

**SENATE BILL No. 353**

By Committee on Utilities

1-19

1 AN ACT concerning wind generation facilities; relating to construction  
2 and setback requirements; requiring local boards of county  
3 commissioners to approve applications for construction; establishing  
4 certain notification and health and safety requirements; establishing  
5 certain operating conditions for existing facilities.

6  
7 WHEREAS, This act shall be known and may be cited as the Kansas  
8 industrial turbine health and safety standards act.

9 Now, therefore:

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

11 Section 1. (a) (1) No facility shall be constructed within this state  
12 unless the setback distance from the each wind turbine of the facility is not  
13 less than 10 times the system height or 5,280 feet, whichever is greater,  
14 from any of the following properties:

15 (A) Nonparticipating landowner's property;

16 (B) public building;

17 (C) airport;

18 (D) federal wildlife refuge;

19 (E) public hunting area; or

20 (F) public park.

21 (2) The setback distances required pursuant to this section shall be  
22 measured from the ground-level center of the turbine to the nearest  
23 property line of any of the properties described in paragraph (1).

24 (b) Prior to the construction of any facility, the board of county  
25 commissioners of any county that contains any property within the setback  
26 distance established pursuant to subsection (a) shall approve an application  
27 for the construction of the facility. In addition to any other reasonable  
28 requirements imposed by the board by resolution and without respect to  
29 whether such requirements are imposed as part of any zoning regulation  
30 pursuant to K.S.A. 12-741 et seq., and amendments thereto, an application  
31 shall be approved by the board if the applicant complies with the  
32 following:

33 (1) The developer shall submit an application to the board on a form  
34 and in the manner specified by the board. Such application shall include:

35 (A) The name, address and telephone number of the applicant and the  
36 applicant's contact person for the construction of the facility; and

1 (B) a detailed site plan for the facility, including, but not limited to,  
2 proposed locations for turbines and any accessory structures and buildings.

3 (2) The applicant shall demonstrate to the board that all applicable  
4 setback distances pursuant to subsection (a) will be satisfied.

5 (3) The applicant shall provide notice, in writing, of the application  
6 and the proposed construction of the facility to all owners of any property  
7 located within any applicable setback distances provided in subsection (a).  
8 The applicant shall publish such notice in the official newspaper of the  
9 county in which the proposed facility would be located and in any county  
10 that contains property within any of the setback distances provided in  
11 subsection (a). The notice shall include a description of the location of the  
12 proposed facility and the total number of wind turbines and the system  
13 height of such wind turbines to be constructed.

14 (4) The applicant shall include information regarding the effects of  
15 and plans for avoiding, minimizing and mitigating potential adverse effects  
16 of the proposed energy facility on public health and safety and shall ensure  
17 that any wind turbine of such facility shall not generate instantaneous wind  
18 turbine noise in excess of 35 decibels as measured at the property line of  
19 adjacent landowners. Such applicant shall stipulate in such application and  
20 in any instruments that convey a lease or easement for the construction and  
21 operation of such facility that:

22 (A) A landowner shall have the right at any time after construction of  
23 the facility to choose and contract with any person or entity that provides  
24 wind turbine acoustic noise measurements to verify compliance with this  
25 paragraph;

26 (B) the applicant or developer shall be responsible for payment of the  
27 costs associated with any wind turbine acoustic measurement conducted  
28 pursuant to subparagraph (A); and

29 (C) the applicant or developer shall shut down any turbine that is  
30 found to be operating with noise levels in excess of such decibel limitation  
31 and shall take any appropriate measures to mitigate the decibel output of  
32 such turbine prior to continuing operation of such turbine.

33 (5) For any proposed facility that includes industrial wind turbines, an  
34 application for construction shall include:

35 (A) (i) An assessment that identifies the astronomical maximum as  
36 well as the anticipated hours per year of shadow flicker expected to be  
37 perceived at each residence, educational facility, workplace, healthcare  
38 setting, outdoor or indoor public gathering area, other occupied building  
39 and roadway within a minimum of one mile of any turbine based on  
40 shadow flicker modeling that assumes an impact distance of at least one  
41 mile from each of the turbines;

42 (ii) an attestation that shadow flicker shall not fall on any  
43 nonparticipating landowner's property or a written commitment to install

1 an optional shadow flicker system that results in no shadow flicker on any  
2 nonparticipating landowner's property;

