110TH CONGRESS
1ST SESSION

S. 2017

To amend the Energy Policy and Conservation Act to provide for national energy efficiency standards for general service incandescent lamps, and for other purposes.

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 4, 2007

Mr. BINGAMAN (for himself and Mr. STEVENS) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

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A BILL

To amend the Energy Policy and Conservation Act to provide for national energy efficiency standards for general service incandescent lamps, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE; TABLE OF CONTENTS.

(a) SHORT TITLE.—This Act may be cited as the ''Energy Efficient Lighting for a Brighter Tomorrow Act of 2007''.

(b) TABLE OF CONTENTS.—The table of contents of this Act is as follows:

SEC. 2. FINDINGS.

Congress finds that—

(1) there are approximately 4,000,000,000 screw-based sockets in the United States that contain traditional, energy-inefficient, incandescent light bulbs;

(2) incandescent light bulbs are based on technology that is more than 125 years old; and

(3) it is in the national interest to encourage the use of more energy-efficient lighting products in the market through energy conservation standards that become effective during the 8-year period beginning on the date of enactment of this Act and—

(A) establish the efficiency requirements to ensure that replacement lamps will provide con-

sumers with the same quantity of light while using significantly less energy;

(B) ensure that consumers will continue to have multiple product choices, including energy-saving halogen, incandescent, compact fluorescent, and LED light bulbs; and

(C) work with industry and key stakeholders on measures that can assist consumers and businesses in making the important transition to more efficient lighting.

SEC. 3. DEFINITION OF SECRETARY.

In this Act, the term ''Secretary'' means the Secretary of Energy.

TITLE I—GENERAL SERVICE INCANDESCENT LAMPS

SEC. 101. ENERGY EFFICIENCY STANDARDS FOR GENERAL SERVICE INCANDESCENT LAMPS.

(a) DEFINITION OF GENERAL SERVICE INCANDESCENT LAMP.—Section 321(30) of the Energy Policy and Conservation Act (42 U.S.C. 6291(30)) is amended—

(1) by striking subparagraph (D) and inserting the following:

''(D) GENERAL SERVICE INCANDESCENT LAMP.—

''(i) IN GENERAL.—The term 'general service incandescent lamp' means a standard incandescent or halogen type lamp that—

''(I) is intended for general service applications;

''(II) has a medium screw base;

''(III) has a lumen range of not less than 200 lumens and not more than 3,000 lumens;

''(IV) has a voltage range at least partially within 110 and 130 volts;

''(V) has an A–15, A–19, A–21, A–23, A–25, PS–25, PS–30, BT–14.5, BT–15, CP–19, TB–19, CA–22, or equivalent shape (as defined in ANSI C78.20–2003); and

''(VI) has a bulb finish of the frosted, clear, soft white, or modified spectrum type.

''(ii) EXCLUSIONS.—The term 'general service incandescent lamp' does not include the following incandescent lamps:

''(I) An appliance lamp.

''(II) A black light lamp.

''(III) A bug lamp.

''(IV) A colored lamp.

''(V) An infrared lamp.

''(VI) A left-hand thread lamp.

''(VII) A marine lamp.

''(VIII) A marine signal service lamp.

''(IX) A mine service lamp.

''(X) A plant light lamp.

''(XI) A reflector lamp.

''(XII) A rough service lamp.

''(XIII) A shatter-resistant lamp (including a shatter-proof lamp and a shatter-protected lamp).

''(XIV) A sign service lamp.

''(XV) A silver bowl lamp.

''(XVI) A showcase lamp.

''(XVII) A 3-way incandescent lamp.

''(XVIII) A traffic signal lamp.

''(XIX) A vibration service lamp.''; and

(2) by adding at the end the following:

''(T) APPLIANCE LAMP.—The term 'appliance lamp' means any lamp that—

''(i) is specifically designed to operate in a household appliance, has a maximum wattage of 40 watts, and is sold at retail, including an oven lamp, refrigerator lamp, and vacuum cleaner lamp; and

''(ii) is designated and marketed for the intended application, with—

''(I) the designation on the lamp packaging; and

''(II) marketing materials that identify the lamp as being for appliance use.

''(U) CANDELABRA BASE INCANDESCENT LAMP.—The term 'candelabra base incandescent lamp' means a lamp that uses candelabra screw base as described in ANSI C81.61–2006, Specifications for Electric Bases, common designations E11 and E12.

''(V) INTERMEDIATE BASE INCANDESCENT LAMP.—The term 'intermediate base incandescent lamp' means a lamp that uses an intermediate screw base as described in ANSI

C81.61–2006, Specifications for Electric Bases, common designation E17.

