Cassadaga Wind Project

Case No. 14-F-0490

1001.18 Exhibit 18

Safety and Security

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EXHIBIT 18 SAFETY AND SECURITY

Safety and security are critical components of the construction and operation of any major electrical generation facility. However, overall safety and security risks associated with the Facility are anticipated to be minimal. To ensure the safety of construction and operations personnel, as well as the security of the Facility, the Applicant has developed, and will implement plans for site security, worker safety, and emergency action, which are described below and are based on the Applicant's experience in addressing safety and security issues at other wind projects. The Applicant has also coordinated with the County emergency department, local first responders, and the New York State Division of Homeland Security and Emergency Services to ensure appropriate actions are taken in the event of an emergency.

(a) Preliminary Plans for Site Security During Facility Construction

To reduce safety and security concerns during construction, public access to the Facility shall be limited. The contractor will be required to provide a final site security plan for construction, which will be developed by the contractor selected to lead the construction of the Facility (i.e., BOP contractor) post certification. Preparation of the site security plan will initiate immediately following selection of the BOP contractor, and will be provided to the Siting Board upon completion. However, the Applicant has prepared a Preliminary Health Safety Plan (Appendix V of this Application), which includes measures to be implemented during Facility construction to ensure security.

(1) Access Controls

To prevent the public or unauthorized personnel from entering the Facility, each work area will be clearly identified using signs and/or physical barriers. Additionally, a log of all personnel visiting, entering, or working on the site shall be maintained by the Plant Operator (PO). Visitor access needs to be approved by the PO or Site Supervisor (SS), and following approval visitors will be required to attend a site orientation/safety training provided by the PO or SS.

(2) Electronic Security and Surveillance Facilities

Trespassing is generally not an issue during construction of wind power projects. Therefore, electronic security and surveillance is not currently proposed for the Facility. However, if problems arise, video cameras or other surveillance technology may be set up to monitor activity. In addition, the Applicant has prepared a Preliminary Emergency Action Plan (EAP), which is included as Appendix W to this Application. The Preliminary EAP provides

a “Civil Disturbance Response Plan” that can also be applied to trespassing, and the following summarizes the steps outlined in this plan:

1. Any site personnel noting a possible civil disturbance should contact a manager immediately.
2. If necessary, all entrances and exits will be secured.
3. Should unauthorized intruders gain access onto the premises, refrain from any contact with the intruders.
4. All site personnel should remain in the area, remain calm and follow instructions from management.
5. Should intruders gain access into the building and damage property, site personnel should not interfere. The personal safety of site personnel is more important than the protection of the Applicant’s property.

(3) Security Lighting

Security lighting activities associated with Facility construction will include lighting of the staging areas and areas immediately around the office trailers. Lighting will be directed downward where possible to minimize the effects of light pollution/trespass and will be minimized to the extent practical in order to reduce potential wildlife attraction. In addition, construction that takes place outside of daylight hours will include the lighting necessary to allow for safe construction activities while at the same time minimizing off-site light pollution/trespass to the maximum extent practicable.

(4) Setback Considerations

Please see Exhibit 6(a) for a detailed discussion of Facility setbacks. These setbacks, in association with the access controls discussed in (a)(1) of this Exhibit above, should ensure adequate safety and security during construction of the Facility.

(b) Preliminary Plans for Site Security During Facility Operation

It is anticipated that the Applicant will own and operate the Cassadaga Wind Project. Therefore, the Applicant will be responsible for site safety and security during operation. The Applicant has developed a Preliminary Site Security Plan for Facility Operations (Appendix X), which includes the following measures to be implemented during Facility operation.

(1) Access Controls

All access roads shall be gated to restrict access to the general public. Gates will be required to be kept locked when turbine maintenance is not occurring. Signage will be installed on gates warning the public not to trespass and of possible ice throw hazards. If unauthorized access is found to become a reoccurring problem (i.e., multiple incidents a month) or gates are found to be damaged, intrusion detection devices shall be evaluated for installation at the entrance of Facility access roads. Violations of access road gate locking by subcontractors and visitors may result in them being banned from the Facility. In addition, all Facility substations shall be fenced. Control buildings within the substation and the fence door shall be kept locked unless authorized personnel are inside the substation. The access road entrance to Facility substations shall be gated and kept locked in a similar manner to turbine access roads. Finally, wind turbine access doors shall be closed and locked except when Facility personnel are inside the turbine. Signage will be posted at every wind turbine stating that it is a federal offense to damage a wind turbine and stating that no trespassing is allowed on the Facility.

