

INITIAL STATEMENT OF REASONS
PROPOSED AMENDMENTS
TO APPLIANCE EFFICIENCY REGULATIONS

**CALIFORNIA CODE OF REGULATIONS,
TITLE 20, SECTIONS 1601 THROUGH 1608**

CALIFORNIA ENERGY COMMISSION
Docket Number 08-AAER-1B
August 29, 2008

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INTRODUCTION

Existing law [Public Resources Code § 25402(c)] requires the California Energy Commission (Energy Commission) to adopt regulations that prescribe minimum efficiency levels for appliances. The Energy Commission first adopted appliance efficiency regulations in 1976 and has periodically revised them since then. The current regulations include provisions on testing of appliances to determine their efficiency, reporting of data by manufacturers to the Energy Commission, standards establishing mandatory efficiency levels, and compliance and enforcement procedures, as well as general provisions on the scope of the regulations and definitions.

The purpose of this rulemaking is to adopt improved energy efficiency standards for metal halide (MH) lighting fixtures (luminaires), a comprehensive voluntary test procedure for battery charger systems, clarification of the current regulations for residential pool pumps (including clarification of the current test method for portable electric spas), requirement that replacement motors for existing residential pool pump equipment must be two-speed or multi-speed motors, and necessary updates and revisions to the overall Appliance Efficiency Regulations for consistency with current federal laws.

The purpose of improved lighting standards for MH luminaires is to address the Energy Commission's expressed priority to carry out the mandates established in Assembly Bill 1109 (Huffman, Chapter 534, Statutes of 2007) (AB 1109). AB 1109 requires the Energy Commission to adopt minimum energy efficiency standards for general purpose lighting that, in combination with other programs and activities, reduce average statewide electrical energy consumption by not less than 50 percent from 2007 levels for indoor residential lighting and not less than 25 percent from the 2007 levels for indoor commercial and outdoor lighting by 2018. Additional savings from improved efficiency of MH luminaires will contribute toward reductions in commercial indoor and outdoor lighting. In a parallel and separate rulemaking (Docket 08-AAER-1A) the Energy Commission intends to adopt lighting efficiency standards for general service lamps and for portable lighting fixtures as part of meeting the AB 1109 mandate to set new efficiency standards for general purpose lighting by December 31, 2008.

SPECIFIC PURPOSE, RATIONALE, AND NECESSITY OF EACH PROPOSED ADOPTION, AMENDMENT, AND REPEAL

The California economy, and the well-being of all of California's citizens, depends on an adequate, reasonably-priced, and environmentally-sound supply of energy. Growth in electricity demand affects the reliability of California's electricity system and has in some circumstances contributed to increasing electricity prices. Similarly, additional power plants using natural gas affect natural gas demand, and natural gas prices are increasing.

Improvements in energy efficiency are the cheapest and most environmentally-friendly methods to help bring demand and supply into balance. Thus existing law (Public Resources Code section 25402(c)) requires the Energy Commission to adopt standards that prescribe minimum efficiency levels for appliances.

In addition, Public Resources Code section 25402.5.4, added by AB 1109, expressly requires the Energy Commission to adopt lighting efficiency standards for general purpose lighting by December 31, 2008. In AB 1109, the Legislature found energy consumption for lighting accounts for nearly 20 percent of the state's electricity demand. The energy efficiencies of existing lighting technologies vary significantly. The purpose of the improved efficiency standards for MH fixture standards is address the requirements for indoor commercial and outdoor lighting energy reduction mandated in AB 1109.

The following is provided in two parts: **SUBSTANTIVE CHANGES** that shows changes for the MH luminaires, standards and clarifying language for residential pool pump appliances and portable electric spas, and new, comprehensive voluntary test procedures for battery chargers; and, **NON-SUBSTANTIVE CHANGES** that shows revisions and updates necessary for consistency with federal law.

SUBSTANTIVE CHANGES

Section 1601. Scope.

Section 1601(g) Gas pool heaters, oil pool heaters, electric resistance pool heaters, heat pump pool heaters, residential pool pumps, and portable electric spas is being amended to add "motor combinations, replacement residential pool pump motors," for the specific purpose and rationale of including replacement pool pump motors in the scope and clarifying the scope of the existing residential pool pumps standards, which is necessary to meet the requirements of the pool pump regulations.

"Section 1601(w) Battery Charger Systems" is being added for the specific purpose and rationale of measuring battery energy consumption in active, maintenance, and standby mode, which is necessary to collect performance data to develop future battery chargers standards.

Section 1602. Definitions.

Section 1602(a) ---General is being amended by the following:

“HP” is being added for the specific purpose and rationale of creating an abbreviation, which is necessary for clarity of the standards.

“Power Factor” is being added for the specific purpose and rationale of defining a regularly used term, which is necessary for clarity.

“UPS” is being added for the specific purpose and rationale of adding a new acronym for uninterruptible power supply which is necessary for consistency with EISA 2007.

“UUT” is being added for the specific purpose and rationale of adding a new acronym for unit under test which is necessary for consistency with EISA 2007.

(g) Pool Heaters, Residential Pool Pumps, and Portable Electric Spas is being amended by the following:

“Capacitor Start-Capacitor Run” is being added for the specific purpose and rationale of defining the system type, which is necessary to collect data.

“Capacitor Start-Induction Run” is being added for the specific purpose and rationale of defining the system type, which is necessary to collect data.

“Default speed” is being added for the specific purpose and rationale of defining “low speed”, which is necessary for data collection, product testing, and is provided for guidance to installers as to the recommended operation of two or more speed pool pump motors.

“Electronically Commutated Motor (ECM)” is being added for the specific purpose and rationale of defining the system type, which is necessary to collect data.

“Multi speed motor” is being added for the specific purpose and rationale of defining a product type, which is necessary for regulation and instructions.

“Nameplate HP” is being added for the specific purpose and rationale of defining what we intend to be used as “Nameplate HP” to differentiate it with “pool pump motor capacity” which is necessary to avoid service factor confusion.

“Permanent Split Capacitor (PSC)” is being added for the specific purpose and rationale of defining the system type, which is necessary to collect data.

“Pool Pump Motor Capacity” is being added for the specific purpose and rationale of defining what we intend to be used as “Nameplate HP” to differentiate it with “pool pump motor capacity” which is necessary to avoid service factor confusion.

“Residential Pool Pump” is being added for the specific purpose and rationale of defining a product that is a pump (impeller). When the “residential pool pump” is attached to a “residential pool pump motor” these separate appliances are considered a “Residential

Pool Pump and Motor Combination” for purposes of the standard. The purpose and rationale of this amendment is to make clear that residential pool pump and residential pool pump motor are different appliances which is necessary for clarity between a different product “residential pool pump motor.”

“Residential Pool Pump and Motor Combination” is being added for the specific purpose and rationale of defining a product that is both a pump (impeller) with a motor included, which is necessary for clarity between a different product “residential pool pump motor.”

“Residential Pool Pump Motor” is being added for the specific purpose and rationale of defining a product that includes only the motor, which is necessary for clarity between a different product “residential pool pump and motor combination”.

“Spa Volume” is being added for the specific purpose and rationale of defining an attribute of spas which is necessary to collect data.

“Speed” is being added for the specific purpose and rationale of defining RPM as the unit measurement for speed, which is necessary to differentiate between low and high speed operation. This is also a necessary definition for data collection.

“Split Phase Start” is being added for the specific purpose and rationale of defining the system type, which is necessary to collect data.

“Two Speed Motor” is being added for the specific purpose and rationale of defining a regulated product, which is necessary to establish minimum requirements as well as collect data.

“Variable speed motor” is being added for the specific purpose and rationale of defining a product type, which is necessary for regulation and instructions.

