EXPRESS TERMS

PROPOSED
EMERGENCY AMENDMENTS
TO
APPLIANCE EFFICIENCY REGULATIONS

CALIFORNIA CODE OF REGULATIONS, TITLE 20:
DIVISION 2, CHAPTER 4, ARTICLE 4, SECTIONS 1601 - 1608

March 12, 2003

For Consideration at
March 19, 2003, Commission Hearing

CALIFORNIA ENERGY COMMISSION

Proposed changes to the current regulations (which went into effect on November 27, 2002)
are shown in <u>underline</u> and ~~strike-out~~ format.
Vertical lines in the margins mark the text where changes have been made.

CALIFORNIA CODE OF REGULATIONS, TITLE 20:
DIVISION 2, CHAPTER 4, ARTICLE 4, SECTIONS 1601-1608:
APPLIANCE EFFICIENCY REGULATIONS

Amend the first paragraph of Section 1601 as follows:

Section 1601. Scope.

This Article applies to the following types of new appliances, if they are sold or offered for sale in California, except those sold wholesale in California for final retail sale outside the state and those designed and sold exclusively for use in recreational vehicles, or other mobile equipment. Each provision applies only to units manufactured on or after the effective date of the provision.

Amend Section 1602 (e) as follows:

Section 1602. Definitions.

. . . .

~~"Space constrained product" means a central air conditioner or heat pump: (1) that has a rated cooling capacity no greater than 30,000 Btu/hr; (2) that has an outdoor or indoor unit having at least two overall exterior dimensions or an overall displacement that: (i) are substantially smaller than those of other units that are (A) currently usually installed in site-built single family homes, and (B) of a similar cooling, and, if a heat pump, heating, capacity, and (ii) if increased, would certainly result in a considerable increase in the usual cost of installation or would certainly result in a significant loss in the utility of the product to the consumer; and (3) is a product type that was available for purchase in the United States as of December 1, 2000.~~

. . . .

"Small duct, high velocity system" means a heating and cooling product that contains a blower and indoor coil combination that: (1) Is designed for, and produces, at least 1.2 inches of external static pressure when operated at the certified air volume rate of 220-350 CFM per rated ton of cooling; and (2) When applied in the field, uses high velocity room outlets generally greater than 100 fpm which have less than 6.0 square inches of free area.

. . . .

"Through-the wall air conditioner and heat pump" means a central air conditioner or heap pump that is designed to be installed totally or partially within a fixed-size opening in an exterior wall, and (1) Is manufactured prior to January 23, 2010; (2) Is not weatherized; (3) Is clearly and permanently marked for installation only through an exterior wall; (4) Has a rated cooling capacity no greater than 30,000 Btu/hour; (5) Exchanges all of its outdoor air across a single surface of the equipment cabinet; and (6) Has a combined outdoor air exchange area of less than 800 square inches (split systems) or less than 1,210 square inches (single packaged systems) as measured on the surface described in paragraph (5) of this definition."

Amend Section 1603(a) as follows:

Section 1603. Testing: All Appliances.

(a) **Testing Requirements**. The manufacturer of appliances for which certification documents are submitted on or after November 27, 2002 shall cause the testing of units of each basic model of appliance within the scope of Section 1601, using the applicable test method listed in Section 1604. If the manufacturer of the basic model does not participate in an approved industry certification program for the basic model, or does not apply such a program to test all units under this Article, the testing shall be at a laboratory that the Executive Director determines that:

(1) has conducted tests using the applicable test method within the previous 12 months;

(2) agrees to and does interpret and apply the applicable test method set forth in Section 1604 precisely as written;

(3) has, and keeps properly calibrated and maintained, all equipment, material, and facilities necessary to apply the applicable test method precisely as written;

(4) agrees to and does maintain copies of all test reports, and provides any such report to the Executive Director on request, for all basic models that are still in commercial production; and

(5) agrees to and does allow the Executive Director to witness any test of such an appliance on request, up to once per calendar year for each basic model.

EXCEPTION: This subsection does not apply to any water heater (1) that is within the scope of 42 U.S.C. sections 6292(a)(4) or 6311(1)(F), (2) that has a rated storage volume of less than 20 gallons, and (3) for which there is no federal test method applicable to that type of water heater.

Amend Section 1604(f)(5)(E) as follows:

Section 1604. Test Methods for Specific Appliances.

. . . .

(f) **Water Heaters**.

. . . .

(5) **Mini-Tank Electric Water Heaters.** The test method for mini-tank electric water heaters is as follows:

(E) Calculations

Determine the Recovery Efficiency (E_r) using the following formula:

$$E_r = 1 - \frac{(S \times K \times V \times \Delta T_2)}{(P \times 3412 \text{ Btu/kWh})}$$

Where:

S = standby loss, hr^{-1}

ΔT_2 = 45° F, the nominal ~~average~~ difference between the mean tank temperature and the ambient air temperature during recovery

P = Rated input, kW

K = 8.25 Btu per gallon °F, the nominal specific heat of water

V = tank capacity expressed in gallons

3412 = conversion factor from kWh to Btu/hr

Determine the Standby Loss (W) using the formula:

$$W = S \times K \times V (\Delta T_1) / (3412 \text{ Btu/kWh})$$

Where:

ΔT_1 = 70° F, the nominal difference between ~~final~~ mean tank temperature and the average ambient air temperature

S = standby loss, hr^{-1}

K = 8.25 Btu per gallon °F, the nominal specific heat of water

V = tank capacity expressed in gallons

3412 = conversion factor from kWh to Btu/hr

Determine the Daily Water Heating Energy Consumption, (C_{wh}) using the formula:

$$C_{wh} = \frac{K \times U \times \Delta T_5}{E_r}$$

Where:

U = 12 gallons, daily water use

ΔT_5 = 72° F, difference in outlet and inlet water temperatures

K = 8.25 Btu per gallon °F, the nominal specific heat of water

E_r = recovery efficiency, assumed to be 98%

Determine the Average Hourly Hot Water Storage Energy Consumption, (C_{us}) using the formula:

$$C_{us} = S \times K \times V \times \Delta T_1$$

Where:

ΔT_1 = 70° F, the nominal difference between the mean tank temperature and the ambient air temperature during standby

S = standby loss, hr^{-1}

K = 8.25 Btu per gallon °F, the nominal specific heat of water

V = tank capacity expressed in gallons

Determine the Average Daily Energy Consumption for Electric Water Heaters, (C_y) using the formula:

$$C_y = C_{wh} + C_{us} \times \frac{24 \text{ hrs}}{\text{day}} - \frac{C_{wh}}{P \times 3412 \text{ Btu/kWh}}$$

Where:

$$C_{wh} = \frac{K \times U \times \Delta T_5}{E_r}$$

C_{us} = $S \times K \times V \times \Delta T_1$

P = Rated input, kW

3412 = conversion factor from kWh to Btu/hr

Determine the Daily Hot Water Energy Consumption, (C_c) using the formula:

$$C_c = K \times U \times \Delta T_5$$

Where:

K = 8.25 Btu per gallon °F, the nominal specific heat of water

U = 12 gallons, daily water use

ΔT_5 = 72° F, the nominal difference ~~in~~ between the outlet and inlet water temperatures

