BOWMAN
WIND

BOWMAN WIND EMERGENCY RESPONSE PLAN

Turbine Shut-down During Emergencies

Turbines and the substation have redundant automated systems that shut the equipment down when a fault condition is detected. Human intervention is not required.

As an example, Apex utilizes a 24/7 365 Remote Operation Control Center (ROCC) connected to the Facility that also has control capabilities with individual turbines, groups of turbines or the substation breakers to isolate in an emergency. Other Operators will have a similar type of control center.

The Facility will also have on-site technicians.

Emergency, Fire, and Explosive Hazards

Unlike thermal power plants, wind power Facilities pose minimal explosion or fire potential, as there is no need to combust fuel to generate power. However, as with any major construction undertaking, construction of the Project does present some minimal fire risks. Fire risk mitigation starts with facility design, especially with electrical design, which needs to comply with the National Electric Code (NEC), National Electric Safety Code (NESC) and the National Fire Protection Agency (NFPA).

Emergency Preparedness Training

Bowman Wind will hold a pre-construction coordination meeting with Bowman County Fire Marshal, local fire officials, and Project contractors to discuss preventive measures prior to the start of Construction.

After COD, Bowman Wind will check-in with Bowman County Emergency Management annually to determine what form of emergency drills (in-person, on-line, or other options that may become available over the life of the Project) are appropriate to train and coordinate efforts with local emergency responders.

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Fire and Explosion Sources and Mitigation Measures

Lightning-induced fires are rare in wind project areas, but regardless, both the wind turbine generators and the substation are equipped with specially-engineered lightning protection systems. As is the case with almost any complex machine, there is some potential for fire inside the wind turbine generators. With the types of modern wind turbines proposed for the Project, however, turbine malfunctions leading to fires in the nacelle are extremely rare. The turbine-control system detects overheating in turbine machinery, and internal fires would be detected by these sensors. The machines would shut down immediately and send an alarm signal to the central SCADA system, which would notify operators of the problem by cell phone or pager.

In terms of Project decommissioning, the potential fire risks are similar in nature to those during Project construction but are lower in probability.

Handling of Hazardous Material During Construction and Operation

Construction

Diesel fuel is the only potentially hazardous material that will be used in any significant quantity during construction of the Project. It will be used for operating construction equipment and vehicles. Construction of the Project will not result in the generation of any hazardous wastes in quantities regulated by State or Federal law. During construction, the primary wastes generated will be solid construction debris such as scrap metal, cable, wire, wood pallets, plastic packaging materials and cardboard. This waste will be accumulated on-site until it is hauled away to a licensed transfer station or landfill.

Operations

Operation of the Project will not result in the generation of regulated quantities of hazardous wastes. As no fuel is burned to power the wind turbine generators, there will be no spent fuel, ash, sludge or other process wastes generated. The primary type of waste generated by Project's operations will be municipal solid waste generated at the O&M facility, consisting of typical office wastes (paper, cardboard, food waste, etc.) which will be stored in a dumpster until it is collected by the local solid waste collection service provider. The periodic changing of lubricating oils and hydraulic fluids used in the individual wind turbine generators will also result in the generation of small quantities of these materials. These waste fluids will be generated in small quantities because they need to be changed only infrequently and the changing of these fluids is not done all at once, but rather on an individual turbine-by-turbine basis. These waste fluids will be stored for short periods of time in appropriate containers at the O&M facility for collection by a licensed collection service for recycling or disposal.

On-Site Emergency Plans

On-site emergency plans will be prepared to protect the public health, safety and environment on and off the Project site in the case of a major natural disaster or industrial accident relating to or affecting the Project. The Project shall prepare the plans and be responsible for implementing the plan with its construction and operations teams in coordination with the local emergency response agencies. The plans will describe the emergency response procedures to be implemented during various emergency situations that may affect the Project or the surrounding community or environment.

The emergency plans described in this section are an outline of the details that will be included in the emergency plans to be developed prior to the construction and operating phases of the Project. This outline is based on the Applicant's experience in operating other similar wind power Projects. For wind power Projects, the key element of an effective emergency and safety plan is the ability to communicate. Therefore, during both construction and operation of the Project, all operations and construction team leaders will be equipped with two-way short-band radios and cellular phones.

During the Project's construction and start-up period, the emergency plans will be updated to conform to manufacturer and vendor safety information for the specific equipment installed at the Project.

Events Covered By Emergency Plans

The emergency plans cover multiple events that may occur at or near the Project site by natural causes, equipment failure or by human mistake. The following is a list of potential events that will be covered by the emergency plans.

- Personnel injury;
- Construction emergencies;
- Facility evacuation;
- Fire or explosion;
- Floods;
- Extreme weather abnormalities.

The Project O&M group and third-party contractors will receive annual emergency response-and safety training to assure that effective and safe action will be taken to reduce and limit the impact of an emergency at the Project site.

Information Signs

Bowman Wind will post information signs (turbine placard) at each turbine that will include the turbine ID number and the phone number to the owners' operation center (24/7 Operations desk). Signage will also be placed at the substation and O&M buildings with the same contact information. If called, the operator will take action notifying the on-call technician and if needed initiate the emergency action plan. If the Operations and Maintenance facility, at some point in the future is abandoned, the owner's operation center will remain the emergency contact. Local emergency responders and Bowman County Commissioners will be given an up-to-date map prior to construction showing the turbine ID numbers in relation to all public roads.