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**CALIFORNIA ENERGY COMMISSION**

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**INITIAL STATEMENT OF REASONS**  
**PROPOSED AMENDMENTS TO THE APPLIANCE EFFICIENCY REGULATIONS**  
California Code of Regulations, Title 20, Sections 1601 through 1609

California Energy Commission  
Docket No. 2018-AAER-10  
March 30, 2018

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## I. INTRODUCTION

Pursuant to Public Resources Code sections 25213, 25218(e), and 25402(c), the California Energy Commission proposes to adopt amendments to California Code of Regulations, title 20, sections 1601 to 1609 (the Appliance Efficiency Regulations). These regulations contain definitions, test procedures, efficiency and design standards, and marking requirements for both federally regulated and state-regulated appliances. The Appliance Efficiency Regulations require appliance manufacturers to certify to the Energy Commission that their products meet all applicable state and federal laws concerning testing, efficiency and design standards, and marking requirements before their products can be included in the Energy Commission's Modern Appliance Efficiency Database System (MAEDbS) of approved appliances sold or offered for sale in California.

The Appliance Efficiency Regulations contain mandatory requirements for both federally regulated and state-regulated appliances to provide manufacturers, distributors, retailers, and consumers of appliances with a clear and comprehensive set of requirements in a single location. Because the Appliance Efficiency Regulations include federal definitions, federal standards, and federal testing and marking requirements, when federal law changes, it is necessary to update the Appliance Efficiency Regulations to reflect these changes and remove outdated federal regulations.

The Energy Commission initiates this rulemaking to include current mandatory federal requirements in the Appliance Efficiency Regulations. These changes include applicable federal appliance efficiency standards and test procedures, and new or updated federal definitions. These federal standards and test procedures either preempt inconsistent state standards or state test procedures as a matter of law, and are therefore effective whether they are included in the Appliance Efficiency Regulations or not. The changes to reflect current federal laws are identified in Table 1, below.

This rulemaking also proposes substantive changes to the state-specific requirements in the Appliance Efficiency Regulations. The substantive changes include removal of state efficiency standards and state test procedures that are preempted by federal law, changes to state test procedures for certain appliances to align with federal test procedures even though there is no preemption, and changes to other state-specific requirements, such as marking and reporting, for certain appliances. These changes are identified in Table 2.1. The substantive changes also include updates to the appliance certification procedures and data submittal requirements for inclusion of appliances in the Energy Commission's MAEDbS. These changes are identified in Tables 2.2 and 2.3, respectively, below.

Finally, this rulemaking proposes nonsubstantive changes to correct typographical errors, clarify ambiguous language, and use consistent terms and format in the regulatory text, and also to

remove federal language that has been superseded by more recent federal standards or federal test procedures. These changes do not impose, create, or modify any existing federal or state requirement in the Appliance Efficiency Regulations. These nonsubstantive changes are identified in Table 3, below.

None of the changes proposed in this rulemaking increase or decrease expected efficiency requirements for any appliance, nor do they increase the underlying testing burdens for manufacturers of regulated appliances.

## **II. STATEMENT OF THE PROBLEM THE AGENCY INTENDS TO ADDRESS AND ANTICIPATED BENEFITS (Gov. Code, § 11346.2(b)(1))**

### **A. Changes to Reflect Current Federal Law**

The Appliance Efficiency Regulations contain federally mandated requirements set forth in the Energy Policy and Conservation Act (EPCA), codified at 42 U.S.C. section 6291 *et seq.*, and in the federal regulations adopted by the U.S. Department of Energy (U.S. DOE) in 10 C.F.R. sections 430 and 431 and by the Federal Trade Commission in 16 C.F.R. section 305.

EPCA provides that no state regulation concerning energy efficiency, energy use, or water use shall be effective with respect to a federally covered product before and after a federal standard established for such product becomes effective, unless an exception to preemption applies. (See 42 U.S.C. §§ 6297(b) & (c), 6316 and 10 C.F.R. § 430.33(a).) EPCA also supersedes any state regulation that requires testing or use of any measure of energy consumption, water use, or energy descriptor in any manner other than that provided under EPCA. (42 U.S.C. §§ 6297(a)(1)(A), and 6316.)

Many of the changes proposed in this rulemaking are to reflect current federal law. Because regulated parties must comply with federal law, regardless of California's regulations, these changes do not materially alter any requirement, right, responsibility, condition, prescription or other regulatory element of any California Code of Regulations. The purpose for reciting federal law in the Appliance Efficiency Regulations is to provide manufacturers, retailers, and consumers of appliances with a clear and comprehensive set of federal and state regulations in a single location.

California Code of Regulations, title 20, section 1605.1, contains the federal standards for federally regulated consumer products and federally regulated commercial and industrial equipment. Section 1605(a)(2) provides for the preservation of each of the federal efficiency standards in section 1605.1 as California state law applicable to the sale and offering for sale of appliances in California, if the corresponding federal standard is repealed or becomes inoperable, inapplicable, or otherwise invalid as federal law. This means that immediately upon the effect of such federal repeal or invalidity, the standard becomes effective as California state law, and no

appliance previously covered by the federal standard would be permitted to be sold or offered for sale in the state unless the appliance complies with the requirements in the Appliance Efficiency Regulations.

This rulemaking makes no changes to section 1605(a)(2) and leaves this provision in place. While the proposed changes reflect updates to federal regulations, these updates would immediately become California state law if the federal standard is repealed or becomes invalid. For example, if DOE repeals the federal energy efficiency standards for federally regulated battery chargers — thereby removing such products from the scope of federal preemption—those previous federal standards for battery chargers would continue as California state law until the Energy Commission took further action to amend the regulations.

It is important that the federal requirements contained in the Appliance Efficiency Regulations properly and accurately reflect current federal law. Many of the existing federal requirements in the Appliance Efficiency Regulations are outdated or inaccurate. This can lead to unnecessary confusion and regulatory burdens which this rulemaking aims to reduce.

The proposed changes will benefit manufacturers by providing both federal and state appliance efficiency regulations in one location. This rulemaking will provide regulated parties and consumers more clarity, accessibility, and regulatory certainty with respect to the federal regulatory language in the Appliance Efficiency Regulations.

## **B. Substantive Changes to State-Specific Regulations**

### **1. Removal of State Standards and State Test Procedures Preempted by Federal Law**

The Appliance Efficiency Regulations contain state-specific requirements. Specifically, California Code of Regulations, title 20, section 1605.3, sets forth the energy and water efficiency standards that are exclusively California standards (hereinafter “state standards” for state-regulated appliances). In addition, section 1604 includes California-specific test procedures (hereinafter “state test procedure” for state-regulated appliances) in addition to federal test procedures. These sections of the Appliance Efficiency Regulations contain state test procedures and state standards that are no longer in effect because federal test procedures or standards have superseded these state requirements. This has led to state requirements that are outdated and inaccurate. Keeping these outdated state test procedures and state standards creates confusion and uncertainty to regulated parties. The proposed changes will benefit manufacturers and other regulated parties by providing them correct and current representation of the state regulations and thereby will provide greater clarity and regulatory certainty.

### **2. Changes to State Test Procedures for Certain State-Regulated Appliances**

California Code of Regulations, title 20, section 1604, includes both state test procedures and federal test procedures. Some of the state test procedures apply to subsets of an appliance type

that do not have a federal test procedure; therefore the state test procedure is not preempted. For example, there are federally regulated consumer battery chargers and state-regulated non-consumer small battery charger systems, which have a federal test procedure and state test procedure, respectively. In some circumstances, having two different test procedures is not necessary and is burdensome to appliance manufacturers. The proposed substantive changes align state test procedures with federal test procedures where appropriate, or remove state test procedures when testing is unnecessary. This rulemaking will benefit appliance manufacturers by reducing industry testing burdens and costs.

### 3. Changes to Reporting and Marking Requirements

California Code of Regulations, title 20, section 1606(j), requires manufacturers of portable luminaires to report to the Energy Commission the annual unit sales of portable non-screw based halogen luminaires sold in California by major product class. The Energy Commission no longer finds this sales data information to be useful and has not identified any concerns about increased sales in these products to justify continuing to collect this information. The proposed changes would remove this reporting requirement to reduce manufacturer burden in having to report information that has not proven useful to the Energy Commission.

California Code of Regulations, title 20, section 1606, requires appliance manufacturers to certify to the Energy Commission that their products meet all applicable federal and state efficiency requirements before their products can be included in the Energy Commission's database of approved appliances and sold or offered for sale in the state. Currently, section 1606 exempts walk-in coolers and freezers and low-profile ceiling fans, among other appliances, from having to certify to the Energy Commission, because there were either no federal efficiency standards for these products or the efficiency standards were design standards that would be difficult to report to the Energy Commission. Today, federal efficiency standards have been established for walk-in coolers and freezers and low-profile ceiling fans. These are performance standards, making certification to the Energy Commission necessary to verify compliance with the applicable standards and to ensure that only compliant products are sold or offered for sale in California. In addition, there are now federal efficiency standards for a new product category, pumps, which were not previously regulated. The proposed changes include new reporting requirements for walk-in coolers and walk-in freezers, low-profile ceiling fans, and pumps to verify that these products comply with the standards. The proposed changes also remove the exceptions from reporting for these products. Reporting efficiency and energy consumption information about these products to the Energy Commission will help the Commission to ensure compliance with the underlying federal efficiency standards.

Under California Code of Regulations, title 20, section 1607, distribution transformers must be labeled according to NEMA Standard TP3-2000. This industry labeling program is no longer maintained, as it has been superseded by updated federal efficiency standards for distribution



transformers, which took effect on January 1, 2016, and which eliminate the need for the NEMA Standard TP3-2000 labeling program to distinguish efficient distribution transformers from inefficient ones. Instead, the Energy Commission proposes to require a simple “DOE compliant” or equivalent mark on the distribution transformer to help consumers determine if their distribution transformer is efficient and complies with the current federal efficiency standards. Making this change will maintain the benefits of a mark or label to identify efficient distribution transformers while decreasing the cost of industry having to comply with a separate, out-of-date labeling program.

