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REVISOR *of* STATUTES

LEGISLATURE *of* THE STATE *of* KANSAS
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MEMORANDUM

To: Senate Select Committee on Wind Turbine Lighting
From: Office of Revisor of Statutes
Date: October 27, 2022
Subject: Summary of 2022 SB 478 – Wind Turbine Lighting Legislation

2022 Senate Bill 478 would require the installation of certain types of obstruction lighting systems on wind energy conversion systems to mitigate the intensity or duration of the obstruction lighting installed upon wind energy conversion systems. During the 2022 Legislative session, the Senate Committee on Utilities held hearings and amended SB 478 but then tabled the bill. This memorandum provides a summary of the introduced version of SB 478 and the committee's amendments to SB 478.

2022 SB 478

Subsection (a) of SB 478 would require each wind energy conversion system that is constructed or commencing operations on or after July 1, 2022, to be equipped with a light-mitigating technology system that complies with Federal Aviation Administration (FAA) requirements. To determine the type of light mitigating technology system that shall be installed, SB 478 would require a wind energy developer to propose the type of light-mitigating technology system that the developer would like to install and maintain on the wind energy conversion system to the board of county commissioners of the county where the wind energy conversion system will be located. The board of county commissioners may approve the proposed lighting system or may require the installation of another type of light-mitigating technology system to serve the public interest.

Subsection (b) of SB 478, would require each owner or operator of an existing wind energy conversion system to install a light-mitigating technology system or before July 1, 2025. If a light-mitigating technology system is not installed and operational by July 1, 2025, the owner or operator of the wind energy conversion system must discontinue operations of the wind

energy conversion system until a light mitigating technology system is installed and operational. To determine the type of light mitigating technology system that shall be installed, SB 478 would require a wind energy developer to propose the type of light-mitigating technology system that the developer would like to install and maintain on the wind energy conversion system to the board of county commissioners of the county where the wind energy conversion system will be located. The board of county commissioners may approve the proposed lighting system or may require the installation of another type of light-mitigating technology system to serve the public interest.

Under SB 478, the costs of the installation and operation of the light-mitigating technology system would be the responsibility of the developer, owner, or operator of the wind energy conversion facility.

As used in SB 478:

- "Light-mitigating technology system" means aircraft detection lighting, light intensity dimming solution technology or any 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.

2022 SB 478 – As Amended by Senate Committee on Utilities

The Senate Committee on Utilities amended SB 478 to make the bill apply only to wind energy conversion systems that commence operations on or after July 1, 2026. The amendment would require the developer of any such wind energy conversion system to file an application with the FAA to request the installation and operation of a light mitigating technology system. If the FAA approves the light mitigating technology system, the developer must install such lighting system. Only those wind energy conversion systems with 20 or more wind turbines that are more than 200 feet tall would be subject to such requirements.

SENATE BILL No. 478

By Committee on Utilities

2-9

1 AN ACT concerning wind energy conversion systems; relating to
2 obstruction lighting; requiring installation of light-mitigating
3 technology systems; authorizing boards of county commissioners to
4 determine the type of lighting system required.
5

6 *Be it enacted by the Legislature of the State of Kansas:*

7 Section 1. (a) (1) On and after July 1, 2022, no wind energy
8 conversion system shall be constructed or commence operations in this
9 state unless such system is equipped with a light-mitigating technology
10 system that complies with federal aviation administration regulations 14
11 C.F.R. § 1.1 et seq. and is approved for operation by the federal aviation
12 administration.

13 (2) Prior to construction or operation of any such wind energy
14 conversion system, the board of county commissioners of any county in
15 which construction is proposed may determine the type of light-mitigating
16 technology system that shall be used on such wind energy conversion
17 system. The developer shall submit an application to the board on a form
18 and in the manner specified by the board proposing the light-mitigating
19 technology system that such developer will install and maintain upon such
20 wind energy conversion system. The board shall have the authority to
21 approve the proposed light-mitigating technology system or to require the
22 installation of another light-mitigating technology system to serve the
23 public interest.

24 (b) (1) Each owner or operator of a wind energy conversion system
25 that was constructed and commenced operations in this state prior to July
26 1, 2022, shall install and maintain a light-mitigating technology system
27 that is consistent with federal aviation administration regulations 14 C.F.R.
28 § 1.1 et seq. and approved for operation by the federal aviation
29 administration. Such light-mitigating technology system shall be installed
30 on or before July 1, 2025. If any such owner or operator does not install
31 such a light-mitigating technology system prior to such date, the owner or
32 operator shall discontinue the operations of the wind energy conversion
33 system until such light-mitigating technology system is installed and
34 operational.

35 (2) The board of county commissioners of the county in which any
36 such wind energy conversion system has been constructed and placed in

1 operation prior to July 1, 2022, may determine the type of light-mitigating
2 technology system that shall be installed. Prior to installing such light-
3 mitigating technology system, the owner or operator shall submit an
4 application to the board of county commissioners on a form and in the
5 manner specified by the board that proposes the light-mitigating
6 technology system that the owner or operator proposes to install. The
7 board shall approve the proposed light-mitigating technology system and
8 may require the installation of another light-mitigating technology system
9 to serve the public interest.

