

## **6.14.045A AMENDMENT TO COUNTY WIND ENERGY REGULATIONS AND DEFINITIONS**

### **Section 1. Purpose and Intent**

The purpose of this amendment is to enhance the safety and efficiency of air traffic near wind energy installations by mandating the implementation of radar-based Aircraft Detection Lighting Systems (ADLS) for all repowering projects of existing wind turbines. This requirement aims to minimize light pollution and improve the visual environment for nearby communities, while ensuring safety compliance for air traffic.

### **Section 2. Definitions**

For the purposes of this amendment:

- a. "Repowering" refers to the process of replacing older wind turbines or significant components of turbines to extend their life, increase their efficiency, or expand their capacity.
- b. "Aircraft Detection Lighting System (ADLS)" refers to a radar or other sensor-based system designed to detect aircraft in the vicinity of wind turbines and control the operation of aviation safety lights accordingly.

### **Section 3. Amendment to County Ordinances**

The existing County Ordinances related to wind turbines are hereby amended to include the following provisions:

#### **a. Installation Requirements and System Specifications:**

Notwithstanding the rules in 6.14.045 through 6.14.050, all Commercial Wind Energy Devices (CWED) constructed or repowered after June 18, 2024 shall not be artificially lighted, except to the extent required by the FAA or other applicable authority. Lighting, including lighting intensity and frequency of strobe, shall adhere to but not exceed requirements established by Federal Aviation Administration permits and regulations.

All CWEDs or turbines constructed or repowered after June 18, 2024 shall be equipped with an Aircraft Detection Lighting System (ADLS). An aircraft Detection Lighting System (ADLS) is a passive radar sensing system used to turn on obstruction lighting (red flashing lights) only when aircraft are detected at the defined outer perimeter.

ADLS systems in Sac County shall be capable of automatically toggling the red aviation safety lights on top of the turbines on when aircraft are detected within a minimum radius of 3 miles from any turbine or as required by FAA regulations.

The ADLS should ensure that turbine lights remain off unless an aircraft's proximity necessitates illumination for safety reasons.

Compliance with Federal Aviation Administration (FAA) guidelines and standards for ADLS systems is mandatory.

**b. Compliance and Verification:**

A certification of compliance with this ordinance from a qualified independent inspector must be submitted to the Sac County Zoning Administrator prior to the operational deployment of newly constructed or repowered CWEDs or turbines.

Wind energy companies must conduct annual tests of the ADLS to ensure functionality and compliance. The results must be submitted to the Sac County Zoning Administrator within 30 days of completion.

**c. Enforcement and Penalties:**

Failure to install an ADLS in accordance with this amendment will result in a penalty of up to \$10,000 per turbine per month of non-compliance.

Continuous non-compliance for more than six months may result in additional penalties and potential suspension of operational permits.

**Section 4. Effective Date**

This amendment will take effect 90 days from the date of passage, allowing wind energy companies adequate time to prepare for the new requirements' implementation.

**Section 5. Severability**

If any portion of this amendment is found to be invalid or unenforceable, the remaining provisions shall continue in full force and effect.

**Section 6. Ratification**

All provisions of the existing county ordinances not amended by this document remain in full force and effect.