#### 4. Changes to the Appliance Certification Procedures

California Code of Regulations, title 20, section 1606, requires appliance manufacturers to certify to the Energy Commission that their products meet all applicable federal and state efficiency requirements before their products can be included in the Energy Commission’s database of approved appliances. In 2015, the Energy Commission implemented the Modern Appliance Efficiency Database System, also known as MAEDbS, which manufacturers must use to electronically certify to the Energy Commission that their appliances comply with all the applicable state and federal standards. The procedures for using MAEDbS are not currently reflected in the existing regulations. In addition, the existing regulations contain cumbersome procedures for communicating with regulated parties. The current regulations include appliance certification procedures that are burdensome to manufacturers, test labs, third party certifiers, and the Energy Commission. The proposed changes reflect the current procedures for utilizing MAEDbS as well as facilitate and accelerate communications between the Energy Commission and regulated parties. Updating section 1606 will remove unnecessary and burdensome certification procedures, and will assist with overall compliance with the Appliance Efficiency Regulations.

#### 5. Changes to the Appliance Data Submittal Requirements

California Code of Regulations, title 20, section 1606, Table X, sets forth the specific data that manufacturers or third party certifiers must submit before their products can be listed in the Energy Commission’s MAEDbS of approved appliances. The U.S. DOE’s adoption of new and updated federal test procedures and standards has resulted in incomplete and outdated appliance data submittal requirements in the Appliance Efficiency Regulations. The proposed changes align appliance data submittal requirements with updates to both federal and state regulations to prevent the submittal of incorrect or unnecessary data to the Energy Commission. These changes will help the Energy Commission and consumers verify compliance with applicable federal and state appliance efficiency standards.

### **C. Nonsubstantive Changes to Correct Typographical Errors, Improve Clarity and Maintain Consistency**

The Appliance Efficiency Regulations contain typographical errors, unintentional ambiguous language, and inconsistent terms and format. Given the complex and technical nature of appliance efficiency regulations, some typographical errors and ambiguities are not identified during initial rulemaking. This can lead to unnecessary confusion and regulatory burdens, which this rulemaking aims to resolve.

The proposed changes correct typographical errors, clarify ambiguous language, and maintain consistent terms and format throughout the regulations. In addition, to improve the clarity of the regulations, the proposed changes delete federal language that has been superseded by more recent federal standards or federal test procedures. These nonsubstantive changes do not impose, create, or modify any existing requirement, but rather will provide greater clarity and accessibility to regulated parties. Improved clarity in the regulations improves compliance and ensures consumers receive efficiency benefits from the underlying regulations.

### **III. STATEMENT OF THE SPECIFIC PURPOSE AND NECESSITY OF EACH AMENDMENT (Gov. Code, § 11346.2(b)(1))**

#### **A. Changes to Reflect Current Federal Law**

The purpose of this portion of the rulemaking is to amend the Appliance Efficiency Regulations to include current federal law. The proposed changes listed in Table 1 are necessary to accurately reflect current mandatory federal requirements in the Appliance Efficiency.

Pursuant to Government Code section 11346.2(c), a state agency that adopts or amends a regulation mandated by federal law or regulations, the provisions of which are identical to a previously adopted or amended federal regulation, shall be deemed to have complied with subdivision (b) if a statement to the effect that a federally mandated regulation or amendment to a regulation is being proposed, together with a citation to where an explanation of the regulation can be found, is included in the notice of proposed adoption or amendment prepared pursuant to Section 11346.5.

Because this portion of the rulemaking proposes to adopt federally mandated regulations, the Energy Commission's obligation to provide the specific purpose and the necessity for each proposed change, as required under Government Code section 11346.2(b), is deemed met. In accordance with Government Code section 11346.2(c), Table 1 identifies the proposed changes to the Appliance Efficiency Regulations to reflect current federal definitions, test procedures, and standards, as well as the corresponding citation to the federal regulation where an explanation of the federal requirement can be found.

**Table1. Changes to Reflect Current Federal Law<sup>1</sup>**

| <b>No.</b> | <b>California Code of Regulations, Title 20</b>               | <b>Proposed Change</b>  | <b>Code of Federal Regulations (C.F.R.)</b> |
|------------|---|---|---|
| 1.         | §1602(a)<br>“Ballast efficacy factor”                         | Amend definition to match federal definition  | 10 C.F.R. §430.2                            |
| 2.         | §1602(a)<br>“Btu”   | Amend definition to match federal definition and include “(1°F)” to the federal definition to specify the symbol for one degree Fahrenheit  | 10 C.F.R. §430.2                            |
| 3.         | §1602(a)<br>“Compact fluorescent lamp (CFL)”                  | Add federal definition  | 10 C.F.R. §430.2                            |
| 4.         | §1602(a)<br>“Distributor”                                     | Add federal definition  | 10 C.F.R. §430.2                            |
| 5.         | §1602(a)<br>“EPCA”  | Add federal definition  | 10 CFR §431.442                             |
| 6.         | §1602(a)<br>“Mercury vapor lamp”                              | Amend definition to match federal definition and move the definition from section 1602(j), which contains definitions relating to fluorescent lamp ballasts, to 1602(a) to clarify that this term applies to more than on appliance | 10 C.F.R. §431.282                          |
| 7.         | §1602(a)<br>“Mercury vapor lamp ballast”                      | Amend definition to match federal definition and move the definition from section 1602(j), which contains definitions relating to fluorescent lamp ballasts, to 1602(a) to clarify that this term applies to more than on appliance | 10 C.F.R. §431.282                          |
| 8.         | §1602(a)<br>“Standby mode”                                    | Add the word “or” to match federal definition   | 10 C.F.R. §430.2                            |
| 9.         | §1602(b)<br>“All-refrigerator”                                | Amend definition to match federal definition  | 10 C.F.R. §430.2                            |
| 10.        | §1602(b)<br>“Anti-sweat heater”                               | Amend definition to match federal definition  | 10 C.F.R. §430, Appendix A to Subpart B     |
| 11.        | §1602(b)<br>“Anti-sweat heater switch”                        | Add federal definition  | 10 C.F.R §430, Appendix A to Subpart B      |
| 12.        | §1602(b)<br>“Automatic defrost system” or “Automatic defrost” | Amend definition to match federal definition  | 10 C.F.R. §430, Appendix A to Subpart B     |

<sup>1</sup> See Table 3 for changes to add the term “of this Article”, replace the term “database” with “MAEDbS”, and all other nonsubstantive changes.

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| 13. | §1602(b)<br>“Basic Model” of<br>federally<br>regulated<br>commercial<br>refrigeration<br>equipment   | Add federal definition  | 10 C.F.R. §431.62     |
| 14. | §1602(b)<br>“Basic Model” of<br>a federally<br>regulated walk-in<br>cooler or walk-in<br>freezer that is<br>commercial or<br>industrial<br>equipment | Add federal definition  | 10 C.F.R.<br>§431.302 |
| 15. | §1602(b)<br>“Bottled or<br>canned beverage”  | Add federal definition  | 10 C.F.R.<br>§431.292 |
| 16. | §1602(b)<br>“Built-in compact<br>cooler”   | Add federal definition  | 10 C.F.R. §430.2      |
| 17. | §1602(b)<br>“Built-in cooler”  | Add federal definition  | 10 C.F.R. §430.2      |
| 18. | §1602(b)<br>“Class A”  | Amend definition to match federal definition  | 10 C.F.R.<br>§431.292 |
| 19. | §1602(b)<br>“Combination A”  | Add federal definition  | 10 C.F.R.<br>§431.292 |
| 20. | §1602(b)<br>“Combination B”  | Add federal definition  | 10 C.F.R.<br>§431.292 |
| 21. | §1602(b)<br>“Combination<br>cooler<br>refrigeration<br>product”  | Add federal definition  | 10 C.F.R. §430.2      |
| 22. | §1602(b)<br>“Combination<br>vending<br>machine”  | Amend definition to match federal definition  | 10 C.F.R.<br>§431.292 |
| 23. | §1602(b)<br>“Consumer<br>refrigeration<br>product”   | Add federal definition  | 10 C.F.R. §430.2      |
| 24. | §1602(b)<br>“Compact<br>freezer”   | Amend the definition to match the federal definition<br>and include reference to the applicable test procedure<br>to clarify the definition | 10 C.F.R. §430.2      |
| 25. | §1602(b)<br>“Compact<br>refrigerator”  | Amend the definition to match the federal definition<br>and include reference to the applicable test procedure<br>to clarify the definition | 10 C.F.R. §430.2      |
| 26. | §1602(b)   | Amend the definition to match the federal definition  | 10 C.F.R. §430.2      |

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|     | “Compact refrigerator-freezer”  |  |   |
| 27. | §1602(b)<br>“Cooler”  | Add federal definition                       | 10 C.F.R. §430.2                        |
| 28. | §1602(b)<br>“Cooler-all-refrigerator”                                 | Add federal definition                       | 10 C.F.R. §430.2                        |
| 29. | §1602(b)<br>“Cooler compartment”                                      | Add federal definition                       | 10 C.F.R. §430, Appendix A to Subpart B |
| 30. | §1602(b)<br>“Cooler-freezer”  | Add federal definition                       | 10 C.F.R. §430.2                        |
| 31. | §1602(b)<br>“Cooler-refrigerator”                                     | Add federal definition                       | 10 C.F.R. §430.2                        |
| 32. | §1602(b)<br>“Cooler-refrigerator-freezer”                             | Add federal definition                       | 10 C.F.R. §430.2                        |
| 33. | §1602(b)<br>“Door of a walk-in cooler or walk-in freezer”             | Add federal definition                       | 10 C.F.R. §431.302                      |
| 34. | §1602(b)<br>“Door angle”  | Add federal definition                       | 10 C.F.R. §431.62                       |
| 35. | §1602(b)<br>“Envelope of a walk-in cooler or walk-in freezer”         | Amend definition to match federal definition | 10 C.F.R. §431.302                      |
| 36. | §1602(b)<br>“Freezer” that is a federally regulated consumer product  | Add federal definition                       | 10 C.F.R. §430.2                        |
| 37. | §1602(b)<br>“Miscellaneous refrigeration product”                     | Add federal definition                       | 10 C.F.R. §430.2                        |
| 38. | §1602(b)<br>“Refrigerated bottled or canned beverage vending machine” | Amend definition to match federal definition | 10 C.F.R. §431.292                      |
| 39. | §1602(b)<br>“Refrigerator”  | Amend definition to match federal definition | 10 C.F.R. §430.2                        |
| 40. | §1602(b)<br>“Refrigerator-freezer”                                    | Amend definition to match federal definition | 10 C.F.R. §430.2                        |
| 41. | §1602(b)  | Add federal definition                       | 10 C.F.R. §430,                         |