''(W) MODIFIED SPECTRUM.—The term 'modified spectrum' means, with respect to an incandescent lamp, an incandescent lamp that—

''(i) is not a colored incandescent lamp; and

''(ii) when operated at the rated voltage and wattage of the incandescent lamp—

''(I) has a color point with (x,y) chromaticity coordinates on the Commission Internationale de l'Eclairage (C.I.E.) 1931 chromaticity diagram that lies below the black-body locus; and

''(II) has a color point with (x,y) chromaticity coordinates on the C.I.E. 1931 chromaticity diagram that lies at least 4 MacAdam steps (as referenced in IESNA LM16) distant from the color point of a clear lamp with the same filament and bulb

shape, operated at the same rated voltage and wattage.

''(X) ROUGH SERVICE LAMP.—The term 'rough service lamp' means a lamp that—

''(i) has a minimum of 5 supports with filament configurations similar to but not limited to C–7A, C–11, C–17, and C–22 as listed in Figure 6–12 of the 9th edition of the IESNA Lighting handbook, where lead wires are not counted as supports; and

''(ii) is designated and marketed specifically for 'rough service' applications, with—

''(I) the designation appearing on the lamp packaging; and

''(II) marketing materials that identify the lamp as being for rough service.

''(Y) 3-WAY INCANDESCENT LAMP.—The term '3-way incandescent lamp' includes an incandescent lamp that—

''(i) employs 2 filaments, operated separately and in combination, to provide 3 light levels; and

"(ii) is designated on the lamp packaging and marketing materials as being a 3-way incandescent lamp.

"(Z) SHATTER-RESISTANT LAMP, SHATTER-PROOF LAMP, OR SHATTER-PROTECTED LAMP.—The terms 'shatter-resistant lamp', 'shatter-proof lamp', and 'shatter-protected lamp' mean a lamp that—

"(i) has a coating or equivalent technology that is compliant with NSF/ANSI 51 and is designed to contain the glass if the glass envelope of the lamp is broken; and

"(ii) is designated and marketed for the intended application, with—

"(I) the designation on the lamp packaging; and

"(II) marketing materials that identify the lamp as being shatter-resistant, shatter-proof, or shatter-protected.

"(AA) VIBRATION SERVICE LAMP.—The term 'vibration service lamp' means a lamp that—

''(i) has filament configurations that are similar to but not limited to C–5, C–7A, or C–9, as listed in Figure 6–12 of the 9th Edition of the IESNA Lighting Handbook;

''(ii) has a maximum wattage of 60 watts;

''(iii) is sold at retail in packages of 4 lamps or less; and

''(iv) is designated and marketed specifically for vibration service or vibration-resistant applications, with—

''(I) the designation appearing on the lamp packaging; and

''(II) marketing materials that identify the lamp as being vibration service only.''.

(b) COVERAGE.—Section 322(a)(14) of the Energy Policy and Conservation Act (42 U.S.C. 6292(a)(14)) is amended by inserting '', general service incandescent lamps,'' after ''fluorescent lamps''.

(c) ENERGY CONSERVATION STANDARDS.—Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended—

(1) in subsection (i)—

(A) in the section heading, by inserting ", GENERAL SERVICE INCANDESCENT LAMPS, INTERMEDIATE BASE INCANDESCENT LAMPS, CANDELABRA BASE INCANDESCENT LAMPS," after "FLUORESCENT LAMPS";

(B) in paragraph (1)—

(i) in subparagraph (A)—

(I) by inserting ", general service incandescent lamps, intermediate base incandescent lamps, candelabra base incandescent lamps," after "fluorescent lamps";

(II) by inserting ", new maximum wattage," after "lamp efficacy"; and

(III) by inserting after the table entitled "INCANDESCENT REFLECTOR LAMPS" the following:

"CLEAR, INSIDE FROST, AND SOFT WHITE GENERAL SERVICE INCANDESCENT LAMPS

Rated Lumen Ranges	Maximum Rate Wattage	Minimum Rate Lifetime	Effective Date
1490–2600	72	1,000 hrs	1/1/2012
1010–1489	53	1,000 hrs	1/1/2013
730–1009	43	1,000 hrs	1/1/2014
310–729	29	1,000 hrs	1/1/2014

''MODIFIED SPECTRUM GENERAL SERVICE INCANDESCENT LAMPS

Rated Lumen Ranges	Maximum Rate Wattage	Minimum Rate Lifetime	Effective Date
1118–1950	72	1,000 hrs	1/1/2012
758–1117	53	1,000 hrs	1/1/2013
548–757	43	1,000 hrs	1/1/2014
232–547	29	1,000 hrs	1/1/2014'';

and

(ii) by striking subparagraph (B) and inserting the following:

''(B) COLOR RENDERING INDEX.—

''(i) APPLICATION.—This subparagraph applies to each lamp that—

''(I) is intended for a general service or general illumination application (whether incandescent or not);

''(II) has a medium screw base;

''(III) has a voltage range that is at least partially within 110 and 130 volts;

''(IV) has no external bulb or a bulb of the frosted, clear, soft white, or modified spectrum type; and

''(V) is manufactured or imported after December 31, 2011.