Determine the Annual Energy Consumption, kBtu/year (E_{annual}) using the formula:

$$E_{annual} = \frac{C_y \text{ Btu/day} \times 365 \text{ days/yr}}{1000}$$

Amend Section 1605.1(c)(1), Table C-2, as follows:

Table C-2
Standards for Single Phase Air-Cooled Air Conditioners with Cooling Capacity Less than 65,000 Btu per Hour and Single Phase Air-Source Heat Pumps with Cooling Capacity Less than 65,000 Btu per Hour, Not Subject to EPAct

Appliance	*Minimum Efficiency*			
	Effective January 1, 1995		*Effective January 23, 2006*	
	Minimum SEER	*Minimum HSPF*	*Minimum SEER*	*Minimum HSPF*
~~Split system air conditioners~~	~~10.0~~	~~—~~	~~13.0[1,2]~~	~~—~~
~~Split system heat pumps~~	~~10.0~~	~~6.8~~	~~13.0[1,2]~~	~~7.7[1,2]~~
~~Single package air conditioners~~	~~9.7~~	~~—~~	~~13.0[1,2]~~	~~—~~
~~Single package heat pumps~~	~~9.7~~	~~6.6~~	~~13.0[1,2]~~	~~7.7[1]~~
~~[1]Except for space constrained products, for which the January 1, 1995 standards remain in effect.~~ ~~[2]The U.S. Department of Energy has announced its intention to reconsider these values. Should these values be changed in federal regulations, the Commission will change the values in Table C-2 accordingly.~~				
Split system air conditioners	10.0 [1]	—	12.0	—
Split system heat pumps	10.0 [1]	6.8	12.0	7.4
Single package air conditioners	9.7 [1]	—	12.0	—
Single package heat pumps	9.7 [1]	6.6	12.0	7.4
Through-the-wall air conditioners – split system	10.0	—	10.9	—
Through-the-wall heat pumps – split system	10.0	6.8	10.9	7.1
Through-the-wall air conditioners – single package	9.7	—	10.6	—
Through-the-wall heat pumps – single package	9.7	6.6	10.6	7.0
Small duct, high velocity systems			10.0	6.8
1. Includes small duct, high velocity systems.				

Amend Sections 1605.3(f)(1) - (2) as follows:

Section 1605.3 State Standards for Non-Federally-Regulated Appliances.

. . . .

(f) **Water Heaters.**

(1) **Hot Water Dispensers and Mini-Tank Electric Water Heaters.** The standby loss of hot water dispensers and mini-tank electric water heaters manufactured on or after March 1, 2003 shall be not greater than 35 watts.

EXCEPTION: This subsection does not apply to any water heater (1) that is within the scope of 42 U.S.C. sections 6292(a)(4) or 6311(1)(F), (2) that has a rated storage volume of less than 20 gallons, and (3) for which there is no federal test method applicable to that type of water heater.

(2) **Small Water Heaters that are Not Federally-Regulated Consumer Products**. The energy factor of small water heaters manufactured on or after March 1, 2003 that are not federally-regulated consumer products, other than hot water dispensers, booster water heaters, and mini-tank electric water heaters, shall be not less than the applicable values shown in Table F-6.

EXCEPTION: This subsection does not apply to any water heater (1) that is within the scope of 42 U.S.C. sections 6292(a)(4) or 6311(1)(F), (2) that has a rated storage volume of less than 20 gallons, and (3) for which there is no federal test method applicable to that type of water heater.

Table F-6
Standards for Small Water Heaters that are Not Federally-Regulated Consumer Products

Appliance	*Energy Source*	*Input Rating*	*Rated Storage Volume (gallons)*	*Minimum Energy Factor*[1]
Storage water heaters	Gas	≤ 75,000 Btu/hr	< 20	0.62 – (.0019 x V)
Storage water heaters	Gas	≤ 75,000 Btu/hr	> 100	0.62 – (.0019 x V)
Storage water heaters	Oil	≤ 105,000 Btu/hr	> 50	0.59 – (.0019 x V)
Storage water heaters	Electricity	≤ 12 kW	> 120	0.93 – (.00132 x V)
Instantaneous Water Heaters	Gas	≤ 50,000 Btu/hr	Any	0.62 – (.0019 x V)
Instantaneous Water Heaters	Gas	≤ 200,000 Btu/hr	≥ 2	0.62 – (.0019 x V)
Instantaneous Water Heaters	Oil	≤ 210,000 Btu/hr	Any	0.59 – (.0019 x V)
Instantaneous Water Heaters	Electricity	≤ 12 kW	Any	0.93 – (.00132 x V)

[1]Volume (V) = rated storage volume in gallons.

Amend the first paragraph of Section 1606(a) as follows:

Section 1606. Filing by Manufacturers; Listing of Appliances in Database.

(a) **Filing of Statements**.

Each manufacturer shall file with the Executive Director a statement for each appliance that is sold or offered for sale in California. The statement shall contain all of the information described in paragraphs (2) through (4) of this subsection and shall meet all of the requirements of paragraph (1) of this subsection and all other applicable requirements in this Article. For models that are in the active database before November 27, 2002, no information needs to be submitted until (i) any of the characteristics in Table U is changed, (ii) the model is discontinued, or (iii) the applicable date in the following list, whichever comes first:

- Appliances within the scope of Section 1601(a), June 1, 2003
- Appliances within the scope of Section 1601(b), July 1, 2003
- Appliances within the scope of Section 1601(c), September 1, 2003
- Appliances within the scope of Section 1601(d), July 1, 2003
- Appliances within the scope of Section 1601(e), July 1, 2003
- Appliances within the scope of Section 1601(f), September 1, 2003
- Appliances within the scope of Section 1601(g), June 1, 2003
- Appliances within the scope of Section 1601(h), June 1, 2003
- Appliances within the scope of Section 1601(j), August 1, 2003

Amend Section 1606(a)(3)(D) as follows:

Section 1606. Filing by Manufacturers; Listing of Appliances in Database.

(a) **Filing of Statements**

. . . .

(3) **Testing and Performance Information**

. . . .

(D) The applicable information listed in Table U; provided, however, that submittal of information marked with "[1]" is voluntary.

