



House of Representatives

General Assembly

File No. 276

February Session, 2006

Substitute House Bill No. 5051

House of Representatives, March 31, 2006

The Committee on Government Administration and Elections reported through REP. CARUSO of the 126th Dist., Chairperson of the Committee on the part of the House, that the substitute bill ought to pass.

AN ACT CONCERNING LUMINAIRES AT STATE AGENCIES.

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

- 1 Section 1. (NEW) (*Effective July 1, 2006*) (a) As used in this section:
- 2 (1) "Fixture" means the assembly that holds a lamp and may include
3 an assembly housing, a mounting bracket or pole socket, a lamp
4 holder, a ballast, a reflector or mirror and a refractor or lens;
- 5 (2) "Full cut-off luminaire" means a luminaire that allows no direct
6 light emissions above a horizontal plane through the luminaire's
7 lowest light-emitting part;
- 8 (3) "Glare" means direct light emitting from a luminaire that causes
9 reduced vision or momentary blindness;
- 10 (4) "Illuminance" means the level of light measured at a surface;
- 11 (5) "Lamp" means the component of a luminaire that produces the

12 light;

13 (6) "Light trespass" means light emitted by a luminaire that shines
14 beyond the boundaries of the property on which the luminaire is
15 located;

16 (7) "Lumen" means a unit of measurement of luminous flux;

17 (8) "Luminaire" means the complete lighting unit, including the
18 lamp and the fixture;

19 (9) "Permanent outdoor luminaire" means any luminaire or system
20 of luminaires that is outdoors and intended to be used for seven days
21 or longer; and

22 (10) "State funds" means any bond revenues or any money
23 appropriated or allocated by the General Assembly.

24 (b) Except as provided in subsection (c) of this section, no state
25 funds shall be used to install or replace a permanent outdoor luminaire
26 for lighting on the grounds of any state building or facility unless (1)
27 the luminaire is designed to maximize energy conservation and to
28 minimize light pollution, glare and light trespass, (2) the luminaire's
29 illuminance is equal to the minimum illuminance adequate for the
30 intended purpose of the lighting, and (3) for a luminaire with a rated
31 output of more than one thousand eight hundred lumens, such
32 luminaire is a full cut-off luminaire.

33 (c) The provisions of subdivision (3) of subsection (b) of this section
34 shall not apply to luminaires located on the grounds of any
35 correctional institution or facility administered by the Commissioner of
36 Correction, required by federal regulations, required for storm
37 operation activities performed by the Department of Transportation, or
38 in a lighting plan for a Department of Transportation facility where
39 less than twenty-five per cent of the luminaires are to be replaced. The
40 Commissioner of Public Works, or the commissioner's designee, may
41 waive the provisions of subdivision (3) of subsection (b) of this section
42 with respect to luminaires on the grounds of any other state building

43 or facility when, after a request for such a waiver has been made and
44 reviewed, the commissioner or the commissioner's designee
45 determines that such a waiver is necessary for the lighting application.
46 Requests for such a waiver shall be made to the commissioner or the
47 commissioner's designee in such form as the commissioner shall
48 prescribe and shall include, without limitation, a description of the
49 lighting plan, a description of the efforts that have been made to
50 comply with the provisions of subdivision (3) of subsection (b) of this
51 section and the reasons such a waiver is necessary. In reviewing a
52 request for such a waiver, the commissioner or the commissioner's
53 designee shall consider design safety, costs and other factors deemed
54 appropriate by the commissioner or the commissioner's designee.

55 (d) The provisions of this section shall not apply to the installation
56 or replacement of luminaires for which the Secretary of the Office of
57 Policy and Management (1) conducts a life-cycle cost analysis of one or
58 more luminaires that meet the requirements set forth in subsection (b)
59 of this section and one or more luminaires that do not meet such
60 requirements, and (2) certifies that a luminaire which meets such
61 requirements is not cost effective and is not the most appropriate
62 alternative based on the life-cycle cost analysis.