''(ii) REQUIREMENT.—For purposes of this paragraph, each lamp described in

clause (i) shall have a color rendering index that is greater than or equal to—

"(I) 80 for frosted, clear, and soft white lamps; or

"(II) 75 for modified spectrum lamps.

"(C) CANDELABRA INCANDESCENT LAMPS AND INTERMEDIATE BASE INCANDESCENT LAMPS.—

"(i) CANDELABRA BASE INCANDESCENT LAMPS.—A candelabra base incandescent lamp shall not exceed 60 rated watts.

"(ii) INTERMEDIATE BASE INCANDESCENT LAMPS.—An intermediate base incandescent lamp shall not exceed 40 rated watts.

"(D) EXEMPTIONS.—

"(i) PETITION.—Any person may petition the Secretary for an exemption for a type of general service lamp from the requirements of this subsection.

"(ii) CRITERIA.—The Secretary may grant an exemption under clause (i) only to the extent that the Secretary finds,

after a hearing and opportunity for public comment, that it is not technically feasible to serve a specialized lighting application (such as a military, medical, public safety, or certified historic lighting application) using a lamp that meets the requirements of this subsection.

''(iii) ADDITIONAL CRITERION.—To grant an exemption for a product under this subparagraph, the Secretary shall include, as an additional criterion, that the exempted product is unlikely to be used in a general service lighting application.

''(E) EXTENSION OF COVERAGE.—

''(i) PETITION.—Any person may petition the Secretary to establish standards for lamp types that are excluded from the definition of general service lamps.

''(ii) INCREASED SALES OF EXEMPTED LAMPS.—The petition shall include evidence that the availability or sales of exempted incandescent lamps have increased significantly since the date on which the standards on general service incandescent lamps were established.

''(iii) CRITERIA.—The Secretary shall grant a petition under clause (i) if the Secretary finds that the petition presents evidence that (assuming no other evidence is considered) demonstrates that sales of exempted incandescent lamp types have increased significantly since the standards on general service lamps were established and are being widely used in general lighting applications.

''(iv) NO PRESUMPTION.—The grant of a petition under this subparagraph shall create no presumption with respect to the determination of the Secretary with respect to any criteria under a rulemaking conducted under this section.

''(v) EXPEDITED PROCEEDING.—If the Secretary grants a petition for a lamp type under this subparagraph, the Secretary shall—

''(I) conduct a rulemaking to determine standards for the exempted lamp type; and

''(II) complete the rulemaking not later than 18 months after the

date on which notice is provided granting the petition.

''(F) DEFINITION OF EFFECTIVE DATE.—In this paragraph, except as otherwise provided in a table contained in subparagraph (A), the term 'effective date' means the last day of the month specified in the table that follows October 24, 1992.'';

(C) in paragraph (5), in the first sentence, by striking ''and general service incandescent lamps'';

(D) by redesignating paragraphs (6) and (7) as paragraphs (7) and (8), respectively; and

(E) by inserting after paragraph (5) the following:

''(6) STANDARDS FOR GENERAL SERVICE INCANDESCENT LAMPS.—

''(A) RULEMAKING BEFORE JANUARY 1, 2015.—

''(i) IN GENERAL.—Not later than January 1, 2015, the Secretary shall initiate a rulemaking procedure to determine whether—

''(I) standards in effect for general service incandescent lamps should

be amended to establish more stringent maximum wattage than the standards specified in paragraph (1)(A); and

"(II) the exemptions for certain incandescent lamps should be maintained or discontinued.

"(ii) SCOPE.—The rulemaking—

"(I) shall not be limited to incandescent lamp technologies; and

"(II) shall include consideration of a minimum efficacy standard of 45 lumens per watt.

"(iii) AMENDED STANDARDS.—If the Secretary determines that the standards in effect for general service incandescent lamps should be amended, the Secretary shall publish a final rule not later than January 1, 2017, with an effective date that is not earlier than 3 years after the date on which the final rule is published.

"(iv) PHASED-IN EFFECTIVE DATES.—The Secretary shall consider phased-in effective dates under this subparagraph after considering—

''(I) the impact of any amendment on manufacturers, retiring and repurposing existing equipment, stranded investments, labor contracts, workers, and raw materials; and

''(II) the time needed to work with retailers and lighting designers to revise sales and marketing strategies.

