (e.g., groundwater conditions, precipitation, seismic activity, high slope angles, and certain geologic landforms) would be identified and mitigation measures implemented to ensure soil stability is maintained.
- Excess excavation materials would be disposed of in approved areas to control erosion and minimize leaching of hazardous materials.

- The original grade and drainage pattern would be re-established to the extent practicable.
- If wells are used, they would be properly filled and capped during site decommissioning.

### **Water Resources**

- Wetland and riparian buffer zones would be established to reduce impacts to these resources.
- New roads would avoid stream crossings and wetlands to the greatest extent practicable and minimize the need to cross drainage bottoms.
- As recommended by the USEPA, facility siting and design would avoid aquatic resource impacts where practicable and include mitigation measures to minimize unavoidable impacts to water quality, stream functions and aquatic habitats from surface disturbance, road-stream crossings, and storm water runoff. Such measures would include locating roads away from streams and riparian areas, steep slopes, landslide prone areas or erosive soils, and providing special protections, such as setbacks or non-motorized zones for areas with high quality or high value water resources.
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- Temporary structures would be removed after their use has been discontinued, to the maximum extent practicable.
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- The Proposed Project would avoid altering existing drainage systems, including drain tile in cultivated fields, to the extent practicable, especially in sensitive areas such as erodible soils or steep slopes.
- Catch basins, drainage ditches, and culverts would be cleaned and maintained regularly, as needed, from stormwater runoff from the Proposed Project during construction.
- Herbicide and pesticide use would be limited to non-persistent, immobile compounds and would be applied using a properly licensed applicator in accordance with label requirements.
- Unstable slopes and local factors that can cause slope instability (e.g., groundwater conditions, precipitation, seismic activity, high slope angles, and certain geologic landforms) would be identified and mitigation measures implemented to ensure soil stability is maintained.
- Excess excavation materials would be disposed of in approved areas to control erosion and minimize leaching of hazardous materials.
- The original grade and drainage pattern would be re-established to the extent practicable.
- If wells are used, they would be properly filled and capped during site decommissioning.

# **Vegetation and Land Cover**

- Revegetation measures would be implemented in accordance with landowner agreements.
- Disturbance to natural vegetation and soil would be minimized.
- The number of road miles of new road construction needed would be minimized.
- Habitat disturbance would be reduced by keeping vehicles on access roads and minimizing foot and vehicle traffic through undisturbed areas.
- A revegetation plan would be developed to restore all temporary workspaces in non-cropland to
  pre-construction vegetation with certified weed-free seed. Revegetation would be initiated as
  soon as possible after construction activities are completed, or a cover crop placed where needed
  to prevent soil erosion and weed infestation if permanent restoration is delayed. The construction
  contractor would coordinate with the NRCS and/or the landowner on seed mixes for revegetation.
   Seed mixes and revegetation plans would be developed as part of the Proposed Project's SWPPP.
- A plan would be developed to manage and control noxious weeds and invasive plants during, and
  for up to three years following, construction to ensure compliance under South Dakota's Weed
  and Pest Control Law and landowner agreements. The plan would address monitoring, weed
  identification, mechanisms for weed spread, and methods for treating infestations. The use of
  certified weed-free seed and mulch would be required.
- Integrated pest/vegetation management plans would be developed to ensure noxious weed management (1) uses nonpersistent and immobile EPA-registered pesticides/herbicides, (2) uses licensed applicators in accordance with labels and application permits, and (3) follows stipulations regarding suitability for terrestrial and aquatic applications.
- A controlled inspection and cleaning area would be established outside of active agricultural areas
  for trucks and construction equipment arriving from locations with known invasive vegetation
  problems to limit the possibility of the spread of noxious weeds. Construction equipment arriving
  at the Proposed Project would be visually inspected and seeds adhered to equipment surfaces
  would be removed and contained.

- Access roads, newly established utility gen-tie line corridors, and tower site areas would be
  regularly monitored for invasive species. CCWF2 would take commercially reasonable steps to
  eliminate noxious weeds caused by the Proposed Project construction where it is reasonably
  evident that such intrusion was attributable to the Proposed Project's development activities.
- Topsoil excavated during construction and decommissioning activities would be salvaged and reapplied to disturbed areas during final restoration activities.

