SENATE, No. 2328 **STATE OF NEW JERSEY** 218th LEGISLATURE

INTRODUCED MARCH 22, 2018

Sponsored by: Senator JAMES BEACH District 6 (Burlington and Camden)

SYNOPSIS

Requires State to use certain energy-efficient outdoor lighting fixtures.

CURRENT VERSION OF TEXT As introduced.



S2328 BEACH

1 AN ACT regulating certain outdoor lighting fixtures and 2 supplementing chapter 34 of Title 52 of the Revised Statutes. 3 4 **BE IT ENACTED** by the Senate and General Assembly of the State 5 of New Jersey: 6 7 1. The Legislature finds and declares that: 8 Unnecessary outdoor lighting squanders money and energy. a. 9 Unshielded outdoor lights are responsible for emitting b. 10 pollutants, including carbon dioxide and wasted light. 11 c. Over-lighting during non-daylight hours neither improves 12 visibility nor increases nighttime safety. 13 d. Removing unnecessary lighting and utilizing efficient light 14 sources saves money and improves the nighttime environment, 15 often at minimal expense. 16 e. It is in the public interest to minimize misdirected and 17 upward light from luminaires to promote the State's fiscal health 18 and to preserve New Jersey's natural nighttime environment. 19 It is necessary to regulate the State's outdoor lighting to f. 20 conserve energy and resources to the greatest extent possible while 21 permitting reasonable uses of outdoor lighting for nighttime safety, 22 utility, security, commerce, and enjoyment. 23 24 2. As used in P.L. , c. (C.) (pending before the 25 Legislature as this bill): 26 "Cutoff luminaire" means a luminaire whose luminous intensity in candelas at or above an angle of 90 degrees above nadir does not 27 numerically exceed 2.5 percent of the luminous flux, in lumens, of 28 29 the lamp or lamps in the luminaire, and the luminous intensity, in 30 candelas, at or above a vertical angle of 80 degrees above nadir 31 does not numerically exceed 10 percent of the luminous flux of the 32 lamp or lamps in the luminaire. 33 "Energy conservation" means the reduction of energy costs and 34 resources by use of methods including, but not limited to, the use of 35 light fixtures with the lowest feasible wattage or a photo-sensitive 36 or timer switch. 37 "Lumen" means an international standard unit of luminous flux 38 representing the quantity of visible light output. 39 "Luminaire" means the complete lighting unit fixture consisting 40 of a lamp, or lamps and ballasts, together with the parts designed to 41 distribute light, including, but not limited to, a reflector, lens, and 42 diffuser, to position and protect the lamps, and to connect the lamps 43 to the power supply. 44 "Luminous flux" means the measure of the perceived power of 45 the light in lumens. "Outdoor lighting fixture" means any type of fixed or movable 46 lighting equipment that is designed or used for illumination 47 48 outdoors, including street lights, searchlights, and area lighting.

