

(i) for horizontal-axis clothes washers, is not more than 3.5 cubic feet; and

(ii) for vertical-axis clothes washers, is not more than 4.0 cubic feet; and

(B) is designed for use in—

(i) applications in which the occupants of more than one household will be using the clothes washer, such as multi-family housing common areas and coin laundries; or

(ii) other commercial applications.

(21) The term “harvest rate” means the amount of ice (at 32 degrees F) in pounds produced per 24 hours.

(Pub. L. 94-163, title III, §340, as added Pub. L. 95-619, title IV, §441(a), Nov. 9, 1978, 92 Stat. 3267; amended Pub. L. 102-486, title I, §122(a), (f)(1), Oct. 24, 1992, 106 Stat. 2806, 2817; Pub. L. 109-58, title I, §136(a), Aug. 8, 2005, 119 Stat. 634.)

AMENDMENTS

2005—Par. (1)(D) to (K). Pub. L. 109-58, §136(a)(1), added subpars. (D) to (G) and redesignated former subpars. (D) to (G) as (H) to (K), respectively.

Par. (2)(B). Pub. L. 109-58, §136(a)(2), substituted “commercial package air conditioning and heating equipment, commercial refrigerators, freezers, and refrigerator-freezers, automatic commercial ice makers, commercial clothes washers” for “small and large commercial package air conditioning and heating equipment” in introductory provisions.

Pars. (8), (9). Pub. L. 109-58, §136(a)(3), added pars. (8) and (9) and struck out former pars. (8) and (9) which read as follows:

“(8) The term ‘small commercial package air conditioning and heating equipment’ means air-cooled, water-cooled, evaporatively-cooled, or water source (not including ground water source) electrically operated, unitary central air conditioners and central air conditioning heat pumps for commercial application which are rated below 135,000 Btu per hour (cooling capacity).

“(9) The term ‘large commercial package air conditioning and heating equipment’ means air-cooled, water-cooled, evaporatively-cooled, or water source (not including ground water source) electrically operated, unitary central air conditioners and central air conditioning heat pumps for commercial application which are rated at or above 135,000 Btu per hour and below 240,000 Btu per hour (cooling capacity).”

Pars. (19) to (21). Pub. L. 109-58, §136(a)(4), added pars. (19) to (21).

1992—Par. (1)(B) to (G). Pub. L. 102-486, §122(a)(1), added subpars. (B) to (F) and redesignated former subpar. (B) as (G).

Par. (2)(B). Pub. L. 102-486, §122(a)(2), in introductory provisions, substituted “pumps, small and large commercial package air conditioning and heating equipment, 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” for “pumps”, redesignated cls. (vi) to (x) and (xii) to (xiv) as cls. (v) to (ix) and (x) to (xii), respectively, and struck out former cls. (v) and (xi) which read “air conditioning equipment;” and “furnaces;”, respectively.

Par. (3). Pub. L. 102-486, §122(f)(1), substituted “(3) The” for “(3) the”.

Pars. (8) to (18). Pub. L. 102-486, §122(a)(3), added pars. (8) to (18).

§ 6312. Purposes and coverage

(a) Congressional statement of purpose

It is the purpose of this part to improve the efficiency of electric motors and pumps and cer-

tain other industrial equipment in order to conserve the energy resources of the Nation.

(b) Inclusion of industrial equipment as covered equipment

The Secretary may, by rule, include a type of industrial equipment as covered equipment if he determines that to do so is necessary to carry out the purposes of this part.

(c) Inclusion of component parts of consumer products as industrial equipment

The Secretary may, by rule, include as industrial equipment articles which are component parts of consumer products, if he determines that—

(1) such articles are, to a significant extent, distributed in commerce other than as component parts for consumer products; and

(2) such articles meet the requirements of section 6311(2)(A) of this title (other than clauses (ii) and (iii)).

(Pub. L. 94-163, title III, §341, as added Pub. L. 95-619, title IV, §441(a), Nov. 9, 1978, 92 Stat. 3268.)

§ 6313. Standards

(a) Small, large, and very large commercial package air conditioning and heating equipment, packaged terminal air conditioners and heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks

(1) Each small commercial package air conditioning and heating equipment manufactured on or after January 1, 1994, but before January 1, 2010, shall meet the following standard levels:

(A) The minimum seasonal energy efficiency ratio of air-cooled three-phase electric central air conditioners and central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), split systems, shall be 10.0.

