4191--A

Cal. No. 727

2011-2012 Regular Sessions

IN SENATE

March 23, 2011

Introduced by Sens. MARCELLINO, DUANE -- read twice and ordered printed, and when printed to be committed to the Committee on Investigations and Government Operations -- recommitted to the Committee on Investigations and Government Operations in accordance with Senate Rule 6, sec. 8 -- reported favorably from said committee and committed to the Committee on Finance -- reported favorably from said committee, ordered to first and second report, amended on second report, ordered to a third reading, and to be reprinted as amended, retaining its place in the order of third reading

AN ACT to amend the public buildings law, in relation to outdoor lighting installed by state agencies and public corporations

THE PEOPLE OF THE STATE OF NEW YORK, REPRESENTED IN SENATE AND ASSEMBLY, DO ENACT AS FOLLOWS:

1 Section 1. The public buildings law is amended by adding a new article 2 4-D to read as follows:

ARTICLE 4-D OUTDOOR LIGHTING

SECTION 90. DEFINITIONS.

3

4

5

6

7

8

9

- 91. PERMANENT OUTDOOR LUMINAIRE.
- 92. INFORMATIONAL PAMPHLET.
- 93. APPLICABILITY.
- S 90. DEFINITIONS. AS USED IN THIS SECTION:
- 10 1. "LUMINAIRE" MEANS A COMPLETE LIGHTING UNIT, INCLUDING A LAMP OR LAMPS TOGETHER WITH THE PARTS DESIGNED TO DISTRIBUTE THE LIGHT, TO POSI12 TION AND PROTECT THE LAMPS, AND TO CONNECT THE LAMPS TO THE POWER SUPPLY; A LIGHT FIXTURE.
- 14 2. "GLARE" MEANS LIGHT EMITTED BY A LUMINAIRE THAT CAUSES REDUCED 15 VISIBILITY OR MOMENTARY BLINDNESS BY SHINING DIRECTLY INTO THE EYES OF 16 THE VIEWER.
- 17 3. "LAMP" MEANS THE COMPONENT OF A LUMINAIRE THAT PRODUCES LIGHT; A 18 LIGHT BULB.

EXPLANATION--Matter in ITALICS (underscored) is new; matter in brackets [ ] is old law to be omitted.

LBD10428-04-2

S. 4191--A 2

 4. "LIGHT POLLUTION" MEANS ANY ADVERSE EFFECT OF OUTDOOR LIGHTING INCLUDING, BUT NOT LIMITED TO, GLARE AND SKY GLOW.