''(v) BACKSTOP REQUIREMENT.—If the Secretary fails to complete a rulemaking in accordance with clauses (i) through (iv) or if the final rule does not produce savings that are greater than or equal to the savings from a minimum efficacy standard of 45 lumens per watt, effective beginning January 1, 2020, the Secretary shall prohibit the sale of any general service lamp that emits less than 300 percent of the average lumens per watt emitted by a 100-watt incandescent general service lamp that is commercially available on the date of enactment of this clause.

''(B) RULEMAKING BEFORE JANUARY 1, 2020.—

''(i) IN GENERAL.—Not later than January 1, 2020, the Secretary shall initiate a rulemaking procedure to determine whether—

''(I) standards in effect for general service incandescent lamps should be amended to reflect lumen ranges with more stringent maximum wattage than the standards specified in paragraph (1)(A); and

''(II) the exemptions for certain incandescent lamps should be maintained or discontinued.

''(ii) SCOPE.—The rulemaking shall not be limited to incandescent lamp technologies.

''(iii) AMENDED STANDARDS.—If the Secretary determines that the standards in effect for general service incandescent lamps should be amended, the Secretary shall publish a final rule not later than January 1, 2022, with an effective date that is not earlier than 3 years after the date on which the final rule is published.

''(iv) PHASED-IN EFFECTIVE DATES.—The Secretary shall consider phased-in effective dates under this subparagraph after considering—

''(I) the impact of any amendment on manufacturers, retiring and repurposing existing equipment, stranded investments, labor contracts, workers, and raw materials; and

''(II) the time needed to work with retailers and lighting designers to revise sales and marketing strategies.''; and

(2) in subsection (l), by adding at the end the following:

''(4) ENERGY EFFICIENCY STANDARDS FOR CERTAIN LAMPS.—

''(A) IN GENERAL.—The Secretary shall prescribe an energy efficiency standard for rough service lamps, vibration service lamps, 3-way incandescent lamps, 150-watt general service incandescent lamps, and shatter-resistant lamps only in accordance with this paragraph.

''(B) BENCHMARKS.—Not later than 1 year after the date of enactment of this para-

graph, the Secretary, in consultation with the National Electrical Manufacturers Association, shall—

''(i) collect actual data for United States unit sales for each of calendar years 1990 through 2006 for each of the 5 types of lamps described in subparagraph (A) to determine the historical growth rate of the type of lamp; and

''(ii) construct a model for each type of lamp based on coincident economic indicators that closely match the historical annual growth rate of the type of lamp to provide a neutral comparison benchmark to model future unit sales after calendar year 2006.

''(C) ACTUAL SALES DATA.—

''(i) IN GENERAL.—Effective for each of calendar years 2010 through 2025, the Secretary, in consultation with the National Electrical Manufacturers Association, shall—

''(I) collect actual United States unit sales data for each of 5 types of

lamps described in subparagraph (A); and

''(II) not later than 90 days after the end of each calendar year, compare the lamp sales in that year with the sales predicted by the comparison benchmark for each of the 5 types of lamps described in subparagraph (A).

''(ii) CONTINUATION OF TRACKING.—

''(I) DETERMINATION.—Not later than January 1, 2023, the Secretary shall determine if actual sales data should be tracked for the lamp types described in subparagraph (A) after calender year 2025.

''(II) CONTINUATION.—If the Secretary finds that the market share of a lamp type described in subparagraph (A) could significantly erode the market share for general service lamps, the Secretary shall continue to track the actual sales data for the lamp type.

''(D) ROUGH SERVICE LAMPS.—

"(i) IN GENERAL.—Effective beginning with the first year that the reported annual sales rate for rough service lamps demonstrates actual unit sales of rough service lamps that achieve levels that are at least 100 percent higher than modeled unit sales for that same year, the Secretary shall—

"(I) not later than 90 days after the end of the previous calendar year, issue a finding that the index has been exceeded; and

"(II) not later than the date that is 1 year after the end of the previous calendar year, complete an accelerated rulemaking to establish an energy conservation standard for rough service lamps.

"(ii) BACKSTOP REQUIREMENT.—If the Secretary fails to complete an accelerated rulemaking in accordance with clause (i)(II), effective beginning 1 year after the date of the issuance of the finding under clause (i)(I), the Secretary shall require rough service lamps to—

''(I) have a shatter-proof coating or equivalent technology that is compliant with NSF/ANSI 51 and is designed to contain the glass if the glass envelope of the lamp is broken and to provide effective containment over the life of the lamp;

''(II) have a maximum 40-watt limitation; and

''(III) be sold at retail only in a package containing 1 lamp.