(2) Electronic Security and Surveillance Facilities

Facility substations and the O&M building will have alarm systems and video recording in place. No other electronic security is currently anticipated or proposed. However, intrusion detection can be added to access road gates and wind turbine towers if such measures are determined to be necessary during Facility operation.

(3) Security Lighting

Security lighting shall be installed at all wind turbines, substations, and the O&M building. Security lighting that fails shall be promptly replaced and checking security lighting functionality shall be a component of all maintenance inspections of substations and turbines in accordance with the inspection schedule indicated in the Facility's Preliminary Operations and Maintenance Plan (see Appendix H). A summary of the security lighting for turbines, substations and the O&M building is provided below (see Section 6. Lighting of the Preliminary Site Security Plan in Appendix X for additional detail).

- Turbine lighting – turbines shall have a safety light near the door, which will be set on a motion detector (if feasible) and hooded downward. If motion detection lighting is not feasible, the light will be placed on an auto-off switch so that it automatically shuts off after a specified period of time. (i.e., period of time needed to accomplish any nighttime safety or maintenance work). The light will be the lowest intensity required to accomplish its safety function, and will not be a sodium vapor light.

- Substation lighting – Substation lights shall be kept to the minimum necessary for security and maintenance safety. Substation lighting will be replaced with low-light video and/or camera surveillance monitoring or other security methods that do not require lighting whenever practicable. Substation lighting will be set on a motion detector or an auto-off switch, and hooded downward. The light will be the lowest intensity required to accomplish its safety purpose and will not be a sodium vapor light. Following Certification of the Facility, a lighting designer will be employed to design a lighting plan for the substation in order to avoid any redundant and ineffective lighting.

- O&M building lighting – O&M building lights will be set on a motion detector (if feasible) and hooded downward. If motion detection lighting is not feasible, the light will be placed on an auto-off switch so that it automatically shuts off after a specified period of time. The light will be the lowest intensity required to accomplish its safety function, and will not be a sodium vapor light.

(4) Aircraft Safety Lighting

Lighting of the turbines (and other infrastructure as needed) will be in accordance with FAA regulations, and will follow specific FAA lighting design guidelines to reduce collision risk. The Applicant submitted applications for 62 turbine locations in August 2015 to the FAA. In November 2015, the FAA issued Determinations of No Hazard to Air Navigation (DNH) for 62 turbine locations, which are included with this Application in Appendix Y. It is the standard procedure of the FAA to stipulate that warning lights be installed on all turbines until the final Facility layout has been established. It is anticipated that the final lighting plan will reduce the number of turbines requiring lighting to approximately one third of the total number of Facility turbines, which is typical for a wind energy project. However, the final lighting plan will ultimately be approved by the FAA, and therefore will ensure aircraft safety. Specifications for anticipated turbine lights will be in accordance with FAA's December 4, 2015 Advisory Circular 70/7460-1L, specifically Chapter 13 (Marking and Lighting Wind Turbines), which requires the use of FAA L-864 aviation lights (Chapter 13 of the FAA Circular is included in Appendix P). Because the Determinations of No Hazard to Air Navigation have already been received, which contemplate the use of white paint/synchronized red lights, radar-activated FAA marking lights will not be considered. Radar-activated FAA marking light systems are considerably more expensive than the traditional white paint/synchronized red light marking system. Furthermore, radar-activated lighting is more practical at wind farms with a smaller Facility area to reduce the number of radar locations needed to provide coverage for the Facility.

(5) Setback Considerations

Please see Exhibit 6(a) for a detailed discussion of Facility setbacks. These setbacks, in association with the access controls discussed in (b)(1) and security lighting discussed in (b)(3) of this Exhibit above, should ensure adequate safety and security during operation of the Facility.

(6) Cyber Security Program

The Applicant has partnered with an industry leading Managed Services Security Provider that is compliant with the necessary North American Electric Corporation's CIP standards and provides continuous (24 hrs/day, 7 days/week, 365 days/year) monitoring and alerting on all servers, workstations, and firewalls. This includes the O&M as well as the substation communication lines and end points. On other projects, the Applicant has implemented a multi-tier advanced endpoint threat detection approach to alerting, and threat mitigation.