- 5. "LUMEN" MEANS THE UNIT OF MEASUREMENT USED TO QUANTIFY THE AMOUNT OF LIGHT PRODUCED BY A LAMP OR EMITTED FROM A LUMINAIRE, AS DISTINCT FROM "WATT", A MEASURE OF POWER CONSUMPTION.
- 6. "FULLY SHIELDED LUMINAIRE" MEANS A LUMINAIRE CONSTRUCTED AND INSTALLED IN SUCH A MANNER THAT ALL LIGHT EMITTED BY IT, EITHER DIRECTLY FROM THE LAMP OR A DIFFUSING ELEMENT, OR INDIRECTLY BY REFLECTION OR REFRACTION FROM ANY PART OF THE LUMINAIRE, IS PROJECTED BELOW A HORIZON-TAL PLANE THROUGH THE LUMINAIRE'S LOWEST LIGHT EMITTING PART.
- 7. "PERMANENT OUTDOOR LUMINAIRE" MEANS ANY LUMINAIRE OR SYSTEM OF LUMINAIRES THAT IS OUTDOORS AND THAT IS USED FOR MORE THAN TEN DAYS IN A THREE HUNDRED SIXTY-FIVE DAY PERIOD.
  - 8. "ROADWAY LIGHTING" MEANS PERMANENT OUTDOOR LUMINAIRES THAT ARE SPECIFICALLY INTENDED TO ILLUMINATE ROADWAYS FOR AUTOMOTIVE VEHICLES.
  - 9. "CONTINUOUS ROADWAY LIGHTING DESIGN" MEANS A LIGHTING PLAN THAT ESTIMATES LIGHT ON A ROADWAY FROM CALCULATIONS UTILIZING FACTORS INCLUDING, BUT NOT LIMITED TO, A PARTICULAR LUMINAIRE, MOUNTING HEIGHT, OR POLE SPACING, IN ORDER TO MEET A SPECIFIED GOAL SUCH AS MINIMUM LIGHTING LEVEL, UNIFORMITY, OR SMALL-TARGET VISIBILITY. LIGHTING PLACED ONLY AT INTERSECTIONS OR OTHER POTENTIALLY HAZARDOUS LOCATIONS SHALL NOT BE CONSIDERED CONTINUOUS.
  - 10. "SKY GLOW" MEANS THE ILLUMINATION OF THE NIGHTTIME SKY THAT RESULTS FROM UPWARD SHINING LIGHT, WHICH IS REFLECTED OFF MOLECULES AND PARTICLES OF DIRT AND MOISTURE IN THE ATMOSPHERE.
  - 11. "STATE PUBLIC CORPORATION" MEANS A PUBLIC BENEFIT CORPORATION TO WHICH THE GOVERNOR APPOINTS A MAJORITY OF THE MEMBERS.
  - S 91. PERMANENT OUTDOOR LUMINAIRE. 1. NO STATE AGENCY OR STATE PUBLIC CORPORATION OPERATING IN THE STATE SHALL INSTALL OR CAUSE TO BE INSTALLED ANY NEW OR REPLACEMENT PERMANENT OUTDOOR LUMINAIRE UNLESS THE FOLLOWING CONDITIONS ARE MET:
  - (A) ANY LUMINAIRE WITH A LAMP OR LAMPS HAVING TOTAL INITIAL OUTPUT GREATER THAN EIGHTEEN HUNDRED LUMENS SHALL BE FULLY SHIELDED, EXCEPT THAT A HISTORIC-STYLE DECORATIVE LUMINAIRE MAY EMIT UP TO TWO PERCENT OF ITS TOTAL LUMENS ABOVE THE HORIZONTAL PLANE;
  - (B) IF A LIGHTING RECOMMENDATION PUBLISHED BY THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA APPLIES, FULL CONSIDERATION IS GIVEN TO THE MINIMUM MAINTAINED LIGHT LEVEL ADEQUATE TO MEET THE RECOMMENDATION;
  - (C) IF NO SUCH LIGHTING RECOMMENDATION APPLIES, NO MORE THAN THE MINI-MUM MAINTAINED LIGHT LEVEL ADEQUATE FOR THE INTENDED PURPOSE IS USED;
  - (D) FOR ROADWAY LIGHTING UNASSOCIATED WITH INTERSECTIONS, A DETERMINATION IS MADE THAT THE PURPOSE OF THE LIGHTING INSTALLATION OR REPLACEMENT CANNOT BE ACHIEVED BY INSTALLATION OF REFLECTORIZED ROADWAY MARKERS, LINES, WARNINGS OR INFORMATION SIGNS, OR OTHER PASSIVE MEANS;
- (E) ADEQUATE CONSIDERATION HAS BEEN GIVEN TO CONSERVING ENERGY AND MINIMIZING GLARE AND SKY GLOW; AND
- (F) THE NEW OR REPLACEMENT LUMINAIRE MEETS THE LUMINAIRE EFFICIENCY AND LAMP LUMINOUS EFFICACY STANDARDS DEVELOPED PURSUANT TO SUBDIVISION FIVE OF THIS SECTION.
- 2. THE FOLLOWING SITUATIONS SHALL BE EXEMPT FROM THE REQUIREMENTS OF SUBDIVISION ONE OF THIS SECTION:
- (A) SITUATIONS WHERE FEDERAL LAWS, RULES AND REGULATIONS TAKE PRECED-ENCE; AND
- 54 (B) SITUATIONS WHERE FIRE, POLICE, RESCUE, OR REPAIR PERSONNEL, 55 INCLUDING, BUT NOT LIMITED TO, UTILITY PERSONNEL, NEED LIGHT FOR TEMPO-56 RARY EMERGENCIES OR ROAD REPAIR WORK.

S. 4191--A

3. THE FOLLOWING SITUATIONS SHALL BE EXEMPT FROM THE REQUIREMENTS OF PARAGRAPHS (A) AND (B) OF SUBDIVISION ONE OF THIS SECTION:

- (A) THE LUMINAIRE IS A REPLACEMENT FOR A LUMINAIRE THAT IS PART OF A CONTINUOUS ROADWAY LIGHTING DESIGN;
- (B) THE LUMINAIRE IS A HISTORIC-STYLE DECORATIVE LUMINAIRE WHICH IS PART OF A CONTINUOUS ROADWAY LIGHTING DESIGN WHERE THE REPLACEMENT OF THE LUMINAIRE PIECEMEAL WITH COMPLIANT LUMINAIRES WOULD UNACCEPTABLY DEGRADE THE AESTHETIC CHARACTERISTICS OF THE EXISTING LIGHTING DESIGN;
- (C) SITUATIONS WHERE THERE ARE SPECIAL REQUIREMENTS, SUCH AS SPORTS FACILITIES, TUNNELS, TRAFFIC CONTROL DEVICES, NAVIGATION LIGHTING, AIRPORTS, UNDERBRIDGE LIGHTING, NATURAL AND CULTURAL MONUMENTS, OR FLAG LIGHTING; PROVIDED, HOWEVER, THAT ALL SUCH LIGHTING SHALL BE SELECTED AND INSTALLED TO SHIELD THE LAMP OR LAMPS FROM DIRECT VIEW AND TO MINIMIZE UPWARD LIGHTING AND GLARE TO THE GREATEST EXTENT POSSIBLE; AND
- (D) SITUATIONS WHERE A WRITTEN DETERMINATION WITH FINDINGS HAS BEEN MADE THAT A SPECIFIED EXEMPTION TO ANY REQUIREMENT OF SUBDIVISION ONE OF THIS SECTION IS NECESSARY AND APPROPRIATE FOR A COMPELLING SAFETY INTEREST THAT CANNOT BE ADEQUATELY ADDRESSED BY ANY OTHER METHOD. THE WRITTEN DETERMINATION SHALL BE MADE BY THE CHIEF EXECUTIVE OFFICER OF THE AGENCY OR CORPORATION OR HIS OR HER DESIGNEE.
- 4. THE OFFICE OF GENERAL SERVICES, IN CONSULTATION WITH THE DEPARTMENT OF TRANSPORTATION, AND GIVING CONSIDERATION TO THE RECOMMENDED PRACTICES ADOPTED BY THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA, SHALL ESTABLISH RULES TO IMPLEMENT THE PROVISIONS OF THIS SECTION, INCLUDING A SYSTEM TO ENSURE THAT THE USE OF STATE FUNDS FOR STREET LIGHTING COMPLIES WITH THE REQUIREMENTS SET FORTH HEREIN AND SHALL PROVIDE FOR THE WIDE DISSEMINATION OF THIS INFORMATION.
- 5. THE COMMISSIONER OF THE OFFICE OF GENERAL SERVICES, IN CONSULTATION WITH THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY, SHALL DEVELOP LUMINAIRE EFFICIENCY AND LAMP LUMINOUS EFFICACY STANDARDS FOR LIGHTING REGULATED UNDER THIS SECTION. FOR PURPOSES OF THIS SECTION "LUMINAIRE EFFICIENCY" SHALL MEAN THE PERCENTAGE OF LUMENS GENERATED BY A LAMP THAT ACTUALLY LEAVE A LUMINAIRE; AND "LAMP LUMINOUS EFFICACY" SHALL MEAN THE AMOUNT OF LIGHT GENERATED BY A LAMP/BALLAST SYSTEM (IN LUMENS) DIVIDED BY THE POWER IT USES (IN WATTS). IN PREPARING SUCH STANDARDS, DUE CONSIDERATION SHALL BE GIVEN TO THE ADVERSE ENVIRONMENTAL AND HEALTH IMPACTS OF "WHITE" LIGHT SOURCES WITH HIGH CORRELATED COLOR TEMPERATURE. SUCH STANDARDS SHALL BE PROMULGATED ON OR BEFORE THE EFFECTIVE DATE OF THIS ARTICLE AND SHALL TAKE EFFECT ONE HUNDRED EIGHTY DAYS AFTER SUCH EFFECTIVE DATE.
- 6. IN RECOGNITION OF THE ONGOING RESEARCH INTO THE DEVELOPMENT OF NEW TECHNOLOGIES IN THE OUTDOOR LIGHTING FIELD, THE OFFICE OF GENERAL SERVICES, IN CONSULTATION WITH THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY, SHALL REPORT TO THE LEGISLATURE REGARDING NEW FINDINGS FROM RESEARCH AND NEW TECHNOLOGIES THAT MAY AFFECT THE PROVISIONS OF THIS ARTICLE. SUCH REPORTING MAY INCLUDE RECOMMENDED AMENDMENTS TO THIS ARTICLE TO INCREASE ITS EFFECTIVENESS IN IMPLEMENTING THE PURPOSES OF ACHIEVING HEALTHY, SAFE AND ENERGY EFFICIENT OUTDOOR LIGHTING.
- S 92. INFORMATIONAL PAMPHLET. THE SECRETARY OF STATE, IN CONSULTATION WITH THE NEW YORK STATE ENERGY RESEARCH AND DEVELOPMENT AUTHORITY AND GIVING CONSIDERATION TO THE RECOMMENDED PRACTICES ADOPTED BY THE ILLUMI-NATING ENGINEERING SOCIETY OF NORTH AMERICA, SHALL DEVELOP AND POST ON THE DEPARTMENT'S AND THE AUTHORITY'S WEBSITES A DOWNLOADABLE PAMPHLET CONTAINING INFORMATION REGARDING THE PROVISIONS OF THIS ARTICLE WITH

S. 4191--A 4

5

6

7

RESPECT TO OUTDOOR LIGHTING, TOGETHER WITH INFORMATION REGARDING THE ADVERSE EFFECTS OF LIGHT POLLUTION AND METHODS OF CONTROLLING IT.

- S 93. APPLICABILITY. NO PROVISION OF THIS ARTICLE SHALL BE CONSTRUED AS TO PERMIT THE PRACTICE OF ARCHITECTURE AS SUCH PRACTICE IS DEFINED IN SECTION SEVENTY-THREE HUNDRED ONE OF THE EDUCATION LAW, OR THE PRACTICE OF ENGINEERING AS SUCH PRACTICE IS DEFINED IN SECTION SEVENTY-TWO HUNDRED ONE OF THE EDUCATION LAW.
- 8 S 2. This act shall take effect 1 year after it shall have become a law; provided that effective immediately, the addition, amendment and/or 9 10 repeal of any rule or regulation or development of any standards necessary for the implementation of this act on its effective date is author-11 12 ized to be made and completed on or before such effective date; provided further, that this act shall not apply to projects for the 13 14 installation or replacement of permanent outdoor luminaires which have already received final design approval prior to the effective date of 16 this act.