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|     | “Special compartment” that is part of a federally regulated freezer consumer product  |  | Appendix B to Subpart B                                |
| 42. | §1602(b)<br>“Special compartment” that is part of a federally regulated refrigerator or refrigerator-freezer consumer product   | Add federal definition                       | 10 C.F.R. §430, Appendix A to Subpart B                |
| 43. | §1602(b)<br>“Through-the-door ice/water dispenser”  | Add federal definition                       | 10 C.F.R. §430, Appendix A and Appendix B to Subpart B |
| 44. | §1602(b)<br>“Total display area (TDA)”  | Amend definition to match federal definition | 10 C.F.R. §431.66                                      |
| 45. | §1602(c)<br>“Basic model” of federally regulated computer room air conditioners   | Add federal definition                       | 10 C.F.R. §431.92                                      |
| 46. | §1602(c)<br>“Basic model” of federally regulated packaged terminal air conditioner (PTAC) or packaged terminal heat pump (PTHP) | Add federal definition                       | 10 C.F.R. §431.92                                      |
| 47. | §1602(c)<br>“Basic model” of federally regulated single package vertical units  | Add federal definition                       | 10 C.F.R. §431.92                                      |
| 48. | §1602(c)<br>“Basic model” of federally regulated small,   | Add federal definition                       | 10 C.F.R. §431.92                                      |

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|     | large, and very large air-cooled or water-cooled commercial package air conditioning and heating equipment |   |  |
| 49. | §1602(c) “Basic model” of federally regulated small, large, and very large water source heat pump          | Add federal definition  | 10 C.F.R. §431.92  |
| 50. | §1602(c) “Basic model” of federally regulated variable refrigerant flow systems                            | Add federal definition  | 10 C.F.R. §431.92  |
| 51. | §1602(c) “Blower coil indoor unit”   | Add federal definition  | 10 C.F.R. §430, Appendix M to Subpart B                  |
| 52. | §1602(c) “Blower coil system”  | Add federal definition  | 10 C.F.R. §430, Appendix M to Subpart B                  |
| 53. | §1602(c) “Casement-only”   | Amend definition to match federal definition  | 10 C.F.R. §430.2   |
| 54. | §1602(c) “Casement-slider”   | Amend definition to match federal definition  | 10 C.F.R. §430.2   |
| 55. | §1602(c) “Central air conditioner”   | Amend definition to match federal definition and include the phrase “...that is a federally regulated consumer product...” to clarify that this definition only applies to central air conditioners that are consumer products            | 10 C.F.R. §430.2   |
| 56. | §1602(c) “Central air-conditioning heat pump”  | Amend definition to match federal definition and include the phrase “...that is a federally regulated consumer product...” to clarify that this definition only applies to central air-conditioning heat pumps that are consumer products | 10 C.F.R. §430.2   |
| 57. | §1602(c) “Coefficient of Performance (COP)” of federally regulated consumer products                       | Add federal definition, capitalized the “p” in performance to maintain consistency, and add the phrase “...of federally regulated commercial and industrial equipment...” for clarity the scope of the definition                         | 10 C.F.R. §430.23(m) Appendix M to Subpart B of part 430 |

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| 58. | §1602(c)<br>“Commercial package air-conditioning and heating equipment”                                | Add federal definition  | 10 C.F.R. §431.92                       |
| 59. | §1602(c)<br>“Coil-only indoor unit”  | Add federal definition  | 10 C.F.R. §430, Appendix M to Subpart B |
| 60. | §1602(c)<br>“Double-duct air conditioner or heat pump”   | Add federal definition  | 10 C.F.R. §431.92                       |
| 61. | §1602(c)<br>“Ducted system”  | Add federal definition and include the phrase “...of a federally regulated consumer product...” for clarity   | 10 C.F.R. §430, Appendix M to Subpart B |
| 62. | §1602(c)<br>“Energy Efficiency Ratio (EER)”  | Amend definition to match federal definition, capitalize the “e” in “efficiency” and the “r” in “ratio” to maintain consistency, express value in “BTU/hour” instead of “BTU/h” for clarity and to maintain consistency, and include the word “central” before “system” to clarify the definition | 10 C.F.R. §430, Appendix M to Subpart B |
| 63. | §1602(c)<br>“Energy Efficiency Ratio (EER)” of federally regulated commercial and industrial equipment | Add federal definition  | 10 C.F.R. §431.92                       |
| 64. | §1602(c)<br>“Heat pump”  | Amend definition to match federal definition, and include the phrase “...that is a federally regulated consumer product...” to clarify the scope of the definition  | 10 C.F.R. §430, Appendix M to Subpart B |
| 65. | §1602(c)<br>“Heat recovery”  | Amend definition to match federal definition  | 10 C.F.R. §431.92                       |
| 66. | §1602(c)<br>“Heating Seasonal Performance Factor (HSPF)” of a federally regulated consumer product     | Amend definition to match federal definition, capitalize the “s” in “seasonal”, the “p” in “performance”, and the “f” in “factor” to maintain format consistency, and include “...of a federally regulated consumer product...” to clarify the scope of the definition                            | 10 C.F.R. §430, Appendix M to Subpart B |
| 67. | §1602(c)<br>“Heating Seasonal Performance Factor (HSPF)” of  | Add federal definition and include “...of a federally regulated commercial and industrial equipment...” to clarify the scope of the definition  | 10 C.F.R. §431.92                       |



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|     | federally regulated commercial and industrial equipment   |   |   |
| 68. | §1602(c)<br>“Integrated Energy Efficiency Ratio (IEER)”   | Add federal definition  | 10 C.F.R. §431.92                       |
| 69. | §1602(c)<br>“Large commercial package air-conditioning and heating equipment”                   | Add federal definition  | 10 C.F.R. §431.92                       |
| 70. | §1602(c)<br>“Multi-head mini-split system”  | Add federal definition  | 10 C.F.R. §430, Appendix M to Subpart B |
| 71. | §1602(c)<br>“Multiple-circuit (or multi-circuit) system”  | Add federal definition  | 10 C.F.R. §430, Appendix M to Subpart B |
| 72. | §1602(c)<br>“Multiple-split (or multi-split) system”  | Add federal definition  | 10 C.F.R. §430, Appendix M to Subpart B |
| 73. | §1602(c)<br>“Packaged terminal air conditioner”   | Add a hyphen to match federal definition  | 10 C.F.R. §431.92                       |
| 74. | §1602(c)<br>“Room air conditioner”  | Amend definition to match federal definition  | 10 C.F.R. §430.2                        |
| 75. | §1602(c)<br>“Seasonal Energy Efficiency Ratio (SEER)” of a federally regulated consumer product | Amend definition to match federal definition, capitalize the “e” in “energy”, the “e” in “efficiency” and the “r” in “ratio” to maintain format consistency, and add “...of a federally regulated consumer product...” to clarify the scope of the definition | 10 C.F.R. §430, Appendix M to Subpart B |
| 76. | §1602(c)<br>“Seasonal Energy Efficiency Ratio (SEER)” of federally regulated commercial and     | Add federal definition  | 10 C.F.R. §431.92                       |

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|     | industrial equipment  |   |   |
| 77. | §1602(c)<br>“Small commercial package air-conditioning and heating equipment”           | Add federal definition  | 10 C.F.R. §431.92                       |
| 78. | §1602(c)<br>“Small duct, high velocity system”  | Amend definition to match federal definition  | 10 C.F.R. §430, Appendix M to Subpart B |
| 79. | §1602(c)<br>“Split system” of a consumer product  | Add federal definition include “of a consumer product” to clarify the scope of the definition | 10 C.F.R. §430, Appendix M to Subpart B |
| 80. | §1602(c)<br>“Split system” of commercial and industrial equipment                       | Add federal definition and include “...and industrial” to clarify the scope of the definition | 10 C.F.R. §431.92                       |
| 81. | §1602(c)<br>“Through-the-wall central air conditioner”                                  | Add federal definition  | 10 C.F.R. §430.2                        |
| 82. | §1602(c)<br>“Through-the-wall central air conditioning heat pump”                       | Add federal definition  | 10 C.F.R. §430.2                        |
| 83. | §1602(c)<br>“Variable refrigerant flow (VRF) system”                                    | Add federal definition  | 10 C.F.R. §430, Appendix M to Subpart B |
| 84. | §1602(c)<br>“Very large commercial package air-conditioning and heating equipment”      | Add federal definition  | 10 C.F.R. §431.92                       |
| 85. | §1602(c)<br>“Water-source heat pump”  | Amend definition to match federal definition  | 10 C.F.R. §431.92                       |
| 86. | §1602(d)<br>- “Belt-driven ceiling fan”<br>- “Blade span”<br>- “Ceiling fan efficiency” | Add federal definitions   | 10 C.F.R. §430, Appendix U to Subpart B |