### Wildlife

- A Wildlife Conservation Strategy would be implemented in accordance with the USFWS's WEG and ECPG to minimize impacts to avian and bat species during construction and operation of the Proposed Project.
- To the extent commercially reasonable, power generation has been maximized per turbine, which reduces the number of turbines needed to achieve maximum energy production.
- MET towers would be located outside sensitive habitats (e.g., wetlands or unbroken grasslands).
   Construction of MET towers would be scheduled to avoid breeding activities or other important behaviors and the disturbed area would be minimized.
- Guy wires would be avoided, or guy wires would be marked with approved bird flight diverters.
- Installation of avian flight diverters would be implemented on the top static wire on any new or upgraded overhead collector, distribution, and transmission lines.
- CCWF2 would avoid siting turbines in wooded patches, wetlands, and waterbodies; minimize disturbance to grassland; and avoid siting turbines in unbroken grassland.
- Wind turbine buffer zones would be established around occupied raptor nests following USFWS Region 6 guidance (USFWS 2021d). Turbines would be sited ≥ 2 mi away from known eagle nests.
- Turbines would be sited ≥ 1 mi away from known prairie grouse leks. Construction activities would not occur < 1 mi from a prairie grouse lek March 15 to June 30. Construction activities would be limited to 3 hours after sunrise to 1 hour before sunset if a 1-mi lek buffer cannot be maintained.
- Vehicle speeds would be limited to 25 mi per hour (mph) to avoid wildlife collisions and construction vehicles would be restricted to pre-designated access routes.
- To the extent feasible, the area required for Proposed Project construction and operation would be minimized. The Proposed Project would develop a restoration plan for restoring all areas of temporary disturbance to their previous condition, including the use of native species when seeding or planting during restoration. The restoration plan would ensure temporarily disturbed areas by Proposed Project construction would be restored, including areas around structure sites, laydown/staging areas, and temporary access roads.
- All turbine and MET tower lighting would follow FAA requirements and would be flashing rather than continuously illuminated. Installation of ADLS would also reduce overall illumination time.
- Lighting at substations and O&M facilities would be at minimums required for safety and security (e.g., directional, hooded or shielded, low-intensity, low-sodium lights, with motion sensors). Lighting at internal turbine nacelles and tower lighting would be extinguished when unoccupied.
- CCWF2 would retain snags, dead/dying trees, and trees with exfoliating bark, which have 3.0 inches or greater diameter at breast height, in areas within 1.0 mi from water.

- Ground clearance surveys would be completed during the primary nesting season (May 1 through August 1) in grasslands a maximum of one week prior to new construction activities to identify and mark any nests of breeding birds and would be valid for seven days from the survey date.
- Gravel would be placed ≥ 5.0 ft around turbine foundations to discourage small mammals and reptiles from burrowing under or near turbine bases.
- CCWF2 would provide training resources to all construction and site personnel on identification of species of concern and their habitats to minimize and/or avoid disturbance.
- Sensitive resources (e.g., nests) identified during pre-construction activities would be flagged and all site personnel notified of their presence and necessary setbacks.
- Unleashed pets would not be allowed on the Proposed Project site during construction.
- Permanent MET towers would be un-guyed.
- Trash would be covered in containers and work sites cleared regularly of garbage and food debris.
- Vehicle speeds would be limited to 25 mph to avoid wildlife collisions.
- Fire hazards from vehicles and human activities would be reduced (e.g., use of spark arrestors on power equipment, avoiding driving vehicles off roads, allowing smoking in designated areas only).
- Pest/weed control measures would be implemented per county, state, and federal requirements.
- Other than maintenance vehicles which would park at the entrance of turbines for maintenance purposes, parts/equipment which may be used as cover for prey would not be stored at the base of wind turbines while a turbine is operational.
- A carcass removal program would be implemented to reduce carrion attractants for raptors.
- CCWF2's employees and contractors working on-site would receive worker awareness training for identifying and responding to encounters with sensitive biological resources, including avian and bat species. The training would include: 1) instructing employees, contractors, and site visitors to avoid harassment and disturbance of wildlife; 2) instruction on identification and values of plant and wildlife species (especially protected species), and significant natural habitats and measures to minimize the spread of weeds; and 3) an overview of the distribution, general behavior, and ecology of golden and bald eagles and appropriate measures when an eagle is encountered.