''(E) VIBRATION SERVICE LAMPS.—

''(i) IN GENERAL.—Effective beginning with the first year that the reported annual sales rate for vibration service lamps demonstrates actual unit sales of vibration service lamps that achieve levels that are at least 100 percent higher than modeled unit sales for that same year, the Secretary shall—

''(I) not later than 90 days after the end of the previous calendar year, issue a finding that the index has been exceeded; and

''(II) not later than the date that is 1 year after the end of the previous calendar year, complete an accelerated rulemaking to establish an energy conservation standard for vibration service lamps.

''(ii) BACKSTOP REQUIREMENT.—If the Secretary fails to complete an accelerated rulemaking in accordance with clause (i)(II), effective beginning 1 year after the date of the issuance of the finding under clause (i)(I), the Secretary shall require vibration service lamps to—

''(I) have a maximum 40-watt limitation; and

''(II) be sold at retail only in a package containing 1 lamp.

''(F) 3-WAY INCANDESCENT LAMPS.—

''(i) IN GENERAL.—Effective beginning with the first year that the reported annual sales rate for 3-way incandescent lamps demonstrates actual unit sales of 3-way incandescent lamps that achieve levels that are at least 100 percent higher than

modeled unit sales for that same year, the Secretary shall—

"(I) not later than 90 days after the end of the previous calendar year, issue a finding that the index has been exceeded; and

"(II) not later than the date that is 1 year after the end of the previous calendar year, complete an accelerated rulemaking to establish an energy conservation standard for 3-way incandescent lamps.

"(ii) BACKSTOP REQUIREMENT.—If the Secretary fails to complete an accelerated rulemaking in accordance with clause (i)(II), effective beginning 1 year after the date of issuance of the finding under clause (i)(I), the Secretary shall require that—

"(I) each filament in a 3-way incandescent lamp meet the new maximum wattage requirements for the respective lumen range established under subsection (i)(1)(A); and

"(II) 3-way lamps be sold at retail only in a package containing 1 lamp.

"(G) 150-WATT GENERAL SERVICE INCANDESCENT LAMPS.—

"(i) IN GENERAL.—Effective beginning with the first year that the reported annual sales rate demonstrates actual unit sales of 150-watt general service incandescent lamps in the lumen range of 2,601 through 3,300 lumens (or, in the case of a modified spectrum, in the lumen range of 1,951 through 2,475 lumens) that achieve levels that are at least 100 percent higher than modeled unit sales for that same year, the Secretary shall—

"(I) not later than 90 days after the end of the previous calendar year, issue a finding that the index has been exceeded; and

"(II) not later than the date that is 1 year after the end of the previous calendar year, complete an accelerated rulemaking to establish an energy conservation standard for those 150-

watt general service incandescent lamps.

''(ii) BACKSTOP REQUIREMENT.—If the Secretary fails to complete an accelerated rulemaking in accordance with clause (i)(II), effective beginning 1 year after the date of issuance of the finding under clause (i)(I), the Secretary shall impose—

''(I) a maximum 95-watt limitation on general service incandescent lamps in the lumen range of 2,601 through 3,300 lumens; and

''(II) a requirement that those lamps be sold at retail only in a package containing 1 lamp.

''(H) SHATTER-RESISTANT LAMPS.—

''(i) IN GENERAL.—Effective beginning with the first year that the reported annual sales rate for shatter-resistant lamps demonstrates actual unit sales of shatter-resistant lamps that achieve levels that are at least 100 percent higher than modeled unit sales for that same year, the Secretary shall—

"(I) not later than 90 days after the end of the previous calendar year, issue a finding that the index has been exceeded; and

"(II) not later than the date that is 1 year after the end of the previous calendar year, complete an accelerated rulemaking to establish an energy conservation standard for shatter-resistant lamps.

"(ii) BACKSTOP REQUIREMENT.—If the Secretary fails to complete an accelerated rulemaking in accordance with clause (i)(II), effective beginning 1 year after the date of issuance of the finding under clause (i)(I), the Secretary shall impose—

"(I) a maximum wattage limitation of 40 watts on shatter resistant lamps; and

"(II) a requirement that those lamps be sold at retail only in a package containing 1 lamp.

"(I) RULEMAKINGS BEFORE JANUARY 1, 2025.—

"(i) IN GENERAL.—Except as provided in clause (ii), if the Secretary issues a final rule prior to January 1, 2025, establishing an energy conservation standard for any of the 5 types of lamps for which data collection is required under any of subparagraphs (D) through (G), the requirement to collect and model data for that type of lamp shall terminate unless, as part of the rulemaking, the Secretary determines that continued tracking is necessary.

"(ii) BACKSTOP REQUIREMENT.—If the Secretary imposes a backstop requirement as a result of a failure to complete an accelerated rulemaking in accordance with clause (i)(II) of any of subparagraphs (D) through (G), the requirement to collect and model data for the applicable type of lamp shall continue for an additional 2 years after the effective date of the backstop requirement.".

SEC. 102. CONSUMER EDUCATION AND LAMP LABELING.

