



**APEX**  
CLEAN ENERGY

# Heritage Wind Project Preliminary Site Security Plan

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## Overview

This preliminary Site Security Plan (“Plan”) will serve as the basis for the final Site Security Plan that will be implemented at the Heritage Wind Project (the “Project”) during both Project construction and operation. The Balance of Plant (“BOP”) contractor will be required to provide a site security plan for the Facility construction, which will be developed post certification. The objective of the Plan is to ensure the Project is operated with proper security measures in compliance with security regulations applicable to the construction site and generation facilities. The plan is intended to avoid unauthorized access and protect the Project assets from trespass, theft, vandalism, or other security threats. The provisions of this Plan are mandatory for all Project personnel and subcontractors assigned to the Project. All Project employees, consultants, and subcontractors will attend a pre-job briefing where the contents of this Plan will be reviewed.

## Access Controls

To reduce safety and security concerns, the public will not be allowed on the Site during construction. Access will be restricted by locked gates, other barriers, and/or signage as appropriate. Gates will be required to be kept locked when construction or maintenance activity is not occurring. Signage will be installed on gates warning the public not to trespass and of possible ice throw hazards. Intrusion detection devices shall be evaluated for installation at the entrance of Project access roads if unauthorized access is found to become a recurring problem (i.e., multiple incidents a month) or gates are found to be damaged. Violations of access road gate locking by subcontractors and visitors may result in them being banned from the Project.

During the construction phase, an overnight security patrol may be stationed on-site when materials and work in progress may be more accessible or at risk of vandalism or theft. A log of all personnel visiting, entering, or working on the Site will be maintained. Visitors will be required to attend the site orientation/safety training provided.

## Wind Turbines

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 to inform people that only authorized access is allowed. If vandalism and damage to wind turbines becomes a problem, intrusion detection devices shall be evaluated for installation at wind turbine sites.

Turbine doors will be equipped with lighting to promote security and safe operation. Lighting will be designed in consideration or required ingress and egress during emergency situations, and to minimize impact to the environment. All lighting on turbines and meteorological towers will comply with Federal Aviation Administration (FAA) regulations and guidelines to minimize collision risk, as explained in more detail in

following sections regarding Lighting within this appendix.

## **Substation**

The Project substations will be fenced, and the access gate will be kept locked. Access will be granted only to authorized personnel. . Signage will be posted along the fence indicating high voltage hazard and prohibiting trespass. Control buildings within the substation will be locked when not being accessed by authorized Facility staff.

Once constructed, the Point of Interconnection Substation (POI) will be owned and operated by National Grid, which will be responsible for implementing necessarily site security measures.

## **Electronic Security and Surveillance Facilities**

Trespassing is generally not an issue during construction of wind power projects. If intrusion/vandalism and damage to the Facility, including access roads, turbines, and substations, becomes an issue. Intrusion detection devices, video cameras, alarm systems or other surveillance technology may be installed as necessary to monitor activity during construction.

## **Operations and Maintenance Building**

The Operations and Maintenance Facility (“O&M building”) will contain necessary tools and equipment required to conduct routine maintenance on wind turbines and associated facilities. The O&M building will be locked when not in use and secured with an alarm system to deter intruders. If unauthorized access and/or vandalism is found to be a problem, intrusion detection devices such as security cameras or other security equipment, may be installed as necessary.

## **Lighting**

Security lighting is an important component of the security plan. 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 in the O&M Plan.

### **Turbine Lighting**

Turbines shall have a safety light near the turbine door. The light shall be set on a motion detector and hooded downward. If motion detector lighting is not feasible, the light will be placed on an auto-off switch in which the light will automatically turn 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 purpose and will not be a sodium vapor light.

Lighting on turbines and meteorological towers will comply with Federal Aviation Administration (FAA) regulations and will follow specific design guidelines to reduce collision risk.<sup>1</sup> It is the standard procedure of the FAA to stipulate that warning lights be installed on all turbines until the final Project layout has been established. It is anticipated that the final lighting plan will reduce the numbers of turbines requiring lighting to approximately one-third of the total number of Project turbines, which is typical for a wind energy project. The final lighting plan will ultimately be approved by the FAA and will ensure aircraft safety. The turbine lights must conform to FAA's December 4, 2015 Advisory Circular 70/7460-1L or as updated, specifically Chapter 13 (Marking and Lighting Wind Turbines), which requires the use of FAA L-864 aviation lights.

### **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 and hooded downward. If motion detector lighting is not feasible, the light will be placed on an auto-off switch in which the light will automatically turn off after a specified period of time (i.e., period of time needed to accomplish any nighttime safety, intrusion detection or maintenance work). The light will be the lowest intensity required to accomplish its purpose and will not be a sodium vapor light. A lighting designer will be employed to design a lighting plan for the substation in order to avoid any redundant and ineffective lighting. The lighting plan will be developed prior to construction and will be provided to the Department of Public Service.

### **O&M Building Lighting**

O&M building lights will be set on a motion detector and will be hooded downward. If motion detector lighting is not feasible, the light will be placed on an auto-off switch in which the light will automatically turn 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 purpose and will not be a sodium vapor light.

## **Setback Considerations**

Project setbacks, in association with the access controls previously discussed, and periodic inspections of security measures, should ensure adequate safety and security during operation of the Project.

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<sup>1</sup> The Project will comply with the requirements imposed by the FAA. This preliminary Site Security Plan will be revised, as necessary, to conform to any terms and conditions imposed by the FAA.

## Cyber Security

The Project operator will partner with an industry leading Managed Services Security Provider that is compliant with the necessary North American Electric Reliability Corporation's (NERC) Critical Infrastructure Protection (CIP) standards and provides continuous (24 hours/day, 7 days/week, 365 days/year) monitoring and alerting on all servers, workstations, and firewalls by a Security Operations Center. This includes the communication lines for the O&M building as well as the substation communication lines and end points. These mandatory Reliability Standards include CIP Standards 001 through 009, which address the security of cyber assets essential to the reliable operation of the electric grid. To date, these standards (and those promulgated by the Nuclear Regulatory Commission) are the only mandatory cybersecurity standards in place across the critical electric infrastructures of the United States. Subject to Federal Energy Regulatory Commission (FERC) oversight, NERC and its Regional Entity partners enforce these standards, including periodic validation, which were developed with substantial input from industry and approved by FERC, to accomplish NERC's mission of ensuring the security and reliability of the electric grid.

## Training

New contractors and site personnel will be oriented to the Plan via a copy and review of the final Site Security Plan covering construction or operation of the Facility, as appropriate (and will be required to sign an Agreement and Acknowledgement Sheet) in combination with their orientation to other Company policies and plans such as the Emergency Action Plan and Health and Safety Plan.

Beyond new contractor and/or personnel hire orientation, the Plant Operator, or the employee's direct supervisor, shall provide training to support their job function. A copy of this Plan is provided to each person on site and is to be available at all times for all site personnel to review at the construction site or the O&M Building, as appropriate.