63 Sec. 2. Subsection (d) of section 13a-143d of the general statutes is
64 repealed and the following is substituted in lieu thereof (*Effective July*
65 *1, 2006*):

66 (d) [Any luminaire] All luminaires in violation of any provision of
67 subsection (b) or (c) of this section operating prior to October 1, [2003]
68 2004, shall be brought into compliance with the requirements in
69 subsection (b) of this section [no later than October 1, 2005] in
70 accordance with the following schedule: Approximately twenty per
71 cent by October 1, 2006, approximately forty per cent by October 1,
72 2007, approximately sixty per cent by October 1, 2008, approximately
73 eighty per cent by October 1, 2009, and one hundred per cent by
74 October 1, 2010.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>July 1, 2006</i>	New section
Sec. 2	<i>July 1, 2006</i>	13a-143d(d)

GAE *Joint Favorable Subst.*

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-Effect	FY 07 \$	FY 08 \$
Pub. Works, Dept.; All agencies with care & control of their buildings	GF - Cost	See Below	See Below
Treasurer, Debt Serv.	GF - Cost	None	See Below
Various	GF - Savings	See Below	See Below
Policy & Mgmt., Off.	GF - Cost	None	None

Note: GF=General Fund

Municipal Impact: None

Explanation

The bill requires that new or replacement permanent light fixtures at state buildings or facilities (with certain exceptions) be replaced with fixtures designed to maximize energy conservation and minimize light pollution, glare and light trespass. It gives the commissioner of Public Works the power to provide waivers to this requirement based on design safety considerations, costs and other factors such as property security. The bill further requires that all luminaries operating prior to 10/1/04 must be brought into compliance with the provisions of Section 21 at the rate of 20% per year between 10/1/06 and 10/1/10.

The fiscal impact of these provisions will depend on the number of luminaries that are replaced. A sampling of current prices obtained from a vendor indicates that the cost differential between semi-cutoff luminaries and full cutoff luminaries range between \$5 and \$30 more per unit for semi-cutoff luminaries. It could also result in an increase in General Fund debt service cost because the requirement also applies to projects funded with General Obligation bonds.

To the degree that the bill results in the installation of more energy efficient lighting, it could also reduce General Fund costs for utilities.

It is anticipated that the Office of Policy and Management can perform a life cycle cost analysis on non-complying lighting systems within the agencies normal budgetary resources.

The Out Years

The annualized ongoing fiscal impact identified above would continue into the future subject to inflation.

OLR Bill Analysis

sHB 5051

AN ACT CONCERNING LUMINAIRES AT STATE AGENCIES.

SUMMARY:

The bill bans, with some exceptions, the use of state funds to install or replace certain outdoor light, or lighting units on state building or facility grounds.

The bill also extends the deadline by which violators must comply with laws regulating the use of floodlights on private property.

EFFECTIVE DATE: July 1, 2006

BAN ON THE USE OF STATE FUNDS FOR CERTAIN LIGHTING

The bill bans the use of state bond revenues or appropriated or allocated state funds to install or replace outdoor lights or lighting units on state building or facility grounds that:

1. fail to maximize energy conservation and minimize light pollution, glare, and light trespass (light that shines beyond the boundaries of the property where it is located);
2. provide light that exceeds what is adequate for its intended purpose; or
3. have an output of more than 1,800 lumens (the unit for measuring the brilliance of a light source), unless it is a full cut-off luminaire (a lighting unit that allows no direct light emissions above a horizontal plane through its lowest light-emitting part).

EXCEPTIONS TO THE BAN

The bill allows four exceptions to the full cut-off requirement. It exempts lighting units (1) on the grounds of a Department of Correction institution or facility, (2) required by federal regulations, (3) required for Department of Transportation (DOT) storm operations, and (4) in a plan for DOT facilities where less than 25% of the luminaires will be replaced.

The bill also exempts a new or replacement lighting system from its requirements if the Office of Policy and Management secretary finds that a noncomplying system is more cost-effective than one that meets the act's requirements. The secretary must determine this by comparing the systems' life-cycle cost analyses and certifying that a system that meets the bill's requirements is not cost-effective or the most appropriate alternative.

The bill sets conditions under which the Department of Public Works commissioner, or his designee, may waive the full cut-off requirement for other state buildings or facilities when necessary. The bill directs the commissioner to prescribe the form for the waiver request, which must include a description of the lighting plan, the efforts that have been made to comply with the cut-off requirement, and the reasons the waiver is necessary. The commissioner, or his designee, must consider design safety, cost, and other appropriate factors in his review.

COMPLIANCE WITH FLOODLIGHT REQUIREMENTS

Current law requires all violators operating before October 1, 2003 to comply by October 1, 2005. The bill instead requires approximately 20% of violators operating before October 1, 2004 to comply by October 1, 2006 and it increases the compliance by 20% each year until full compliance is reached by October 1, 2010. The law prohibits (1) 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 and (2) 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.

COMMITTEE ACTION

Government Administration and Elections Committee

Joint Favorable Substitute

Yea 19 Nay 0 (03/14/2006)