Section 324(a)(2)(C) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)(2)(C)) is amended by adding at the end the following:

"(iii) RULEMAKING TO CONSIDER EFFECTIVENESS OF LAMP LABELING.—

"(I) IN GENERAL.—Not later than 1 year after the date of enactment of this clause, the Commission shall initiate a rulemaking to consider—

"(aa) the effectiveness of current lamp labeling for power levels or watts, light output or lumens, and lamp lifetime; and

"(bb) alternative labeling approaches that will help consumers to understand new high-efficiency lamp products and to base the purchase decisions of the consumers on the most appropriate source that meets the requirements of the consumers for lighting level, light quality, lamp lifetime, and total lifecycle cost.

''(II) COMPLETION.—The Commission shall—

''(aa) complete the rulemaking not later than the date that is 30 months after the date of enactment of this clause; and

''(bb) consider reopening the rulemaking not later than 180 days before the effective dates of the standards for general service incandescent lamps established under section 325(i)(1)(A), if the Commission determines that further labeling changes are needed to help consumers understand lamp alternatives.''.

SEC. 103. MARKET ASSESSMENTS AND CONSUMER AWARENESS PROGRAM.

(a) IN GENERAL.—In cooperation with the Administrator of the Environmental Protection Agency, the Secretary of Commerce, the Federal Trade Commission, lighting and retail industry associations, energy efficiency organizations, and any other entities that the Secretary determines to be appropriate, the Secretary shall—

(1) conduct an annual assessment of the market for general service lamps and compact fluorescent lamps to—

(A) identify trends in the market shares of lamp types, efficiencies, and light output levels purchased by residential and nonresidential consumers; and

(B) better understand the degree to which consumer decisionmaking is based on lamp power levels or watts, light output or lumens, lamp lifetime, and other factors, including information required on labels mandated by the Federal Trade Commission;

(2) provide the results of the market assessment to the Federal Trade Commission for consideration in the rulemaking described in section 324(a)(2)(C)(iii) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)(2)(C)(iii)); and

(3) in cooperation with industry trade associations, lighting industry members, utilities, and other interested parties, carry out a proactive national program of consumer awareness, information, and education that broadly uses the media and other effective communication techniques over an extended period of time to help consumers understand the

lamp labels and make energy-efficient lighting choices that meet the needs of consumers.

(b) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $10,000,000 for each of fiscal years 2009 through 2012.

SEC. 104. GENERAL RULE OF PREEMPTION FOR ENERGY CONSERVATION STANDARDS BEFORE FEDERAL STANDARD BECOMES EFFECTIVE FOR A PRODUCT.

Section 327(b)(1) of the Energy Policy and Conservation Act (42 U.S.C. 6297(b)(1)) is amended—

(1) by inserting ''(A)'' after ''(1)'';

(2) by inserting ''or'' after the semicolon at the end; and

(3) by adding at the end the following:

''(B) in the case of any portion of any regulation that establishes requirements for general service incandescent lamps, intermediate base incandescent lamps, or candelabra base lamps, was enacted or adopted before the date of enactment of this subparagraph, except that—

''(i) the regulation shall only be effective until the effective date of the Federal standard for the applicable lamp category under subpara-

graphs (A), (B), and (C) of section 325(i)(1); and

''(ii) a State may, at any time, modify or adopt a State standard for general service lamps to conform with Federal standards and effective dates.''.

SEC. 105. PROHIBITED ACTS.

Section 332(a) of the Energy Policy and Conservation Act (42 U.S.C. 6302(a)) is amended—

(1) in paragraph (4), by striking ''or'' at the end;

(2) in paragraph (5), by striking the period at the end and inserting ''; or''; and

(3) by adding at the end the following:

''(6) for any manufacturer, distributor, retailer, or private labeler to distribute in commerce an adapter that—

''(A) is designed to allow an incandescent lamp that does not have a medium screw base to be installed into a fixture or lampholder with a medium screw base socket; and

''(B) has a voltage range that includes 110 and 130 volts.''.

SEC. 106. ENFORCEMENT.

Section 334 of the Energy Policy and Conservation Act (42 U.S.C. 6304) is amended by inserting after the second sentence the following: ''Any such action to restrain any person from distributing in commerce a general service incandescent lamp that does not comply with the applicable standard established under section 325(i) or an adapter prohibited under section 332(a)(6) may also be brought by the attorney general of a State in the name of the State.''.

SEC. 107. RESEARCH AND DEVELOPMENT PROGRAM.

(a) IN GENERAL.—The Secretary may carry out a lighting technology research and development program—

(1) to support the research, development, demonstration, and commercial application of lamps and related technologies sold, offered for sale, or otherwise made available in the United States; and

(2) to assist manufacturers of general service lamps in the manufacturing of general service lamps that, at a minimum, achieve the wattage requirements imposed as a result of the amendments made by section 101.