Table U

	Appliance	*Required Information*	*Permissible Answers*
	All Appliances	* Manufacturer's Name	
		* Brand Name	
		* Model Number	
		Regulatory Status	Federally-regulated consumer product, federally-regulated commercial and industrial equipment, non-federally-regulated
A	Non-Commercial Refrigerators, Non-Commercial Refrigerator-Freezers, Non-Commercial Freezers	*Style	~~Kitchen unit~~, ~~drawer unit, internal freezer~~, ~~freezer > 30ft³ and ≤ 39 ft³~~, ~~wine chiller that is a consumer product~~, Category in Table A-3 (specify).
		*Defrost System	Automatic, manual, partial-automatic
		*Type	Refrigerator, refrigerator-freezer, freezer
		Access [1]	Door, drawer, both door and drawer
		Kitchen Unit [1]	Yes, no
		Internal Freezer [1]	Yes, no
		Wine Chiller	Yes, no
		Chest Refrigerator [1]	Yes, no
		Refrigerator Volume	
		Freezer Volume	
		Total Volume	
		Height	
		Width	
		Depth	
		Annual Energy Consumption (low)	
		Annual Energy Consumption (high)	
		Annual Energy Consumption (mean)	
		Anti-sweat Heater Switch	Yes, no
		Refrigerant Type [1]	Ozone-depleting, non-ozone-depleting
		Insulation Type [1]	Ozone-depleting, non-ozone-depleting

	Appliance	Required Information	Permissible Answers
	Commercial Refrigerators, Commercial Refrigerator-Freezers, Commercial Freezers	*Cabinet Style	Ice cream cabinet; milk or beverage cabinet; milk, beverage, or ice cream cabinet; undercounter cabinet; other reach-in cabinet; pass-through cabinet; roll-in or roll-through cabinet; preparation table; buffet table; work top table; wine chiller that is not a consumer product.
		*Defrost System	Automatic, manual, partial-automatic
		*Type	Refrigerator, refrigerator-freezer, freezer
		*Door Style	Solid hinged, solid sliding, transparent hinged, transparent sliding, none.
		Refrigerator Volume	
		Freezer Volume	
		Total Volume	
		Height	
		Width	
		Depth	
		Daily Energy Consumption	
		Type of Illumination (reach-in cabinets, pass-through cabinets, roll-in or roll-through cabinets, and wine chillers that are not consumer products only) (for those with transparent doors only)	T-8 fluorescent lamps with electronic ballasts, slim line T-12 fluorescent lamps with electronic ballasts, slim line T-12 fluorescent lamps with magnetic ballasts, other (specify LPW).
		Efficacy LPW (where Type of Illumination is required and is not T-8 fluorescent lamps with electronic ballasts)(for units manufactured on or after March 31, 2003 only)	
		Illumination Wattage	
		Refrigerant Type	Ozone-depleting, non-ozone-depleting
		Insulation Type	Ozone-depleting, non-ozone-depleting
	Refrigerating Bottled or Canned Beverage Vending Machines	Daily Energy Consumption	
		Type of Illumination	T-8 fluorescent lamps with electronic ballasts, other (specify design and LPW).
		Standard Vendible Product	Can (specify size in ounces), Bottle (specify size in ounces)
		Standard Vendible Capacity	
		Refrigerant Type	Ozone-depleting, non-ozone-depleting
		Insulation Type	Ozone-depleting, non-ozone-depleting

* "Identifier" information as described in Section 1606(e).

	Appliance	Required Information	Permissible Answers
B	Room Air Conditioners and Room Air-Conditioning Heat Pumps	*Voltage	
		*Electrical Phase	1, 3
		*Type	Room air conditioner, room air conditioning heat pump, casement-only room air conditioner, casement-slider room air conditioner.
		* Louvered Sides	Yes, no
		Cooling Capacity at 95° F	
		Electrical Input at 95° F	
		Energy Efficiency Ratio (EER) at 95° F	
		Heating Capability	Heat pump, electric resistance heating, heat pump and electric resistance heating, no heating capability
		Heating Capacity (for heat pumps only)	
		Electrical Input (for heat pumps only)	
		Coefficient of Performance (for heat pumps only)	

	Appliance	Required Information	Permissible Answers
		Heating Capacity (for models with electric resistance heating only)	
		Electrical Input (for those with electric resistance heating)	
		Refrigerant Type[1]	Ozone-depleting, non-ozone-depleting
	Packaged Terminal Air Conditioners and Packaged Terminal Heat Pumps	*Voltage	
		*Electrical Phase	1, 3
		*Type	PTAC, PTHP
		Cooling Capacity at 95° F	
		Electrical Input at 95° F	
		Energy Efficiency Ratio (EER) at 95° F	
		Heating Capability	Heat pump, electric resistance heating, heat pump and electric resistance heating, no heating capability
		Heating Capacity (for models with heating capability only)	
		Electrical Input (for models with heating capability only)	
		Coefficient of Performance (for models with heating capability only)	
		Refrigerant Type[1]	Ozone-depleting, non-ozone-depleting
		Indoor Fan Nominal Horsepower	
		Indoor Fan Motor Type	Premium, standard
		Outdoor Fan Nominal Horsepower[1]	
		Outdoor Fan Motor Type[1]	Premium, standard
		Compressor Power[1]	
C	All Central Air Conditioners and Central Air-Conditioning Heat Pumps	*~~Non-Compressor-Containing Unit Model Number~~Coil Model Number with which compressor was tested (for split systems only)	
		*Type	Air conditioner, heat pump (heating and cooling), heat pump (heating only), heat pump (cooling only)
		*Energy Source for Cooling	Electricity, natural gas
		*Energy Source for Heating	Gas, oil, electric heat pump, electric resistance, heat pump and electric resistance, none
		*Computer Room Air Conditioner	Yes, no
		*ARI Classification	
		*~~System Design~~	~~Single package, split system~~
		*~~Year-Round~~	~~Yes, no~~
		*~~Refrigeration Chassis~~	~~Yes, no~~
		*~~Source of Heating or Cooling~~	~~Air, evaporative, water, ground-water, ground, glycol~~
		*~~Ducted~~	~~Yes, no~~
		*~~Type of Condenser or Condensing Unit~~	~~Remote condenser, remote condensing unit, non-remote condensing unit, remote chiller condensing unit, remote outdoor unit, remote drycooler~~
		*~~Coil Design~~	~~Coil alone, coil with blower, remote outdoor coil~~
		*~~Indoor Fan~~	~~Yes, no~~
		*Voltage	
		*Electrical Phase	1, 3

* "Identifier" information as described in Section 1606(e).