(B) The minimum seasonal energy efficiency ratio of air-cooled three-phase electric central air conditioners and central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), single package, shall be 9.7.

(C) The minimum energy efficiency ratio of air-cooled central air conditioners and central air conditioning heat pumps at or above 65,000 Btu per hour (cooling capacity) and less than 135,000 Btu per hour (cooling capacity) shall be 8.9 (at a standard rating of 95 degrees F db).

(D) The minimum heating seasonal performance factor of air-cooled three-phase electric central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), split systems, shall be 6.8.

(E) The minimum heating seasonal performance factor of air-cooled three-phase electric central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity), single package, shall be 6.6.

(F) The minimum coefficient of performance in the heating mode of air-cooled central air conditioning heat pumps at or above 65,000 Btu per hour (cooling capacity) and less than 135,000 Btu per hour (cooling capacity) shall be 3.0 (at a high temperature rating of 47 degrees F db).

(G) The minimum energy efficiency ratio of water-cooled, evaporatively-cooled and water-

source central air conditioners and central air conditioning heat pumps less than 65,000 Btu per hour (cooling capacity) shall be 9.3 (at a standard rating of 95 degrees F db, outdoor temperature for evaporatively cooled equipment, and 85 degrees Fahrenheit entering water temperature for water-source and water-cooled equipment).

(H) The minimum energy efficiency ratio of water-cooled, evaporatively-cooled and water-source central air conditioners and central air conditioning heat pumps at or above 65,000 Btu per hour (cooling capacity) and less than 135,000 Btu per hour (cooling capacity) shall be 10.5 (at a standard rating of 95 degrees F db, outdoor temperature for evaporatively cooled equipment, and 85 degrees Fahrenheit entering water temperature for water source and water-cooled equipment).

(I) The minimum coefficient of performance in the heating mode of water-source heat pumps less than 135,000 Btu per hour (cooling capacity) shall be 3.8 (at a standard rating of 70 degrees Fahrenheit entering water).

(2) Each large commercial package air conditioning and heating equipment manufactured on or after January 1, 1995, but before January 1, 2010, shall meet the following standard levels:

(A) The minimum energy efficiency ratio of air-cooled central air conditioners and central air conditioning heat pumps at or above 135,000 Btu per hour (cooling capacity) and less than 240,000 Btu per hour (cooling capacity) shall be 8.5 (at a standard rating of 95 degrees F db).

(B) The minimum coefficient of performance in the heating mode of air-cooled central air conditioning heat pumps at or above 135,000 Btu per hour (cooling capacity) and less than 240,000 Btu per hour (cooling capacity) shall be 2.9.

(C) The minimum energy efficiency ratio of water- and evaporatively-cooled central air conditioners and central air conditioning heat pumps at or above 135,000 Btu per hour (cooling capacity) and less than 240,000 Btu per hour (cooling capacity) shall be 9.6 (according to ARI Standard 360-86).

(3) Each packaged terminal air conditioner and packaged terminal heat pump manufactured on or after January 1, 1994, shall meet the following standard levels:

(A) The minimum energy efficiency ratio (EER) of packaged terminal air conditioners and packaged terminal heat pumps in the cooling mode shall be $10.0 - (0.16 \times \text{Capacity [in thousands of Btu per hour at a standard rating of 95 degrees F db, outdoor temperature]})$. If a unit has a capacity of less than 7,000 Btu per hour, then 7,000 Btu per hour shall be used in the calculation. If a unit has a capacity of greater than 15,000 Btu per hour, then 15,000 Btu per hour shall be used in the calculation.

(B) The minimum coefficient of performance (COP) of packaged terminal heat pumps in the heating mode shall be $1.3 + (0.16 \times \text{the minimum cooling EER as specified in subparagraph (A)})$ (at a standard rating of 47 degrees F db).

(4) Each warm air furnace and packaged boiler manufactured on or after January 1, 1994, shall meet the following standard levels:

(A) The minimum thermal efficiency at the maximum rated capacity of gas-fired warm-air furnaces with capacity of 225,000 Btu per hour or more shall be 80 percent.

(B) The minimum thermal efficiency at the maximum rated capacity of oil-fired warm-air furnaces with capacity of 225,000 Btu per hour or more shall be 81 percent.

(C) The minimum combustion efficiency at the maximum rated capacity of gas-fired packaged boilers with capacity of 300,000 Btu per hour or more shall be 80 percent.