Section 1602(n) --- Luminaires is being amended by the following:

“Automatic Daylight Control” is being added for the specific purpose and rationale of defining a term used in new sections 1605.3(n)(2)(B)2. and 1606(a) Table X of the regulations, which is necessary to clearly communicate the intent of the regulations.

“Integral Control” is being added for the specific purpose and rationale of defining a term used in new sections 1605.3(n)(2)(B)1., 1605.3(n)(2)(B)2., and 1606(a) Table X of the regulations, which is necessary to clearly communicate the intent of the regulations.

“Occupant Sensor, Lighting” is being added for the specific purpose and rationale of defining a term used in a new section 1605.3(n)(2)(B)1. of the regulations, which is necessary to clearly communicate the intent of the regulations.

Section 1602(w) ---Battery Chargers is being added as a new subsection and the following are being added as new definitions for this section:

“Accumulated Nonactive Energy” is being added for the specific purpose and rationale of complying with the federal test method which is necessary to accurately represent federal code in the California regulations.

“Active Mode” is being added for the specific purpose and rationale of complying with the federal test method which is necessary to accurately represent federal code in the California regulations.

“Battery” or “battery pack” is being added for the specific purpose and rationale of complying with the federal test method which is necessary to accurately represent federal code in the California regulations.

“Battery Charger Systems (BCS)” is being added for the specific purpose and rationale of defining the appliance type, which is necessary for consideration of developing a future appliance specific standard.

“Battery Energy” is being added for the specific purpose and rationale of complying with the federal test method which is necessary to accurately represent federal code in the California regulations.

“Battery Maintenance Mode” is being added for the specific purpose and rationale of complying with the federal test method which is necessary to accurately represent federal code in the California regulations.

“Energy Ratio” is being added for the specific purpose and rationale of complying with the federal test method which is necessary to accurately represent federal code in the California regulations.

“Multi-port Charger” is being added for the specific purpose and rationale of complying with the federal test method which is necessary to accurately represent federal code in the California regulations.

“Multi-voltage a la carte charger” is being added for the specific purpose and rationale of complying with the federal test method which is necessary to accurately represent federal code in the California regulations.

“Standby Mode (no-load mode)” is being added for the specific purpose and rationale of complying with the federal test method which is necessary to accurately represent federal code in the California regulations.

Section 1604. Test Method for Specific Appliances

Section 1604(g)(2)(F) is being amended to remove the language “four hours” for the specific purpose and rationale of simplifying the test method, as this four hour period is already described in part E of this subsection. This change is necessary for clarity.

Sections 1604(g)(2)(B) and 1604(g)(2)(C) are being amended to add ambient air and water temperature tolerances for the specific purpose and rationale of modifying the test method to include correct tolerances which is necessary for spa testing.

Section 1604(g)(2)(H) is being amended to remove the requirement for reporting cover and spa R values for the specific purpose and rationale of eliminating required reporting of a non-regulated value which is necessary to maintain a test method that provides consistent results.

Section 1604(g)(3)(C) is being amended to add "Curve C" for the specific purpose and rationale of gathering additional testing data which is necessary for compliance with the 2008 California Code of Regulations, Title 24, Part 6, California Building Standards Code.

Section 1604(g)(3)(D) is being amended to replace the existing language that states: "speed (two speed pumps shall be tested at both high and low speeds)" with new language; "at the default speed," for the specific purpose and rationale of simplifying the regulation. This is necessary because the use of low speed is the only data parameter that is required by the testing procedures.

Section 1604(w)(1) Battery Charger Systems is being added to include the federal test method for battery chargers which is located in 10 CFR Section 430.23(aa) (Appendix Y to Subpart B of Part 430) (2008), for the specific purpose and rationale of complying with the Code of Federal Regulations (CFR) which is necessary to accurately represent federal code in the California regulations.

Section 1604(w)(2) Battery Charger Systems is being added as a "California Test Method for Battery Chargers" which will be a voluntary test method for battery charger systems as developed under *Energy Efficiency Battery Charger System Test Procedure* Version 2.1.4 dated August 1, 2008." for the specific purpose and rationale of extending BCS measurement capabilities to include active and no battery modes, which is necessary to obtain sufficient data to consider developing a future energy efficiency standard for battery charger systems.

The requirement for testing BCS "Battery chargers capable of charging batteries both less than and greater than 50 kWh shall be tested only with suitable batteries of 50 kWh or less" is being added to the test procedures for the specific purpose and rationale of consistency with the BCS test method, which is necessary to limit the scope of the test method.

The requirement for testing BCS "Laboratory testing equipment used to test and analyze batteries is specifically excluded from the scope of this test procedure" is being added for the specific purpose and rationale of consistency with the BCS test method, which is necessary to meet requirements within the test procedure.

The requirement for testing BCS "battery charging systems that provide power for portable laboratory testing equipment are included" is being added for the specific purpose and rationale of consistency with the BCS test method, which is necessary to meet requirements within the test procedure.

Section 1605.3. State Standards for Non-Federally Regulated Appliances

Section 1605.3(g)(5) is being amended to add in the heading “and Motor Combinations, and Replacement Residential Pool Pump Motors” for the specific purpose and rationale of incorporating the change in the scope of these standards, which is necessary to implement the standards.

Section 1605.3(g)(5)(B) Two-Speed Capability is being amended for the specific purpose and rationale to clarify the scope of the regulations to now include replacement of existing residential pool pump motors and require the use of specified pool pump controllers which is necessary for compliance with the standards.

Section 1605.3(n) Luminaires.

Section 1605.3(n)(2) is being amended to add new standards for metal halide luminaires for the specific purpose and rationale of providing revised, higher efficiency standards, which is necessary to meet the goals of AB 1109 and to protect the California economy by reducing electrical demand.

Section 1605.3(n)(2)(A) is being added to require 90 and 92 percent ballast efficiencies for metal halide luminaires for the specific purpose and rationale of providing revised, higher efficiency standards, which is necessary to meet the goals of AB 1109 and to protect the California economy by reducing electrical demand.

Section 1605.3(n)(2)(B) is being added to provide three alternative compliance options for the specific purpose and rationale providing revised, higher efficiency standards for metal halide luminaires, which is necessary to meet the goals of AB 1109 and to protect the California economy by reducing electrical demand.

Section 1605.3(n)(2)(B)1. is being added to provide an alternative compliance option of including an occupancy sensor for the specific purpose and rationale providing revised, higher efficiency standards for metal halide luminaires, which is necessary to meet the goals of AB 1109 and to protect the California economy by reducing electrical demand.

Section 1605.3(n)(2)(B)2. is being added to provide an alternative compliance option of including an automatic daylight control for the specific purpose and rationale of providing revised, higher efficiency standards for metal halide luminaires, which is necessary to meet the goals of AB 1109 and to protect the California economy by reducing electrical demand.

Section 1605.3(n)(2)(B)3. is being added to provide a three year exemption for 150-350 watt lamps for the specific purpose and rationale of providing revised, higher efficiency standards for metal halide luminaires, which is necessary to meet the goals of AB 1109 and to protect the California economy by reducing electrical demand.

Section 1605.3(n)(2) EXCEPTION 1 is being added to provide an exemption for lag ballasts for the specific purpose and rationale of making the exceptions consistent with existing regulations, which is necessary to be consistent with previously adopted exceptions.

Section 1605.3(n)(2) EXCEPTION 2 is being added to provide an exemption for 480V electronic ballasts for the specific purpose and rationale of making the exceptions consistent with existing regulations, which is necessary to be consistent with previously adopted exceptions.

Section 1605.3(n)(2) EXCEPTION 3 is being added to provide an exemption for 150W lamps capable of environmental operation for the specific purpose and rationale of making the exceptions consistent with existing regulations, which is necessary to be consistent with previously adopted exceptions.