	Appliance	Required Information	Permissible Answers
C	All Central Air Conditioners and Central Air-Conditioning Heat Pumps	Refrigerant Type[1]	Ozone-depleting, non-ozone-depleting
		Thermostatic Expansion Valve (for air-source or air-cooled models only)	Yes, no
		Thermostatic Expansion Valve (for air-source or air-cooled models only)[1]	~~Yes~~, Exception 1, Exception 2, Exception 3 [See Section 1605.2(c)(1)(B)], no exception
		~~Coil Model Number with which Compressor was Tested (for split systems only)~~	
		Compressor Motor Design	Single-speed, dual-speed, multiple-speed, variable-speed
		Compressor Motor Horsepower	
		Compressor Motor Type[1]	Premium, standard
		Outdoor Fan Motor Design	Single-speed, dual-speed, multiple-speed, variable-speed
		Outdoor Fan Motor Nominal Horsepower	
		Outdoor Fan Motor Type[1]	Premium, standard
		Outdoor Fan Motor Power Factor (for models with variable speed motors only)[1]	
		Indoor Fan Motor Design	Single-speed, dual-speed, multiple-speed, variable-speed
		Indoor Fan Motor Nominal Horsepower	
		Indoor Fan Motor Type	Premium, standard
		Indoor Fan Motor Power Factor (for variable speed motors only)[1]	
	Air-Cooled, Single Package CAC < 65,000 Btu/hour and Air-Cooled, Split System CAC < 65,000 Btu/hour	Seasonal Energy Efficiency Ratio (SEER)	
		Cooling Capacity at 82° F	
		Electrical Input at 82° F	
		Degradation Coefficient at 82° F	
		Cooling Capacity at 95° F	
		Electrical Input at 95° F	
		Energy Efficiency Ratio (EER) at 95° F	
		Cooling Capacity at 105° F (Voluntary)	
		Electrical Input at 105° F (Voluntary)	
		Energy Efficiency Ratio (EER) at 105° F (Voluntary)	
		Cooling Capacity at 115° F (Voluntary)	
		Electrical Input at 115° F (Voluntary)	
		Energy Efficiency Ratio (EER) at 115° F (Voluntary)	
		Small duct high velocity system	Yes, no
		Through the wall air conditioner	Yes, no
		~~Space Constrained Product~~	~~Yes, no~~
	Air-Source, Single Package HP < 65,000 Btu/hour and Air-Source Split System HP < 65,000 Btu/hour	Seasonal Energy Efficiency Ratio (SEER)	
		Cooling Capacity at 82° F	
		Electrical Input at 82° F	
		Degradation Coefficient at 82° F	
		Cooling Capacity at 95° F	
		Electrical Input at 95° F	
		Energy Efficiency Ratio (EER) at 95° F	
		Cooling Capacity at 105° F (Voluntary)	
		Electrical Input at 105° F (Voluntary)	
		Energy Efficiency Ratio (EER) at 105° F (Voluntary)	
		Cooling Capacity at 115° F (Voluntary)	
		Electrical Input at 115° F (Voluntary)	
		Energy Efficiency Ratio (EER) at 115° F (Voluntary)	
		Heating Seasonal Performance Factor (HSPF)	

		Heating Capacity	
		Electrical Input	
		Small duct high velocity system	Yes, no
		Through the wall air conditioner	Yes, no
		~~Space Constrained Product~~	~~Yes, no~~

* “Identifier” information as described in Section 1606(e).

	Appliance	***Required Information***	***Permissible Answers***
C	Air-Cooled, Single Package CAC ≥ 65,000 and < 240,000 Btu/hour Air-Cooled, Split System CAC ≥ 65,000 and < 240,000 Btu/hour All Computer Room Air Conditioners	Cooling Capacity at 95° F	
		Electrical Input at 95° F	
		Energy Efficiency Ratio (EER) at 95° F	
		Integrated Part Load Value (IPLV) If Applicable	
		Heating System Type[1]	Gas, oil , electric resistance, none
	Air-Source, Single Package HP ≥ 65,000 Btu/hour and < 240,000 Btu/hour; and Air-Source, Split-System HP ≥ 65,000 and < 240,000 Btu/hour	Cooling Capacity at 95° F	
		Electrical Input at 95° F	
		Energy Efficiency Ratio (EER) at 95° F	
		Integrated Part Load Value (IPLV) If Applicable	
		Heating Capacity at 47° F	
		Electrical Input at 47° F	
		Coefficient of Performance (COP) at 47° F	
		Heating Capacity at 17° F	
		Electrical Input at 17° F	
		Coefficient of Performance (COP) at 17° F	
	Evaporatively-Cooled Single Package CAC < 240,000 Btu/hour and Evaporatively-Cooled Split System CAC < 240,000 Btu/hour	Cooling Capacity at 95° F	
		Electrical Input at 95° F	
		Energy Efficiency Ratio (EER) at 95° F	
		Integrated Part Load Value (IPLV) If Applicable	
		Heating System Type[1]	Gas, oil, electric resistance, none
	Water-Cooled Single-Package CAC < 240,000 Btu/hour and Water-Cooled, Split System CAC < 240,000 Btu/hour	Compressor Electrical Input (for models ≥ 65,000 Btu/hour only)	
		Indoor Fan Electrical Input (for models ≥ 65,000 Btu/hour only)	
		Outdoor Fan Electrical Input (for models ≥ 65,000 Btu/hour only)	
		Cooling Capacity at 85° F Entering Water Temperature	
		Electrical Input at 85° F Entering Water Temperature	
		Energy Efficiency Ratio (EER) at 85° F Entering Water Temperature	
		Low Temperature EER at 75° F Entering Water Temperature (for models < 65,000 Btu/hour only)	
		Heating System Type[1]	Gas, oil electric resistance, none
	Water-Source, Single Package HP < 240,000 Btu/hour and Water-Source Split System HP < 240,000 Btu/hour	Compressor Electrical Input (for models ≥ 65,000 Btu/hour only)	
		Indoor Fan Electrical Input (for models ≥ 65,000 Btu/hour only)	

		Outdoor Fan Electrical Input (for models ≥ 65,000 Btu/hour only)	
		Cooling Capacity at 85° F Entering Water Temperature	
		Electrical Input at 85° F Entering Water Temperature	
		Energy Efficiency Ratio (EER) at 85° F Entering Water Temperature	
		Heating Capacity at 70° F Entering Water Temperature	
		Electrical Input at 70° F Entering Water Temperature	
		Coefficient of Performance (COP) at 70° F Entering Water Temperature	
		Low Temperature EER at 75° F Entering Water Temperature (for models < 65,000 Btu/hour only)	

* “Identifier” information as described in Section 1606(e).

	Appliance	*Required Information*	*Permissible Answers*
C	Ground Water-Source, Single Package HP (< 240,000 Btu/hour except as noted) and Ground Water-Source Split System HP (< 240,000 Btu/hour except as noted)	Compressor Electrical Input (for models ≥ 65,000 Btu/hour only)	
		Indoor Fan Electrical Input (for models ≥ 65,000 Btu/hour only)	
		Outdoor Fan Electrical Input (for models ≥ 65,000 Btu/hour only)	
		Cooling Capacity at 70° F Entering Water Temperature (for models manufactured before October 29, 2003 only)	
		Electrical Input at 70° F Entering Water Temperature (for models manufactured before October 29, 2003 only)	
		Energy Efficiency Ratio (EER) at 70° F Entering Water Temperature (for models manufactured before October 29, 2003 only)	
		Cooling Capacity at 59° F Entering Water Temperature (for all sizes, including but not limited to models ≥ 240,000 Btu/hour; and for models manufactured on or after October 29, 2003 only)	
		Electrical Input at 59° F Entering Water Temperature (for all sizes, including but not limited to models ≥ 240,000 Btu/hour; and for models manufactured on or after October 29, 2003 only)	
		Energy Efficiency Ratio (EER) at 59° F Entering Water Temperature (for all sizes, including but not limited to models ≥ 240,000 Btu/hour; and for models manufactured on or after October 29, 2003 only)	
		Heating Capacity at 70° F Entering Water Temperature (for all sizes, including but not limited to models ≥ 240,000 Btu/hour; and for models manufactured ~~on or after~~before October 29, 2003 only)	
		Electrical Input at 70° F Entering Water Temperature (for all sizes, including but not limited to models ≥ 240,000 Btu/hour; and for models manufactured ~~on or after~~before October 29, 2003 only)	
		Coefficient of Performance (COP) at 70° F Entering Water Temperature (for all sizes, including but not limited to models ≥ 240,000 Btu/hour; and for models manufactured ~~on or after~~before October 29, 2003 only)	
		Heating Capacity at 50° F Entering Water Temperature (for all sizes, including but not limited to models ≥ 240,000 Btu/hour)	
		Electrical Input at 50° F Entering Water Temperature (for all sizes, including but not limited to models ≥ 240,000 Btu/hour)	
		Coefficient of Performance (COP) at 50° F Entering Water Temperature (for all sizes, including but not limited to models ≥ 240,000 Btu/hour)	
		Cooling Capacity at 50° F Entering Water Temperature (for models manufactured before October 29, 2003 only)	