(D) The minimum combustion efficiency at the maximum rated capacity of oil-fired packaged boilers with capacity of 300,000 Btu per hour or more shall be 83 percent.

(5) Each storage water heater, instantaneous water heater, and unfired water storage tank manufactured on or after January 1, 1994, shall meet the following standard levels:

(A) Except as provided in subparagraph (G), the maximum standby loss, in percent per hour, of electric storage water heaters shall be $0.30 + (27/\text{Measured Storage Volume [in gallons]})$.

(B) Except as provided in subparagraph (G), the maximum standby loss, in percent per hour, of gas- and oil-fired storage water heaters with input ratings of 155,000 Btu per hour or less shall be $1.30 + (114/\text{Measured Storage Volume [in gallons]})$. The minimum thermal efficiency of such units shall be 78 percent.

(C) Except as provided in subparagraph (G), the maximum standby loss, in percent per hour, of gas- and oil-fired storage water heaters with input ratings of more than 155,000 Btu per hour shall be $1.30 + (95/\text{Measured Storage Volume [in gallons]})$. The minimum thermal efficiency of such units shall be 78 percent.

(D) The minimum thermal efficiency of instantaneous water heaters with a storage volume of less than 10 gallons shall be 80 percent.

(E) Except as provided in subparagraph (G), the minimum thermal efficiency of instantaneous water heaters with a storage volume of 10 gallons or more shall be 77 percent. The maximum standby loss, in percent/hour, of such units shall be $2.30 + (67/\text{Measured Storage Volume [in gallons]})$.

(F) Except as provided in subparagraph (G), the maximum heat loss of unfired hot water storage tanks shall be 6.5 Btu per hour per square foot of tank surface area.

(G) Storage water heaters and hot water storage tanks having more than 140 gallons of storage capacity need not meet the standby loss or heat loss requirements specified in subparagraphs (A) through (C) and subparagraphs (E) and (F) if the tank surface area is thermally insulated to R-12.5 and if a standing pilot light is not used.

(6)(A)(i) If ASHRAE/IES Standard 90.1, as in effect on January 1, 2010, is amended with respect to any small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, and very large commercial package air conditioning and heating equipment, or if ASHRAE/IES Standard 90.1, as in effect on October 24, 1992, is amended with respect to any

packaged terminal air conditioners, packaged terminal heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, or unfired hot water storage tanks, the Secretary shall establish an amended uniform national standard for that product at the minimum level for each effective date specified in the amended ASHRAE/IES Standard 90.1, unless the Secretary determines, by rule published in the Federal Register and supported by clear and convincing evidence, that adoption of a uniform national standard more stringent than such amended ASHRAE/IES Standard 90.1 for such product would result in significant additional conservation of energy and is technologically feasible and economically justified.

(ii) If ASHRAE/IES Standard 90.1 is not amended with respect to small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, and very large commercial package air conditioning and heating equipment during the 5-year period beginning on the effective date of a standard, the Secretary may initiate a rulemaking to determine whether a more stringent standard—

(I) would result in significant additional conservation of energy; and

(II) is technologically feasible and economically justified.

(B)(i) If the Secretary issues a rule containing such a determination, the rule shall establish such amended standard. In determining whether a standard is economically justified for the purposes of subparagraph (A), the Secretary shall, after receiving views and comments furnished with respect to the proposed standard, determine whether the benefits of the standard exceed its burdens by, to the greatest extent practicable, considering—

(I) the economic impact of the standard on the manufacturers and on the consumers of the products subject to such standard;

(II) the savings in operating costs throughout the estimated average life of the product in the type (or class) compared to any increase in the price of, or in the initial charges for, or maintenance expenses of, the products which are likely to result from the imposition of the standard;

(III) the total projected amount of energy savings likely to result directly from the imposition of the standard;

(IV) any lessening of the utility or the performance of the products likely to result from the imposition of the standard;

(V) the impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the imposition of the standard;

(VI) the need for national energy conservation; and

(VII) other factors the Secretary considers relevant.

(ii) The Secretary may not prescribe any amended standard under this paragraph which increases the maximum allowable energy use, or decreases the minimum required energy efficiency, of a covered product. The Secretary may

not prescribe an amended standard under this subparagraph if the Secretary finds (and publishes such finding) that interested persons have established by a preponderance of the evidence that a standard is likely to result in the unavailability in the United States in any product type (or class) of performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially the same as those generally available in the United States at the time of the Secretary's finding. The failure of some types (or classes) to meet this criterion shall not affect the Secretary's determination of whether to prescribe a standard for other types or classes.