Section 1606. Filing by Manufacturers; Listing of Appliances in Database Table V, Data Submittal Requirements is being amended for:

“Residential Pool Pumps” is being amended to add several fields to Table V for the specific purpose and rationale of collecting the critical data which is necessary to meet the requirements of our regulation. Table V was altered in the following ways:

- The permissible answers to “Motor Construction” were changed to expand the abbreviation “Cap” to capacitor for clarity.
- A row was added for “frame” to allow for the exception detailed in 1605.3(g)(5).
- A row was added for “speed” for public knowledge of motor RPM at the “default speed.”
- A row was added for “unit type” to allow data collection and to check for necessary compliance with curve a, b and c.
- “Pool Pump motor capacity” was added in order to collect data necessary for regulation.
- “Pool Pump motor service factor” was changed to “motor service factor” because pool pumps do not have a service factor.
- “Rated Horsepower” was changed to “Nameplate Horsepower” for consistency and clarity.

Additional rows were added to Table V to allow for data collection for curve C (flow, power, energy factor) as included in Title 24.

“Metal Halide Luminaires” is being amended to add rows “Compliance Method Used,” “Minimum Ballast Efficiency,” “Rated Use,” “Integral Control Type,” “Integral Control Method,” “Integral Occupancy Sensor will be shipped with the factory default setting to automatically reduce lamp power through dimming by a minimum of 40 percent within 30 minutes or less after the area has been vacated,” “Integral Automatic Daylight Control will be shipped with the factory default setting to automatically reduce lamp power through dimming by a minimum of 40 percent,” to Table V for the specific purpose and rationale of collecting the critical data which is necessary to meet the requirements of our regulation.

Section 1607. Marking of Appliances

Section 1607(d)(10) Residential Pool Pumps is being amended to add “and Replacement Pool Pump Motors,” in the heading for the specific purpose and rationale changing labeling requirements to reflect the amended scope of the regulations which are necessary for enforcement of the amended standards.

Section 1607(d)(10) is being amended in subsection (ii) to replace “total horsepower” with the proposed term “pool pump motor capacity” with the specific purpose and rationale of changing terms which is necessary for consistency with the definitions in 1602(g).

Section 1607(d)(10) is being amended to add subsection (iii) to require that two speed or multispeed pool pumps certified under Section 1606 after January 1, 2010 be marked stating that “This pump must be installed with a two speed or multi-speed pump motor controller.” The specific purpose and rationale of adding a new requirement for labeling pool pump motors which is necessary to inform installers and inspectors of the requirements of the regulations.

NON-SUBSTANTIVE CHANGES

Changes Related to Updates of Federal Law Affecting Multiple Sections

Each of the following sections includes non-substantive changes without regulatory effect specifically related to updates of federal law, found either in 10 CFR 430 (2008), 10 CFR 431 (2008), 16 CFR 305 (2008), or the Energy Independence and Security Act of 2007 (EISA) which amended the federal appliance regulations beginning at 42 U.S.C. 6291. These changes reflect updates to federally regulated appliances.

Purpose and Rationale: Making these changes will ensure that California’s Appliance Efficiency Regulations (Regulations) are consistent with respect to federally regulated appliances.

Necessity: Making these changes will provide regulatory certainty with respect to the accurate inclusion of federal regulatory language in California’s Regulations.

1601(a)	1601(d)	1601(e)	1601(j)	1602(a)
1602(b)	1602(c)	1602(d)	1602(e)	1602(f)
1602(h)	1602(i)	1602(j)	1602(k)	1602(l)
1602(m)	1602(n)	1602(o)	1602(p)	1602(q)
1602(r)	1602(s)	1602(t)	1602(u)	1602 end*
1603(c)	1604(a)	1604(b)	1604(c)	1604(d)
1604(e)	1604(f)	1604(g)	1604(h)	1604(i)
1604(j)	1604(k)	1604(l)	1604(m)	1604(n)
1604(o)	1604(p)	1604(q)	1604(r)	1604(s)
1604(t)	1604(u)	1604 end*,	1605.1(a)(1)	1605.1(a)(6)
1605.1(b)(1)	1605.1(c)(1)	1605.1(d)(3)	1605.1(e)(2)	1605.1(f)(1)
1605.1(j)	1605.1(k)	1605.1(o)	1605.1(p)(1)	1605.1(p)(5)
1605.1(q)	1605.1(s)(1)	1605.1(s)(2)	1605.1(t)(2)	1605.1(t)(3)
1605.1 end*	1605.2(d)	1605.2(d)(1)	1605.2(d)(2)	1605.2(e)
1605.2(i)	1605.2(j)	1605.2(n)	1605.2(o)	1605.2(q)
1605.2(s)	1605.3(a)(7)	1605.3(d)(2)	1605.3(i)	1605.3(p)(2)
1606(a)(4)	1607(d)(1)	1607(d)(3)		
1607 end*	1608(e)(3)	1608 end*		

**Standards incorporated by reference” section.

Changes Related to Updates of Federal Law Affecting Multiple Sections for Previously California-only Standards

Each of the following sections includes non-substantive changes without regulatory effect specifically related to updates of federal law, found either in 10 CFR 430 (2008), 10 CFR 431 (2008), 16 CFR 305 (2008), or the Energy Independence and Security Act of 2007 (EISA), that relate to standards that were previously California-only standards shown in Section 1605.3 that are now federal standards shown in Section 1605.1.

Purpose and Rationale: Making these changes will ensure that California's Regulations are consistent with respect to federally regulated appliances.

Necessity: Making these changes will provide regulatory certainty with respect to the accurate inclusion of federal regulatory language in California's Regulations.

1605.1(a)(2)	1605.1(a)(3)	1605.1(a)(4)	1605.1(a)(5)	1605.1(c)(1)
1605.1(d)(1)	1605.1(d)(2)	1605.1(d)(4)	1605.1(e)(4)	1605.1(e)(5)
1605.1(h)(4)	1605.1(l)	1605.1(m)***	1605.1(n)	1605.1(p)(3)
1605.1(t)(1)	1605.1(u)	1605.2(l)	1605.2(m)	1605.2(n)
1605.2(p)	1605.2(t)	1605.2(u)	1605.3(a)(4)	1605.3(a)(5)
1605.3(a)(6)	1605.3(a)(9)	1605.3(a)(12)	1605.3(c)(3)	1605.3(d)(1)
1605.3(d)(3)	1605.3(e)(1)	1605.3(h)(3)***	1605.3(k)(5)	1605.3(l)
1605.3(m)***	1605.3(m)(2)	1605.3(n)(1)	1605.3(n)(4)	1605.3(p)(1)
1605.3(t)	1605.3(u)	1606(a) EXCEPTION 4	1606(a)(4)(A)4.b.	1607(d)(9)
1608(a)(4) EXCEPTION 4				

***Note: California standards for commercial pre-rinse spray valves and for traffic signal modules for pedestrian control appear in federal statute at 42 U.S.C., Chapter 77, Subchapter III, Part A, §6297(c)(7)(A) (spray valves) and §6297(c)(8)(A) (traffic signal modules).

Changes Related to Internal Re-numbering of Tables Affecting Multiple Sections

Each of the following sections includes non-substantive changes related to internal re-numbering of tables to maintain consistency within the Regulations.

Purpose and Rationale: Making these changes will ensure internal consistency within the Regulations.

Necessity: To provide needed clarity.