		Electrical Input at 50° F Entering Water Temperature (for models manufactured before October 29, 2003 only)	
		EER at 50° F Entering Water Temperature (for models manufactured before October 29, 2003 only)	
	Ground Source, Closed-Loop, Single Package HP and Ground-Source, Closed-Loop, Split System HP	Compressor Electrical Input (for models ≥ 65,000 Btu/hour only)	
		Indoor Fan Electrical Input (for models ≥ 65,000 Btu/hour only)	
		Outdoor Fan Electrical Input (for models ≥ 65,000 Btu/hour only)	

* “Identifier” information as described in Section 1606(e).

	Appliance	*Required Information*	*Permissible Answers*
C	Ground Source, Closed-Loop, Single Package HP and Ground-Source, Closed-Loop, Split System HP	Cooling Capacity at 77° F Entering Brine Temperature	
		Electrical Input at 77° F Entering Brine Temperature	
		Energy Efficiency Ratio (EER) at 77° F Entering Brine Temperature	
		Heating Capacity at 32° F Entering Brine Temperature	
		Electrical Input at 32° F Entering Brine Temperature	
		Coefficient of Performance (COP) at 32° F Entering Brine Temperature	
	Gas-Fired Air Conditioners and Gas-Fired Heat Pumps	Cooling Capacity – (cooling bin summary)	
		Gas Input While Cooling – (cooling bin summary)	
		Electric Input While Cooling – (cooling bin summary)	
		Cooling COP – Gas	
		Cooling COP – Electric	
		Heating Output – (heating bin summary)	
		Gas Input While Heating – (heating bin summary)	
		Electric Input While Heating – (heating bin summary)	
		Heating COP – Gas	
		Heating COP – Electric	
D	Spot Air Conditioners	*Type	Single package, air-cooled; single package, evaporatively-cooled; split system: air-cooled condensing unit, coil with blower; split system: evaporatively-cooled condensing unit, coil alone; single package, air-cooled (FD); single package, evaporatively-cooled (FD); split system; air-cooled condensing unit, coil with blower (FD); split system; evaporatively-cooled condensing unit, coil alone (FD)
		Cooling Capacity	
		Total Electrical Input	
		Cooling Efficiency Ratio (CER)	
		Fan Electrical Input	
		Refrigerant Type	Ozone-depleting, non-ozone-depleting
E	All Space Heaters	*Energy Source	Natural gas, LPG, oil, combination (natural gas and oil)
		*Burner Type	~~Atmospheric, power (natural draft), power (forced draft, power (induced draft), power (pulse combustion)~~Induced draft, luminous, injection type, power, pressure
		*~~Main Burner Ignition Source (for gas or oil models only)~~	~~Continuous ignition source, intermittent/continuous ignition source, intermittent ignition source, intermittent/interrupted ignition source, interrupted ignition source~~
		Continuously burning pilot light, (for gas or oil models only)	Yes, no
		*Labeled for Outdoor Installation	Yes, no
		*Electrical Phase	1, 3, none
		*Air Flow Direction (except boilers and infrared gas space heaters)	Up, down, horizontal
		Draft Equipment[1]	Draft hood, draft diverter, barometric regulator, none

		Off-Cycle Devices	Stack damper, electro-mechanical inlet damper, electro-mechanical flue damper, none
		Flue Gas	Condensing, non-condensing
		Control	Single-stage, two-stage modulating, step modulating
		Fan Motor Design (furnaces only)[1]	Single-speed, dual-speed, multiple-speed, variable- speed
		Total Nominal Fan Motor Horsepower (furnaces only)	
		Fan Motor Type (furnaces only)	Premium, standard
		Fan Motor Power Factor (furnaces with variable-speed motors only)[1]	
		Pump Motor Design (boilers only)	Single-speed, dual-speed, multiple-speed, variable- speed
		Total Nominal Pump Motor Horsepower (boilers only)	

* “Identifier” information as described in Section 1606(e).

	Appliance	*Required Information*	*Permissible Answers*
E	All Space Heaters	Pump Motor Type (boilers only)	Premium, standard
		Pump Motor Power Factor (boilers with variable-speed motors only)[1]	
		Nameplate Input Rating	
		Rated Output	
	Central Furnaces	*Mobile Home	Yes, no
		~~In-Door~~Fan Blower Capacity, High, at 0.5" ~~Degrees~~ W.C.	
		~~In-Door~~Fan Blower Capacity, Low, at 0.5" ~~Degrees~~ W.C.	
		Thermal Efficiency (for models ≥ 225,000 Btu input and for three-phase equipment < 225,000 Btu/hr for which the manufacturer chooses to test using ANSI Z21.47-2001)	
		Standby Watts [controls, not fan energy] (for models ≥ 225,000 Btu/hour input only)	
		Annual Fuel Energy Consumption (for models < 225,000 Btu/hour input only, except for three-phase equipment for which the manufacturer chooses to test using ANSI Z21.47-2001)	
		Annual Fuel Utilization Efficiency [AFUE] (for models < 225,000 Btu/hour input only, except for three-phase equipment for which the manufacturer chooses to test using ANSI Z21.47-2001)	
		Annual Auxiliary Electrical Energy Consumption (for models < 225,000 Btu/hour input only, except for three-phase equipment for which the manufacturer chooses to test using ANSI Z21.47-2001)	
		Thermal Efficiency at Minimum Capacity Provided and Allowed by the Controls (for models ≥ 225,000 Btu/hr input only)	
	Room Heaters, Floor Furnaces, and Wall Furnaces	*Type	Room heater (vented fan); room heater (gravity); floor furnace (fan); floor furnace (gravity); wall furnace (direct vent fan); wall furnace (direct vent gravity); wall furnace (vented fan); wall furnace (vented gravity)
		Annual Fuel Utilization Efficiency (AFUE)	
		Auxiliary Electric Power (for ~~vented~~ fan-type heaters only)	
		Average Annual Auxiliary Electrical Energy Consumption (for ~~vented~~ fan-type heaters only)[1]	
	Duct Furnaces and Unit Heaters	*Type	Duct furnace; low static unit heater; high static unit heater; floor-mounted unit heater
		Thermal Efficiency at Maximum Rated Capacity	
		Energy Consumption During Standby	
		Thermal Efficiency at Minimum Rated Capacity	
	Infrared Gas Space Heaters	*Type	Patio heater, non-patio heater
		Intensity	High, low
		Radiant Tube Type	Yes, no
		Portable	Yes, no
		Vented	Yes, no
		Physically Possible to Measure Radiant Coefficient	Yes, no
		Combustion Efficiency (for models using ANSI test method only)	

		Radiant Coefficient (for models using ANSI test method only; for models for which it is physically possible to measure radiant coefficient only)	
		Effective Heating Area (for models using FSTC test method only)	
		Efficiency Index (for models using FSTC test method only)	

* “Identifier” information as described in Section 1606(e).

