

Black Oak Wind Farm Lighting Plan

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 of the nacelles shall be implemented as per the requirements and determinations of the FAA. 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 dictate 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, and do not have a proven track record.

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. No O&M building is planned, so it will need no lighting.