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SENATE

{ REPORT
115-78

TO EXCLUDE POWER SUPPLY CIRCUITS, DRIVERS, AND DEVICES DESIGNED TO BE CONNECTED TO, AND POWER, LIGHT-EMITTING DIODES OR ORGANIC LIGHT-EMITTING DIODES PROVIDING ILLUMINATION OR CEILING FANS USING DIRECT CURRENT MOTORS FROM ENERGY CONSERVATION STANDARDS FOR EXTERNAL POWER SUPPLIES

MAY 24, 2017.—Ordered to be printed

Ms. MURKOWSKI, from the Committee on Energy and Natural Resources, submitted the following

R E P O R T

[To accompany S. 226]

[Including cost estimate of the Congressional Budget Office]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 226) to exclude power supply circuits, drivers, and devices designed to be connected to, and power, light-emitting diodes or organic light-emitting diodes providing illumination or ceiling fans using direct current motors from energy conservation standards for external power supplies, having considered the same, reports favorably thereon without amendment and recommends that the bill do pass.

PURPOSE

The purpose of S. 226 is to exclude power supply circuits, drivers, and devices to be connected to, and power, light-emitting diodes or organic light-emitting diodes providing illumination, or ceiling fans using direct current motors from energy conservation standards for external power supplies.

BACKGROUND AND NEED

Since the 1973 oil embargo and every subsequent energy crisis, studies have shown that the United States could save energy and money by investing in energy efficiency measures. Today, efficient energy use and the deployment of more efficient technologies are critical to the nation's economic competitiveness and job creation. In addition, efficient energy use reduces pollution that would be associated with energy production. Nevertheless, many existing en-

ergy efficiency technologies and programs have yet to be installed or implemented.

The National Academies released a 2010 study entitled *Real Prospects for Energy Efficiency in the United States* on the potential for energy efficiency in commercial and residential buildings, transportation, and manufacturing. The study found that energy efficiency could more than offset the Energy Information Administration’s projected increase in U.S. energy consumption through 2030.

In 2005, in the Energy Policy Act (Public Law 109–58), Congress amended the Energy Policy and Conservation Act (EPCA) to define external power supplies (EPS) as an “external power supply circuit that is used to convert household electric current into DC current or lower-voltage AC current to operate a consumer product.” 42 U.S.C. 6291(36)(A). In addition, it directed the Department of Energy (DOE) to set energy conservation standards for EPSs.

DOE adopted standards for EPSs by rule in 2006. 71 Fed. Reg. 71340 (Dec. 8, 2006). In February 2014, DOE amended the energy conservation standards that applied to certain external power supplies and established new ones for others that were not previously required to meet energy conservation standards. 79 Fed. Reg. 7846 (Feb. 10, 2014). The 2014 rule included certain solid state lighting drivers, including, for example, light emitting diodes (LEDs). However, the design of LED drivers is different from the design of an EPS. While EPSs use a single stage power conversion, LED drivers utilize a two stage power conversion design. The EPS efficiency standards are based on a single stage design; the efficiency of a two stage design is the product of the efficiencies of each stage, and therefore a standard based on a single stage design is not appropriate for LED drivers. The 2014 final rule went into effect on February 10, 2016, meaning LED drivers are now technically not supposed to be available in the market as they cannot meet the EPS efficiency standard. If not addressed, the EPS standard will lead to LED drivers being taken off of the market, disrupting the lighting industry’s transition to more energy efficient lighting and increasing energy use and costs for consumers.

S. 226 would exclude solid state lighting (e.g., LEDs) drivers and ceiling fans using direct current motors from DOE’s existing EPS standards, and protect these products from being captured by other wide ranging DOE regulations that do not deal directly with this lighting technology. Additionally, S. 226 preserves DOE’s ability to prescribe an energy conservation standard specifically for solid state lighting power supply circuits, drivers, and other products in the future, should it prove necessary.

LEGISLATIVE HISTORY

S. 226 was introduced by Senators Portman, Cantwell, and Shaheen on January 24, 2017.

Companion legislation, H.R. 518, was introduced in the House by Representatives DeGette, Dent, Guthrie, and Matsui on January 13, 2017. H.R. 518 was passed in the House of Representatives by a voice vote on January 23, 2017.

In the 114th Congress, an identical bill, S. 2476, was introduced by Senators Portman, Alexander, Cantwell, McConnell, and Shaheen on February 1, 2016.