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|     | - “Centrifugal ceiling fan”   |                                   |   |
| 87. | §1602(d)<br>“Combined energy efficiency ratio”  | Add federal definition            | 10 C.F.R. §430.23(dd)<br>Appendix CC to Subpart B |
| 88. | §1602(d)<br>“Dehumidifier”  | Amend to match federal definition | 10 C.F.R. §430.2                                  |
| 89. | §1602(d)<br>“Dual-duct portable air conditioner”  | Add federal definition            | 10 C.F.R. §430.2                                  |
| 90. | §1602(d)<br>“Furnace fan”   | Add federal definition            | 10 C.F.R. §430.2                                  |
| 91. | §1602(d)<br>- “High speed”<br>- “High-speed small-diameter (HSSD) ceiling fan” (including new Table D-1)<br>- “Highly decorative ceiling fan”<br>- “Hugger ceiling fan”<br>- “Large-diameter ceiling fan”<br>- “Low speed”<br>- “Low-speed small-diameter (LSSD) ceiling fan” (including new Table D-2)<br>- “Multi-head ceiling fan”<br>- “Multi-mount ceiling fan”<br>- “Oscillating ceiling fan” | Add federal definitions           | 10 C.F.R. §430, Appendix U to Subpart B           |
| 92. | §1602(d)<br>“Portable air conditioner”  | Add federal definition            | 10 C.F.R. §430.2                                  |
| 93. | §1602(d)<br>“Portable dehumidifier”   | Add federal definition            | 10 C.F.R. §430.2                                  |
| 94. | §1602(d)<br>“Seasonally adjusted cooling capacity”  | Add federal definition            | 10 C.F.R. §430.23(dd)<br>Appendix CC to Subpart B |

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| 95.  | §1602(d)<br>“Single-duct portable air conditioner”   | Add federal definition | 10 C.F.R. §430.2                        |
| 96.  | §1602(d)<br>“Small-diameter ceiling fan”   | Add federal definition | 10 C.F.R. §430, Appendix U to Subpart B |
| 97.  | §1602(d)<br>“Standard ceiling fan”   | Add federal definition | 10 C.F.R. §430, Appendix U to Subpart B |
| 98.  | §1602(d)<br>“Total airflow”  | Add federal definition | 10 C.F.R. §430, Appendix U to Subpart B |
| 99.  | §1602(d)<br>“Very-small-diameter (VSD) ceiling fan”  | Add federal definition | 10 C.F.R. §430, Appendix U to Subpart B |
| 100. | §1602(d)<br>“Whole-home dehumidifier”  | Add federal definition | 10 C.F.R. §430.2                        |
| 101. | §1602(e)<br>“Basic model” of federally regulated commercial packaged boilers”  | Add federal definition | 10 C.F.R. §431.82                       |
| 102. | §1602(e)<br>“Basic model” of federally regulated commercial warm air furnaces”   | Add federal definition | 10 C.F.R. §431.72                       |
| 103. | §1602(f)<br>“Activation lock”  | Add federal definition | 10 C.F.R. §430.2                        |
| 104. | §1602(f)<br>“Air-source commercial heat pump water heater”   | Add federal definition | 10 C.F.R. §431.102                      |
| 105. | §1602(f)<br>“Basic model” of federally regulated water heaters, hot water supply boilers, or unfired hot water storage tanks that are commercial | Add federal definition | 10 C.F.R. §431.102                      |

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|      | and industrial equipment   |  |                    |
| 106. | §1602(f)<br>- “Commercial heat pump water heater (CHPWH)”<br>- “Direct geo-exchange commercial heat pump water heater”   | Add federal definitions  | 10 C.F.R. §431.102 |
| 107. | §1602(f)<br>- “Electric instantaneous water heater” that is a federally regulated consumer product<br>- “Electric storage water heater” that is a federally regulated consumer product                                   | Add updated federal definitions and include “...that is a federally regulated consumer product...” to clarify that this definition only applies to water heaters that are consumer products              | 10 C.F.R. §430.2   |
| 108. | §1602(f)<br>- “Electric instantaneous water heater” that is federally regulated commercial and industrial equipment<br>- “Electric storage water heater” that is federally regulated commercial and industrial equipment | Add updated federal definitions and include “...that is a federally regulated commercial and industrial equipment...” to clarify that this definition only applies to commercial water heating equipment | 10 C.F.R. §431.102 |
| 109. | §1602(f)<br>“Flow-activated instantaneous water heater”  | Add federal definition   | 10 C.F.R. §431.102 |
| 110. | §1602(f)<br>- “Gas-fired   | Add updated federal definitions and include “...that is a federally regulated consumer product...” to clarify  | 10 C.F.R. §430.2   |

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|      | instantaneous water heater” that is a federally regulated consumer product<br>- “Gas-fired storage water heater” that is a federally regulated consumer product  | that this definition only applies to water heaters that are consumer products  |                    |
| 111. | §1602(f)<br>“Gas-fired instantaneous water heater” that is federally regulated commercial and industrial equipment<br>“Gas-fired storage water heater” that is federally regulated commercial and industrial equipment | Add updated federal definitions and include “...that is a federally regulated commercial and industrial equipment...” to clarify that this definition only applies to commercial water heating equipment | 10 C.F.R. §431.102 |
| 112. | §1602(f)<br>“Grid-enabled water heater”  | Add federal definition   | 10 C.F.R. § 430.2  |
| 113. | §1602(f)<br>- “Ground-source closed-loop commercial heat pump water heater”<br>- “Ground water-source commercial heat pump water heater”   | Add federal definitions  | 10 C.F.R. §431.102 |
| 114. | §1602(f)<br>“Immersed heating element”   | Add federal definition   | 10 C.F.R. §430.2   |
| 115. | §1602(f)<br>“Indoor water-source commercial heat   | Add federal definition   | 10 C.F.R. §431.102 |

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|      | pump water heater”   |  |   |
| 116. | §1602(f)<br>“Instantaneous water heater” that is federally regulated commercial and industrial equipment   | Amend definition to match updated federal definition   | 10 C.F.R. §431.102                      |
| 117. | §1602(f)<br>“Maximum gpm (L/min) rating”   | Amend definition to match federal definition   | 10 C.F.R. §430, Appendix E to Subpart B |
| 118. | §1602(f)<br>- “Oil-fired instantaneous water heater” that is a federally regulated consumer product<br>- “Oil-fired storage water heater” that is a federally regulated consumer product                                   | Add updated federal definitions and include “...that is a federally regulated consumer product...” to clarify that this definition only applies to water heaters that are consumer products            | 10 C.F.R. §430.2                        |
| 119. | §1602(f)<br>- “Oil-fired instantaneous water heater” that is federally regulated commercial and industrial equipment<br>- “Oil-fired storage water heater” that is federally regulated commercial and industrial equipment | Add updated federal definitions and include “...that is federally regulated commercial and industrial equipment...” to clarify that this definition only applies to commercial water heating equipment | 10 C.F.R. §431.102                      |
| 120. | §1602(f)<br>“Rated storage volume”   | Amend definition to match federal definition   | 10 C.F.R. §430, Appendix E to Subpart B |
| 121. | §1602(f)<br>- “R-value”<br>- “Residential-duty water   | Add federal definitions and exceptions in Table F-1 (new)  | 10 C.F.R. §431.102                      |

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|      | heater”, including Table F-1 (new)  |  |   |
| 122. | §1602(f)<br>“Storage water heater”  | Add updated federal definition               | 10 C.F.R. §431.102                      |
| 123. | §1602(f)<br>“Thermal efficiency”  | Amend definition to match federal definition | 10 C.F.R. §431.102                      |
| 124. | §1602(f)<br>“Water heater” that is a federally regulated water heater as defined in 10 C.F.R. section 430.2   | Amend definition to match federal definition | 10 C.F.R. §430.2                        |
| 125. | §1602(g)<br>- “Bare pump”<br>- “Basic model of a federally regulated pump”<br>- “Best efficiency point (BEP)”<br>- “Bowl diameter”<br>- “Clean water pump”<br>- “Close-coupled pump”<br>- “Continuous control”<br>- “Control”<br>- “Driver”<br>- “Dry rotor pump” | Add federal definitions                      | 10 C.F.R. §431.462                      |
| 126. | §1602(g)<br>-“Electric heat pump pool heater”<br>- “Electric resistance pool heater”  | Add federal definitions                      | 10 C.F.R. §430, Appendix P to Subpart B |
| 127. | §1602(g)<br>- “End suction close-coupled (ESCC) pump”<br>- “End suction frame mounted/own bearings (ESFM)”  | Add federal definitions                      | 10 C.F.R. §431.462                      |



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|      | <p>pump”</p> <ul style="list-style-type: none"> <li>- “End suction pump”</li> <li>- “Fire pump”</li> </ul>  |  |   |
| 128. | <p>§1602(g)</p> <p>“Fossil fuel-fired pool heater”</p>  | Add federal definition                       | 10 C.F.R. §430, Appendix P to Subpart B |
| 129. | <p>§1602(g)</p> <ul style="list-style-type: none"> <li>- “Full impeller diameter”</li> <li>- “Horizontal motor”</li> </ul>  | Add federal definitions                      | 10 C.F.R. §431.462                      |
| 130. | <p>§1602(g)</p> <p>“Hybrid pool heater”</p>   | Add federal definition                       | 10 C.F.R. §430, Appendix P to Subpart B |
| 131. | <p>§1602(g)</p> <ul style="list-style-type: none"> <li>- “In-line (IL) pump”</li> <li>- “Magnet driven pump”</li> <li>- “Mechanical equipment”</li> <li>- “Mechanically coupled pump”</li> <li>- “Non-continuous control”</li> </ul>  | Add federal definitions                      | 10 C.F.R. §431.462                      |
| 132. | <p>§1602(g)</p> <ul style="list-style-type: none"> <li>- “PEI<sub>CL</sub>”</li> <li>- “PEI<sub>VL</sub>”</li> </ul>  | Add federal definition                       | 10 C.F.R. §431.465(a)                   |
| 133. | <p>§1602(g)</p> <p>“Pool heater”</p>  | Amend definition to match federal definition | 10 C.F.R. §430.2                        |
| 134. | <p>§1602(g)</p> <ul style="list-style-type: none"> <li>- “Prime assist pump”</li> <li>- “Pump”</li> <li>- “Radially split, multi-stage, vertical, in-line diffuser casing (RSV) pump”</li> <li>- “Rotodynamic pump”</li> <li>- “Self-priming pump”</li> <li>- “Single axis flow pump”</li> <li>- “Submersible turbine (ST) pump”</li> </ul> | Add federal definitions                      | 10 C.F.R. §431.462                      |