(C) A standard amended by the Secretary under this paragraph shall become effective for products manufactured—

(i) with respect to small commercial package air conditioning and heating equipment, 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, on or after a date which is two years after the effective date of the applicable minimum energy efficiency requirement in the amended ASHRAE/IES standard referred to in subparagraph (A); and

(ii) with respect to large commercial package air conditioning and heating equipment and very large commercial package air conditioning and heating equipment, on or after a date which is three years after the effective date of the applicable minimum energy efficiency requirement in the amended ASHRAE/IES standard referred to in subparagraph (A);

except that an energy conservation standard amended by the Secretary pursuant to a rule under subparagraph (B) shall become effective for products manufactured on or after a date which is four years after the date such rule is published in the Federal Register.

(7) Small commercial package air conditioning and heating equipment manufactured on or after January 1, 2010, shall meet the following standards:

(A) The minimum energy efficiency ratio of air-cooled central air conditioners at or above 65,000 Btu per hour (cooling capacity) and less than 135,000 Btu per hour (cooling capacity) shall be—

(i) 11.2 for equipment with no heating or electric resistance heating; and

(ii) 11.0 for equipment with all other heating system types that are integrated into the equipment (at a standard rating of 95 degrees F db).

(B) The minimum energy efficiency ratio of air-cooled central air conditioner heat pumps at or above 65,000 Btu per hour (cooling capacity) and less than 135,000 Btu per hour (cooling capacity) shall be—

(i) 11.0 for equipment with no heating or electric resistance heating; and

(ii) 10.8 for equipment with all other heating system types that are integrated into the equipment (at a standard rating of 95 degrees F db).

(C) The minimum coefficient of performance in the heating mode of air-cooled central air

conditioning heat pumps at or above 65,000 Btu per hour (cooling capacity) and less than 135,000 Btu per hour (cooling capacity) shall be 3.3 (at a high temperature rating of 47 degrees F db).

(8) Large commercial package air conditioning and heating equipment manufactured on or after January 1, 2010, shall meet the following standards:

(A) The minimum energy efficiency ratio of air-cooled central air conditioners at or above 135,000 Btu per hour (cooling capacity) and less than 240,000 Btu per hour (cooling capacity) shall be—

(i) 11.0 for equipment with no heating or electric resistance heating; and

(ii) 10.8 for equipment with all other heating system types that are integrated into the equipment (at a standard rating of 95 degrees F db).

(B) The minimum energy efficiency ratio of air-cooled central air conditioner heat pumps at or above 135,000 Btu per hour (cooling capacity) and less than 240,000 Btu per hour (cooling capacity) shall be—

(i) 10.6 for equipment with no heating or electric resistance heating; and

(ii) 10.4 for equipment with all other heating system types that are integrated into the equipment (at a standard rating of 95 degrees F db).

(C) The minimum coefficient of performance in the heating mode of air-cooled central air conditioning heat pumps at or above 135,000 Btu per hour (cooling capacity) and less than 240,000 Btu per hour (cooling capacity) shall be 3.2 (at a high temperature rating of 47 degrees F db).

(9) Very large commercial package air conditioning and heating equipment manufactured on or after January 1, 2010, shall meet the following standards:

(A) The minimum energy efficiency ratio of air-cooled central air conditioners at or above 240,000 Btu per hour (cooling capacity) and less than 760,000 Btu per hour (cooling capacity) shall be—

(i) 10.0 for equipment with no heating or electric resistance heating; and

(ii) 9.8 for equipment with all other heating system types that are integrated into the equipment (at a standard rating of 95 degrees F db).

(B) The minimum energy efficiency ratio of air-cooled central air conditioner heat pumps at or above 240,000 Btu per hour (cooling capacity) and less than 760,000 Btu per hour (cooling capacity) shall be—

(i) 9.5 for equipment with no heating or electric resistance heating; and

(ii) 9.3 for equipment with all other heating system types that are integrated into the equipment (at a standard rating of 95 degrees F db).

(C) The minimum coefficient of performance in the heating mode of air-cooled central air conditioning heat pumps at or above 240,000 Btu per hour (cooling capacity) and less than

760,000 Btu per hour (cooling capacity) shall be 3.2 (at a high temperature rating of 47 degrees F db).