## Air Quality and Climate

- Surface access roads, on-site roads, and parking lots with aggregates or surfaces that maintain compacted soil conditions to reduce dust generation would be used.
- Lower speed limits on dirt and gravel access roads would be posted and enforced to minimize airborne fugitive dust.
- Potential environmental impacts from the use of dust palliatives would be minimized by taking the necessary measures to keep the chemicals out of sensitive terrestrial habitats and streams. The application of dust palliatives would comply with federal, state, and county regulations.
- All pieces of heavy equipment would meet South Dakota emission standards. Routine preventive
  maintenance would be conducted, including tune-ups to manufacturer specification for efficient
  combustion and minimum emissions. If possible, equipment with more stringent emission
  controls would be leased or purchased.

- Fuel diesel engines would be employed in facility construction and maintenance that use ultralow sulfur diesel, with a maximum of 15 parts per million sulfur content.
- Idling of diesel equipment would be limited to ≤ 10 minutes, unless necessary for operation.
- Construction activities would be staged to limit exposure of disturbed soils.
- Unpaved roads, disturbed areas (e.g., areas with scraping, excavation, backfilling, grading, and compacting), and loose materials generated during Proposed Project activities would be watered as necessary to minimize fugitive dust generation.
- Stockpiles of soil would be sprayed with water, covered with tarpaulins, and/or treated with appropriate dust suppressants, especially when high wind or storm conditions are likely. If possible, temporary cover crops would be used to limit dust generation for stockpiles that would be inactive for relatively long periods.
- Workers would be trained to limit idling, comply with speed limits, use good engineering practices, minimize the drop height of excavated materials, and minimize disturbed areas.
- Vehicles transporting loose materials would be covered when traveling on public roads and/or loads kept sufficiently wet and below the freeboard of the truck to minimize wind dispersal.
- Tires of construction-related vehicles would be cleaned and inspected, as necessary, to be free of dirt prior to entering paved public roadways.
- Visible track out or runoff dirt would be cleaned (e.g., through street vacuum sweeping) from the construction site off public roadways.

#### **Environmental Justice**

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- Tires of construction-related vehicles would be cleaned and inspected, as necessary, to be free of dirt prior to entering paved public roadways.
- Visible track out or runoff dirt would be cleaned (e.g., through street vacuum sweeping) from the construction site off public roadways.
- Access roads would be designed and constructed to the appropriate standard necessary to accommodate their intended function (e.g., traffic volume and weight of vehicles) and minimize erosion. Access roads no longer needed would be recontoured and reclaimed.
- The Proposed Project would enter into county Road Use Agreements to obtain the appropriate access and use permits, and to minimize impacts to county roads.
- A transportation plan would be prepared that identifies measures CCWF2 would implement to comply with state and federal requirements, and to obtain the necessary permits. This plan would address transportation of turbine components, main assembly crane, and other large pieces of equipment. The plan would consider specific object size, weight, origin, destination, and unique handling requirements and would evaluate transportation alternatives (e.g., rail or barge).
- Proposed Project personnel and contractors would be instructed and required to adhere to speed limits commensurate with road types, traffic volumes, vehicle types, and site-specific conditions to ensure safe and efficient traffic flow.
- During construction, O&M, and decommissioning phases, traffic would be restricted to designated Proposed Project roads. Use of other unimproved roads would be restricted to emergency situations.
- Turbines would be sited a sufficient distance from occupied residences to limit noise levels from the Proposed Project to ≤ 45 dBA.
- Equipment with the lowest noise levels available and no prominent discrete tones would be selected, when possible.
- Equipment would be maintained in good working order in accordance with manufacturer specifications. Suitable mufflers and/or air-inlet silencers would be installed on internal combustion engines and certain compressor components.
- Vehicles in and around the Proposed Project Area would be operated in accordance with posted speed limits.
- A corporate process for documenting, investigating, evaluating, and resolving Project-related noise complaints has been established and would be implemented.
- When possible, noisy construction activities would be limited to times when nearby sensitive receptors are least likely to be disturbed.
- Noisy activities would be scheduled to occur at the same time, whenever practicable, since additional sources of sound generally do not greatly increase sound levels at site boundaries.

