

SESSION OF 2023

SUPPLEMENTAL NOTE ON SENATE BILL NO. 49

As Amended by Senate Committee on Utilities

Brief*

SB 49, as amended, would require the installation of a light-mitigating technology system (lighting system) in new and existing wind energy conversion systems (wind turbines) upon approval from the Federal Aviation Administration (FAA). The bill would also establish requirements for the vendors of lighting systems and allow board of county commissioners to enter into certain agreements with a developer, owner, or operator (developer) of wind turbines.

Lighting System Requirement for New Wind Turbines

The bill would require, on and after July 1, 2023, any developer of new wind turbines to apply to the FAA for the installation of a lighting system that complies with FAA regulations. If approved by the FAA, the developer would be required to install the lighting system on the approved wind turbines within 24 months after approval.

Lighting System Requirement for Existing Wind Turbines

The bill would require, on and after January 1, 2026, any developer of wind turbines that began commercial operations in Kansas without a lighting system to apply to the FAA for installation and operation of such system that complies with FAA regulations within six months after the execution of a new power offtake agreement related to the wind turbines.

*Supplemental notes are prepared by the Legislative Research Department and do not express legislative intent. The supplemental note and fiscal note for this bill may be accessed on the Internet at <http://www.kslegislature.org>

The bill would require the developer of the wind turbines, if approved by the FAA, to install the lighting system on approved wind turbines within 24 months of the approval.

Requirements for Vendors of Lighting Systems

The bill would require any vendor selected for installation of a lighting system on wind turbines and approved by the FAA for installation to provide the Kansas Department of Transportation (KDOT), Aviation Division, notice of the progress of the installation of the lighting system, in a form and manner prescribed by the Aviation Division.

If the installation of the lighting system is delayed beyond the 24-month installation requirement, the vendor would be required to provide notice and an update to the Aviation Division no less than once every three months on the reasons for the delay and the current status of the installation.

The bill would authorize the Aviation Division to establish policies and procedures to establish a uniform schedule for submitting notice.

Costs

The bill would place the responsibility for any costs associated with the installation, implementation, operation, and maintenance of a lighting system on the developer, owner, or operator of the wind turbine.

Board of County Commissioners

The bill would authorize the board of county commissioners (board) of any county to enter into an agreement with a developer of wind turbines for the purpose of financing some or all of the costs of the purchase and installation of a lighting system, subject to approval by the

FAA. The board would be authorized to issue revenue bonds for this purpose.

The bill would state that, at or prior to the issuance of the revenue bonds, the board could pledge any revenues associated with the wind turbines or any other revenues. Any costs associated with the ongoing operation and maintenance of the lighting system that is financed in whole or in part by a county would be the sole responsibility of the developer of the wind turbines.

Definitions

The bill would define the following terms:

- “Light-mitigating technology system” would mean aircraft detection lighting or any other comparable system capable of reducing the impact of facility obstruction lighting while maintaining conspicuity sufficient to assist aircraft in identifying and avoiding collision with a wind energy conversion system;
- “Power offtake agreement” would mean a long-term contract that provides for:
 - The provision of the whole or any part of the available capacity or the sale or other disposal of the whole or any part of the output of a wind energy conversion system; or
 - A contract for differences or financial hedge tied to the output from the wind energy conversion system; and
- “Wind energy conversion system” would mean an electric generation facility consisting of five or more wind turbines that are 50 feet or taller in height and

any accessory structures and buildings, including substations, meteorological towers, electrical infrastructure, transmission lines, and other appurtenant structures.

Effective Date

The bill would be in effect upon publication in the *Kansas Register*.

Background

The bill was introduced by the Senate Committee on Utilities at the request of a representative of the Kansas Power Alliance.

[*Note:* The Senate Select Committee on Wind Turbine Lighting met during the 2022 Interim. Part of the Interim Committee's recommendations included the introduction of two separate bills to address lighting systems for future wind turbines and the retrofitting of existing wind turbines. The bill pertaining the retrofitting of existing wind turbines is 2023 SB 46, portions of which were added to SB 49 by the Senate Committee.]

Senate Committee on Utilities

In the Senate Committee hearing, Senator Peck, representatives of the Kansas Power Alliance and Kansas Livestock Association, the Executive Director of Audubon of Kansas, and one private citizen provided **proponent** testimony. The proponent testimony discussed the work by the Senate Select Committee on Wind Turbine Lighting, enjoyment of the night sky, private property rights, cost of lighting systems, and the effect of wind turbine lights on bats and birds.

Written-only proponent testimony was provided by a representative of the Sierra Club – Kansas Chapter and six private citizens.

Neutral testimony was provided by the Director of Policy for KDOT, who stated the agency has concerns about naming KDOT as the agency to review waiver or extension requests and issue the waivers or extensions, as KDOT does not have the authority to do so. The FAA is the agency with exclusive authority to regulate aviation safety, the efficiency of the navigable airspace, and air traffic control over airspace. Written-only neutral testimony was provided by representatives of Climate + Energy Project and DeTect, Inc.

No other testimony was provided.

The Senate Committee amended the bill to:

- Change the date from January 1, 2023, to July 1, 2023, for which new wind turbines would be required to apply to the FAA for installation of a lighting system;
- Remove the ability for a developer of wind turbines to apply for a waiver from the 24-month requirement for lighting systems on new wind turbines;
- Establish January 1, 2026, as the date upon which a developer of existing wind turbines would, upon a new power offtake agreement, be required to apply to the FAA for approval of a lighting system;
- Require developers of existing wind turbines to apply to the FAA for approval of a lighting system within 6 months of executing a new power offtake agreement, and upon approval by the FAA, require the installation of a lighting system within 24 months;

- Add requirements for a lighting system vendor to provide certain information to the KDOT Aviation Division;
- Authorize a board of county commissioners to finance some or part of a lighting system, allow a board to issue revenue bonds, and state the ongoing operation and maintenance costs of a light system financed by in whole or part by a board are the responsibility of the developer;
- Delete “light intensity solution technology” from the definition of “light-mitigating technology system”;
- Add the definition of “power offtake agreement”;
and
- Change the effective date to upon publication in the *Kansas Register*.

Fiscal Information

The fiscal note prepared by the Division of the Budget on the bill, as introduced, states that KDOT would require additional expenditures totaling \$200,000 from the State Highway Fund in FY 2023 to carry out its responsibilities associated with the bill. This amount includes salaries and wages of \$175,000 for 5.0 additional FTE positions, plus \$25,000 for other operating expenses. The implementation of the bill would require additional expenditures from the State Highway Fund of \$403,500 in FY 2024, \$407,035 in FY 2025, \$410,605 in FY 2026, and \$414,211 in FY 2027. Total expenditures from FY 2023 to FY 2027 would be \$1,835,351. Of this amount, \$1,610,351 would be for ongoing annual salaries and wages expenditures for 5.0 FTE positions and \$225,000 would be for ongoing operating expenditures.

The Kansas Corporation Commission and the Citizens' Utility Ratepayer Board indicate that enactment of the bill would not have a fiscal effect.

Any fiscal effect associated with the bill is not reflected in *The FY 2024 Governor's Budget Report*.

Wind turbines; wind energy conversion systems; aviation obstruction lighting; light-mitigating technology systems; Federal Aviation Administration; Kansas Department of Transportation Aviation Division; retrofit; board of county commissioners; wind developer