1602(a)	1602(d)	1604(d)	1604(f)	1605.1(a)(2)
1605.1(a)(3)	1605.1(c)(1)	1605.1(d)(3)	1605.1(f)(1)	1605.1(k)(3)
1605.1(k)(4)	1605.1(k)(5)	1605.1(m)(1)	1605.1(s)(1)	1605.1(t)(1)
1605.1(t)(2)	1605.1(t)(3)	1605.1(u)(1)	1605.2(c)	1605.3(a)(1)
1605.3(a)(2)	1605.3(a)(4)	1605.3(a)(5)	1605.3(a)(6)	1605.3(a)(7)
1605.3(a)(9)	1605.3(c)(1)	1605.3(c)(2)	1605.3(e)(1)	1605.3(k)(1)
1605.3(k)(2)	1605.3(n)(6)	1605.3(u)	1605.3(v)	1606(a)
1606(a)(1)(D)	1606(a)(1)(G)	1606(a)(2)(B)	1606(a)(3)(D)	1606(a)(3)(D) EXCEPTION 2
1606(a)(3)(D) EXCEPTION 3	1606(a)(3)(E)	1606(a) Table X (formerly Table V)	1606(a)(4)	1606(e)
1606(f)	1607(d)(2)	1607(d)(9)(A)1.		

Changes Related to Internal Re-numbering Affecting Multiple Sections

Each of the following sections includes non-substantive changes related to internal re-numbering of subsections to maintain consistency within the Regulations.

Purpose and Rationale: Making these changes will ensure internal consistency within the Regulations.

Necessity: To provide needed clarity.

1602(s)	1605.3(a)(4)(A))	1605.3(a)(4)(B)	1605.3(a)(6)	1605.3(a)(7)
1605.3(a)(8)	1605.3(a)(8)	1605.3(a)(9)	1605.3(a)(10)	1605.3(a)(11)
1605.3(a)(12)	1605.3(a)(11)	1605.3(g)(5)(B)1	1605.3(g)(5)(B)3	1605.3(k)(1)
1605.3(k)(2)	1605.3(k)(5)	1605.3(m)(1)	1605.3(m)(2)	1605.3(n)(1)
1605.3(p)(2)	1606(c)(1)(B)1.	1606(c)(1)(B)2.	1607(d)(9)(A)	1607(d)(9)(A)1
1607(d)(9)(B)	1607(d)(9)(B)1	1607(d)(9)(B)2.	1607(d)(9)(B)3.	1607(d)(9)(B)4
1607(d)(9)(B)5	1607(d)(10)(A)	1607(d)(10)(B)		

Changes Related to Renaming Section Headers Affecting Multiple Sections

Each of the following section headers includes non-substantive changes related to the re-naming of headers to maintain consistency within the Regulations.

Purpose and Rationale: Making these changes will ensure internal consistency within the Regulations.

Necessity: To provide needed clarity.

1602(d)	1602(e)	1602(n)	1602(u)	1604(d)
1604(e)	1604(n)	1604(u)	1605.1(d)	1605.1(e)
1605.1(h)(1)	1605.1(n)	1605.1(u)	1605.2(d)	1605.2(e)
1605.2(n)	1605.2(u)	1605.3(d)	1605.3(e)	1605.3(k)(2)
1605.3(m)(1)	1605.3(n)	1605.3(p)	1605.3(u)	

Changes Related to Renaming Section Headers for Pool Heaters, Portable Electric Spas, and Pool Pumps Affecting Multiple Sections

Each of the following sections includes non-substantive changes related to the re-naming of the headers for the sections specifically covering pool heaters, portable electric spas, residential pool pump and motor combinations, and replacement residential pool pump motors. Whereas the amendments to the sections that now clarify the regulatory coverage of this section are considered substantive (and are covered in a separate part of this ISOR), the changes to these section headers are strictly intended to maintain consistency with the section header naming conventions of the overall document.

Purpose and Rationale: Making these changes will ensure internal consistency within the Regulations.

Necessity: To provide needed clarity.

1602(g)	1604(g)	1605.1(a)(1)	1605.1(g)	1605.2(g)
1605.3(g)	Table X, Section G			

Sections with Substantive Changes Affecting Multiple Sections

The following sections contain substantive changes and are discussed elsewhere in this filing:

1601(g)	1601(w)	1602(g)	1602(n)	1602(w)
1604(g)(2)	1604(g)(3)	1604(w)	1604 – end	1605.1(g)
1605.1(w)	1605.2(g)	1605.2(w)	1605.3(g)	1605.3(n)(2)
1605.3(w)	1607(d)(10)(B)			

Changes to Specific Sections

Section 1602(b)

The amendments to this section would update the definitions for “Walk-in cooler” (formerly “Walk-in refrigerator”) and “Walk-in freezer” by adding to each definition the phrase “... does not include products designed and marketed exclusively for medical, scientific, or research purposes.”

Purpose and Rationale: To correct an oversight in the informal draft Regulations by adding the new federal exclusion adopted in EISA 2007.

Necessity: Insertion of the Federal Walk-in Exclusion in the Commission's Definitions for ‘Walk-in Cooler’ and ‘Walk-in Freezer’ is required for consistency with EISA 2007 and to provide regulatory certainty with respect to the regulation of walk-in refrigeration products in California's Regulations.

Section 1604(l)

“Emergency Lighting” is being amended to strike all printed language as to performance criteria and referencing 10 CFR Section 431.204(b) (2008) which is the language from the Energy Policy Act regarding the requirements for exit signs.

Purpose and Rationale: to reference the federal test method in lieu of the one published in Section 1604(l) of Regulations.

Necessity: to remove the California test method entirely and replace it with the one referenced in federal regulations.

Section 1604. Documents Incorporated by Reference

Excluding the following three exceptions bulleted below, all changes to the documents incorporated by reference at the end of Section 1604 are to accurately reflect the test methods referenced in 10 CFR 430, 10 CFR 431, 16 CFR 305, and EISA.

Purpose and Rationale: Making these changes will ensure that California's Regulations are consistent with respect to the test methods referenced for federally regulated appliances.

Necessity: Making these changes will provide regulatory certainty with respect to the accurate inclusion of federal regulatory language in California's Regulations.

- ANSI/ASHRAE 124-2007 – “Methods of Testing for Rating Combination Space-Heating and Water-Heating Appliances.” The proposal is to update this Method of Test from the currently referenced 1991 edition to the updated 2007 edition. The purpose and rationale is to reference the updated and currently available consensus test method.

- Deletion of California Department of Transportation (CalTrans) document "Traffic Signal Modules for Combination Pedestrian Signals, January 17, 2001." The proposal is to delete the reference to this test method. The purpose and rationale for deleting this test method is to lessen confusion for anyone specifying the test method. The necessity of deleting this test method is that it is no longer published by CalTrans, and has been removed from their website.
- HVI 916 (2005) – "Airflow Test." The proposal is to update this test method from the currently-referenced 1995 edition to the updated 2005 edition. The purpose and rationale is to reference the updated and currently available test method. The publisher, the Home Ventilating Institute, no longer supports the 1995 edition. Additionally, the publisher has moved since the currently referenced address was published in these Regulations. Their address, phone number, and FAX number are being updated. The purpose and rationale is to better allow testing laboratories to contact the publisher to obtain a copy of the test method.

Section 1606(a)

Data certification for appliances with no energy efficiency, energy consumption, energy design, water efficiency, water consumption, or water design standard in Section 1605.1, 1605.2, or 1605.3 was set, in an earlier rulemaking, to be January 1, 2006. This proposed change would set this certification date to one year after each appliance is added to Section 1601 (Scope), unless a different effective date is set for each appliance.

Purpose and Rationale: Making this change will eliminate any misunderstanding for appliances which were added to the scope of the Regulations after January 1, 2006.

Necessity: Making this change will alleviate possible confusion over the apparent regulatory requirement of requiring certification of some appliances as of January 1, 2006 when newly regulated appliances did not appear in the regulations as of that date.