(b) Electric motors

(1) Except for definite purpose motors, special purpose motors, and those motors exempted by the Secretary under paragraph (2), each electric motor manufactured (alone or as a component of another piece of equipment) after the 60-month period beginning on October 24, 1992, or in the case of an electric motor which requires listing or certification by a nationally recognized safety testing laboratory, after the 84-month period beginning on October 24, 1992, shall have a nominal full load efficiency of not less than the following:

| Number of poles | Nominal Full-Load Efficiency | | | | | |
|------------------|------------------------------|------|-------|---------------|------|------|
| | Open Motors | | | Closed Motors | | |
| | 6 | 4 | 2 | 6 | 4 | 2 |
| Motor Horsepower | | | | | | |
| 1 | 80.0 | 82.5 | | 80.0 | 82.5 | 75.5 |
| 1.5 | 84.0 | 84.0 | 82.5 | 85.5 | 84.0 | 82.5 |
| 2 | 85.5 | 84.0 | 84.0 | 86.5 | 84.0 | 84.0 |
| 3 | 86.5 | 86.5 | 84.0 | 87.5 | 87.5 | 85.5 |
| 5 | 87.5 | 87.5 | 85.5 | 87.5 | 87.5 | 87.5 |
| 7.5 | 88.5 | 88.5 | 87.5 | 89.5 | 89.5 | 88.5 |
| 10 | 90.2 | 89.5 | 88.5 | 89.5 | 89.5 | 89.5 |
| 15 | 90.2 | 91.0 | 89.5 | 90.2 | 91.0 | 90.2 |
| 20 | 91.0 | 91.0 | 90.2 | 90.2 | 91.0 | 90.2 |
| 25 | 91.7 | 91.7 | 91.0 | 91.7 | 92.4 | 91.0 |
| 30 | 92.4 | 92.4 | 91.0 | 91.7 | 92.4 | 91.0 |
| 40 | 93.0 | 93.0 | 91.7 | 93.0 | 93.0 | 91.7 |
| 50 | 93.0 | 93.0 | 92.4 | 93.0 | 93.0 | 92.4 |
| 60 | 93.6 | 93.6 | 93.0 | 93.6 | 93.6 | 93.0 |
| 75 | 93.6 | 94.1 | 93.0 | 93.6 | 94.1 | 93.0 |
| 100 | 94.1 | 94.1 | 93.0 | 94.1 | 94.5 | 93.6 |
| 125 | 94.1 | 94.5 | 93.6 | 94.1 | 94.5 | 94.5 |
| 150 | 94.5 | 95.0 | 93.6 | 95.0 | 95.0 | 94.5 |
| 200 | 94.5 | 95.0 | 94.5 | 95.0 | 95.0 | 95.0 |

(2)(A) The Secretary may, by rule, provide that the standards specified in paragraph (1) shall not apply to certain types or classes of electric motors if—

(i) compliance with such standards would not result in significant energy savings because such motors cannot be used in most general purpose applications or are very unlikely to be used in most general purpose applications; and

(ii) standards for such motors would not be technologically feasible or economically justified.

(B) Not later than one year after October 24, 1992, a manufacturer seeking an exemption under this paragraph with respect to a type or class of electric motor developed on or before October 24, 1992, shall submit a petition to the Secretary requesting such exemption. Such petition shall include evidence that the type or class of motor meets the criteria for exemption specified in subparagraph (A).

(C) Not later than two years after October 24, 1992, the Secretary shall rule on each petition for exemption submitted pursuant to subparagraph (B). In making such ruling, the Secretary shall afford an opportunity for public comment.

(D) Manufacturers of types or classes of motors developed after October 24, 1992, to which

standards under paragraph (1) would be applicable may petition the Secretary for exemptions from compliance with such standards based on the criteria specified in subparagraph (A).

(3)(A) The Secretary shall publish a final rule no later than the end of the 24-month period beginning on the effective date of the standards established under paragraph (1) to determine if such standards should be amended. Such rule shall provide that any amendment shall apply to electric motors manufactured on or after a date which is five years after the effective date of the standards established under paragraph (1).

(B) The Secretary shall publish a final rule no later than 24 months after the effective date of the previous final rule to determine whether to amend the standards in effect for such product. Any such amendment shall apply to electric motors manufactured after a date which is five years after—

- (i) the effective date of the previous amendment; or
- (ii) if the previous final rule did not amend the standards, the earliest date by which a previous amendment could have been effective.