The measure was included in Amendment No. 3168 which the Senate agreed to on April 19, 2016, as an amendment to S. 2012, the Energy Policy Modernization Act of 2016, which the Senate passed, as amended, on April 20, 2016.

Companion legislation, H.R. 4444, was introduced in the House by Representatives Ellmers, DeGette, Dent, Matsui, and Pompeo on February 3, 2016. H.R. 4444 was passed in the House of Representatives by a voice vote on February 29, 2016. It was received in the Senate on March 1, 2016, and referred to the Committee on Energy and Natural Resources on July 14, 2016.

The Committee met in an open business session on March 30, 2017, and ordered S. 226 favorably reported.

COMMITTEE RECOMMENDATION

The Senate Committee on Energy and Natural Resources, in an open business session on March 30, 2017, by a majority voice vote of a quorum present, recommends that the Senate pass S. 226, as described herein.

SECTION-BY-SECTION ANALYSIS

Section 1. Application of energy conservation standards to certain external power supplies

Section 1(a) amends Section 321(36)(A) of EPCA (42 U.S.C. 6291(36)(A)) to exclude from energy conservation standards for external power supplies any power supply circuit, driver, or device designed exclusively to be connected to, and power, light-emitting diodes, organic light-emitting diodes, or ceiling fans using direct current motors.

Subsection (b) amends section 340(2)(B) of EPCA to include lighting power supply circuits. This subsection also provides the Secretary of Energy with the regulatory authority to prescribe energy conservation standards for lighting power supply circuits no earlier than one year after the date on which a test procedure has been prescribed for such equipment.

Subsection (c) makes technical corrections to sections 321(6)(B) and 324 of EPCA.

COST AND BUDGETARY CONSIDERATIONS

The following estimate of the costs of this measure has been provided by the Congressional Budget Office:

The Energy Policy Act of 2005 directed the Secretary of Energy to establish energy conservation standards for external power supplies (EPS), which are devices that convert power drawn from a wall outlet into lower voltage power that can be used directly by certain electronic devices. S. 226 would amend the definition of EPS to exclude some technologies and specify the circumstances under which the Secretary could establish energy conservation standards for such technologies in the future.

CBO estimates that enacting S. 226 would have no significant effect on the federal budget. Based on information from the Department of Energy, we expect that any change in the agency's costs to regulate or establish standards for technologies affected by the

bill (which would be subject to appropriation) would be insignificant in any year.

Enacting S. 226 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply. CBO estimates that enacting S. 226 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2028.

S. 226 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would not affect the budgets of state, local, or tribal governments.

The CBO staff contact for this estimate is Megan Carroll. The estimate was approved by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out the bill.

The bill is not a regulatory measure in the sense of imposing Government-established standards or significant economic responsibilities on private individuals and businesses.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

Little, if any, additional paperwork would result from the enactment of the bill, as ordered reported.

CONGRESSIONALLY DIRECTED SPENDING

S. 226, as ordered reported, does not contain any congressionally directed spending items, limited tax benefits, or limited tariff benefits as defined in rule XLIV of the Standing Rules of the Senate.

EXECUTIVE COMMUNICATIONS

Executive Communications on S. 226 were not requested by the Committee on Energy and Natural Resources for the 115th Congress.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the original bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

ENERGY POLICY AND CONSERVATION ACT

Public Law 94–163, as amended

* * * * *

TITLE III—IMPROVING ENERGY EFFICIENCY

* * * * *

**PART B—ENERGY CONSERVATION PROGRAM FOR
CONSUMER PRODUCTS OTHER THAN AUTOMOBILES**

DEFINITIONS

SEC. 321. For purposes of this part:

* * * * *

(5) The term “energy efficiency” means the ratio of the useful output of services from a consumer product to the energy use of such product, determined in accordance with test procedures under section 323.

(6) The term “energy conservation standard” means—

(A) a performance standard which prescribes a minimum level of energy efficiency or a maximum quantity of energy use, or, in the case of showerheads, faucets, water closets, and urinals, water use, for a covered product, determined in accordance with test procedures prescribed under section 323; or

(B) a design requirement for the products specified in paragraphs (6), (7), (8), (10), (15), (16), (17), and **[(19)]** (20) of section 323; and

* * * * *

(35) (A) The term “distribution transformer” means a transformer that—

- (i) has an input voltage of 34.5 kilovolts or less;
- (ii) has an output voltage of 600 volts or less; and
- (iii) is rated for operation at a frequency of 60 Hertz.