Section 1606(a)(3)(D)

Change 1:

The proposed change beginning with "... for federally regulated appliances" is to provide additional clarity that appears elsewhere in these regulations found only in footnotes to Table X. Footnote 1 was already addressed in this section. When Footnote 2 was added later, it was an oversight that it was not also addressed in this section.

Purpose and Rationale: Making this change will ensure that more prominence is given to data fields that are voluntary under certain, differing circumstances.

Necessity: Making these changes will correct an oversight when Footnote 2 was added to the "Data Submittal Requirements" table.

Change 2:

The proposed change added in the last sentence is to provide specificity regarding acceptable responses for categories that might have answers beyond those found in the "Permissible Answers" column. Currently, the choice of "other (specify)" has led to the misunderstanding that "other" is an acceptable response. When originally written, staff believed that by saying "Other (specify)" that answers different than the already-provided set would have the actual type fitting the "Required Information" field provided. Instead, some data certifiers have simply been saying (or "specifying") "other."

Purpose and Rationale: Certain data fields may have different technologies or features available, beyond those specified in the "Permissible Answers" column. Clarifying the acceptable answer in these fields cannot be "other" will give the data certifiers flexibility to provide more detail.

Necessity: Making this change will codify needed flexibility into data collection for a limited number of fields.

Section 1606(c)(1)(A)

The proposed change will eliminate reference to sections that do not discuss removing data from the database, which is the subject of this section of the Regulations.

Purpose and Rationale: Making this change will eliminate possible confusion by eliminating sections that do not address this subject.

Necessity: To eliminate possible confusion by removing cross-references to sections within the Regulations that do not address the subject of this section.

Section 1606(c)(1)(B)2.

The proposed change (to a re-numbered section referenced above) will correct a cross-referenced section with the correct Section number. Section 1608(d)(2)(A) does not address appliance testing, but appliance inspection.

Purpose and Rationale: Making this change will eliminate possible confusion by eliminating a section that does not address this subject and to replace it with the correct reference.

Necessity: To eliminate possible confusion by removing cross-references to a section within the Regulations that does not address the subject of this section and to replace it with the correct section reference.

Section 1608(f)

The proposed change (to a re-numbered section referenced above) will eliminate reference to sections that do not discuss removing data from the database, which is the subject of this section of the Regulations.

Purpose and Rationale: Making this change will eliminate possible confusion by eliminating sections that do not address this subject.

Necessity: To eliminate possible confusion by removing cross-references to sections within the Regulations that do not address the subject of this section.

Other Non-Substantive Changes

The following sections contain other non-substantive changes that are being made independent of 10 CFR 430 (2008), 10 CFR 431 (2008), 16 CFR 305 (2008), or the Energy Independence and Security Act of 2007 (EISA). These sections contain minor changes that include changes for one or more of the following reasons:

- A. Change wording, formatting, or spelling for consistency of language.
- B. Company name and/or address change or website, phone number or FAX number change.
- C. Add definition for clarity or for a term moved from different section or used elsewhere in the Regulations.
- D. Delete definition for term moved to different section.
- E. Update reference to test method or standard updated since the Regulations were last amended.
- F. Separate Consumer Audio & Video Equipment from External Power Supplies (EPS) (currently both found in subsection "(u)"). [This will leave EPS in subsection "(u)" and place Consumer Audio & Video Equipment in subsection "(v)" in sections 1602, 1604, 1605.1, 1605.2, 1605.3, and Table X.
- G. Delete test method no longer referenced by company previously publishing.

<u>Section</u>	<u>Change</u>	<u>Reason</u>
1602(a)	Add definition for "AHRI" (formerly "ARI")	B
1602(a)	Delete definition for "ARI" (now AHRI, after merger with GAMA)	B
1602(a)	Add definition for "CIE" (found in 1602(k))	C
1602(a)	Add definition for "EISA" (found throughout the Regulations)	C
1602(a)	Amend definition, changing "HI-G" to "HI-A"	B
1602(a)	Add definition for "LPW" (moved from 1602(b))	C
1602(a)	Add definition for "OSA" (found in 1602(k))	C
1602(a)	Add definitions for "power factor," "UPS," and "UUT"	C
1602(b)	Delete definition for "LPW" (moved to 1602(a))	D
1602(l)	Delete definition for "Light-emitting diode (LED)"	D
1602(m)	Delete definition for "Light-emitting diode (LED)"	D

Section	Change	Reason
1602(n)	Delete definition for "High intensity discharge lamp (HID)"	D
1602(u) & 1602(v)	Delete definitions from subsection (u) and place in subsection (v) for "Audio standby-passive mode," "Compact audio product," "Digital versatile disk (DVD)," "Digital versatile disk (DVD) player," "Digital versatile disk (DVD) recorder," "Digital video recorder (DVR)," "Electronic programming guide (EPG)," "Point of deployment (POD)," "Television (TV)," "TV standby-passive mode," "Video cassette recorder (VCR)," "Video standby-passive mode."	F
1602(v)	"Digital versatile disc (DVD)" was changed from how it originally appeared in 1602(u), changing "disk: to "disc" for consistency with similar defined terms.	A
1602 end	Documents incorporated by reference section: Update website address for the U.S. Government Printing Office. Previously referenced website no longer operative.	B
1603(a)	EXCEPTIONs 1 and 2	A
1604(a)	Table A-1, wine chiller test method	E
1604(a)	Table A-2, commercial refrigeration and vending machine test methods	E
1604(a)	Table A-2, reference to "integrated average temperature" (2 locations) changed to match updated definition in 1602(b)	A
1604(d)	Table D-1, HVI-916 test method (two references)	E
1604(e)	Table E-1, small three-phase furnace test method	E
1604(e)	Table E-1, large gas-fired furnace test method (correction to reflect federal test method)	E
1604(u) & 1604(v)	Remove Consumer Audio & Video Equipment test method from subsection 1604(u) and insert in new subsection 1604(v)	F
1604 end	Documents incorporated by reference section: Update website address for the U.S. Government Printing Office. Previously referenced website no longer operative.	B
1604 end	Documents incorporated by reference section: change ARI to AHRI, and change web-site link.	B
1604 end	Documents incorporated by reference section: Update test title and year, and reflect address, phone and FAX change for HVI	B, E
1604 end	Documents incorporated by reference section: change Hydronics Institute – Division of GAMA to " ... Section of AHRI;" and change web-site link.	B
1604 end	Documents incorporated by reference section: remove reference to CalTrans test method – this test method is no longer available.	G
1604 end	Documents incorporated by reference section: add website link and FAX number for Hydraulic Institute (HI).	B

Section	Change	Reason
1605.3(f)(1)	EXCEPTION	A
1605.3(f)(2)	EXCEPTION	A
1606(a)	EXCEPTION	A
1606(a)(3)(D)	EXCEPTIONS 1 , 2, and 3	A
1606(a)(4)(A)5.d.	Previously California standard (found in 1605.3), now a federal standard (found in 1605.1)	E
1606(c)(2)	Referenced section of Building Standards (Title 24) changed.	E
1606(f)(1)(A)1.	1. Change for consistency of references. 2. Subsection “(u)” changed to “(w)” to reference expansion of Scope.	A
1606(g)(1)(B)	Incorrectly referenced earlier subsection of regulations.	A
1607(b)	Preamble text (before 1607(b)(1))	A
1607(c)	Header, and 1607(c)(1), (2), and (3)	A
1607(d)(3)	Update and correct references to ASHRAE 90.1-2007 edition. 1999 and 2001 editions are now outdated.	E
1607(d)(5)	Previously California standard (found in 1605.3), now a federal standard (found in 1605.1)	E
1607(d)(9)(b)	1. Section has been relettered and renumbered to match proper formatting. 2. Struck-out text is eliminating reference to other sections that are being deleted.	A
1607 end	Documents incorporated by reference section: Update website address for the U.S. Government Printing Office. Previously referenced website no longer operative.	B
1608(a)	EXCEPTIONS	A
1608 end	Documents incorporated by reference section: Update website address for the U.S. Government Printing Office. Previously referenced website no longer operative.	B

Purpose and Rationale: Making these changes will ensure internal consistency within the Regulations.