(c) Commercial refrigerators, freezers, and refrigerator-freezers

(1) In this subsection:

(A) The term “AV” means the adjusted volume (ft³) (defined as 1.63 x frozen temperature compartment volume (ft³) + chilled temperature compartment volume (ft³)) with compartment volumes measured in accordance with the Association of Home Appliance Manufacturers Standard HRF1-1979.

(B) The term “V” means the chilled or frozen compartment volume (ft³) (as defined in the Association of Home Appliance Manufacturers Standard HRF1-1979).

(C) Other terms have such meanings as may be established by the Secretary, based on industry-accepted definitions and practice.

(2) Each commercial refrigerator, freezer, and refrigerator-freezer with a self-contained condensing unit designed for holding temperature applications manufactured on or after January 1, 2010, shall have a daily energy consumption (in kilowatt hours per day) that does not exceed the following:

| | |
|---|-------------------------|
| Refrigerators with solid doors | 0.10 V + 2.04 |
| Refrigerators with transparent doors | 0.12 V + 3.34 |
| Freezers with solid doors | 0.40 V + 1.38 |
| Freezers with transparent doors | 0.75 V + 4.10 |
| Refrigerators/freezers with solid doors the greater of. | 0.27 AV – 0.71 or 0.70. |

(3) Each commercial refrigerator with a self-contained condensing unit designed for pull-down temperature applications and transparent doors manufactured on or after January 1, 2010, shall have a daily energy consumption (in kilowatt hours per day) of not more than 0.126 V + 3.51.

(4)(A) Not later than January 1, 2009, the Secretary shall issue, by rule, standard levels for ice-cream freezers, self-contained commercial refrigerators, freezers, and refrigerator-freezers without doors, and remote condensing commercial refrigerators, freezers, and refrigerator-freezers, with the standard levels effective for equipment manufactured on or after January 1, 2012.

(B) The Secretary may issue, by rule, standard levels for other types of commercial refrigerators, freezers, and refrigerator-freezers not covered by paragraph (2)(A) with the standard levels effective for equipment manufactured 3 or more years after the date on which the final rule is published.

(5)(A) Not later than January 1, 2013, the Secretary shall issue a final rule to determine whether the standards established under this subsection should be amended.

(B) Not later than 3 years after the effective date of any amended standards under subparagraph (A) or the publication of a final rule determining that the standards should not be amended, the Secretary shall issue a final rule to determine whether the standards established under this subsection or the amended standards, as applicable, should be amended.

(C) If the Secretary issues a final rule under subparagraph (A) or (B) establishing amended standards, the final rule shall provide that the amended standards apply to products manufactured on or after the date that is—

- (i) 3 years after the date on which the final amended standard is published; or
- (ii) if the Secretary determines, by rule, that 3 years is inadequate, not later than 5 years after the date on which the final rule is published.

(d) Automatic commercial ice makers

(1) Each automatic commercial ice maker that produces cube type ice with capacities between 50 and 2500 pounds per 24-hour period when tested according to the test standard established in section 6314(a)(7) of this title and is manufactured on or after January 1, 2010, shall meet the following standard levels:

| Equipment Type | Type of Cooling | Harvest Rate (lbs ice/24 hours) | Maximum Energy Use (kWh/100 lbs Ice) | Maximum Condenser Water Use (gal/100 lbs Ice) |
|-----------------|-----------------|---------------------------------|--------------------------------------|---|
| Ice Making Head | Water | <500 | 7.80–0.0055H | 200–0.022H |
| | | – 500 and <1436 | 5.58–0.0011H | 200–0.022H |
| | | – 1436 | 4.0 | 200–0.022H |
| Ice Making Head | Air | <450 | 10.26–0.0086H | Not Applicable |
| | | – 450 | 6.89–0.0011H | Not Applicable |

| Equipment Type | Type of Cooling | Harvest Rate (lbs ice/24 hours) | Maximum Energy Use (kWh/100 lbs Ice) | Maximum Condenser Water Use (gal/100 lbs Ice) |
|---|-----------------|---------------------------------|--------------------------------------|---|
| Remote Condensing (but not remote compressor) | Air | <1000 | 8.85–0.0038H | Not Applicable |
| | | – 1000 | 5.10 | Not Applicable |
| Remote Condensing and Remote Compressor | Air | <934 | 8.85–0.0038H | Not Applicable |
| | | – 934 | 5.3 | Not Applicable |
| Self Contained | Water | <200 | 11.40–0.019H | 191–0.0315H |
| | | – 200 | 7.60 | 191–0.0315H |
| Self Contained | Air | <175 | 18.0–0.0469H | Not Applicable |
| | | – 175 | 9.80 | Not Applicable |

H = Harvest rate in pounds per 24 hours.