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|      | -“Twin head pump”   |   |   |
| 135. | §1602(h)<br>“Basic model” of a federally regulated commercial pre-rinse spray valve | Add federal definition and include “of a federally regulated commercial pre-rinse spray valve” for clarity  | 10 C.F.R. §431.262                      |
| 136. | §1602(h)<br>“Commercial pre-rinse spray valve”                                      | Amend definition to match federal definition  | 10 C.F.R. §431.262                      |
| 137. | §1602(h)<br>“ozf”   | Add definition because the term “ozf” is found in the federal definition for “spray force”  | 10 C.F.R. §431.262                      |
| 138. | §1602(h)<br>“Spray force”   | Add federal definition  | 10 C.F.R. §431.262                      |
| 139. | §1602(h)<br>“Water use”   | Amend definition to match federal definition concerning showerheads and faucets   | 10 C.F.R. §430, Appendix S to Subpart B |
| 140. | §1602(i)<br>“Blowout toilet”  | Amend to match federal definition   | 10 C.F.R. §430.2                        |
| 141. | §1602(j)<br>“Ballast luminous efficiency”   | Add federal definition  | 10 C.F.R. §430.2                        |
| 142. | §1602(j)<br>“Replacement ballast”   | Amend to match federal definition   | 10 C.F.R. §430.2                        |
| 143. | §1602(k)<br>“Appliance lamp”  | Amend to match federal definition   | 10 C.F.R. §430.2                        |
| 144. | §1602(k)<br>“BR30”  | Amend to match federal definition and incorporate the wattage restrictions for BR30 provided in the federal definition for “BR incandescent reflector lamp”<br>Note: The “...than 66” is being removed from the definition because there is no need to include the “66” in the definition (if it is less than 66 watts, then it is also less than 85 watts) | 10 C.F.R. §430.2                        |
| 145. | §1602(k)<br>“BR40”  | Amend to match federal definition and incorporate the wattage restrictions for BR40 provided in the federal definition for “BR incandescent reflector lamp”   | 10 C.F.R. §430.2                        |
| 146. | §1602(k)<br>“Integrated compact fluorescent lamp”                                   | Add federal definition  | 10 C.F.R. §430, Appendix W to Subpart B |
| 147. | §1602(k)<br>“Lifetime of a compact fluorescent lamp”                                | Add federal definition  | 10 C.F.R. §430, Appendix W to Subpart B |

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| 148. | §1602(k)<br>“Lumen maintenance”  | Amend to match federal definition   | 10 C.F.R. §430, Appendix W to Subpart B                   |
| 149. | §1602(k)<br>“Lumen output”   | Amend to match federal definition   | 10 C.F.R. §430, Appendix R to Subpart B                   |
| 150. | §1602(k)<br>“Modified spectrum”  | Add federal definition  | 10 C.F.R. §430.2  |
| 151. | §1602(k)<br>“Rated wattage”  | Amend to match federal definition   | 10 C.F.R. §430.2  |
| 152. | §1602(k)<br>“3-way incandescent lamp”  | Amend and change from “Three way lamp” to “3-way incandescent lamp” to match federal definition | 10 C.F.R. §430.2  |
| 153. | §1602(o)<br>“Dishwasher”   | Amend definition to match federal definition  | 10 C.F.R. §430.2  |
| 154. | §1602(o)<br>- “Non-soil sensing dishwasher”<br>- “Soil sensing dishwasher”<br>- “Water-softening dishwasher” | Add federal definitions   | 10 C.F.R. §430.2  |
| 155. | §1602(p)<br>- “Automatic clothes washer”<br>- “Clothes washer”   | Amend definitions to match federal definitions  | 10 C.F.R. §430.2  |
| 156. | §1602(q)<br>- “Electric clothes dryer”<br>- “Gas clothes dryer”  | Amend definitions to match federal definitions  | 10 C.F.R. §430.2  |
| 157. | §1602(q)<br>“Ventless clothes dryer”   | Add federal definition  | 10 C.F.R. §430, section 1.19 of Appendix D1 to Subpart B, |
| 158. | §1602(r)<br>“Built-in microwave oven”  | Amend definition to match federal definition  | 10 C.F.R. §430, section 1.2 of Appendix I to Subpart B    |
| 159. | §1602(r)<br>“Combined cooking product”   | Add federal definition  | 10 C.F.R. §430, Appendix I to Subpart B                   |
| 160. | §1602(r)<br>- “Conventional cooking top”   | Amend definitions to match federal definitions  | 10 C.F.R. §430.2  |

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|      | - “Conventional oven”<br>- “Cooking products”<br>- “Microwave oven”<br>- “Other cooking products” |   |   |
| 161. | §1602(r)<br>“Standby mode”  | Amend definition to match federal definition  | 10 C.F.R. §430, Appendix I to Subpart B |
| 162. | §1602(s)<br>- “Accreditation body”<br>- “Accreditation system”                                    | Add federal definitions   | 10 C.F.R. §431.12                       |
| 163. | §1602(s)<br>- “Actual volume flow rate”<br>- “Air compressor”                                     | Add federal definitions   | 10 C.F.R. §431.342                      |
| 164. | §1602(s)<br>“Air-over electric motor”   | Add federal definition  | 10 C.F.R. §431.12                       |
| 165. | §1602(s)<br>“Alternative efficiency determination method”   | Add federal definition  | 10 C.F.R. §§431.12 and 431.442          |
| 166. | §1602(s)<br>- “Ancillary equipment”<br>- “Auxiliary substance”                                    | Add federal definitions   | 10 C.F.R. §431.342                      |
| 167. | §1602(s)<br>“Average full-load efficiency”  | Amend to include criteria found in the federal definition   | 10 C.F.R. §431.442                      |
| 168. | §1602(s)<br>“Bare compressor”   | Add federal definition  | 10 C.F.R. §431.342                      |
| 169. | §1602(s)<br>“Basic model” of a federally regulated compressor”                                    | Add federal definition and include “...of a federally regulated compressor...” to clarify the scope of the definition | 10 C.F.R. §431.342                      |
| 170. | §1602(s)<br>- “Certification program”<br>- “Certification   | Add federal definitions   | 10 C.F.R. §431.12                       |

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|      | system”   |   |                    |
| 171. | §1602(s)<br>- “Compressor”<br>- “Compressor motor nominal horsepower”   | Add federal definitions   | 10 C.F.R. §431.342 |
| 172. | §1602(s)<br>“Definite purpose electric motor”   | Amend existing definition to match federal definition   | 10 C.F.R. §431.12  |
| 173. | §1602(s)<br>“Driver”  | Add federal definition  | 10 C.F.R. §431.342 |
| 174. | §1602(s)<br>“Enclosed motor”  | Amend existing definition to match federal definition   | 10 C.F.R. §431.12  |
| 175. | §1602(s)<br>“Full-load actual volume flow rate”   | Add federal definition  | 10 C.F.R. §431.342 |
| 176. | §1602(s)<br>- “General purpose electric motor (subtype I)”<br>- “General purpose electric motor (subtype II)”                         | Amend definitions to match federal definitions and include the “Note” set forth after each federal definition | 10 C.F.R. §431.12  |
| 177. | §1602(s)<br>- “IEC Design H motor”<br>- “IEC Design N motor”  | Add federal definitions   | 10 C.F.R. §431.12  |
| 178. | §1602(s)<br>“Mechanical equipment” of an air compressor   | Add federal definition and include “...of an air compressor...” to clarify the scope of the definition        | 10 C.F.R. §431.342 |
| 179. | §1602(s)<br>- “NEMA Design A motor”<br>- “NEMA Design C motor”  | Add federal definitions   | 10 C.F.R. §431.12  |
| 180. | §1602(s)<br>- “Package isentropic efficiency”<br>- “Pressure ratio at full-load operating pressure”<br>- “Rotor”<br>- “Variable-speed | Add federal definitions   | 10 C.F.R. §431.342 |

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|      | compressor”   |  |   |
| 181. | §1602(t)<br>“Efficiency of distribution transformer”  | Amend definition to match federal definition | 10 C.F.R. §431.192                      |
| 182. | §1602(t)<br>- “No-load loss”<br>- “Phase angle”<br>- “Phase angle correction”<br>- “Phase angle error”<br>- “Reference temperature” | Add federal definitions                      | 10 C.F.R. §431.192                      |
| 183. | §1602(t)<br>“Regulating transformer”  | Amend definition to match federal definition | 10 C.F.R. §431.192                      |
| 184. | §1602(t)<br>- “Total loss”<br>- “Transformer with tap range of 20 percent or more”  | Add federal definitions                      | 10 C.F.R. §431.192                      |
| 185. | §1602(u)<br>“Adaptive external power supply”  | Add federal definition                       | 10 C.F.R. §430.2                        |
| 186. | §1602(u)<br>“Class A external power supply”   | Amend definition to match federal definition | 10 C.F.R. §430.2                        |
| 187. | §1602(u)<br>- “Detachable battery”<br>- “External power supply design family”   | Add federal definitions                      | 10 C.F.R. §430.2                        |
| 188. | §1602(u)<br>“Indirect operation external power supply”<br>(specifically, (1)(E))  | Amend definition to match federal definition | 10 C.F.R. §430.2                        |
| 189. | §1602(u)<br>- “Multiple-voltage external power supply”<br>- “Single-voltage external AC-AC  | Add federal definitions                      | 10 C.F.R. §430, Appendix Z to Subpart B |