Necessity: To provide needed clarity.

Tables X and Y

Table “X” designation change: Throughout Sections 1601 (Scope), 1602 (Definitions), 1604 (Test Methods for Specific Appliances), 1605.1 (Federal and State Standards for Federally-Regulated Appliances), 1605.2 (State Standards for Federally-Regulated Appliances), 1605.3 (State Standards for Non-Federally-Regulated Appliances), and 1606 (Table X – Data Submittal Requirements) the same Section letter is used for each appliance group (e.g, “(c)” represents “Central Air Conditioners” in each of these sections; “(f)” represents “Water Heaters” in each of these sections, and so on). The only

exception is for Section 1602, where Section “(a)” is “General” definitions, “(b)” is “Refrigerators, Refrigerator-Freezers, and Freezers” and “(c)” is “Air Conditioners” (inclusive).

The Table numbering structure also follows these letter designations for the appliance sections they appear in (e.g., all tables for Water Heaters are labeled with the letter “F”).

This letter designation structure is being expanded to provide clarity among Power Supplies, Consumer Audio and Video Equipment, and Battery Charger Systems. Formerly, both Power Supplies and Consumer Audio and Video Equipment were found in the same letter section, “(u).” Battery Charger Systems is a new section letter. This proposal is maintaining Power Supplies in “(u),” moving all language related solely to Consumer Audio and Video to “(v),” and placing Battery Charger Systems in “(w).” The purpose and rationale of these changes are to provide clarity, and by placing each appliance in its own section.

There are two tables found in the Regulations that are not unique to specific appliances. These were formerly “Table V – Data Submittal Requirements” and “Table W – Requirements for Marking of Federally-Regulated Commercial and Industrial Equipment.” This proposal changes these tables, respectively, to “Table X” (formerly “Table V”) and “Table Y” (formerly “Table W”). Without renaming these tables with new letter designations, it could appear to readers of these Regulations that “Table V – Data Submittal Requirements” applied only to Consumer Audio and Video and that “Table W – Requirements for Marking of Federally-Regulated Commercial and Industrial Equipment” applied only to Battery Charger Systems.

Purpose and Rationale: Making these changes will ensure internal consistency within the Regulations.

Necessity: To provide needed clarity.

Section 1606. TABLE X — “Data Submittal Requirements”

Numerous changes are being proposed for the manufacturers’ “Data Submittal Requirements” shown in the newly named “Table X” (formerly “Table V”) in Section 1606(a). These changes are described individually below:

Section “A”, “Self-contained Commercial Refrigerators with doors, Self-contained Commercial Refrigerator-Freezers with doors, Self-contained Commercial Freezers with doors, Self-contained Commercial Refrigerators specifically designed for display and sale of bottled or canned beverages without doors.”

1. Change Required Information “Type” designation: adding “refrigerator with self-condensing unit designed for pull-down temperature applications.”

Purpose and Rationale: As shown in Section 1605.1(a)(2), Table A-4, this new designation has a specific federal standard taking effect January 1, 2010. Adding

this designation to the other included choices will enable manufacturers to provide data for this unique commercial refrigeration appliance.

Necessity: At the present time, there is no format whereby manufacturers can designate this type of commercial refrigerator. The federal standard for this appliance is slightly less stringent than other standards for either solid-door or transparent-door commercial refrigerators. Adding this designation will enable manufacturers to comply when the new standard becomes effective.

2. Change Required Information "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)" designation: (a) adding "incandescent lamps" and (b) deleting the requirement for specifying LPW for "other" types from this data reporting category.

Purpose and Rationale: Adding an illumination type of "incandescent" will allow manufacturers to report this specific type of common illumination. Reference to LPW is being deleted here, as the specific requirement for reporting it appears in the category immediately below, "Efficacy LPW... ."

Necessity: At the present time, there is no format whereby manufacturers can designate "incandescent" as an illumination type for their commercial refrigerators without grouping it in the "other" category which could include dissimilar types of illumination. Including LPW in this category is confusing and redundant.

Section "A", "Automatic Commercial Ice-Makers."

1. Change Required Information "Types of Ice Harvested" designation: adding "crushed."

Purpose and Rationale: Adding this designation to the other included choices will enable manufacturers to provide data for this specific type of ice, which differs from the other two currently reported (cube, flake).

Necessity: At the present time, there is no format whereby manufacturers can designate this type of ice. Allowing the manufacturers to report an additional type of ice will provide more useful and accurate data to purchasers of ice machines.

Section "A", "Water Dispensers."

1. Change Required Information "Cooling Capacity (gallons/hour)" designation: deleting "Yes, no" answers.

Purpose and Rationale: To correct an error. The category designation provides the correct reporting parameter, "gallons/hour."

Necessity: Removing the “Yes, no” answers will eliminate potential confusion regarding whether a “Yes” or “No” response is required or whether the specific gallons per hour (gallons/hour) is required for this field.

Section “A”, “Refrigerators without doors not specifically designed for the display and sale of bottled or canned beverages, Freezers without doors, Walk-in ~~Refrigerators~~Coolers, and Walk-in Freezers.”

1. Change category name, changing the term “Walk-in Refrigerators” to “Walk-in Coolers.”

Purpose and Rationale: Federal standards take effect for walk-in refrigeration as of January 1, 2009. The language found in Section 312 of EISA uses “cooler” rather than “refrigerator.” This change is being made throughout the Regulations.

Necessity: Making this change will use the same terminology as used by the U.S. Department of Energy (U.S. DOE), and will eliminate confusion by the use of different terminology to reference an appliance that will become federally regulated next year.

Section “A”, “Refrigerated Bottled or Canned Beverage Vending Machines.”

1. Change Required Information “Type of Illumination” designation: adding “light emitting diodes (LEDs)” as a Permissible Answer.

Purpose and Rationale: Adding this designation to the other included choices will enable manufacturers to provide data for this specific type of illumination, which differs from the other available type.

Necessity: At the present time, there is no format whereby manufacturers can designate this type of illumination. Allowing the manufacturers to report an additional type of illumination will provide more useful and accurate data to purchasers of vending machines.

“Section C,” “All Central Air Conditioners and Central Air-Conditioning Heat Pumps.”

1. Add Required Information “Vertical Air Conditioner (for single package models only) (required on or after January 1, 2010)” designation with a “Permissible Answer” of “Yes” or “No.”

Purpose and Rationale: As shown in Section 1605.1(c)(1), Table C-6, this new type of central air conditioner has a different federal standard taking effect January 1, 2010. Adding this data parameter will enable manufacturers to provide data for this central air conditioner type.

Necessity: At the present time, there is no format whereby manufacturers can designate this type of central air conditioner. Adding this data parameter will enable manufacturers to comply when the new standard becomes effective.

“Section C,” “Air-Cooled, Single Package CAC < 65,000 Btu/hour and Air-Cooled, Split System CAC < 65,000 Btu/hour” AND “Air-Source, Single Package HP < 65,000 Btu/hour and Air-Source Split System HP < 65,000 Btu/hour.”

1. Change Required Information “Space-Constrained Product” designation from “Yes” or “No” to specific types of Space-Constrained Products.

Purpose and Rationale: “Permissible Answers” will be “space-constrained,” “through-the-wall,” “small duct, high velocity,” and “not space-constrained.” As shown in Section 1605.1(c)(1), Table C-6, each of these types of central air conditioners has a different federal standard which took effect January 23, 2006. Expanding the allowable answers for this data parameter will enable manufacturers to designate their specific central air conditioner type, and allow the Energy Commission’s Appliance Database to validate each type properly.