Furthermore, on other projects, the Applicant has engaged all site and corporate employees with ongoing cybersecurity awareness training and testing on an annual basis. Additionally, the Applicant has developed a number of policies that address strong password encryption, two factor authentication, an incident response plan and playbook, as well as off-site storage of log files and backup of critical assets. The Applicant anticipates incorporating these measures at the Facility.

(c) Preliminary Safety Response Plan

A Preliminary Emergency Action Plan (EAP) has been developed by the Applicant and is included as Appendix W to this Application. The information contained in the EAP has been developed in conjunction with local emergency service providers, will be made available to the employees of the Applicant and any visitors or workers to the Facility, and outlines the procedures to follow in the event of an emergency. In addition to identifying specific emergencies that could arise at the Facility, the EAP also provides awareness to the following:

- Identify alarm and emergency evacuation procedures.
- Identify procedures to be followed by site personnel who remain to operate critical operations before they evacuate.
- Identify rescue and medical duties for all site personnel following emergency evacuation.
- Identify persons who can be contacted for further information or explanation of duties under this plan.

- Establish training guidelines for site personnel regarding this plan to support safe practices in the event of an emergency.

A discussion of the various elements contained within the EAP is provided below.

(1) Identification of Contingencies that Would Constitute an Emergency

The EAP has been developed to support the safety of persons at the Facility in the event of a major emergency. The EAP contains information regarding the following emergency situations (and for each, outlines procedures and/or guidelines to be followed in the event an emergency arises):

1. Medical emergency
2. Building evacuation
3. Building utility failure
4. Fire
5. Earthquake
6. Adverse weather
7. Hazardous material spill
8. Crime/violent behavior/civil disturbance
9. Bomb threat

(2) Emergency Response Measures by Contingency

In the event an emergency response measure is necessary, the EAP provides detailed instructions to (and procedures/guidelines to be followed by) site personnel, the general public, and emergency responders for each of the above listed contingencies. A brief summary of these procedures is provided below (see Appendix W for additional information).

1. Medical emergency
    a. Do not move victim unless safety dictates.
    b. If the injury appears to be life threatening, be prepared to give the 911 operator as much information as possible.
    c. If the injury is not life threatening or likely to result in permanent disability, first aid care may be provided by trained employee.

2. Building evacuation
    a. An O&M building evacuation is required in the event of an emergency situation. i.e. fire/chemical spill
    b. Be aware of all marked exits from your area and building. Know the routes from your work area. Marked exit signs are installed in all buildings.
    c. Take note of physically handicapped individuals in your area that may need assistance.
    d. Keep fire lanes, hydrants and walkways clear for emergency crews and equipment.
3. Building utility failure
    a. Notify the Plant Operator.
    b. Do not return to an evacuated building unless directed to do so by Plant Operator.
4. Fire
    a. Call 911 in the event of a fire. After the 911 call notify the Plant Operator and Turbine Supplier Supervisor.
    b. Know the location of fire extinguishers, fire exits and alarm systems in your area and know how to use them. Extinguishing a fire should not be done unless it can be done in a safe manner.
    c. A complete evacuation of the entire building or area will be performed in <u>any</u> fire emergency. All site personnel should proceed to the nearest exit or safe location.
    d. Seek out any handicapped personnel in the area and provide assistance when exiting.
    e. Managers or site personnel will assist in the evacuation and will meet the Fire Department to direct them to the proper location. Once the Fire Department has arrived, the responding incident commander will take charge of all rescue operation and suppression activities.
5. Earthquake
    a. Stay in the building. Many injuries occur while people run through the building to the outside. It is possible to be hit by flying objects, falling plaster or other debris.
    b. Assist any handicapped persons in the area and find a safe place for them.
    c. Drop, cover and hold. Try to take cover under a table or other sturdy furniture. Kneel, sit or stay close to the floor. Hold onto furniture legs for balance. Be prepared to move with your cover. Face away from any windows.
    d. If you are outside, stay outside. Go to a clear area away from buildings, trees and power lines.
6. Adverse weather
    a. Remain indoors.
    b. Stay away from open doors or windows, metal pipes or electrical appliances.
    c. Prepare for flash flooding.
    d. Follow Management instructions.

7. Hazardous material spill
    a. Refer to the SPCC.
8. Crime/violent behavior/civil disturbance (see Exhibit 18(a)(2) above)
9. Bomb threat
    a. All bomb threats must be treated as a serious matter and must be considered real until proven otherwise.
    b. If through mail or suspicious packages: do not handle the envelope or package. Clear the area and call 911, then contact the Plant Operator.