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|      | power supply”<br>- “Single-voltage external AC-DC power supply”<br>- “Switch-selectable single voltage external power supply” |  |   |
| 190. | §1602(v)<br>- “Combination TV”<br>- “High-definition multimedia interface”  | Add federal definitions  | 10 C.F.R. §430.2  |
| 191. | §1602(w)<br>“Federally regulated battery charger”   | Add federal definition and include “backup battery chargers are not included as federally regulated battery chargers” to clarify that battery chargers for consumer products that are backup battery chargers are not included in definition of federally regulated battery chargers   | 10 C.F.R. §430.2  |
| 192. | §1602(w)<br>“Federally regulated uninterruptible power supply (UPS)”  | Add federal definition and include “and that utilize the standardized National Electrical Manufacturer Association (NEMA) plug, 1-15P or 5-15P and have an AC output” to specify which UPS are covered   | 10 C.F.R. §430, Appendix Y to Subpart B                   |
| 193. | §1602<br>Documents Incorporated by Reference  | Add the following documents to the list of documents incorporated by reference (all these documents are referenced in the new or amended federal definitions described above):<br>-“ C.F.R., Title 10, sections 429.14(d), 429.16(a), and 429.61(d)”<br>-“C.F.R., Title 10, section 430.2”<br>-“C.F.R., Title 10, sections 431.25, 431.192, 431.344, 431.442, and 431.446”<br>-“ANSI C78.901-2014”<br>-“ANSI C79.1-2002”<br>-“ASTM C177-13”<br>-“ASTM C518-15”<br>-“FM Class Number 1319 January 2015 edition”<br>-“HDMI Specification Informational Version 1.0”<br>-“ANSI/Hi 1.1-1.2-2014”<br>-“ANSI/Hi 2.1-2.2-2014”<br>-“ITU-R BT 470-6”<br>-“NFPA 20 (2016)”<br>-“SMPTE 170M-2004”<br>-“ANSI/UL 448-2013”<br>-“UL 1995” | Various sections of CFR identified above for definitions. |

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| 194. | §1602 Documents Incorporated by Reference  | For the document “IEC 60034-12” Remove “1980” and add “Edition 2.1 2007-09” to match what is shown in section 1602(s)  | 10 C.F.R. §431.12.   |
| 195. | §1602 Documents Incorporated by Reference  | For the Document “C.F.R., Title 10, part 431” Amend “subparts B through W” to “subparts A through Y” to capture all of the provisions in part 431, including newly added federal language in subpart Y.  | 10 C.F.R. §431   |
| 196. | §1604(d), Table D-3 (previously Table D-1) | Add federal test procedure for federally regulated single-duct and dual-duct portable air conditioners   | 10 C.F.R. §430.23(dd), Appendix CC to Subpart B                          |
| 197. | §1604(d), Table D-3 (previously Table D-1) | Add federal test procedure for federally regulated portable dehumidifiers and whole-home dehumidifiers manufactured on or after June 13, 2019  | 10 C.F.R. §430.23(z), Appendix X1 to subpart B                           |
| 198. | §1604(f)(1) (new)                          | Add federal test procedure for federally regulated residential water heaters   | 10 C.F.R. §430.23(e), Appendix E to Subpart B                            |
| 199. | §1604(g)(1)                                | Amend to reflect that the updated federal test procedure for pool heaters applies to fossil-fired pool heaters, electric resistance pool heaters, and electric heat pump pool heaters  | 10 C.F.R. §430.23(p); Appendix P to Subpart B of 10 C.F.R. § 430.        |
| 200. | §1604(g)(4)                                | Add federal test procedure for federally regulated pumps   | 10 C.F.R. §431.464; Appendix A to Subpart Y of 10 C.F.R § 431            |
| 201. | §1604(p)(2)(A) and (B)                     | Add federally regulated commercial clothes washers and the federal test procedures for commercial clothes washers. Also, add text to specify the required test procedure effective before January 1, 2018 and the test procedure effective on and after January 1, 2018. | 10 C.F.R. §430.23(j); Appendix J1 to Subpart B of 10 C.F.R. § 430        |
| 202. | §1604(q)                                   | Amend to reflect the updated federal test procedures for clothes dryers and include language in the preamble of Appendix D2  | 10 C.F.R. §430.23(d); Appendix D1 and D2 to Subpart B of 10 C.F.R. § 430 |
| 203. | §1604(r), Table R-1                        | Add “combined cooking products” and the federal test procedure for combined cooking products   | 10 C.F.R. §430.23(i); Appendix I to Subpart B of 10 C.F.R. § 430         |
| 204. | §1604(s)(3)                                | Add federally regulated compressors and the federal test procedure for compressors   | 10 C.F.R. §431.344; Appendix A to  |



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|      |   |   | Subpart T of 10 C.F.R. § 431  |
| 205. | §1604(w)(1) (new)                         | Add federal test procedure for federally regulated battery chargers and federally regulated uninterruptible power supplies  | 10 C.F.R. §430.23(aa); Appendix Y to Subpart B of 10 C.F.R. § 430               |
| 206. | §1604 Documents Incorporated by Reference | Add the following documents to the list of documents incorporated by reference (all these documents are referred to in section 1604):<br>-“10 C.F.R. Appendixes A, B, C1, D1, D2, E, F, H, I, J1, J2, M, N, O, P, Q, R, S, T, U, V, W, X, S1, Y, Z, AA, and CC of subpart B of part 430”<br>-“ C.F.R., Title 10, sections 431.344”<br>-“ C.F.R., Title 10, section 431.464” | 10 C.F.R. part 430, subpart B, all appendices; 10 C.F.R. §§ 431.344 and 431.464 |
| 207. | §1605.1(a)(1)(B) and Table A-3 (new)      | Add federal standards for miscellaneous refrigerated products   | 10 C.F.R. §430.32(aa)   |
| 208. | §1605.1(a)(2)(A), Tables A-4 and A-5      | Amend to include federal standards for commercial refrigerators and commercial freezers manufactured on or after March 27, 2017, and to delete paragraph “(A)” since the language in this paragraph is no longer found in the federal regulation  | 10 C.F.R. §431.66(e)  |
| 209. | §1605.1(a)(2)(B), Table A-6               | Amend to include federal standards for commercial ice cream freezers manufactured on or after March 27, 2017  | 10 C.F.R. §431.66(e)  |
| 210. | §1605.1(a)(2)(C)                          | Amend to include federal standards for commercial refrigeration equipment with two or more compartments and to delete paragraphs (i), (ii), and (iii) since the language in those paragraphs is no longer found in the federal regulation   | 10 C.F.R. §431.66(e)(2)   |
| 211. | §1605.1(a)(2)(D)                          | Amend to reflect updates to the federal standards for wedge cases   | 10 C.F.R. §431.66(e)(3)   |
| 212. | §1605.1(a)(2)                             | Add exception found in the federal regulations that states federal standards for commercial refrigerators, commercial refrigerator-freezers, and commercial freezers do not apply to salad bars, buffet tables, chef bases or griddle stands.   | 10 C.F.R. §431.66(f)  |
| 213. | §1605.1(a)(4)(F) 1                        | Add “brushless direct current motors” to match language in the federal standards for walk-in coolers and walk-in freezers   | 10 C.F.R. §431.306(a)(6)(i)   |
| 214. | §1605.1(a)(5)(C) 1                        | Change “appliance” and “walk-in cooler or walk-in freezer” to match language in the federal standards for walk-in coolers and freezers with transparent reach-in doors  | 10 C.F.R. §431.306(a)(b)(4)   |
| 215. | §1605.1(a)(5)(D) and Table A-10 (new)     | Add federal standards for walk-in cooler and walk-in freezer display doors manufactured on or after June 5, 2017  | 10 C.F.R. §431.306(c)   |

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| 216. | §1605.1(a)(5)(E) and Table A-11 (new)                     | Add federal standards for walk-in cooler and walk-in freezer non-display doors manufactured on or after June 5, 2017  | 10 C.F.R. §431.306(d)                      |
| 217. | §1605.1(a)(5)(F) and Table A-12 (new)                     | Add federal standards for walk-in cooler and walk-in freezer refrigeration systems manufactured on or after June 5, 2017  | 10 C.F.R. §431.306(e)                      |
| 218. | §1605.1(a)(6)(A) and Table A-13 (previously A-10)         | Amend effective date of federal standards for refrigerated canned and bottled beverage vending machines to specify that these standards apply to products manufactured before January 8, 2019 and also add explanatory footnote found in the federal regulation. Also, renumber Table “A-10” to “A-13” for correct numbering. | 10 C.F.R. §431.296(a)                      |
| 219. | §1605.1(a)(6)(B) and Table A-14 (new)                     | Add federal standards for refrigerated canned and bottled beverage vending machines manufactured on or after January 8, 2019  | 10 C.F.R. §431.296(a)                      |
| 220. | §1605.1(b)(2) and Table B-4 (new)                         | Add federal standards for standard-size packaged terminal air conditioners and standard-sized packaged terminal heat pump manufactured on or after January 1, 2017  | 10 C.F.R. §431.97, Table 7 and 8           |
| 221. | §1605.1(c)(1)   | Add “IEER” to reflect federal standards for central air conditioners in effect as of January 1, 2018  | 10 C.F.R. §431.97, Table 3                 |
| 222. | §1605.1(c), Table C-4                                     | Amend to reflect the updated federal standards for commercial package air conditioning and heating equipment that are air-cooled. Also, make the “T” in “To” lowercase for correct grammar.   | 10 C.F.R. §431.97, Table 3 and 4           |
| 223. | §1605.1(c), Table C-5                                     | Amend to reflect the updated federal standards for commercial package air conditioning and heating equipment that are water-cooled, evaporatively-cooled, and water-source  | 10 C.F.R. §431.97, Table 1, 2, 3, and 4    |
| 224. | §1605.1(c), Table C-6                                     | Amend to reflect the updated federal standards for single package vertical air conditioners and single package vertical heat pumps  | 10 C.F.R. §431.97, Table 10 and 11         |
| 225. | §1605.1(c), Table C-9                                     | Add federal standards for double-duct air-cooled commercial air conditioning and heat equipment   | 10 C.F.R. §431.97, Table 5 and 6           |
| 226. | §1605.1(d)(1)(B), Table D-4 (new)                         | Add federal standards for ceiling fans manufactured on or after January 21, 2020, and include exceptions to section 1605.1(d)(1) found in the federal regulations   | 10 C.F.R. §430.32(s)(2)                    |
| 227. | §1605.1(d)(2) and Tables D-5, D-6, D-7, and D-8 (all new) | Amend to reflect updated federal standards for ceiling fan light kits<br>Note: Due to substantial changes, all existing text is being deleted and new text added  | 10 C.F.R. §430.32(s)(2), (3), (4), and (5) |
| 228. | §1605.1(d)(3)(B) and Table D-10                           | Add federal standards for dehumidifiers manufactured on or after June 13, 2019  | 10 C.F.R. §430.32(v)(2)                    |