	Appliance	*Required Information*	*Permissible Answers*
E	Combination Space-Heating and Water-Heating Equipment	*Primary Function	Primary function is space heating, secondary function is domestic water heating; primary function is domestic water heating, secondary function is space heating
		Volume (measured)	
		Volume (rated)	
	~~Combination Space-Heating and Water-Heating Equipment~~ ***[ALSO DELETE LINE IMMEDIATELY ABOVE THIS BOX]***	Energy Factor (for those models whose primary function is water heating)	
		Effective Space-Heating Efficiency (CA_{AFUE}) (for those models whose primary function is water heating)	
		Annual Fuel Utilization Efficiency (AFUE) (for those models whose primary function is space heating)	
		Effective Water-Heating Efficiency (CA_{EF}) (for those models whose primary function is space heating)	
		Combined Annual Efficiency (CAE)	
	Boilers	*Type	Steam, hot water
		Design	copper, cast iron, other
		Input at Minimum Capacity[1]	
		~~Input at Maximum Capacity~~	
		Output at Minimum Capacity[1]	
		~~Output at Maximum Capacity~~	
		Combustion Efficiency (for models ≥ 300,000 Btu/hour input only)	
		Thermal Efficiency (for models ≥ 300,000 Btu/hour input ~~only)~~ and < 2,500,000 Btu/hour	
		Thermal Efficiency (for models > 2,500,00 Btu/hour)[1]	
		Standby Loss (for packaged boilers > 300,000 Btu/hour input only)	
		Standby Loss (for nonpackaged boilers > 300,000 Btu/hour input only)	
		Thermal Efficiency at Minimum Capacity Rating (for non-packaged boilers ≥ 300,000 Btu/hr input only)	
		AFUE (for models < 300,000 Btu/hour input only)	
F	All Water Heaters	*Energy Source	Natural gas, LPG, oil, electric resistance, heat pump
		Rated Volume (except booster heaters and hot water dispensers)	
		Measured Volume (~~except booster heaters~~large water heaters only)	
		Rated Input	
		Heat Traps (for storage models only)	Yes, no
		Ozone Depleting Substance in Insulation[1]	Yes, no
		Ozone Depleting Substance in Refrigerant (for heat pump water heaters only)[1]	Yes, no
		Constant burning pilot light (for large gas and oil models only)	Yes, no

		*~~Main Burner Ignition Source (for gas or oil models only)~~	~~Continuous ignition source, intermittent/continuous ignition source, intermittent ignition source, intermittent/interrupted ignition source, interrupted ignition source~~
		Mobile Home	Yes, no
	Booster Heaters	~~Rated Output~~	
		Flow Capacity	
		Thermal Efficiency at 100% Capacity with 110° F Water Input Temperature	
	Hot Water Dispensers	~~Rated Output~~	
		Standby Loss	
	Mini-Tank Electric Water Heater	First Hour Rating	
		Height	
		Width at the Point of Greatest Width	
		Depth at the Point of Greatest Depth	
		Recovery Efficiency	
		Standby Loss % per hour	
		Total Standby Loss	
		Annual Energy Consumption	

* "Identifier" information as described in Section 1606(e).

	Appliance	***Required Information***	***Permissible Answers***
F	Other Small Electric Water Heaters	Annual Energy Consumption[1]	
		Tabletop Water Heater	Yes, no
		First Hour Rating	
		Energy Factor	
	Large Electric Water Heaters	Thermal Efficiency (instantaneous models only)~~Standby Loss, % (for large storage models only)~~	
		Standby Loss, % per hour (except for those models > 140 gallons for which exemption from standby loss standard is claimed	
		Standby Loss, Watts ~~(for large storage models only)~~ (except for those models > 140 gallons for which exemption from standby loss standard is claimed)	
		R-value of Insulation (for models > 140 gallons ~~only)~~ except those which comply with standby loss standard)	
	Small Gas Water Heaters and Small Oil Water Heaters	First Hour Rating (for storage models only)	
		Maximum Gallons Per Minute (for instantaneous models only)	
		Recovery Efficiency	
		Annual Energy Consumption[1]	
		Energy Factor	
		Pilot Light Energy Consumption (for instantaneous models only)	
	Large Gas Water Heaters and Large Oil Water Heaters	Thermal Efficiency	
		Standby Loss, %/hr (except for those models > 140 gallons for which exemption from standby loss standard is claimed)	

		Standby Loss, Btu/hr (except for those models > 140 gallons for which exemption from standby loss standard is claimed)	
		Electrical Power During Recovery While Appliance is Heating (for storage models only)	
		Electrical Power During Standby	
		R-value of Insulation (for models > 140 gallons only) for which exemption from standby loss standard is claimed	
		Flue Damper (for models > 140 gallons only)	Yes, no
		Fan Assisted Combustion (for models > 140 gallons only)	Yes, no
	Heat Pump Water Heaters	Current Rating	
		Voltage	
		Energy Factor (for models ≤ 24 amps current rating only)	
		Standby Loss (for models > 24 amps current rating only)	
		Thermal Efficiency (for models > 24 amps current rating and ≥ 4,000 Btu/hour per gallon only)	
		R-value of Insulation (for models > 24 amps current rating only)	
		Refrigerant Type[1]	Ozone-depleting, non-ozone-depleting
G	Heat Pump Pool Heaters	Heating Capacity at Standard Temperature Rating	
		Readily-accessible on-off switch	True; false
		Coefficient of Performance at Standard Temperature Rating	
		Heating Capacity at Low Temperature Rating	
		Coefficient of Performance at Low Temperature Rating	
		Heating Capacity at Spa Conditions Rating	
		Coefficient of Performance at Spa Conditions Rating	
		Refrigerant Type[1]	Ozone-depleting, non-ozone-depleting
	Other Pool Heaters	~~Type~~Energy Source	Natural gas, LPG, oil, electric resistance
		Readily-accessible on-off switch	True; false
		Constant burning pilot light (for gas models)	Yes, no
		*~~Main Burner Ignition Source (for gas or oil models only)~~	~~Continuous ignition source, intermittent/continuous ignition source, intermittent ignition source, intermittent/interrupted ignition source, interrupted ignition source~~
		Input	
		Thermal Efficiency	
H	Plumbing Fittings	*Type	Showerhead, lavatory faucet, kitchen faucet, metering faucet, lavatory replacement aerator, kitchen replacement aerator, wash fountain, lift-type tub spout diverter, turn-type tub spout diverter, pull-type tub spout diverter, push-type tub spout diverter
		Flow Rate	
		Pulsating (for showerheads only)	Yes, no
		Rim Space (for wash fountains only)	
		Tub Spout Leakage Rate When New	
		Tub Spout Leakage Rate After 15,000 Cycles	

* “Identifier” information as described in Section 1606(e).