(B) The term “distribution transformer” does not include—

- (i) a transformer with multiple voltage taps, the highest of which equals at least 20 percent more than the lowest;
- (ii) a transformer that is designed to be used in a special purpose application and is unlikely to be used in general purpose applications, such as a drive transformer, rectifier transformer, auto-transformer, Uninterruptible Power System transformer, impedance transformer, regulating transformer, sealed and nonventilating transformer, machine tool transformer, welding transformer, grounding transformer, or testing transformer; or
- (iii) any transformer not listed in clause (ii) that is excluded by the Secretary by rule because—

(I) the transformer is designed for a special application;

(II) the transformer is unlikely to be used in general purpose applications; and

(III) the application of standards to the transformer would not result in significant energy savings.

(36) EXTERNAL POWER SUPPLY.—

(A) **IN GENERAL.—The term**—

(i) *IN GENERAL.—The term “external power supply” means an external power supply circuit that is used to convert household electric current into DC current or lower-voltage AC current to operate a consumer product.*

(ii) *EXCLUSION.—The term “external power supply” does not include a power supply circuit, driver, or de-*

vice that is designed exclusively to be connected to, and power—

- (I) light-emitting diodes providing illumination;*
- (II) organic light-emitting diodes providing illumination; or*
- (III) ceiling fans using direct current motors.*

* * * * *

LABELING

SEC. 324. (a) IN GENERAL.— * * *

(3) The Commission may prescribe a labeling rule under this section applicable to covered products of a type specified in paragraph ~~[(19)]~~ (20) of section 322(a) (or a class thereof) if—

(A) the Commission or the Secretary has made a determination with respect to such type (or class thereof) that labeling in accordance with this section will assist purchasers in making purchasing decisions,

* * * * *

(b) RULES IN EFFECT; NEW RULES.— (1) (A) Any labeling rule in effect on the date of the enactment of the National Appliance Energy Conservation Act of 1987 shall remain in effect until amended, by rule, by the Commission.

(B) After the date of the enactment of the National Appliance Energy Conservation Act of 1987 and not later than 30 days after the date on which a proposed test procedure applicable to a covered product of any of the types specified in paragraphs (1) through (13), and paragraphs (15) through ~~[(19)]~~ (20) of section 322(a)(or class thereof) is prescribed under section 322(b), the Commission shall publish a proposed labeling rule applicable to such type (or class thereof).

(2) The Commission shall afford interested persons an opportunity to present written or oral data, views, and comments with respect to the proposed labeling rules published under paragraph (1). The period for such presentations shall not be less than 45 days.

(3) Not earlier than 45 days nor later than 60 days after the date on which test procedures are prescribed under section 322(b) with respect to covered products of any type (or class thereof) specified in paragraphs (1) through (12) of section 322(a), the Commission shall prescribe labeling rules with respect to covered products of such type (or class thereof). Not earlier than 45 days after the date on which test procedures are prescribed under section 322(b) with respect to covered products of a type specified in paragraph ~~[(19)]~~ (20) of section 322(a), the Commission may prescribe labeling rules with respect to covered products of such type (or class thereof).

(4) A labeling rule prescribed under paragraph (3) shall take effect not later than 3 months after the date of prescription of such rule, except that such rules may take effect not later than 6 months after such date of prescription if the Commission determines that such extension is necessary to allow persons subject to such rules adequate time to come into compliance with such rules.

(5) The Commission may delay the publication of a proposed labeling rule, or the prescription of a labeling rule, beyond the dates specified in paragraph (1) or (3), if it determines that it cannot pub-

lish proposed labeling rules or prescribe labeling rules which meet the requirements of this section on or prior to the date specified in the applicable paragraph and publishes such determination in the Federal Register, together with the reasons therefor. In any such case, it shall publish proposed labeling rules or prescribe labeling rules for covered products of such type (or class thereof) as soon as practicable unless it determines (A) that labeling in accordance with this section is not economically or technically feasible, or (B) in the case of a type specified in paragraphs (3), (5), and (7) of section 322(a), that labeling in accordance with this section is not likely to assist consumers in purchasing decisions. Any such determination shall be published in the Federal Register, together with the reasons therefor. This paragraph shall not apply to the prescription of a labeling rule with respect to covered products of a type specified in paragraph ~~[(19)]~~ (20) of section 322(a).