Necessity: At the present time, there is no format whereby manufacturers can designate these type of central air conditioners. Adding this data parameter will enable manufacturers to properly designate their type of appliance. Allowing the manufacturers to specify these types of air conditioners will also provide more useful data to purchasers.

“Section C,” “Air-Source, Single Package HP Heat Pumps < 65,000 Btu/hour and Air-Source Split System HP Heat Pumps < 65,000 Btu/hour;” AND “Air-Source, Single Package HP Heat Pumps ≥ 65,000 Btu/hour and < 240,000 Btu/hour; and Air-Source, Split-System HP Heat Pumps ≥ 65,000 and < 240,000 Btu/hour;” AND “Water-Source, Single Package HP Heat Pumps < 240,000 Btu/hour and Water-Source Split System HP Heat Pumps < 240,000 Btu/hour;” AND “Ground Water-Source, Single Package HP Heat Pumps (< 240,000 Btu/hour except as noted) and Ground Water-Source Split System HP Heat Pumps (< 240,000 Btu/hour except as noted);” AND “Ground-Source, Closed-Loop, Single Package HP Heat Pumps and Ground-Source, Closed-Loop, Split System HP Heat Pumps.”

1. Change category names, changing the term “HP” to “Heat Pumps” wherever it appears.

Purpose and Rationale: The acronym “HP” is being defined as “Horsepower” as part of this rulemaking. (see Section 1602(a)).

Necessity: Making this change will eliminate confusion and specify that this category applies to heat pumps, not horsepower.

“Section D,” “Ceiling Fans, Except Low-Profile Ceiling Fans.”

1. Add “Required Information” fields for
 - a. Fan speed controls separate from light controls
 - b. Adjustable speed controls
 - c. Reversible Fan Action capableeach with its own applicable “Permissible Answers.”

Purpose and Rationale: Ceiling Fans are now federally regulated. These fields are now part of the federal test method.

Necessity: Adding these fields allows for collection of data under the federal test method and will enable manufacturers to comply with the federal standards already in effect.

“Section D,” “Ceiling Fan Light Kits.”

1. Add data collection for newly regulated appliance.

Purpose and Rationale: Ceiling Fan Light Kits are now federally regulated, with a federal test method.

Necessity: At the present time, there is no format whereby manufacturers can certify this type of appliance. Adding these fields allows for collection of data under the federal test method and will enable manufacturers to comply with the federal standards already in effect.

“Section D,” “Dehumidifiers.”

1. Add data collection for newly regulated appliance.

Purpose and Rationale: Dehumidifiers are now federally regulated, with a federal test method.

Necessity: At the present time, there is no format whereby manufacturers can certify this type of appliance. Adding these fields allows for collection of data under the federal test method and will enable manufacturers to comply with the federal standards already in effect.

“Section D,” “All Space Heaters.”

1. Change Required Information “Energy Source” designation: adding “electricity (electric residential boilers only)” as a Permissible Answer.

Purpose and Rationale: As of September 1, 2012, there is a federal design standard that requires small hot water boilers to provide an automatic means for adjusting temperature. This requirement includes electric boilers. Adding this additional ‘permissible answer’ will enable manufacturers to provide data for this boiler type.

Necessity: At the present time, there is no format whereby manufacturers can designate this type of boiler. Adding this data parameter will enable manufacturers to comply when the new standard becomes effective.

“Section E,” “Duct Furnaces and Unit Heater.”

1. Change Required Information for both “Power Venting” and “Automatic Flue Damper,” removing the restriction that these fields only apply to natural gas models.

Purpose and Rationale: As of August 8, 2008, there is a federal design standard for unit heaters (See Section 1605.1(e)(4)). Amending these two fields will enable manufacturers to provide this data.

Necessity: At the present time, there is a restriction on both of these fields, limiting responses only to natural gas models. Amending these two fields will enable manufacturers to provide this data and show compliance with federal standards already in effect.

“Section E,” “Boilers.”

1. Add Required Information for “Automatic Means for Adjusting Water Temperature (Small hot water boilers only).”

Purpose and Rationale: As discussed above under “All Space Heaters,” as of September 1, 2012, there is a federal design standard that requires small hot water boilers to provide an automatic means for adjusting temperature. Adding this additional data parameter will enable manufacturers to provide data for this boiler type.

Necessity: At the present time, there is no format whereby manufacturers can provide this data for these boilers. Adding this data parameter will enable manufacturers to comply when the new standard becomes effective.

“Section J,” “Fluorescent Lamp Ballasts.”

1. Change Required Information “Type of Lamp” designation: adding “F34T12,” “F96T12/ES,” and “F96T12HO/ES” as Permissible Answers.

Purpose and Rationale: Federal standards for these types of fluorescent lamp ballasts become effective on various dates in 2009 and 2010. Adding these additional ‘permissible answers’ will enable manufacturers to provide data for fluorescent lamp ballasts operating these lamp types.

Necessity: At the present time, there is no format whereby manufacturers can designate these fluorescent lamp ballasts that operate these types of lamps. Adding this data parameter will enable manufacturers to comply when the new standard becomes effective.

“Section K,” “Federally regulated incandescent reflector lamps, and state regulated incandescent reflector lamps.”

1. Move data collection into a separate section from federally regulated general service incandescent lamps.

Purpose and Rationale: Federal and California standards are already reflected in California's Regulations. This re-ordering of data collection for both federal and state regulated incandescent reflector lamps does not change any current reporting requirements, but separates each type of lamp into its own category within Table X.

Necessity: To provide needed clarity.

"Section K," "Federally-regulated Medium Base Compact Fluorescent Lamps," "Federally-Regulated General Service Incandescent Lamps," and "Federally-regulated Candelabra Base and Intermediate Base Lamps."

2. Add data collection for newly federally regulated lamps.

Purpose and Rationale: Federal standards for medium base compact fluorescent lamps took effect on January 8, 2007. Federal standards for general service incandescent lamps, candelabra base, and Intermediate base lamps take effect starting January 1, 2012.

Necessity: At the present time, there is no format whereby manufacturers can certify these types of appliances. Adding these fields allows for collection of data under the federal test method and will enable manufacturers to provide this data and show compliance with federal standards already in effect and those that will become effective in the near future.

"Section M," "Traffic Signal Modules for Vehicle control."

1. Change Required Information fields for both "~~Power Consumption~~Nominal Wattage at 25° C" and "~~Power Consumption~~Maximum Wattage at 74° C."

Purpose and Rationale: As of January 1, 2006, there is a federal standard for traffic signal modules for vehicle control (See Section 1605.1(m)(1) and Table M-1). The federal standards apply to Nominal Wattage 25° C" and to Maximum Wattage at 74° C. These are replacing California's Regulations that set the standards as "Power Consumption" rather than the wattages shown in federal standards and reflected in this proposed change.

Necessity: These changes will update data collection to match federal standards found within these Regulations.

"Section S," "Electric Motors."

1. Change Required Information "Type" "Permissible Answers" field to include new motor types "Design N" and "Other equivalent design."

Purpose and Rationale: The federal definition of “electric motor” states “Has performance in accordance with NEMA Design A (MG1) or B (MG1) characteristics, or equivalent designs such as IEC Design N (IEC); ...” (See 10 CFR 431.12, “electric motor” definition at (1)(vi). “Design N” and “Other equivalent design” are added in order to more closely align the text in our Regulations with that of 10 CFR 431.

Necessity: “Design N” and “Other equivalent design” are being added to the “Type” field under ‘Permissible Answer’ to allow manufacturers to provide data that is as specified in the federal definition.