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| 229. | §1605.1(d)(4) and Table D-11 (new)                            | Add federal standards for residential furnace fans   | 10 C.F.R. §430.32(y)   |
| 230. | §1605.1(e)(2), Table E-3                                      | Amend to include federal standards for gas- and oil-fired central boilers and electrical residential boilers less than 300,000 Btu/hr effective January 15, 2021, and to delete extraneous language and outdated standards   | 10 C.F.R. §430.32(e)(ii), and 10 C.F.R. §430.32(e)(iii)(A) & (B) |
| 231. | §1605.1(e)(2), Table E-5                                      | Amend to include federal standards for commercial gas- and oil-fired central furnaces effective January 1, 2023  | 10 C.F.R. §431.77(a)(2) & (b)(2)                                 |
| 232. | §1605.1(e)(2), Table E-6                                      | Amend to include additional federal standards for gas- and oil-fired central boilers less than 225,000 Btu/hr and electrical residential boilers   | 10 C.F.R. § 430.32(e)(1)(iii)                                    |
| 233. | §1605.1(f)(1)   | Change “thermal efficiency and standby loss” to “uniform energy factor” to reflect the new metric for the updated federal standards for water heaters that are regulated under 10 C.F.R. section 430.32(d) (consumer products)                                       | 10 C.F.R. § 430.32(d)  |
| 234. | §1605.1(f)(1), Table F-2 (new)                                | Add new Table F-2 to reflect the updated federal standards for water heaters that are regulated under 10 C.F.R. section 430.32(d) (consumer products) and delete current Table F-2 to remove outdated federal standards for water heaters that are consumer products | 10 C.F.R. § 430.32(d)  |
| 235. | §1605.1(f)(3), (f)(3)(A) and Table F-4 (previously Table F-3) | Amend subsection (f)(3), add subsection (f)(3)(A) and new Table F-4 (previously Table F-3) to reflect updated federal standards for commercial water heaters regulated under 10 C.F.R. section 431.110(a) (excluding residential duty commercial water heaters).     | 10 C.F.R. §431.110(a)  |
| 236. | §1605.1(f)(3)(B) and Table F-5 (new)                          | Add federal standards for residential-duty commercial water heaters  | 10 C.F.R. §431.110(b)  |
| 237. | §1605.1(g)(6), including Table G-2 (new)                      | Add federal standards for pumps  | 10 C.F.R. §431.465   |
| 238. | §1605.1(h)(4)(B) including Table H-2 (new)                    | Add updated federal standards for commercial pre-rinse spray valves manufactured on or after January 28, 2019  | 10 C.F.R. §431.266   |
| 239. | §1605.1(j)(1) (new)   | Amend to make consistent with the federal standards for fluorescent lamp ballasts other than dimming ballasts  | 10 C.F.R. §430.32(m)(1)  |
| 240. | §1605.1(j)(2) (new)   | Amend to make consistent with the federal standards for certain dimming ballasts   | 10 C.F.R. §430.32(m)(2)  |
| 241. | §1605.1(j)(2) (new)   | Add exceptions to federal standards for fluorescent lamp ballasts and dimming ballasts   | 10 C.F.R. §430.32(m)(3)  |
| 242. | §1605.1(k)(1) and Table K-2                                   | Add federal standards for federally regulated general service fluorescent lamps manufactured on or after   | 10 C.F.R. §430.32(n)(4)  |

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|      | (previously Table K-3)   | January 26, 2018  |  |
| 243. | §1605.1(k)(3) and Table K-4 (previously Table K-6)                                     | Amend to make consistent with the federal standards for medium base compact fluorescent lamps   | 10 C.F.R. §430.32(u)(1), Table 1   |
| 244. | §1605.1(l)(1)  | Amend to make consistent with the federal standard for emergency lighting and self-contained lighting controls  | 10 C.F.R. §431.206   |
| 245. | §1605.1(s)(1)  | Add criteria found in the federal regulation that sets the specific types of electric motors the federal standards apply to   | 10 C.F.R. §431.25(g)   |
| 246. | §1605.1(s)(2) and Table S-1 (new)  | Add federal standards in effect as of June 1, 2016 for NEMA design A motors, NEMA design B motors, and IEC design N motors  | 10 C.F.R. §431.25(h), Table 5  |
| 247. | §1605.1(s)(3) and Table S-2 (new)  | Add federal standards in effect as of June 1, 2016 for NEMA design C motors and IEC design H motors   | 10 C.F.R. §431.25(i), Table 6  |
| 248. | §1605.1(s)(4) and Table S-3 (new)  | Add federal standards in effect as of June 1, 2016 for Fire Pump Electric Motors  | 10 C.F.R. §431.25(j), Table 7  |
| 249. | §1605.1(s)   | Add exception found in the federal regulations that states that the federal standards for electric motors do not apply to specific types of electric motors   | 10 C.F.R. §431.25(l)   |
| 250. | §1605.1(t)(1), Table T-3   | Amend footnote to Table T-3 to match explanatory language in the federal standards for low-voltage dry-type distribution transformers   | 10 C.F.R. §431.196(a)(2)   |
| 251. | §1605.1(t)(2), Table T-4   | Amend footnote to Table T-4 to match explanatory language in the federal standards for liquid-immersed distribution transformers  | 10 C.F.R. §431.196(b)(2)   |
| 252. | §1605.1(t)(3), Table T-5 (previously Table T-6)  | Add updated federal standards for medium-voltage dry-type distribution transformers manufactured on or after January 1, 2016, and delete the original Table T-5 which contains outdated standards   | 10 C.F.R. §431.196(b)(2)   |
| 253. | §1605.1(u)(1) through (u)(8) , including Table U-1, U-2, and U-3 (all new subsections) | Add updated federal standards for external power supplies and remove outdated standards (including the original Tables U-1 and U-2).  | 10 C.F.R. §430.32(w)   |
| 254. | §1605.1(w)(1) and Table W-1, including Exceptions (new)                                | Add federal standards for federally regulated battery chargers manufactured on or after June 13, 2018   | 10 C.F.R. §430.32(z)   |
| 255. | §1605.1 Documents Incorporated by Reference  | Add the following documents to the list of documents incorporated by reference (all these documents are referred to in section 1605.1):<br>-“ C.F.R., Title 10, section 429.39(a)”<br>-“ C.F.R., Title 10, section 429.44”<br>-“C.F.R., Title 10, section 429.59” | As referenced here. AHRI 1200-2006 is referenced in 10 C.F.R. § 431.66(d). |

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|      |   | -“C.F.R., Title 10, part 430, subpart B, appendix AA”<br>-“C.F.R., Title 10, part 430.2”<br>-“C.F.R., Title 10, part 430.3”<br>-“C.F.R., Title 10, sections 430.23(a) (Appendix A to subpart B of part 430)”<br>-“C.F.R., Title 10, sections 430.23(b) (Appendix B to subpart B of part 430)”<br>-“C.F.R., Title 10, section 430.32(c)”<br>-“C.F.R., Title 10, section 430.32(d)”<br>-“C.F.R., Title 10, section 430.32 (w)(1)”<br>-“C.F.R., Title 10, sections 431.63”<br>-“C.F.R., Title 10, sections 431.66(d)(2)(i) through (iii)”<br>-“C.F.R., Title 10, section 431.110”<br>-“C.F.R., Title 10, section 431.324”<br>-“C.F.R., Title 10, section 431.326(b)(3)”<br>-“C.F.R., Title 10, section 431.462”<br>-“C.F.R., Title 10, part 431, subpart K, Appendix A”<br>-“C.F.R., Title 10, section 431.465(c)(6)”<br>-“C.F.R., Title 10, part 431, subpart Y, Appendix A, Section II.B”<br>-“C.F.R., Title 10, part 50, “Domestic Licensing of Production and Utilization Facilities””<br>-“AHRI 1200-2006” |                         |
| 256. | §1607 Documents Incorporated by Reference | Add “C.F.R., Title 10, section 430.32(w)(4)” to the list of documents incorporated by reference (it is referred to in section 1607 for marking of federally regulated external power supplies)   | 10 C.F.R. §430.32(w)(4) |

In addition to the proposed changes to the Appliance Efficiency Regulations to reflect current mandatory federal requirements located in the Code of Federal Regulations, this rulemaking proposes to include the statutory federal energy efficiency standards applicable to water heaters. Specifically, the proposed change adds the federal energy efficiency standards located in 42 U.S.C. section 6295(e)(1), which are applicable to gas water heaters, oil water heaters, and electric water heaters that are consumer products as defined in 42 U.S.C. section 6291(27). Because the scope of the federal statutory standards for consumer water heaters differs from the scope of the federal standards adopted by the U.S. DOE, the following information is provided to help explain the proposed change.

Proposed change: Add new section 1605.1(f)(2) and Table F-3

Purpose: The purpose of this change is to add a new table that sets out the statutory federal efficiency standards for water heaters for which there is a federal test procedure (see 10 C.F.R. § 430.23(e) and Appendix E to Subpart B of Part 430) but where the U.S. DOE has not set efficiency standards by regulation (c.f. 10 C.F.R. § 430.32(d)). These water heaters were previously state-regulated products covered by state test procedures and state standards. As a

result of the new federal test procedure covering these products, California is preempted from setting its own test procedures for these products, and the federal standards in 42 U.S.C. section 6295(e)(1) apply. The purpose of the footnote in the table is to clarify that the standards will not take effect until the federal test procedure, which measures energy consumption characteristics that produce a “uniform energy factor,” is modified or provides a conversion to obtain an “energy factor” necessary for determining compliance with the standards in 42 U.S.C. section 6295(e)(1).