- Stationary construction equipment (e.g., compressors or generators) would be kept as far as practicable from nearby sensitive receptors.
- If blasting or pile driving is needed for construction, nearby residents would be notified prior to.
- For ancillary buildings and other structures, low profiles would be chosen whenever practicable to reduce visibility.
- Color selections for turbines would be made to reduce visual impact and applied uniformly to tower, nacelle, and rotor, unless gradient or other patterned color schemes are used.
- Grouped structures would be painted the same to reduce visual complexity and color contrast.
- Non-reflective paints and coatings would be used on wind turbines, visible ancillary structures, and other equipment to reduce reflection and glare.
- Turbines, visible ancillary structures, and other equipment would be painted before or immediately after installation.
- Lighting for facilities would not exceed the minimum required for safety and security, and full cutoff designs that minimize upward light scattering (light pollution) would be selected. If practicable, site design would make security lights nonessential. Where necessary, security lights would be extinguished except when activated by motion detectors (e.g., only around the substation).
- Commercial messages and symbols, such as logos and trademarks, on wind turbines would be avoided and would not appear on sites or ancillary structures of wind energy projects.
- Turbines would be sited to limit shadow flicker resulting from Proposed Project wind turbines at currently occupied residences.
- Existing rocks, vegetation, and drainage patterns would be preserved to the maximum extent practicable.
- Installation of gravel and pavement would be avoided, where possible, to reduce color and texture contrasts with the existing landscape.
- For road construction, excess fill would be used to fill uphill-side swales to reduce slope interruption that would appear unnatural and to reduce fill piles.
- The geometry of road ditch design would consider visual objectives; rounded slopes are preferred to V-shaped and U-shaped ditches.
- Topsoil from cut/fill activities would be segregated and spread on freshly disturbed areas to reduce color contrast and aid rapid revegetation. Topsoil piles would not be left in sensitive viewing areas.
- Excess fill material would not be disposed of downslope to avoid creating color contrast with existing vegetation/soils.
- Communication and other local utility cables would be buried.
- The burning of trash would be prohibited during construction; trash would be stored in containers and/or hauled off-site.
- Litter would be controlled and removed regularly during construction.
- Inoperative Proposed Project turbines would be repaired, replaced, or removed quickly. Nacelle covers and rotor nose cones would always be in place and undamaged.
- Nacelles and towers would be cleaned regularly (≥ once/year) to remove spilled or leaking fluids and the dirt and dust that accumulates, especially in seeping lubricants.

- Facilities and off-site surrounding areas would be kept clean of debris, "fugitive" trash or waste, and graffiti. Scrap heaps and material dumps would be prohibited and prevented. Material storage yards, though tidy, would be kept to a minimum. Surplus, broken, or unused materials and equipment of any size would not be allowed to accumulate.
- Maintenance activities would include litter cleanup and noxious weed control.
- Road maintenance activities would avoid blading of existing forbs and grasses in ditches and adjacent to roads; however, any invasive or noxious weeds would be controlled as needed.
- Interim restoration would be undertaken during the operating life of the Proposed Project as soon as possible after disturbances.

## **Transportation and Aviation**

- Access roads would be designed and constructed to the appropriate standard necessary to accommodate their intended function (e.g., traffic volume and weight of vehicles) and minimize erosion. Access roads no longer needed would be recontoured and reclaimed.
- The Proposed Project would enter into county Road Use Agreements to obtain the appropriate access and use permits, and to minimize impacts to county roads.
- A transportation plan would be prepared that identifies measures CCWF2 would implement to comply with state and federal requirements, and to obtain the necessary permits. This plan would address transportation of turbine components, main assembly crane, and other large pieces of equipment. The plan would consider specific object size, weight, origin, destination, and unique handling requirements and would evaluate transportation alternatives (e.g., rail or barge).
- Proposed Project personnel and contractors would be instructed and required to adhere to speed limits commensurate with road types, traffic volumes, vehicle types, and site-specific conditions to ensure safe and efficient traffic flow.
- During construction, O&M, and decommissioning phases, traffic would be restricted to designated Proposed Project roads. Use of other unimproved roads would be restricted to emergency situations.

### Noise

- Turbines would be sited a sufficient distance from occupied residences to limit noise levels from the Proposed Project to ≤ 45 dBA.
- Equipment with the lowest noise levels available and no prominent discrete tones would be selected, when possible.
- Equipment would be maintained in good working order in accordance with manufacturer specifications. Suitable mufflers and/or air-inlet silencers would be installed on internal combustion engines and certain compressor components.
- Vehicles traveling within and around the Proposed Project Area would be operated in accordance with posted speed limits.
- A corporate process for documenting, investigating, evaluating, and resolving Project-related noise complaints has been established and would be implemented.

- When possible, noisy construction activities would be limited to times when nearby sensitive receptors are least likely to be disturbed.
- Noisy activities would be scheduled to occur at the same time, whenever practicable, since additional sources of sound generally do not greatly increase sound levels at site boundaries.
- Stationary construction equipment (e.g., compressors or generators) would be kept as far as practicable from nearby sensitive receptors.
- If blasting or pile driving is needed for construction, nearby residents would be notified prior to.