	Appliance	*Required Information*	*Permissible Answers*
I	Plumbing Fixtures	*Type	Blowout water closet, gravity tank type water closet, electromechanical hydraulic water closet, flushometer tank water closet, urinal, prison-type urinal, prison-type water closet, flushometer valve water closet, trough-type urinal, waterless urinal, vacuum type urinal, vacuum type water closet
		Water Consumption	
		Trough Length (trough-type urinals only)	
J	Fluorescent Lamp Ballasts	*Ballast Input Voltage	120, 277, other (specify)
		*Number of Lamps	
		*Type of Lamp	F40T12, F96T12, F96T12HO, other T12 (specify), T5, T8, other (specify)
		Designed for Dimming	Continuous, stepped, no
		Designed for Dimming to 50% or Less of Maximum Output	Continuous, stepped, no
		Power Factor	
		Building Application	Designed but not labeled for use only in residential buildings, designed and labeled for use only in residential buildings, other
		Designed for Use in Ambient Temperatures of ≤ 0° F	Yes, no
		Designed for Use (a) at Ambient Temperatures ≤ -20° F and (b) in an Outdoor Sign (for models with two F96T12HO lamps only)	Yes, no
		Replacement Ballast as Defined in Section 1602(j)	Yes, no
		Total Nominal Lamp Watts	
		Ballast Efficacy Factor	
		Relative Light Output	
		Circuit Design	Cathode cut-out, electronic, magnetic
		Start	Instant, rapid
K	Lamps	*Type	4-foot medium bi-pin general service fluorescent lamp, 2-foot U-shaped general service fluorescent lamp, 8-foot slim line general service fluorescent lamp, 8-foot high output general service fluorescent lamp, incandescent reflector lamp, other (specify)
		Lumens[1]	
		Nominal Lamp Wattage	
		Color Rendering Index (for general service fluorescent lamp models only)	
		Average Lamp Efficacy	
L	Emergency Lighting	Light Source Type	LED, electroluminescent, fluorescent, incandescent, other (specify)
		Height of Letters “E, X, T”	
		Width of Letters “E, X, T”	
		Height of Letter “I”	
		Width of Letter “I”	
		Battery Backup	Yes, no
		Number of Faces	
		Sign Format	Edge-lit, panel, matrix, stencil, other (specify)

		Input Power	
		Minimum Luminance of Face	
		Maximum Luminance of Face	
		Average Luminance of Face	
		Maximum to Minimum Luminance Ratio	
		Luminance Contrast	

* “Identifier” information as described in Section 1606(e).

	Appliance	*Required Information*	*Permissible Answers*
M	Traffic Signal Modules	Module Color	Green, amber, red
		Module ~~Size and~~ Type	~~300 mm~~ circular, ~~200 mm circular~~, ~~300 mm~~ arrow, lane control-arrow, lane control-X, pedestrian, other (specify)
		Module Size (circular, arrow only)	
		Power Consumption at 25° C	
		Power Consumption at 74° C	
N	Luminaires	None	
O	Dishwashers	*Type	Compact, standard
		*Width Number of place settings	
		Power Consumption Per Cycle	
		Water Heating Dishwasher	Yes, no
		Truncated Normal Cycle Capable	Yes, no
		Energy Factor	
P	Clothes Washers that are federally regulated consumer products	*Type	Front-loading, top loading
		*Controls	Automatic, semi-automatic, other (specify)
		*Axis	Horizontal, vertical
		Suds-Saving	Yes, no
		Combination Washer/Dryer[1]	Yes, no
		Clothes Container Compartment Capacity	
		Power Consumption Per Cycle[1]	
		Energy Factor	
P	Clothes Washers that are not federally regulated consumer products	*Type	Front-loading, top loading
		*Controls	Automatic, semi-automatic, other (specify)
		*Axis	Horizontal, vertical
		Suds-Saving	Yes, no
		Combination Washer/Dryer	Yes, no
		Clothes Container Compartment Capacity	
		Power Consumption Per Cycle	
		Water Consumption Per Cycle	
		Energy Factor	
		Water Factor	
		Remaining Moisture Content (required only on and after January 1, 2004)	
Q	Clothes Dryers	*~~Fuel~~Energy Source	Gas, electric
		*Drum Capacity	
		*Voltage	120, 240, other (specify)
		Combination Washer/Dryer[1]	Yes, no
		Automatic Termination Control[1]	Yes, no
		Energy Factor	
		Constant Burning Pilot Light (Gas models only)	Yes, no
R	Consumer Product Cooking Products [filing requirements take effect only when there is a federal standard or federal reporting requirement for annual cooking energy consumption (or similar measure of energy performance)]	~~*Main Burner Ignition Source (for gas or oil models only)~~	~~Continuous ignition source, intermittent/continuous ignition source, intermittent ignition source, intermittent/interrupted ignition source, interrupted ignition source~~
		*Type	Conventional range, conventional cooking top, conventional oven, microwave oven, microwave/conventional range, other (specify)
		*Energy ~~Type~~Source	Gas, electric, microwave

		Electrical Supply Cord (for gas models only)	Yes, no
		*Main Burner Ignition Source (for gas or oil models only)	Continuous ignition source, intermittent/continuous ignition source, intermittent ignition source, intermittent/interrupted ignition source, interrupted ignition source
		Annual Cooking Energy Consumption	
		Annual Self-Cleaning Energy Consumption (for conventional ovens only)	
		Total Annual Energy Consumption (for conventional ovens only)	
		Clock Power Consumption (for gas conventional ovens only)	
		Pilot Light Consumption (for gas conventional ovens only)	
		Annual Secondary Energy Consumption (for gas conventional ovens only)	

* “Identifier” information as described in Section 1606(e).

	Appliance	*Required Information*	*Permissible Answers*
R	Commercial Convection Ovens	Energy Input Rate	
		Idle Energy Consumption Rate	
	Commercial Hot Food Holding Cabinets	Energy Input Rate	
		Idle Energy Consumption Rate	
	Commercial Range Tops	Energy Input Rate	
		Cooking Energy Efficiency	
		~~Cooking Energy Efficiency~~ Test Cooking Vessel Diameter	
S	Electric Motors	Type	NEMA Design A, NEMA Design B, IEC Design N, other (specify)
		Voltage	230, 460, both 230 and 460
		Speed	Single, multiple
		Rated Horsepower	
		Power Consumption	
		Air Exchange	Open, enclosed
		Number of Poles	2, 4, 6, 8
		Nominal Full Load Efficiency	
T	Distribution Transformers	*Phase	1, 3
		Rated Output Power	
		Output Power at 35% of the Rated Output Power	
		Total Loss Power at 35% of the Rated Output Power	
		Efficiency at 35% of the Rated Output Power	

* “Identifier” information as described in Section 1606(e).

Amend Section 1606(a)(3)(E) as follows:

Section 1606. Filing by Manufacturers; Listing of Appliances in Database.

(a) . . . .

. . . .

(3) **Testing and Performance Information.**

. . . .