* * * * *

ENERGY CONSERVATION STANDARDS

SEC. 325. (a) PURPOSES.—The purposes of this section are to—

(1) provide Federal energy conservation standards applicable to covered products; and

* * * * *

(1) STANDARDS FOR OTHER COVERED PRODUCTS.— (1) The Secretary may prescribe an energy conservation standard for any type (or class) of covered products of a type specified in paragraph ~~[(19)]~~ (20) of section 322(a) if the requirements of subsections (o) and (p) are met and the Secretary determines that—

(A) the average per household energy use within the United States by products of such type (or class) exceeded 150 kilowatt-hours (or its Btu equivalent) for any 12-month period ending before such determination;

(B) the aggregate household energy use within the United States by products of such type (or class) exceeded 4,200,000,000 kilowatt-hours (or its Btu equivalent) for any such 12-month period;

(C) substantial improvement in the energy efficiency of products of such type (or class) is technologically feasible; and

(D) the application of a labeling rule under section 324 to such type (or class) is not likely to be sufficient to induce manufacturers to produce, and consumers and other persons to purchase, covered products of such type (or class) which achieve the maximum energy efficiency which is technologically feasible and economically justified.

(2) Any new or amended standard for covered products of a type specified in paragraph ~~[(19)]~~ (20) of section 322(a) shall not apply to products manufactured within five years after the publication of a final rule establishing such standard.

(3) The Secretary may, in accordance with subsections (o) and (p), prescribe an energy conservation standard for television sets. Any such standard may not become effective with respect to products manufactured before January 1, 1992.

(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, 2,601–3,300 lumen general service incandescent lamps, and shatter-resistant lamps in accordance with this paragraph.

(B) BENCHMARKS.—Not later than 1 year after the date of enactment of this, 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 calendar 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) 2,601–3,300 LUMEN GENERAL SERVICE INCANDESCENT LAMPS.—Effective beginning with the first year that the reported annual sales rate demonstrates actual unit sales of 2,601–3,300 lumen 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 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.

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PART C—CERTAIN INDUSTRIAL EQUIPMENT

DEFINITIONS

SEC. 340. For purposes of this part—

* * * * *

(2)(A) The term “industrial equipment” means any article of equipment referred to in subparagraph (B) of a type—

- (i) which in operation consumes, or is designed to consume, energy;
- (ii) which, to any significant extent, is distributed in commerce for industrial or commercial use; and
- (iii) which is not a “covered product” as defined in section 321(a)(2), other than a component of a covered product with respect to which there is in effect a determination under section 341(c);

without regard to whether such article is in fact distributed in commerce for industrial or commercial use.

(B) The types of equipment referred to in this subparagraph (in addition to electric motors and pumps, commercial package air conditioning and heating equipment, commercial refrigerators, freezers, and refrigerator-freezers, automatic commercial ice makers, commercial clothes washers, packaged terminal air-conditioners, packaged terminal heat pumps, warm air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks) are as follows:

- (i) compressors;
- (ii) fans;
- (iii) blowers;
- (iv) refrigeration equipment;
- [(v) electric lights;]
- (v) electric lights and lighting power supply circuits;*
- (vi) electrolytic equipment;
- (vii) electric arc equipment;
- (viii) steam boilers;
- (ix) ovens;
- (x) kilns;
- (xi) evaporators;
- (xii) dryers; and
- (xiii) other motors.

(3) The term “energy efficiency” means the ratio of the useful output of services from an article of industrial equipment to the energy use by such article, determined in accordance with test procedures under section 343.

* * * * *

STANDARDS

SEC. 342. (a) * * *

(f) WALK-IN COOLERS AND WALK-IN FREEZERS.—

(1) IN GENERAL.—Subject to paragraphs (2) through (6), each walk-in cooler or walk-in freezer manufactured on or after January 1, 2009, shall—

(A) have automatic door closers that firmly close all walk-in doors that have been closed to within 1 inch of full closure, except that this subparagraph shall not apply to doors wider than 3 feet 9 inches or taller than 7 feet;

(B) have strip doors, spring hinged doors, or other method of minimizing infiltration when doors are open;

(C) contain wall, ceiling, and door insulation of at least R-25 for coolers and R-32 for freezers, except that this subparagraph shall not apply to glazed portions of doors nor to structural members;

(D) contain floor insulation of at least R-28 for freezers;

(E) for evaporator fan motors of under 1 horsepower and less than 460 volts, use—

(i) electronically commutated motors (brushless direct current motors); or

(ii) 3-phase motors;

(F) for condenser fan motors of under 1 horsepower, use—

(i) electronically commutated motors;

(ii) permanent split capacitor-type motors; or

(iii) 3-phase motors; and

(G) for all interior lights, use light sources with an efficacy of 40 lumens per watt or more, including ballast losses (if any), except that light sources with an efficacy of 40 lumens per watt or less, including ballast losses (if any), may be used in conjunction with a timer or device that turns off the lights within 15 minutes of when the walk-in cooler or walk-in freezer is not occupied by people.