### **Visual Resources and Shadow Flicker**

- For ancillary buildings and other structures, low profiles would be chosen whenever practicable to reduce visibility.
- Color selections for turbines would be made to reduce visual impact and applied uniformly to tower, nacelle, and rotor, unless gradient or other patterned color schemes are used.
- Grouped structures would be painted the same to reduce visual complexity and color contrast.
- Non-reflective paints and coatings would be used on wind turbines, visible ancillary structures, and other equipment to reduce reflection and glare.
- Turbines, visible ancillary structures, and other equipment would be painted before or immediately after installation.
- Lighting for facilities would not exceed the minimum required for safety and security, and full cutoff designs that minimize upward light scattering (light pollution) would be selected. If practicable, site design would make security lights nonessential. Where necessary, security lights would be extinguished except when activated by motion detectors (e.g., only around the substation).
- Commercial messages and symbols, such as logos and trademarks, on wind turbines would be avoided and would not appear on sites or ancillary structures of wind energy projects.
- Turbines would be sited to limit shadow flicker resulting from Proposed Project wind turbines at currently occupied residences.
- Existing rocks, vegetation, and drainage patterns would be preserved to the maximum extent practicable.
- Installation of gravel and pavement would be avoided, where possible, to reduce color and texture contrasts with the existing landscape.
- For road construction, excess fill would be used to fill uphill-side swales to reduce slope interruption that would appear unnatural and to reduce fill piles.
- The geometry of road ditch design would consider visual objectives; rounded slopes are preferred to V-shaped and U-shaped ditches.
- Topsoil from cut/fill activities would be segregated and spread on freshly disturbed areas to reduce color contrast and aid rapid revegetation. Topsoil piles would not be left in sensitive viewing areas.
- Excess fill material would not be disposed of downslope to avoid creating color contrast with existing vegetation/soils.
- Communication and other local utility cables would be buried.

- The burning of trash would be prohibited during construction; trash would be stored in containers and/or hauled off-site.
- Litter would be controlled and removed regularly during construction.
- Inoperative Proposed Project turbines would be repaired, replaced, or removed quickly. Nacelle covers and rotor nose cones would always be in place and undamaged.
- Nacelles and towers would be cleaned regularly (≥ once/year) to remove spilled or leaking fluids and the dirt and dust that accumulates, especially in seeping lubricants.
- Facilities and off-site surrounding areas would be kept clean of debris, "fugitive" trash or waste, and graffiti. Scrap heaps and material dumps would be prohibited and prevented. Material storage yards, though tidy, would be kept to a minimum. Surplus, broken, or unused materials and equipment of any size would not be allowed to accumulate.
- Maintenance activities would include litter cleanup and noxious weed control.
- Road maintenance activities would avoid blading of existing forbs and grasses in ditches and adjacent to roads; however, any invasive or noxious weeds would be controlled as needed.
- Interim restoration would be undertaken during the operating life of the Proposed Project as soon as possible after disturbances.

## **Cultural Resources**

- A paleontological resource management plan would be developed for areas where there is a high potential for paleontological materials.
- If human remains are found within the Proposed Project, work would cease immediately within 15 meters of the find and CCWF2 would adhere to the requirements of South Dakota statutes 34.27 §§ 18 33., and the appropriate law enforcement officials and WAPA would be contacted. No materials would be removed from the find location. Once it is determined by a professional archaeologist that the remains are archaeological, the SHPO would be contacted to determine how the remains should be addressed.
- Archaeological resources (excluding human remains) discovered during construction would immediately be brought to the attention of WAPA. Work would be halted in the vicinity of the find to avoid further disturbance of the resources while they are evaluated, and appropriate mitigation plans would be developed in consultation with interested tribes and SHPO.
- A paleontological resource management plan would be developed for areas where there is a high potential for paleontological materials.

### **Health and Safety**

- All site characterization, construction, operation, and decommissioning activities would be conducted in compliance with applicable federal and state occupational safety and health standards (e.g., the Occupational Safety and Health Administration's [OSHA's] Occupational Safety and Health Standards, 29 CFR Parts 1910 and 1926, respectively).
- Safety assessments would be conducted to describe potential safety issues and means of
  mitigating them, covering issues such as site access, construction, safe work practices, security,
  heavy equipment transportation, traffic management, emergency procedures, and fire control.