2. Change Required Information “Type” “Permissible Answers” field to include new motor types “General Purpose subtype I,” “General purpose subtype II,” “Fire pump motor,” and “NEMA Design B general purpose.”

Purpose and Rationale: Federal standards take effect for the following types of motors on December 19, 2010:

- General Purpose subtype I
- General purpose subtype II
- Fire pump motor
- NEMA Design B general purpose

Adding these types into data collection will enable the Energy Commission to have data collection parameters in place for when the new federal standards take effect.

Necessity: These changes will update data collection to match federal standards found within these Regulations and taking effect on December 19, 2010. At the present time, there is no format whereby manufacturers can certify this type of appliance. Adding these fields allows for collection of data under the federal test method and will enable manufacturers to comply when the standard becomes effective.

3. Change Required Information “Type” “Permissible Answers” field to include an entry for “Multiple-Designs (two or more of NEMA Design A, NEMA Design B, IEC Design N, other equivalent design).”

Purpose and Rationale: The fields that define a ‘unique’ motor model are (a) manufacturer name, (b), brand name, and (c) model. These fields were agreed to in earlier negotiations with the National Electrical Manufacturers Association (NEMA). Adding additional fields to define a unique model are not practical for this appliance. A NEMA member manufacturer has requested that we provide them with the capability of submitting motor models that incorporate multiple motor design types; adding “Multiple Designs” meets this request without changing how a unique model is defined.

Necessity: Manufacturers not wishing to designate their models as a multiple-design would not be required to do so. This “Permissible Answer” is being expanded to allow for a manufacturer to provide this data only if they would like to do so.

4. Change Required Information “Voltage” “Permissible Answers” field to include an entry for “Multi-voltage (includes 230 or 460).”

Purpose and Rationale: The fields that define a ‘unique’ motor model are (a) manufacturer name, (b), brand name, and (c) model. These fields were agreed to in earlier negotiations with the National Electrical Manufacturers Association (NEMA). Adding additional fields to define a unique model are not practical for this appliance. A NEMA member manufacturer has requested that we provide them with the capability of submitting motor models that incorporate multi-voltages to allow for them to submit data for models where “any motor voltage is possible”; adding “Multi-voltage” meets this request without changing how a unique model is defined.

Necessity: Manufacturers not wishing to designate their models as a multi-voltage would not be required to do so. This “Permissible Answer” is being expanded to allow for a manufacturer to provide this data only if they would like to do so.

5. Change “Permissible Answers” field to for input to correctly reflect the acronym for “kilowatts” as “kW” and not “kw.”

Purpose and Rationale: To correct a typographical error.

Necessity: To correct a typographical error.

“Section T,” “Distribution Transformers.”

1. Change Required Information to conform with federal requirements.

Purpose and Rationale: Federal standards became effective for low-voltage dry-type distribution transformers on January 1, 2007; they take effect for medium voltage dry-type distribution transformers and for liquid-immersed distribution transformers on January 1, 2010. A field is being added to specify which of the three types is being certified, and other changes are being made to represent the changes from state-regulated data collection to federally regulated data collection.

Necessity: Each of these changes will allow manufacturers to provide data that is in compliance with the federal test method. At the present time, there is no format whereby manufacturers can certify these types of transformers. Adding these fields allows for collection of data under the federal test method and will enable manufacturers to provide this data and show compliance with federal standards already in effect and those that will become effective in the near future

“Section U,” “Consumer Audio and Video Equipment” and “Section V,” Consumer Audio and Video Equipment.

1. Remove all data collection parameters from “Section U” for “Consumer Audio and Video Equipment” and move to “Section V” to conform with other reorganizing that has been incorporated into the Regulations and explained above.

Purpose and Rationale: Split out requirements for Consumer Audio & Video Equipment from being included in the same subsection as External Power Supplies (EPS) (currently subsection “(u)”). [This will show EPS as subsection “(u)” and Consumer Audio & Video Equipment as subsection “(v)” in sections 1602, 1604, 1605.1, 1605.2, 1605.3, and Table X.]

Necessity: To provide needed clarity.

REASONS FOR MANDATING SPECIFIC ACTIONS, PROCEDURES, TECHNOLOGIES, OR EQUIPMENT; CONSIDERATION OF PERFORMANCE STANDARDS

Residential pool pump standards require two speed pumps because the Energy Commission has determined that single speed pumps cannot meet the efficiencies available using two speed pumps. Two speed pump controllers are necessary to obtain the efficiencies of two speed pumps.

Metal halide luminaire standards consist of both prescriptive and performance standards. Metal halide luminaires must either be 90 to 92 percent efficient or be 88 percent efficient and include specified design criteria. The reason for providing a prescriptive alternative to the performance standards is to provide greater flexibility to the manufacturers.

STUDIES, REPORTS, AND DOCUMENTS RELIED UPON

California Energy Commission Staff Report, 2008 Appliance Efficiency Rulemaking, Phase I, Parts B, August 2008 CEC-400-2008-023.

Pat Eilert, Gary Fernstrom, Ed Elliot, “Proposal Information Template for: Pool and Spa Measure Revisions,” January 30, 2008

Pat Eilert, Gary Fernstrom, Ed Elliot, “Proposal Information Template for: Pool and Spa Measure Revisions,” May 9, 2008

Pat Eilert, Gary Fernstrom, Ed Elliot, “Proposal Information Template for: Battery Charger Systems,” January 30, 2008

Pat Eilert, Gary Fernstrom, Ed Elliot, “Proposal Information Template for: Battery Charger Systems,” April 7, 2008

Pat Eilert, Gary Fernstrom, Ed Elliot, "Analysis of Standards Options for High-Intensity Discharge Lighting Fixtures," January 30, 2008

Pat Eilert, Gary Fernstrom, Ed Elliot, "Analysis of Standards Options for High-Intensity Discharge Lighting Fixtures," April 3, 2008

REASONABLE ALTERNATIVES, IF ANY, TO THE PROPOSED AMENDMENTS THAT WERE CONSIDERED, INCLUDING ALTERNATIVES TO LESSEN IMPACTS ON SMALL BUSINESS, AND REASONS FOR REJECTING THEM

The Energy Commission is proposing new minimum efficiency standards and amendments to the existing Appliance Efficiency Regulations. No reasonable alternatives have been identified or deemed necessary that would lessen impacts on small businesses. The basis for this determination is supported by the findings in the document titled "*Energy Commission Staff Report, 2008 Appliance Efficiency Rulemaking, Phase I, Part B*, August 2008 CEC-400-2008-023".

FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE RELIED UPON TO SUPPORT THE INITIAL DETERMINATION, IN THE NOTICE OF PROPOSED ACTION THAT THE REGULATION WILL NOT HAVE A SIGNIFICANT ADVERSE ECONOMIC IMPACT ON BUSINESSES.

The basis for this determination is supported by the findings in the document titled "*California Energy Commission Staff Report, 2008 Appliance Efficiency Rulemaking, Phase I, Part B*, August 2008 CEC-400-2008-023".

EFFORTS TO AVOID UNNECESSARY DUPLICATION OR CONFLICT WITH THE CODE OF FEDERAL REGULATIONS

The proposed regulations neither duplicate nor conflict with any federal regulation.

There are extensive federal regulations on appliance efficiency regulations adopted by the Department of Energy that preempt the Energy Commission's appliance efficiency regulations. (See 42 U.S.C. § 6291 et seq.; 10 CFR Parts 430, 431.) However, the proposed amendments affect only those appliances that are not covered by these [preempted federal regulations], except for minor clarifications and corrections that do not duplicate or conflict with any federal regulation.

Battery charger systems test procedure regulation was necessary to include active mode with maintenance and standby modes, and to expand the scope of products to include motive and industrial sized battery chargers. The federal test method does not include these aspects of battery chargers systems.