(b) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section $10,000,000 for each of fiscal years 2008 through 2013.

(c) TERMINATION OF AUTHORITY.—The program under this section shall terminate on September 30, 2015.

SEC. 108. REPORT ON MERCURY USE AND RELEASE.

Not later than 1 year after the date of enactment of this Act, the Secretary, in cooperation with the Administrator of the Environmental Protection Agency, shall submit to Congress a report describing recommendations relating to the means by which the Federal Government may reduce or prevent the release of mercury during the manufacture, transportation, storage, or disposal of light bulbs.

TITLE II—STANDARDS FOR METAL HALIDE LAMP FIXTURES

SEC. 201. DEFINITIONS.

Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) is amended by adding at the end the following:

''(52) BALLAST.—The term 'ballast' means a device used with an electric discharge lamp to obtain necessary circuit conditions (including voltage, current, and waveform) for starting and operating.

''(53) BALLAST EFFICIENCY.—

''(A) IN GENERAL.—The term 'ballast efficiency' means, with respect to a high intensity discharge fixture, the efficiency of a lamp and

ballast combination this is equal to the percentage obtained by dividing P_{out}/P_{in}, as measured, with—

"(i) P_{out} equal to the measured operating lamp wattage; and

"(ii) P_{in} equal to the measured operating input wattage.

"(B) ADMINISTRATION.—In calculating ballast efficiency under subparagraph (A)—

"(i) the lamp and (if provided) the capacitor shall constitute a nominal system in accordance with the ANSI Standard C78.43–2004; and

"(ii) P_{in} and P_{out} shall be measured after lamps have been stabilized according to section 4.4 of ANSI Standard C82.6–2005 using a wattmeter with—

"(I) in the case of ballast with a frequency of 60 hertz, accuracy specified in section 4.5 of ANSI Standard C82.6–2005; and

"(II) in the case of ballast with a frequency greater than 60 hertz, a basic accuracy of ± 0.5 percent at the higher of 3 times the output operating

frequency of the ballast, or 2 kilohertz.

''(C) MODIFICATION.—The Secretary may, by rule, modify the definition of 'ballast efficiency' if the Secretary determines that the modification is necessary or appropriate to carry out this Act.

''(54) ELECTRONIC BALLAST.—The term 'electronic ballast' means a device that use semiconductors as the primary means to control lamp starting and operation.

''(55) GENERAL LIGHTING APPLICATION.—The term 'general lighting application' means lighting that provides an interior or exterior area with overall illumination.

''(56) METAL HALIDE BALLAST.—The term 'metal halide ballast' means a ballast that is used to start and operate metal halide lamps.

''(57) METAL HALIDE LAMP.—The term 'metal halide lamp' means a high intensity discharge lamp with the major portion of the light produced by radiation of metal halides and the products of dissociation of metal halides, possibly in combination with metallic vapors.

''(58) METAL HALIDE LAMP FIXTURE.—The term 'metal halide lamp fixture' means a light fixture for general lighting application that is designed to be operated with a metal halide lamp and a ballast for a metal halide lamp.

''(59) PROBE-START METAL HALIDE BALLAST.—The term 'probe-start metal halide ballast' means a ballast that—

''(A) starts a probe-start metal halide lamp that contains a third starting electrode (probe) in the arc tube; and

''(B) does not generally contain an igniter and instead starts lamps with high ballast open circuit voltage.

''(60) PULSE-START METAL HALIDE BALLAST.—The term 'pulse-start metal halide ballast' means an electronic or electromagnetic ballast that starts a pulse start metal halide lamp with high voltage pulses, with—

''(A) the lamp started by first providing a high voltage pulse for ionization of the gas to produce a glow discharge; and

''(B) to complete the starting process, power provided by the ballast to sustain the discharge through the glow-to-arc transition.''.

SEC. 202. COVERAGE.

Section 322(a) of the Energy Policy and Conservation Act (42 U.S.C. 6292(a)) is amended—

(1) by redesignating paragraph (19) as paragraph (20); and

(2) by inserting after paragraph (18) the following:

''(19) Metal halide lamp fixture.''.

SEC. 203. TEST PROCEDURES.

Section 323(b) of the Energy Policy and Conservation Act (42 U.S.C. 6293(b)) is amended by adding at the end the following:

''(17) METAL HALIDE LAMP BALLASTS.—Test procedures for metal halide lamp ballasts shall be based on ANSI Standard C82.6–2005, entitled 'Ballasts for High Intensity Discharge Lamps—Method of Measurement'.''.

SEC. 204. LABELING.