Water use is for the condenser only and does not include potable water used to make ice.

(2)(A) The Secretary may issue, by rule, standard levels for types of automatic commercial ice makers that are not covered by paragraph (1).

(B) The standards established under subparagraph (A) shall apply to products manufactured on or after the date that is—

(i) 3 years after the date on which the rule is published under subparagraph (A); or

(ii) if the Secretary determines, by rule, that 3 years is inadequate, not later than 5 years after the date on which the final rule is published.

(3)(A) Not later than January 1, 2015, with respect to the standards established under paragraph (1), and, with respect to the standards established under paragraph (2), not later than 5 years after the date on which the standards take effect, the Secretary shall issue a final rule to determine whether amending the applicable standards is technologically feasible and economically justified.

(B) Not later than 5 years after the effective date of any amended standards under subparagraph (A) or the publication of a final rule determining that amending the standards is not technologically feasible or economically justified, the Secretary shall issue a final rule to determine whether amending the standards established under paragraph (1) or the amended standards, as applicable, is technologically feasible or economically justified.

(C) If the Secretary issues a final rule under subparagraph (A) or (B) establishing amended standards, the final rule shall provide that the amended standards apply to products manufactured on or after the date that is—

(i) 3 years after the date on which the final amended standard is published; or

(ii) if the Secretary determines, by rule, that 3 years is inadequate, not later than 5 years after the date on which the final amended standard is published.

(4) A final rule issued under paragraph (2) or (3) shall establish standards at the maximum level that is technically feasible and economically justified, as provided in subsections (o) and (p) of section 6295 of this title.

(e) Commercial clothes washers

(1) Each commercial clothes washer manufactured on or after January 1, 2007, shall have—

(A) a Modified Energy Factor of at least 1.26; and

(B) a Water Factor of not more than 9.5.

(2)(A)(i) Not later than January 1, 2010, the Secretary shall publish a final rule to determine whether the standards established under paragraph (1) should be amended.

(ii) The rule published under clause (i) shall provide that any amended standard shall apply to products manufactured 3 years after the date on which the final amended standard is published.

(B)(i) Not later than January 1, 2015, the Secretary shall publish a final rule to determine whether the standards established under paragraph (1) should be amended.

(ii) The rule published under clause (i) shall provide that any amended standard shall apply to products manufactured 3 years after the date on which the final amended standard is published.

(Pub. L. 94–163, title III, § 342, as added Pub. L. 95–619, title IV, § 441(a), Nov. 9, 1978, 92 Stat. 3269; amended Pub. L. 102–486, title I, § 122(d), Oct. 24, 1992, 106 Stat. 2810; Pub. L. 109–58, title I, § 136(b)–(e), Aug. 8, 2005, 119 Stat. 636–641.)

AMENDMENTS

2005—Subsec. (a). Pub. L. 109–58, § 136(b)(1), substituted “Small, large, and very large” for “Small and large” in heading.

Subsec. (a)(1). Pub. L. 109–58, § 136(b)(2), inserted “but before January 1, 2010,” after “January 1, 1994,” in introductory provisions.

Subsec. (a)(2). Pub. L. 109–58, § 136(b)(3), inserted “but before January 1, 2010,” after “January 1, 1995,” in introductory provisions.

Subsec. (a)(6)(A). Pub. L. 109–58, § 136(b)(4)(A), designated existing provisions as cl. (i), substituted “January 1, 2010” for “October 24, 1992”, inserted “and very large commercial package air conditioning and heating equipment, or if ASHRAE/IES Standard 90.1, as in effect on October 24, 1992, is amended with respect to any” after “large commercial package air conditioning and heating equipment,” and added cl. (ii).

Subsec. (a)(6)(C)(ii). Pub. L. 109–58, § 136(b)(4)(B), inserted “and very large commercial package air condi-

tioning and heating equipment” after “large commercial package air conditioning and heating equipment”.

Subsec. (a)(7) to (9). Pub. L. 109–58, §136(b)(5), added pars. (7) to (9).

Subsecs. (c) to (e). Pub. L. 109–58, §136(c)–(e), added subsecs. (c) to (e).

