



House of Representatives

File No. 714

General Assembly

January Session, 2003

(Reprint of File No. 380)

Substitute House Bill No. 5686
As Amended by House
Amendment Schedule "A"

Approved by the Legislative Commissioner
May 16, 2003

**AN ACT REQUIRING REDUCTION IN HAZARDOUS ROAD GLARE
AND LIGHT POLLUTION FROM PRIVATE AREA FLOODLIGHTING
LOCATED WITHIN THE STATE RIGHT-OF-WAY.**

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. (NEW) (*Effective October 1, 2003*) (a) For the purposes of
2 this section:

3 (1) "Fixture" means the assembly that holds a lamp and may include
4 an assembly housing, a mounting bracket or pole socket, a lamp
5 holder, a ballast, a reflector or mirror and a refractor or lens;

6 (2) "Luminaire" means the complete lighting system, including the
7 lamp and the fixture;

8 (3) "Lumen" means a unit of measurement of luminous flux;

9 (4) "Floodlight" means any luminaire fitted with a lamp having an
10 output greater than one thousand eight hundred lumens intended for
11 private area lighting and mounted on a utility pole within the state
12 right-of-way;

13 (5) "Light pollution" means direct light emitted above the horizontal
14 plane running through the lowest point on the luminaire;

15 (6) "Light trespass" means light emitted by a luminaire that shines
16 beyond the boundaries of the property intended for illumination;

17 (7) "State highway" has the same meaning as in subsection (a) of
18 section 13a-1 of the general statutes;

19 (8) "Direct light" means light that can be seen directly from the light
20 source and other light-emitting or reflecting elements of the luminaire;

21 (9) "Glare" means the sensation produced by the illuminance of a
22 luminaire within the visual field that is sufficiently greater than the
23 illuminance to which the eyes are adapted causing annoyance,
24 discomfort or loss in visual performance and visibility; and

25 (10) "Illuminance" is the density of the luminous flux incident on a
26 surface represented by the quotient of the luminous flux by the area of
27 the surface when the surface is uniformly illuminated.

28 (b) No floodlight intended for private property illumination shall be
29 located within the state right-of-way on any state highway unless (1)
30 the luminaire is designed to maximize energy efficiency and to
31 minimize light pollution, glare and light trespass, (2) the maintained
32 illuminance levels produced by the luminaire are equal to the
33 minimum maintained levels recommended by the Illuminating
34 Engineering Society of North America for the lighting application, (3)
35 the luminaire is sufficiently shielded and aimed so that no direct light
36 from the luminaire is visible at any point in the highway where the
37 viewing height is four feet or greater and the distance from the
38 mounting pole is seventy feet or greater, and (4) the luminaire is
39 sufficiently shielded and aimed to prevent light trespass onto
40 properties other than the property intended for illumination and so
41 that no direct light is visible at a viewing height of five feet or greater
42 at any point along the adjacent property line.

43 (c) No floodlight intended for private property illumination shall be
44 located within the state right-of-way if the structure or object intended
45 for illumination is across a public highway from the utility pole on
46 which the floodlight would be mounted.

47 (d) Any luminaire in violation of any provision of subsection (b) or
48 (c) of this section operating prior to October 1, 2003, shall be brought
49 into compliance with the requirements in subsection (b) of this section
50 no later than October 1, 2005.

This act shall take effect as follows:	
Section 1	<i>October 1, 2003</i>

The following fiscal impact statement and bill analysis are prepared for the benefit of members of the General Assembly, solely for the purpose of information, summarization, and explanation, and do not represent the intent of the General Assembly or either House thereof for any purpose:

OFA Fiscal Note

State Impact:

Agency Affected	Fund-Type	FY 04 \$	FY 05 \$
Transportation, Dept.	TF - See Below	None	None

Note: TF=Transportation Fund

Municipal Impact: None

Explanation

Since the Department of Transportation (DOT) currently forwards any complaint regarding floodlight glare or related issues to electric utility companies for them to correct, there is no fiscal impact to the state.

House "A" eliminated the provision in the bill that required the Department of Transportation to impose a civil penalty on electric companies that failed to correct a floodlight violation on or after October 1, 2005 and removed the potential future revenue impact stated in the original file copy.

OLR Bill Analysis

sHB 5686 (as amended by House "A")*

AN ACT REQUIRING REDUCTION IN HAZARDOUS ROAD GLARE AND LIGHT POLLUTION FROM PRIVATE AREA FLOODLIGHTING LOCATED WITHIN THE STATE RIGHT-OF-WAY.**SUMMARY:**

This bill (1) prohibits floodlights intended to illuminate private property from being located in a state highway right-of-way unless they meet certain light pollution reduction and other requirements; (2) prohibits a floodlight from being located in a state highway right-of-way if the private property it is intended to illuminate is across the highway from the utility pole on which it would be mounted; and (3) requires any existing luminaire that violates either of the above requirements to be brought into compliance with the bill's floodlight restrictions by October 1, 2005. The bill defines a floodlight as a luminaire with an output greater than 1,800 lumens and a luminaire as the complete lighting system, including the lamp and fixture.

*House Amendment "A" eliminates a provision requiring the transportation commissioner to impose, beginning October 1, 2005, a \$100 per day civil penalty on an electric distribution company he notifies of a violation of the floodlight requirements that remains uncorrected more than 90 days after the notice has been received by the company.

EFFECTIVE DATE: October 1, 2003

RESTRICTIONS ON FLOODLIGHTS USED TO ILLUMINATE PRIVATE PROPERTY

The bill prohibits a luminaire intended for private property illumination from being located on a state highway right-of-way unless (1) it is designed to maximize energy conservation and minimize light pollution, glare, and light trespass; (2) the maintained illuminance levels it produces are equal to the minimum levels

recommended by the Illuminating Engineering Society of North America for the lighting application; and (3) the luminaire is sufficiently shielded and aimed so that (a) its direct light is not visible at any point on the highway where the viewing height is four feet or more and the distance from the pole is 70 feet or more and (b) there is no light trespass onto properties adjacent to the one for which the illumination is intended and its direct light is not visible at a viewing height of five feet or more at any point along the adjacent property line.

Under the bill:

1. "light trespass" is light from the luminaire that shines beyond the boundaries of the property meant for illumination;
2. "direct light" is light that can be seen directly from the light source and other light-emitting or reflecting parts of the luminaire;
3. "light pollution" is direct light emitted above the horizontal plane running through the lowest point on the luminaire;
4. "glare" is the sensation produced by the illumination within the visual field that is sufficiently greater than the illumination to which the eyes are adapted and thus causes annoyance, discomfort, or loss in visual performance and visibility; and
5. "illuminance" is the density of luminous flux incident on a surface that is represented by the luminous flux divided by the area of the surface when it is uniformly illuminated.

BACKGROUND

Legislative History

The House referred the bill to the Energy and Technology Committee on April 22. The committee reported it favorably on April 30.

COMMITTEE ACTION

Transportation Committee

Joint Favorable Substitute

Yea 26 Nay 0

Energy and Technology Committee

Joint Favorable Report

Yea 9 Nay 5