10 (c) Any costs associated with the installation, implementation,
11 operation and maintenance of light-mitigating technology systems shall be
12 the sole responsibility of the developer, owner or operator of the wind
13 energy conversion system.

14 (d) As used in this section:

15 (1) "Light-mitigating technology system" means aircraft detection
16 lighting, light intensity dimming solution technology or any comparable
17 system capable of reducing the impact of facility obstruction lighting
18 while maintaining conspicuity sufficient to assist aircraft in identifying and
19 avoiding collision with a wind energy conversion system.

20 (2) "Wind energy conversion system" means an electric generation
21 facility consisting of one or more wind turbines and any accessory
22 structures and buildings, including substations, meteorological towers,
23 electrical infrastructure, transmission lines and other appurtenant
24 structures.

25 Sec. 2. This act shall take effect and be in force from and after its
26 publication in the statute book.

SENATE BILL No. 478

By Committee on Utilities

Proposed Amendments to
Senate Bill No. 478
Proposed Amendment 2
Senate Committee on Utilities
Prepared by: Nick Myers
Office of Revisor of Statutes

1 AN ACT concerning wind energy conversion systems; relating to
2 ~~obstruction lighting; requiring installation of light-mitigating~~
3 ~~technology systems; authorizing boards of county commissioners to~~
4 ~~determine the type of lighting system required.~~

5
6 Be it enacted by the Legislature of the State of Kansas:

7 Section 1. (a) ~~(1)~~ On and after July 1, 2022, no wind energy
8 conversion system shall be constructed or commence operations in this
9 state unless such system is equipped with a light-mitigating technology
10 system that complies with federal aviation administration regulations 14
11 C.F.R. § 1.1 et seq. and is approved for operation by the federal aviation
12 administration.

2026

notice was filed and application was made to the federal
aviation administration that included a request to install a
comprehensive

13 ~~(2) Prior to construction or operation of any such wind energy~~
14 ~~conversion system, the board of county commissioners of any county in~~
15 ~~which construction is proposed may determine the type of light-mitigating~~
16 ~~technology system that shall be used on such wind energy conversion~~
17 ~~system. The developer shall submit an application to the board on a form~~
18 ~~and in the manner specified by the board proposing the light-mitigating~~
19 ~~technology system that such developer will install and maintain upon such~~
20 ~~wind energy conversion system. The board shall have the authority to~~
21 ~~approve the proposed light-mitigating technology system or to require the~~
22 ~~installation of another light-mitigating technology system to serve the~~
23 ~~public interest.~~

If the request is approved by the federal aviation administration,
such light mitigating technology system shall be installed.

24 ~~(b) (1) Each owner or operator of a wind energy conversion system~~
25 ~~that was constructed and commenced operations in this state prior to July~~
26 ~~1, 2022, shall install and maintain a light-mitigating technology system~~
27 ~~that is consistent with federal aviation administration regulations 14 C.F.R.~~
28 ~~§ 1.1 et seq. and approved for operation by the federal aviation~~
29 ~~administration. Such light-mitigating technology system shall be installed~~
30 ~~on or before July 1, 2025. If any such owner or operator does not install~~
31 ~~such a light-mitigating technology system prior to such date, the owner or~~
32 ~~operator shall discontinue the operations of the wind energy conversion~~
33 ~~system until such light-mitigating technology system is installed and~~
34 ~~operational.~~

35 ~~(2) The board of county commissioners of the county in which any~~
36 ~~such wind energy conversion system has been constructed and placed in~~

1 ~~operation prior to July 1, 2022, may determine the type of light-mitigating~~
 2 ~~technology system that shall be installed. Prior to installing such light-~~
 3 ~~mitigating technology system, the owner or operator shall submit an~~
 4 ~~application to the board of county commissioners on a form and in the~~
 5 ~~manner specified by the board that proposes the light-mitigating~~
 6 ~~technology system that the owner or operator proposes to install. The~~
 7 ~~board shall approve the proposed light-mitigating technology system and~~
 8 ~~may require the installation of another light-mitigating technology system~~
 9 ~~to serve the public interest.~~

Strike all in lines 1-13

10 ~~(c) Any costs associated with the installation, implementation,~~
 11 ~~operation and maintenance of light-mitigating technology systems shall be~~
 12 ~~the sole responsibility of the developer, owner or operator of the wind~~
 13 ~~energy conversion system.~~

(b)

14 ~~(d)~~ As used in this section:

15 (1) "Light-mitigating technology system" means aircraft detection
 16 lighting, light intensity dimming solution technology or any comparable
 17 system capable of reducing the impact of facility obstruction lighting
 18 while maintaining conspicuity sufficient to assist aircraft in identifying and
 19 avoiding collision with a wind energy conversion system.

20 (2) "Wind energy conversion system" means an electric generation
 21 facility consisting of ~~one~~ or more wind turbines and any accessory
 22 structures and buildings, including substations, meteorological towers,
 23 electrical infrastructure, transmission lines and other appurtenant
 24 structures.

20

that are more than 200 feet in height above ground level

25 Sec. 2. This act shall take effect and be in force from and after its
 26 publication in the statute book.