3 (B) a description of the planned setbacks that explains why the  
4 indicated distances are adequate to protect the public from risks associated  
5 with the operation of the proposed wind energy facility and that indicates  
6 the distance between each wind turbine and the nearest:

7 (i) Landowner's existing building and property line; and

8 (ii) public road and overhead or underground energy infrastructure or  
9 energy transmission pipeline within two miles of any such wind turbine;

10 (C) an assessment of the risks of ice throw that includes an ice throw  
11 simulation to quantify ice throw risk, blade shear and tower collapse on  
12 public safety, including a description of the measures taken or planned to  
13 avoid or minimize the occurrence of such events and the alternative  
14 measures considered but not included by the applicant;

15 (D) a description of the lightning protection system planned for the  
16 proposed facility;

17 (E) a description of the federal aviation administration's lighting,  
18 turbine color and other requirements for the wind turbines and any  
19 determination made by the federal aviation administration regarding  
20 whether any hazard to aviation is expected from any of the wind turbines  
21 included in the proposed facility;

22 (F) a decommissioning plan prepared by an independent, qualified  
23 person or entity with demonstrated knowledge and experience in wind  
24 generation projects and cost estimates. Such decommissioning plan shall  
25 be in place prior to the operation of the facility and shall include:

26 (i) A description of sufficient and secure funding to implement the  
27 decommissioning plan that does not account for the anticipated salvage  
28 value of facility components or materials;

29 (ii) the provision of financial assurance in the form of an irrevocable  
30 standby letter of credit, performance bond, surety bond or unconditional  
31 payment guaranty executed by a parent company of the facility owner  
32 maintaining at all times an investment-grade credit rating. Such financial  
33 assurance shall be:

34 (a) Provided in an amount that is not less than  $\frac{1}{4}$  of the total cost of  
35 construction of such facility;

36 (b) updated at least once every five years to account for and adjust  
37 such financial assurance amount to reflect the average changes in the  
38 consumer price index for all urban consumers as published by the United  
39 States department of labor for each calendar year that precedes such  
40 update; and

41 (c) accessible by the county so that the county may initiate  
42 decommissioning of the facility if such facility has been abandoned or has  
43 not generated any electricity within the previous 24 months;

1 (iii) a requirement that such plan be resubmitted and reviewed by the  
2 board at least once every five years to ensure that the amount planned for  
3 decommissioning is sufficient and complies with the requirements of this  
4 section;

5 (iv) a plan for disassembly and removal of all turbines, including the  
6 blades, nacelles and towers from the site;

7 (v) a plan for the removal from the site of all transformers, overhead  
8 power collection conductors and electric poles;

9 (vi) a plan for the removal from the site of all underground  
10 infrastructure that is at depths of four feet or less below grade and the  
11 abandonment in place of all underground infrastructure at depths greater  
12 than four feet below finished grade; and

13 (vii) a plan to fill, grade to match adjacent contours and appropriately  
14 reseed areas where subsurface components are removed to stabilize such  
15 areas and allow them to revegetate naturally;

16 (G) a plan for fire protection for the proposed facility that is prepared  
17 by or in consultation with a fire safety expert; and

18 (H) an assessment of the risks that determines whether the proposed  
19 facility will interfere with the weather radars used for severe storm  
20 warning or any local weather radars.

21 (c) (1) Upon the filing of an application and publication of notice  
22 pursuant to subsection (b), the board of county commissioners shall hold a  
23 public hearing on the application at least 20 days, but not more than 90  
24 days, after the publication of such notice. The board shall deny the  
25 application if the board finds that the developer failed to comply with any  
26 of the requirements set forth in this section.

27 (2) If an application for construction is denied, nothing in this section  
28 shall prohibit a developer from resubmitting to the board an application for  
29 construction pursuant to this section.

30 (d) Nothing in this section shall prohibit zoning regulations adopted  
31 pursuant to K.S.A. 12-741 et seq., and amendments thereto, from imposing  
32 additional conditions or limitations with respect to facilities, approval of  
33 facilities or setbacks required for facilities.

34 (e) For the purpose of this section:

35 (1) "Airport" means any area of land or water designed and set aside  
36 for the landing and takeoff of aircraft and utilized or to be utilized in the  
37 interest of the public for such purposes, including any such private airstrip,  
38 landing strip or area used for military or commercial purposes.

39 (2) "Applicant" means any developer filing an application pursuant to  
40 this act. In the event that there is more than one person or entity qualifying  
41 as a developer, any of such persons or entities may serve as the applicant  
42 pursuant to this act.