1992—Pub. L. 102–486 amended section generally, substituting present provisions for former provisions requiring Secretary to conduct evaluations of electric motors and pumps and other industrial equipment for purposes of determining standards.

§ 6314. Test procedures

(a) Prescription by Secretary; requirements

(1) The Secretary may conduct an evaluation of a class of covered equipment and may prescribe test procedures for such class in accordance with the provisions of this section.

(2) Test procedures prescribed in accordance with this section shall be reasonably designed to produce test results which reflect energy efficiency, energy use, and estimated operating costs of a type of industrial equipment (or class thereof) during a representative average use cycle (as determined by the Secretary), and shall not be unduly burdensome to conduct.

(3) If the test procedure is a procedure for determining estimated annual operating costs, such procedure shall provide that such costs shall be calculated from measurements of energy use in a representative average-use cycle (as determined by the Secretary), and from representative average unit costs of the energy needed to operate such equipment during such cycle. The Secretary shall provide information to manufacturers of covered equipment respecting representative average unit costs of energy.

(4)(A) With respect to small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, very large commercial package air conditioning and heating equipment, 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 to which standards are applicable under section 6313 of this title, the test procedures shall be those generally accepted industry testing procedures or rating procedures developed or recognized by the Air-Conditioning and Refrigeration Institute or by the American Society of Heating, Refrigerating and Air Conditioning Engineers, as referenced in ASHRAE/IES Standard 90.1 and in effect on June 30, 1992.

(B) If such an industry test procedure or rating procedure for small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, very large commercial package air conditioning and heating equipment, packaged terminal air conditioners, packaged terminal heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, or unfired hot water storage tanks is amended, the Secretary shall amend the test procedure for the product as necessary to be consistent with the amended industry test procedure or rating procedure unless the Secretary determines, by rule, published in the Federal Register and supported by clear and convincing evidence, that to do so would not meet the re-

quirements for test procedures described in paragraphs (2) and (3) of this subsection.

(C) If the Secretary prescribes a rule containing such a determination, the rule may establish an amended test procedure for such product that meets the requirements of paragraphs (2) and (3) of this subsection. In establishing any amended test procedure under this subparagraph or subparagraph (B), the Secretary shall follow the procedures and meet the requirements specified in section 6293(e) of this title.

(5)(A) With respect to electric motors to which standards are applicable under section 6313 of this title, the test procedures shall be the test procedures specified in NEMA Standards Publication MG1–1987 and IEEE Standard 112 Test Method B for motor efficiency, as in effect on October 24, 1992.

(B) If the test procedure requirements of NEMA Standards Publication MG–1987 and IEEE Standard 112 Test Method B for motor efficiency are amended, the Secretary shall amend the test procedures established by subparagraph (A) to conform to such amended test procedure requirements unless the Secretary determines, by rule, published in the Federal Register and supported by clear and convincing evidence, that to do so would not meet the requirements for test procedures described in paragraphs (2) and (3) of this subsection.

(C) If the Secretary prescribes a rule containing such a determination, the rule may establish amended test procedures for such electric motors that meets the requirements of paragraphs (2) and (3) of this subsection. In establishing any amended test procedure under this subparagraph or subparagraph (B), the Secretary shall follow the procedures and meet the requirements specified in section 6293(e) of this title.

(6)(A)(i) In the case of commercial refrigerators, freezers, and refrigerator-freezers, the test procedures shall be—

(I) the test procedures determined by the Secretary to be generally accepted industry testing procedures; or

(II) rating procedures developed or recognized by the ASHRAE or by the American National Standards Institute.

(ii) In the case of self-contained refrigerators, freezers, and refrigerator-freezers to which standards are applicable under paragraphs (2) and (3) of section 6313(c) of this title, the initial test procedures shall be the ASHRAE 117 test procedure that is in effect on January 1, 2005.

(B)(i)¹ In the case of commercial refrigerators, freezers, and refrigerator-freezers with doors covered by the standards adopted in February 2002, by the California Energy Commission, the rating temperatures shall be the integrated average temperature of 38 degrees F (\pm 2 degrees F) for refrigerator compartments and 0 degrees F (\pm 2 degrees F) for freezer compartments.

(C) The Secretary shall issue a rule in accordance with paragraphs (2) and (3) to establish the appropriate rating temperatures for the other products for which standards will be established under section 6313(c)(4) of this title.

(D) In establishing the appropriate test temperatures under this subparagraph, the Sec-

¹ So in original. No cl. (ii) has been enacted.