(E) **How Test Data Must Be Reported**

1. For any numerical value required by Table U that is produced by a test specified in Section 1604, the reported value shall be no higher for the value for which the consumer would prefer a high number, and no lower for the value for which the consumer would prefer a low number, than the values obtained by testing; unless ~~differing specific rounding-off~~ different specific instructions are specified in the test method specified in Section 1604.

2. For any numerical value required by Table U that is produced by calculation from measured numerical test results, the reported value shall be no higher for the values where the consumer would prefer a high number than the exact result of the calculation, and no lower than the exact result of the calculation where the consumer would prefer a low number, than the values obtained by calculating, unless ~~specific rounding-off~~ different specific instructions are specified in the test method specified in Section 1604.

3. Manufacturers may report:

   a. numbers higher than tested values, where the consumer would, all other things being equal, prefer lower values (or is indifferent); and

   b. numbers lower than tested values, where the consumer would, all other things being equal, prefer higher values (or is indifferent).

Example: An air conditioner is tested using the appropriate test method specified in Section 1604, and the test method does not include specific instructions about the precision of reporting.

- ~~An air conditioner is tested using the appropriate test method specified in Section 1604 that does not include specific instructions about rounding off or precision of reporting.~~

- Cooling capacity is measured as: 36,014 Btu per hour.
- ~~The manufacturer may report any value up to 36,014 Btu per hour.~~
- For cooling capacity, consumers prefer higher values.
- The manufacturer may not report any value over 36,014 Btu per hour.
- The manufacturer chooses to report 36,000 Btu per hour.

- Electrical energy use is measured at 3,487 watts.
- ~~The manufacturer may report any value down to 3,487 watts.~~
- For electrical energy use, consumers prefer lower values.
- The manufacturer may not report any value under 3,487 watts.
- The manufacturer chooses to report 3,500 watts.

- Using the data the manufacturer chooses to report, EER = 36,000/3,500 = 10.285714.
- For EER, consumers prefer higher values.
- The manufacturer may not report any value of EER over 10.285714(if EER is reported with only one decimal place, the maximum value would be 10.2).
- The manufacturer chooses to report EER = 10.2 Btu per watt-hour.

- If the manufacturer had chosen to report the cooling capacity as 36,014 Btu per hour, and the electrical energy use as 3,487 watts, the calculated EER would have been 36,014/3,487 = 10.328076. In this case the manufacturer could not report any value of EER over 10.328076 (if EER is reported with only one decimal place, the maximum value would be 10.3).

Amend Sections 1606(b)(1)-(2) as follows:

Section 1606. Filing by Manufacturers; Listing of Appliances in Database.

. . . .

(b) **Review of Statements by the Executive Director.**

In this subsection, "manufacturer" also includes a third party filing a statement under Section 1606(f).

(1) **Determination.** The Executive Director shall determine whether a statement is complete, accurate, and in compliance with all applicable provisions of this Article, and whether the appliance for which the statement was submitted complies with all applicable standards in Sections 1605.1, 1605.2, and 1605.3.

(2) **Informing Manufacturer of Determination**.

(A) The Executive Director shall inform the manufacturer of the determination within these time limits:

through February 28, ~~2003~~ 2004:

if the statement was filed electronically, within 30 calendar days after receipt by the Executive Director;

if the statement was filed on paper, within 45 calendar days after receipt by the Executive Director; and

beginning March 1, ~~2003~~ 2004:

if the statement was filed electronically, within 14 calendar days after receipt by the Executive Director;

if the statement was filed on paper, within 21 calendar days after receipt by the Executive Director.

(B) The Executive Director's determination shall be sent to the manufacturer electronically if the statement was filed electronically and either electronically or on paper if the statement was filed on paper.

Amend Sections 1607(b)-(c) as follows:

Section 1607. Marking of Appliances.

. . . .

(b) **Name, ~~and~~ Model Number, and Date**.

~~The manufacturer's name, brand name, or trademark, and the model number, shall be permanently and legibly displayed on each unit or, for plumbing fittings on the unit's packaging. Where there is a nameplate, the display shall be on the nameplate. On appliances without nameplates, the display shall be in a conspicuous and accessible place on the unit.~~Except as provided in subsection (c), the following information shall be permanently, legibly, and conspicuously displayed on an accessible place on each unit:

(1) manufacturer's name or brand name or trademark;

(2) model number; and

(3) date of manufacture, indicating (i) year and (ii) month or smaller (e.g. week) increment. If the date is in a code that is not readily understandable to the layperson, the manufacturer shall immediately, on request, provide the code to the Energy Commission.

~~(c)**Date of Manufacture**.~~

(c) **Exceptions to Subsection (b).**

~~The date of manufacture, and other date information chosen by the manufacturer, shall be permanently and legibly displayed on an accessible and conspicuous place on each unit or, for plumbing fittings, on the unit's packaging, in the following format: month and four digit year.~~

(1) For plumbing fixtures and plumbing fittings, the information required by subsection (b) shall be permanently, legibly, and conspicuously displayed on an accessible place on each unit or on the unit's packaging.

(2) For lamps, the information required by subsection (b) shall be permanently, legibly, and conspicuously displayed on an accessible place on each unit, on the unit's packaging, or, where the unit is contained in a group of several units in a single package, on the packaging of the group.

(3) For fluorescent lamp ballasts, the date of manufacture information required by section 1607(b)(3) shall indicate (i) year and (ii) three-month or smaller increment. If the date is in a code that is not readily understandable to the layperson, the manufacturer shall immediately, on request, provide the code to the Energy Commission.

Repeal Section 1607(d)(1)(B) and renumber Section 1607(d)(1)(A) accordingly :

Section 1607. Marking of Appliances.

. . . .

(d) Energy Performance Information

(1) Federally Regulated Consumer Products

~~(A)~~ The marking required by 16 CFR Part 305 (2001) shall be displayed on all unites of all federally-regulated consumer products of the following classes:

. . . .

~~(B) In addition, beginning on the effective date of the central air conditioner standards in Section 1605.2(c)(1), the following information shall be permanently and legibly displayed on an accessible and conspicuous place on all units subject to those standards:~~

~~1. EER; and~~

~~2. "Complies with California TXV requirement."~~

Amend Section 1608(a) as follows:

Section 1608. Compliance, Enforcement, and General Administrative Matters.

(a) **General Requirements for the Sale or Installation of All Appliances**.

Any unit of any appliance within the scope of Section 1601 may be sold or offered for sale in California only if:

(1) the appliance appears in the most recent database established pursuant to Section 1606(c), unless the only reason for the appliance's absence from the database is its failure to comply with an applicable standard in Section 1605.1;

(2) the manufacturer has:

(A) tested the appliance as required by Sections 1603 and 1604;

(B) marked the unit as required by Section 1607;

(C) for any appliance for which there is an applicable standard in Section ~~1605.1,~~ 1605.2~~,~~ or 1605.3, certified under Section 1606(a) that the appliance complies with the standard;

(3) the unit has the same components, design characteristics, and all other features that affect energy or water consumption or energy or water efficiency, as applicable, as the units that were tested under Sections 1603 and 1604 and for which information was submitted under Section 1606(a); and

(4) for any appliance for which there is an applicable standard in Section ~~1605.1,~~ 1605.2~~,~~ or 1605.3, the unit complies with the standard.