Section 324(a)(2) of the Energy Policy and Conservation Act (42 U.S.C. 6293(b)) is amended by adding at the end the following:

''(H) METAL HALIDE LAMP FIXTURES.—

''(i) IN GENERAL.—The Commission shall prescribe labeling rules under this section applicable to the covered product specified in section 322(a)(19) and to

which standards are applicable under section 325.

''(ii) LABELING.—The rules shall provide that the labeling of any metal halide lamp fixture manufactured on or after the later of January 1, 2009, or the date that is 270 days after the date of enactment of this subparagraph, shall indicate conspicuously, in a manner prescribed by the Commission under subsection (b) by July 1, 2008, a capital letter 'E' printed within a circle on the packaging of the fixture, and on the ballast contained in the fixture.''.

SEC. 205. ENERGY CONSERVATION STANDARDS.

Section 325 of the Energy Policy and Conservation Act (42 U.S.C. 6295) is amended—

(1) by redesignating subsection (gg) as subsection (hh);

(2) by inserting after subsection (ff) the following:

''(gg) STANDARDS FOR METAL HALIDE LAMP FIXTURES.—

''(1) IN GENERAL.—Subject to paragraphs (2) through (5), a metal halide lamp fixture designed to be operated with a lamp that is rated greater than

or equal to 150 watts, but less than or equal to 500 watts, shall contain—

"(A) a pulse-start metal halide ballast with a minimum ballast efficiency of 88 percent;

"(B) a magnetic probe-start ballast with a minimum ballast efficiency of 94 percent; or

"(C) a non-pulse-start electronic ballast with a minimum ballast efficiency of—

"(i) 92 percent for wattages greater than 250 watts; and

"(ii) 90 percent for wattages less than or equal to 250 watts.

"(2) EXCEPTIONS.—The standards established under paragraph (1) shall not apply to—

"(A) fixtures with regulated lag ballasts;

"(B) fixtures that use electronic ballasts that operate at 480 volts; or

"(C) fixtures that—

"(i) are rated only for 150 watt lamps;

"(ii) are rated for use in wet locations, as specified by section 410.4(A) of the National Electrical Code (2002); and

''(iii) contain a ballast that is rated to operate at ambient air temperatures above 50° celsius, as specified by UL 1029–2001.

''(3) AMENDED STANDARDS.—

''(A) PRODUCTS MANUFACTURED AFTER JANUARY 1, 2015.—

''(i) IN GENERAL.—Not later than January 1, 2012, the Secretary shall publish a final rule to determine whether the standards established under paragraph (1) should be amended.

''(ii) ADMINISTRATION.—The final rule shall—

''(I) contain the amended standards, if any; and

''(II) apply to products manufactured after January 1, 2015.

''(B) PRODUCTS MANUFACTURED AFTER JANUARY 1, 2022.—

''(i) IN GENERAL.—Not later than January 1, 2019, the Secretary shall publish a final rule to determine whether the standards then in effect should be amended.

''(ii) ADMINISTRATION.—The final rule shall—

''(I) contain the amended standards, if any; and

''(II) apply to products manufactured after January 1, 2022.

''(4) DESIGN AND PERFORMANCE REQUIREMENTS.—Notwithstanding any other provision of law, any standard established under this subsection may contain both design and performance requirements.

''(5) EFFECTIVE DATE.—The standards established under paragraph (1) shall apply to metal halide lamp fixtures manufactured on or after the later of—

''(A) January 1, 2009; or

''(B) the date that is 270 days after the date of enactment of the Energy Efficient Lighting for a Brighter Tomorrow Act of 2007.''; and

(3) in paragraph (2) of subsection (hh) (as redesignated by paragraph (1)), by striking ''(ff)'' each place it appears and inserting ''(gg)''.

SEC. 206. EFFECT ON OTHER LAW.

Section 327(c) of the Energy Policy and Conservation Act (42 U.S.C. 6297(c)) is amended—

(1) in paragraph (6), by striking ''or'' after the semicolon at the end;

(2) in paragraph (8), by striking the period at the end and inserting ''; or''; and

(3) by adding at the end the following:

''(9) is a regulation concerning metal halide lamp fixtures adopted by the California Energy Commission on or before January 1, 2011, except that (notwithstanding any other provision of this section)—

''(A) if the Secretary fails to issue a final rule within the 180-day period beginning on the date of the deadline for rulemaking under section 325(gg)(3)(A)(i), preemption shall not apply to a regulation concerning metal halide lamp fixtures adopted by the California Energy Commission on or before July 1, 2015; or

''(B) if the Secretary fails to issue a final rule within the 180-day period beginning on the deadline specified in section 325(gg)(3)(B)(i), preemption shall not apply to a regulation concerning metal halide lamp fixtures adopted by

the California Energy Commission or on or before July 1, 2022.''.

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