43 (3) "Astronomical maximum" means the theoretical maximum

1 number of hours that shadow flicker will be produced at a location  
2 assuming the sun is shining all day from sunrise to sunset, the rotor-plane  
3 of the turbine is always perpendicular to the sun and the turbine is always  
4 operating.

5 (4) "Board" means the board of county commissioners of the county  
6 to which an application is submitted.

7 (5) "Developer" means any person, firm, partnership, corporation,  
8 limited liability corporation, association, cooperative corporation or other  
9 entity desiring to construct all or any portion of a facility and holding by  
10 lease, easement or otherwise the real property rights necessary for  
11 construction of a facility. "Developer" includes any of the persons or  
12 entities that may hold record title to the real property rights used or  
13 intended to be used for a facility.

14 (6) "Facility" means an electric generation facility consisting of one  
15 or more wind turbines and any accessory structures and buildings,  
16 including substations, meteorological towers, electrical infrastructure,  
17 transmission lines and other appurtenant structures located within the  
18 boundaries of land where a developer plans to construct all or a portion of  
19 such electric generation facility.

20 (7) "Industrial wind turbine" means any wind turbine with a  
21 generating capacity in excess of one megawatt.

22 (8) "Nonparticipating landowner" means any landowner who has not  
23 signed a lease agreement for the installation of an industrial wind turbine  
24 and owns real property adjacent to real property in which a landowner has  
25 signed a lease agreement for the installation of an industrial wind turbine.

26 (9) "Residential property" means any single-family dwelling, multi-  
27 family dwelling that contains two or more separate residential dwelling  
28 units, rural home site or farm home site that has been used as a residence  
29 within the last three years preceding an application filed pursuant to this  
30 section.

31 (10) "Shadow flicker" means the alternating changes in light intensity  
32 that can occur when the rotating blades of a wind turbine are back-lit by  
33 the sun and cast moving shadows on the ground or on structures.

34 (11) "System height" means the total height of a wind turbine as  
35 measured from the end of one blade of such turbine in a vertical position  
36 to the lowest point of the tower base.

37 (12) "Wind easement" means a right, whether stated in the form of a  
38 restriction, easement, covenant or condition, in a deed, will or other  
39 instrument executed by or on behalf of an owner of land for the purpose of  
40 ensuring adequate exposure of a facility to the winds.

41 Sec. 2. (a) Any developer, owner or operator of any facility that has  
42 commenced operation in this state shall:

43 (1) Operate such facility in a manner such that no permanent

1 residential dwelling shall experience shadow flicker under the normal  
2 operating conditions of such facility. If the owner or resident of any  
3 permanent residential dwelling experiences such shadow flicker, such  
4 owner or resident may submit a request to the developer, owner or operator  
5 of the facility to eliminate such shadow flicker. If the developer, owner or  
6 operator of any such facility receives such a request, such developer,  
7 owner or operator shall take immediate steps to eliminate the shadow  
8 flicker occurring upon such dwelling, including temporarily ceasing the  
9 operation of the offending turbine until achievement of the shadow flicker  
10 mitigation strategy. If the developer, owner or operator of a facility does  
11 not take action to eliminate such shadow flicker or is unable to eliminate  
12 such shadow flicker within 60 calendar days from the date any such  
13 request was received, the developer, owner or operator of the facility shall  
14 discontinue operation of the turbine until an inspection is done to verify  
15 that any subsequent mitigation strategies undertaken by the developer,  
16 owner or operator are sufficient to eliminate such shadow flicker on the  
17 permanent residential dwelling.

18 (2) Be adequately insured against loss or damage arising from  
19 liability to adjacent persons, properties and structures that are within the  
20 minimum setback distances provided in section 1, and amendments  
21 thereto. Such insurance shall be adequate to insure against the risks  
22 associated with the operation of the facility within such setback distances  
23 and shall insure against risks associated with ice throw, blade shear, tower  
24 collapse and any other damage caused by the operation of the facility.

25 (b) As used in this section:

26 (1) "Residential property" means any single-family dwelling, multi-  
27 family dwelling that contains two or more separate residential dwelling  
28 units, rural home site or farm home site that has been used as a residence  
29 within the preceding three years.

30 (2) "Developer," "facility" and "shadow flicker" mean the same as  
31 defined in section 1, and amendments thereto.

32 Sec. 3. This act shall take effect and be in force from and after its  
33 publication in the Kansas register.