(3) Evacuation Control Measures by Contingency

Unlike a nuclear facility or a natural gas facility, a wind power project does not create safety concerns of a magnitude that would necessitate an evacuation. Therefore, Facility-related operations are not anticipated to require evacuation. Although unlikely, natural disasters (e.g., tornadoes, earthquakes) represent the only possible circumstances that may require excavation. However, in the event an evacuation from the Facility is necessary, the EAP provides detailed instructions to site personnel, the general public, and emergency responders (see Exhibit 18(c)(2) above for more information).

(4) Community Notification Procedures by Contingency

The EAP includes protocols for the notification of land owners, neighbors of the O&M building, relevant utilities, local first responders/emergency services, and environmental agencies in the event of an emergency. The PO will notify Facility component host land owners of incidents occurring on their private property via telephone. This reporting will be at the discretion of the PO. Additionally, emergency notification of neighbors of the O&M building will be provided if the PO deems it necessary.

The PO will notify local or regional environmental agencies of incidents which may have resulted in violation of applicable environmental regulations (for example, release of chemicals or lubricants to the environment). In addition, as indicated above Exhibit 18(c)(2), notification of local emergency responders will also take place in the event of various emergencies.

(5) Notification of Relevant Utilities

The PO will notify any relevant utilities that may be impacted by incidents that occur at the Facility by telephone. A list of all utility contacts shall be kept at the O&M building.

(6) Access for Emergency Responders

Emergency responders will not have direct access to turbines or substations through access roads due to security concerns and landowner preferences. However, anytime that the Facility operators and maintenance personnel are at a turbine site or substation, the access road gates will remain unlocked so that medical personnel will be able to access turbines and substations when personnel are at these locations. If a fire should occur, local fire departments are not expected to access turbine locations to fight the fire. With regard to other potential emergencies, it is not anticipated that anyone will be at the turbine locations or substation that would require medical attention when the access road gates are locked. Emergency responders will have the contact information of all the Applicant's POs so that access for emergencies can be obtained as quickly as possible.

(d) Provision of Security and Safety Plans to NYS Division of Homeland Security

The Site Security Plan (Appendix X) and EAP (Appendix W) were provided to the NYS Division of Homeland Security on March 22, 2016.

(e) Provision of Security and Safety Plans to Local Office of Emergency Management

The Facility site is not located within any part of a city that has a population over one million and therefore a review by the local office of emergency management is not required by the Article 10 regulations. However, as stated above, the Applicant has coordinated with the Chautauqua County Emergency Services Department. Specifically, an Applicant representative (Seth Wilmore) spoke with Chautauqua County's Director of Emergency Services (Julius Leone Jr.), who indicated a pre-filing review of the Site Security Plan or EAP was not necessary, and rather those documents would be reviewed by the Chautauqua County Emergency Services Department when the entire Application is filed and made available to the public.

(f) Onsite Equipment to Respond to Fire Emergencies or Hazardous Substance Incidences

The Applicant will provide fire extinguishers in all turbines, automated external defibrillators, first aid kits, spill kits, and Spec Pak at the O&M building. There will also be emergency descent rescue devices in the nacelles of every turbine

to allow personnel to escape from a turbine in the event of a serious injury, fire, etc. Sliders for the fall arrest system will be provided to emergency responders who have been specifically qualified to climb wind turbines.

(g) Contingency Plans for Fire Emergencies or Hazardous Substance Incidences

The EAP contains a protocol and guidelines to be followed in the event of a fire emergency, as summarized in Section (c)(2) above. In addition, drills with emergency responders at each site will occur at least once a year. Drill activities would be jointly decided between site management and emergency responders and typically cover a different rescue aspect each time. In addition, a detailed Spill Prevention, Control and Countermeasure (SPCC) has been prepared, and will be implemented for both the construction and operation phases of the Facility. The SPCC plan provides a detailed assessment of potential hazardous substances that could be utilized during the construction, operation or maintenance of the Facility. The SPCC includes detailed protocols to be followed in the event of minor and major hazardous substance discharge events, as well as a Facility-wide inventory of spill response equipment. The majority of potentially hazardous substances on site consist of various oils such as hydraulic oil, mineral oil, and lubricating oil (See Exhibit 23 for additional information on the Preliminary SPCC Plan).

(h) Provision of Security and Safety Plans to Local Emergency First Responders

The EAP, as described above, has been provided to the local emergency first responders that serve the Facility (see Appendix W for copies of cover letters associated with providing the EAP to local emergency responders).