1 "Outdoor lighting fixture" shall not include lighting equipment that 2 is required by law to be installed on motor vehicles, lighting 3 required for the safe operation of aircraft, or lighting used for 4 advertising purposes. 5 "State" means the State of New Jersey and any office, 6 department, division, bureau, board, commission, authority, agency, 7 or instrumentality of the State, but does not include counties, 8 municipalities, school districts, and county or municipal authorities. 9 10 3. a. The State shall install, replace, or maintain an outdoor 11 lighting fixture by using State funds only if: 12 (1) any outdoor lighting fixture with a rated output greater than 13 1,800 lumens is installed or replaced with a cutoff luminaire; (2) the minimum illuminance adequate for the intended purpose 14 15 is used with consideration given to nationally recognized standards; 16 (3) for lighting of a designated highway of the State highway 17 system, the Department of Transportation determines that the purpose of the outdoor lighting fixture cannot be achieved by the 18 19 installation of reflective road markers, lines, warning or 20 informational signs, or other effective passive methods; and 21 (4) full consideration has been given to energy conservation, 22 reducing glare, minimizing light pollution, and preserving the 23 natural night environment. 24 b. Subsection a. of this section shall not apply if: 25 (1) the outdoor lighting fixture is used on a temporary basis 26 because emergency personnel require additional illumination for 27 emergency procedures; 28 (2) the outdoor lighting fixture is used on a temporary basis for 29 nighttime work; 30 (3) the outdoor lighting fixture is used for a special event or 31 situation requiring additional illumination that cannot be produced by another method; 32 33 (4) a compelling safety interest exists that cannot be addressed 34 by another method; 35 (5) the replacement of outdoor lighting fixtures constitutes less than 30 percent of an entire outdoor lighting system at a New Jersey 36 37 Transit Corporation facility, or an outdoor lighting fixture at a New 38 Jersey Transit Corporation facility that was approved by the New 39 Jersey Historic Preservation Office in the Department of 40 **Environmental Protection;** 41 (6) a federal law supersedes or is inconsistent with the 42 requirements of subsection a. of this section ; or 43 (7) the outdoor lighting fixture is used on a historic property as 44 that term is defined in section 3 of P.L.1999, c.152 (C.13:8C-3) or 45 any building, site, or area designated historic by a historic 46 preservation commission pursuant to sections 21 through 26 of P.L.1985, c.516 (40:55D-107 et seq.). 47

S2328 BEACH

1 c. This section shall not be construed to require the State to 2 replace properly functioning outdoor lighting fixtures and shall only 3 apply to the replacement of deficient outdoor lighting fixtures or the 4 installation of outdoor lighting fixtures constructed on or after the 5 effective date of P.L., c. (C.) (pending before the Legislature 6 as this bill).

d. The provisions of section 9 of P.L.2009, c.4 (C.52:34-25)
shall apply to P.L., c. (C.) (pending before the Legislature as
this bill) if the State, as part of implementing an energy savings
improvement program, enters into an energy savings services
contract with an energy services company to install, replace, or
maintain an outdoor lighting fixture.

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4. This act shall take effect on the first day of the thirteenthmonth next following the date of enactment.

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STATEMENT

This bill requires the State to install, replace, or maintain outdoor lighting fixtures that comply with design requirements stated in the bill that are intended to minimize wasted light and State funds. The bill does not require the State to replace outdoor lighting fixtures that function properly as of the bill's effective date, but only applies to the replacement of deficient outdoor lighting fixtures.

26 Under the bill, the State is to install, replace, or maintain an 27 outdoor lighting fixture if: an outdoor lighting fixture with a rated output greater than 1,800 lumens is installed or replaced with a 28 29 cutoff luminaire; the minimum illuminance adequate for the 30 intended purpose is used with consideration given to nationally 31 recognized standards; for fixtures used for lighting a designated 32 highway of the State highway system, the Department of 33 Transportation determines that that purpose of the outdoor lighting 34 fixture cannot be achieved by the installation of reflective road 35 markers, lines, warning or informational signs, or other effective 36 methods; and full consideration has been given to energy 37 conservation, reducing glare, minimizing light pollution, and 38 preserving the natural light environment.

39 Under this bill, the State is not required to install, replace, or 40 maintain an outdoor lighting fixture if: the outdoor lighting fixture 41 is used on a temporary basis because emergency personnel require 42 it; the outdoor lighting fixture is used on a temporary basis for 43 nighttime work; the outdoor lighting fixture is used for a special 44 event or situation; a compelling safety interest exists; the 45 replacement of outdoor lighting fixtures constitutes less than 30 46 percent of an entire outdoor lighting system at a New Jersey Transit 47 (NJT) Corporation facility, or an outdoor lighting fixture at a NJT 48 Corporation facility was approved by the New Jersey Historic

S2328 BEACH 5

- 1 Preservation Office; a federal law supersedes or is inconsistent with
- 2 the bill; or the outdoor lighting fixture is used on a historic property
- 3 or any building, site, or area designated historic by a historic
- 4 preservation commission.