- CCWF2 would develop a health and safety program to protect workers during site characterization, construction, operation, and decommissioning of a wind energy project. The program would identify all applicable federal and state occupational safety standards and establish safe work practices addressing all hazards, including requirements for developing the following plans: general injury prevention, personal protection equipment requirements and training, respiratory protection, hearing conservation, electrical safety, hazardous materials safety and communication, housekeeping and material handling, confined space entry, hand and portable power tool use, gas-filled equipment use, and rescue response and emergency medical support, including on-site first-aid capability.
- A health and safety program would address OSHA standard practices for the safe use of explosives
  and blasting agents (if needed), measures for reducing occupational EMF exposures, the
  establishment of fire safety evacuation procedures, and required safety performance standards
  (e.g., electrical system standards and lighting protection standards). The program would include
  training requirements for applicable tasks for workers and establish procedures for providing
  required training to all workers. Documentation of training and a mechanism for reporting serious
  accidents to appropriate agencies would be established.
- Electrical systems would be designed to meet applicable safety standards (e.g., the National Electrical Safety Code) and comply with the interconnection requirements of the transmission system operator.
- If an accidental release of hazardous substances to the environment occurred, CCWF2 would document the event, including a root cause analysis, a description of appropriate corrective actions taken, and a characterization of the resulting environmental or health and safety impacts. Documentation of the event would be provided to permitting agencies and other appropriate Federal and State agencies within 30 days, as required.
- CCWF2 would develop a health and safety program addressing protection of public health and safety during site characterization, construction, operation, maintenance, and decommissioning activities of a wind energy project. The program would establish a safety zone or setback for wind energy facilities and associated transmission lines from residences and occupied buildings, roads, rights-of-way, and other public access areas sufficient to prevent accidents resulting from hazards during all phases of development. The program would identify requirements for temporary fencing around staging areas, storage yards, and excavations during construction or decommissioning activities. The program would identify measures to be taken during the operations phase to limit public access to facilities (e.g., equipment with access doors should be locked to limit public access and permanent fencing with slats should be installed around electrical substations).
- Use of proper signage and/or engineered barriers (e.g., fencing) would be implemented to limit access to electrically energized equipment and conductors to prevent access to electrical hazards by unauthorized individuals or wildlife.
- CCWF2 would develop a fire management and protection plan to implement measures to minimize the potential for a human-caused fire and to respond to human- or natural-caused fires.

- CCWF2 would work with agencies (e.g., DOE and Transportation Security Administration) to address critical infrastructure and key resource vulnerabilities at wind energy facilities and to minimize and plan for potential risks from natural events, sabotage, and terrorism.
- CCWF2 would prepare a hazardous materials and waste management plan addressing the selection, transport, storage, and use of hazardous materials needed for construction, operation, and decommissioning of the facility for local emergency response and public safety authorities and for the regulating agency, and that addresses the characterization, on-site storage, recycling, and disposal of resulting wastes. The plan would include a comprehensive hazardous materials inventory, Material Safety Data Sheets for each hazardous material, emergency contacts and mutual aid agreements, site map showing hazardous materials and waste storage and use locations, copies of spill and emergency response plans (see below), and hazardous materialsrelated elements of a decommissioning/closure plan. The waste management plan would identify waste streams expected to be generated at the site during construction and operation and address hazardous waste determination procedures, waste storage locations, waste-specific management and disposal requirements (e.g., selecting appropriate waste storage containers, appropriate off-site treatment, storage, and disposal facilities), inspection procedures, and waste minimization procedures. The plan would address solid and liquid wastes that may be generated at the site in compliance with CWA requirements if a National Pollutant Discharge Elimination System permit is needed.
- If pesticides/herbicides would be used on the site, CCWF2 would develop an integrated pest/vegetation management plan to ensure applications would be conducted in the framework of managing agencies and only USEPA-registered pesticides/herbicides that are: (1) nonpersistent and immobile and (2) applied by licensed applicators in accordance with label and application permit directions, following stipulations regarding suitability for terrestrial and aquatic applications, would be used.
- Trash would be covered in containers and work sites cleared regularly of garbage and food debris.
- Burning of trash would be prohibited during construction. Trash would be stored in containers and/or hauled off-site.
- Litter would be controlled and removed regularly during construction.
- Facilities and off-site surrounding areas would be kept clean of debris, "fugitive" trash or waste, and graffiti. Scrap heaps and materials dumps would be prohibited and prevented. Materials storage yards, even if orderly, would be kept to a minimum. Surplus, broken, or disused materials and equipment would not be allowed to accumulate.