(2) ELECTRONICALLY COMMUTATED MOTORS.—

(A) IN GENERAL.—The requirements of paragraph (1)(E)(i) for electronically commutated motors shall take effect January 1, 2009, unless, prior to that date, the Secretary determines that such motors are only available from 1 manufacturer.

(B) OTHER TYPES OF MOTORS.—In carrying out paragraph (1)(E)(i) and subparagraph (A), the Secretary may allow other types of motors if the Secretary determines that, on average, those other motors use no more energy in evaporator fan applications than electronically commutated motors.

(C) MAXIMUM ENERGY CONSUMPTION LEVEL.—The Secretary shall establish the maximum energy consumption level under subparagraph (B) not later than January 1, 2010.

(3) ADDITIONAL SPECIFICATIONS.—Each walk-in cooler or walk-in freezer with transparent reach-in doors manufactured on or after January 1, 2009, shall also meet the following specifications:

(A) Transparent reach-in doors for walk-in freezers and windows in walk-in freezer doors shall be of triple-pane glass with either heat-reflective treated glass or gas fill.

(B) Transparent reach-in doors for walk-in coolers and windows in walk-in cooler doors shall be—

(i) double-pane glass with heat-reflective treated glass and gas fill; or

(ii) triple-pane glass with either heat-reflective treated glass or gas fill.

(C) If the appliance has an antisweat heater without antisweat heat controls, the appliance shall have a total door rail, glass, and frame heater power draw of not more than 7.1 watts per square foot of door opening (for freezers) and 3.0 watts per square foot of door opening (for coolers).

(D) If the appliance has an antisweat heater with antisweat heat controls, and the total door rail, glass, and frame heater power draw is more than 7.1 watts per square foot of door opening (for freezers) and 3.0 watts per square foot of door opening (for coolers), the antisweat heat controls shall reduce the energy use of the antisweat heater in a quantity corresponding to the relative humidity in the air outside the door or to the condensation on the inner glass pane.

(4) PERFORMANCE-BASED STANDARDS.—

(A) IN GENERAL.—Not later than January 1, 2012, the Secretary shall publish performance-based standards for walk-in coolers and walk-in freezers that achieve the maximum improvement in energy that the Secretary determines is technologically feasible and economically justified.

(B) APPLICATION.—

(i) IN GENERAL.—Except as provided in clause (ii), the standards shall apply to products described in subparagraph (A) that are manufactured beginning on the date that is 3 years after the final rule is published.

(ii) DELAYED EFFECTIVE DATE.—If the Secretary determines, by rule, that a 3-year period is inadequate, the Secretary may establish an effective date for products manufactured beginning on the date that is not more than 5 years after the date of publication of a final rule for the products.

(5) AMENDMENT OF STANDARDS.—

(A) IN GENERAL.—Not later than January 1, 2020, the Secretary shall publish a final rule to determine if the standards established under paragraph (4) should be amended.

(B) APPLICATION.—

(i) IN GENERAL.—Except as provided in clause (ii), the rule shall provide that the standards shall apply to products manufactured beginning on the date that is 3 years after the final rule is published.

(ii) DELAYED EFFECTIVE DATE.—If the Secretary determines, by rule, that a 3-year period is inadequate, the Secretary may establish an effective date for products manufactured beginning on the date that is not more than 5 years after the date of publication of a final rule for the products.

(6) INNOVATIVE COMPONENT TECHNOLOGIES.—Subparagraph (C) of paragraph (1) shall not apply to a walk-in cooler or walk-in freezer component if the component manufacturer has demonstrated to the satisfaction of the Secretary that the component reduces energy consumption at least as much as if such subparagraph were to apply. In support of any demonstration under this paragraph, a manufacturer shall provide to the Secretary all data and technical information necessary to fully evaluate its application.

(g) *LIGHTING POWER SUPPLY CIRCUITS.*—*If the Secretary, acting pursuant to section 341(b), includes as a covered equipment solid state lighting power supply circuits, drivers, or devices described in section 321(36)(A)(ii), the Secretary may prescribe under this part, not earlier than 1 year after the date on which a test procedure has been prescribed, an energy conservation standard for such equipment.*

* * * * *