Necessity: This change is necessary to replace the state standards for previously state-regulated water heaters. The state standards covered water heaters that were outside the range of those described in the federal regulations in 10 C.F.R. section 430.32(d) (such as gas water heaters less than 20 gallons). These products are subject to the standards in 42 U.S.C. section 6295(e)(1), but until December 2016, there was no federal test procedure for these products. After the U.S. DOE developed a test procedure that covered these products (see 81 Fed. Reg. 96204 (Dec. 29, 2016)), California became preempted from requiring compliance with its state test procedure and state standards.

The footnote is necessary to clarify that the federal standards are not effective until the U.S. DOE develops a conversion to obtain an “energy factor” from the federal test procedure. The current federal test procedure yields information that can be used to calculate “uniform energy factor,” which is a different metric than “energy factor.” In order to determine “energy factor” as needed to determine compliance with the standards in 42 U.S.C. section 6295(e)(1), the U.S. DOE must provide a conversion or “crosswalk” from the test procedure to the “energy factor” metric. Until the U.S. DOE publishes that crosswalk, it is not possible to determine compliance with the federal statutory standards.

As the U.S. DOE stated in its final rule establishing the test procedures for water heaters:

*“DOE is reaffirming its interpretation in the August 2016 SNOPR that the statutory standards apply to the water heaters listed in Table III.1, including those with storage volumes between 2 and 20 gallons. DOE acknowledges that its long delay in issuing test procedures for such products as well as statements it has made in the past may have caused confusion about this issue. Coming into compliance with the statutory standards immediately would be quite burdensome for industry . . .”*

*“Since DOE is declining to adopt mathematical conversion factors and converted standards in UEF in this final rule for the water heaters listed in Table III.1, DOE will not enforce the statutory standards applicable to the consumer water heaters listed in Table III.1 until some point after DOE finalizes the conversion factor and the converted standards applicable to those products. In doing so, DOE will work with industry on making this transition.”*

(81 Fed. Reg. 96204, 96211 (Dec. 29, 2016).)

**B. Substantive Changes to State Regulations**

The purpose of this portion of the rulemaking is to make substantive changes to the state-specific requirements in the Appliance Efficiency Regulations. Specifically, Table 2.1 lists proposed substantive changes to state test procedures, standards, and labeling and reporting requirements for certain state-regulated appliances and provides the specific purpose and necessity for each proposed change. These changes include:

1. Removing state test procedures and state standards that are preempted by federal law,
2. Aligning the state test procedure for battery chargers with the federal test procedure even though there is no preemption,
3. Removing the requirement to report portable luminaire sales data, and
4. Changing the marking requirement for distribution transformers.

Table 2.2 sets forth the proposed changes to the appliance certification procedures as well as the specific purpose and necessity for each proposed change. These changes include, but are not limited to:

1. Allowing the Energy Commission to send electronic notifications via email or directly through the MAEDbS instead of mail notifications by registered or certified mail,
2. Providing for automatic removal of appliance models from the “Approved” database to the “Archived”, and
3. Removing unnecessary or burdensome appliance certification procedures.

Table 2.3 contains the proposed changes to the appliance data submittal requirements in Table X of section 1606 and the purpose and necessity for each proposed change. These changes include updates to align the appliance data submittal requirements with updates to federal and state test procedures and standards and to add new reporting obligations for newly federally regulated products, such as pumps, low-profile ceiling fans, and walk-in coolers and freezers.

**Table 2.1. Changes to Test Procedures, Standards, Labeling and Reporting Requirements for State-Regulated Appliances<sup>2</sup>**

| No.  | Title 20 Section    | Proposed Change   | Purpose  | Necessity  |
|------|---------------------|---|--|--|
| 257. | §1604(e), Table E-1 | Delete the terms “unit heaters”, “gas-fired”, and “oil-fired”, and delete their associated state test | The purpose of this change is to remove unnecessary state test procedures. | This change is necessary to reduce industry testing burdens and costs. Unit heaters have been federally regulated since October 8, 2008. Although there are no federal |

<sup>2</sup> See Table 3 for changes to add the term “of this Article”, replace the term “database” with “MAEDbS”, and all other nonsubstantive changes.

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|      |                            | procedures, and the footnote in Table E-1   |   | test procedures for unit heaters, these products are subject to federal design standards that preempt the state standards for unit heaters. It is no longer useful to collect efficiency data from tests for unit heaters with state standards that cannot be enforced due to federal preemption. The footnote in Table E-1 is no longer necessary because it only applies to test procedures that will not be required for unit heaters.  |
| 258. | §1604(f)(1), and Table F-1 | Delete original text in subsection (f)(1) and delete the original Table F-1 (small water heater test methods) | The purpose of this change is to remove state testing requirements that are preempted by federal law. | This change is necessary to remove outdated state test procedures superseded by federal test procedures. The term “small water heaters” means water heaters that are not federally regulated consumer products, and include gas and oil storage type < 20 gallons rated capacity, booster water heaters, hot water dispensers, and mini-tank electric water heaters. The term “small water heaters” is not used in the federal regulations. The updated federal test procedures for residential water heaters applies to consumer water heaters of all storage volumes, including gas and oil storage type < 20 gallons rated capacity, booster water heaters, hot water dispensers, and mini-tank electric water heaters. (See 10 C.F.R. §430.23(e), Appendix E to Subpart B; 81 FR 96204, 96207.) Therefore, the federal test procedures for residential water heaters supersede the state test procedures for small water heaters. This change will provide greater clarity and certainty to regulated parties. |



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| 259. | §1604(f)(4)         | Delete subsection (f)(4) (state test procedure for hot water dispensers)   | The purpose of this change is to remove a state test procedure that is preempted by federal law. | This change is necessary to remove an outdated state test procedure superseded by a federal test procedure. A hot water dispenser is defined as a small electric water heater that has measured storage volume no greater than 1.0 gallon. (See §1602(f).) The updated federal test procedure for residential water heaters applies to consumer water heaters of all storage volumes, including hot water dispensers. (See 10 C.F.R. §430.23(e), Appendix E to Subpart B; 81 FR 96204, 96207.) Therefore, the federal test procedure supersedes the state test procedure for hot water dispensers.   |
| 260. | §1604(f)(5)         | Delete subsection (f)(5) (state test procedure for mini-tank electric water heaters)   | The purpose of this change is to remove a state test procedure that is preempted by federal law. | This change is necessary to remove an outdated state test procedure superseded by a federal test procedure. A mini-tank electric water heater is defined as a small electric water heater that has a measured storage volume more than 1.0 gallon and a rated storage volume less than 20 gallons. (See §1602(f).) The updated federal test procedure for residential water heaters applies to consumer water heaters of all storage volumes, including mini-tank electric water heaters. (See 10 C.F.R. §430.23(e), Appendix E to Subpart B; 81 FR 96204, 96207.) Therefore, the federal test procedure supersedes the state test procedure for mini-tank electric water heaters. |
| 261. | §1604(g), Table G-1 | Delete Table G-1 (pool heater test methods) and the text referencing it. Also, renumber the remaining “G” tables as a result | The purpose of this change is to remove state test procedures that are preempted by federal law. | This change is necessary to remove state test procedures that are superseded by federal test procedures. The updated federal test procedure for pool heaters applies to all pool heaters, including fuel-fired   |

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|      |                           |   |  | pool heaters, electric resistance pool heaters, and heat pump pool heaters. (See 10 C.F.R. section 430.23(p) (Appendix P to subpart B of part 430).) Therefore, the state test procedures with modification shown in Table G-1 for gas-fired and oil-fired pool heaters, electric resistance pool heaters, and heat pump pool heaters are superseded by the federal test procedure.   |
| 262. | §1604(k)(4) and Table K-1 | Amend subsection (k)(4) and Table K-1 (test procedures for state-regulated LED lamps and LED small diameter directional lamp) | The purpose of these changes is to align state and federal testing requirements. The proposed changes incorporate the published federal test procedures for integrated LED lamps at 10 C.F.R. section 430.23(ee) and Appendix BB to Subpart B of part 430. | These changes are necessary to reduce industry testing burdens and costs. The original state test procedures for state-regulated LED lamps and LED small diameter directional lamp referenced a federal register notice of proposed rulemaking and the underlying industry test procedure with modifications. The proposed changes to the state test procedures reference the final published federal test procedure.   |
| 263. | §1604(n)(4)               | Amend subsection (n)(4) (test procedure for LED luminaires using LED lamps)   | The purpose of this change is to establish that the state test procedures for LED luminaires using LED lamps are the same as the test procedures for LED lamps shown in Table K-1 of section 1604(k)(4).   | This change is necessary to correct a conflict in the regulations and to reduce industry testing burdens and costs. The existing efficiency standards for portable luminaires require that portable luminaires be sold either with CFLs meeting ENERGY STAR requirements or with LED lamps meeting the requirements of sections 1601-1607, including the testing, marking, certification, and standards requirements. (See Section 1605.3(n)(3)(A)(4).) Thus, LED lamps sold with portable luminaires must use the test procedure in section 1604 to meet the standard under section 1605.3, but the test procedure identified in section |

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|      |   |  |   | 1604(n) conflicts with the test procedure for LED lamps in Table K-1. To correct this conflict, the state test procedures for portable luminaires using LED lamps under section 1604(n) is updated to match the requirements for LED lamps under section 1604(k)(4).   |
| 264. | §1604(w)(2) (previously (1))              | Amend subsection (w)(2) (test procedure for battery charger systems)                           | The purpose of these changes are to (1) clarify which appliance types are excluded from the test procedure for state-regulated small battery charger systems and (2) align the state test procedure for small battery charger systems with federal test procedure for battery chargers as of January 1, 2017. | This change is necessary to (1) reflect that small battery charger systems (not including federally regulated battery chargers, battery backups or uninterruptible power supplies) have their own test procedure, and (2) align the state test procedure for small battery charger systems with federal test procedure for battery chargers where appropriate to decrease testing costs. The date is necessary because this is being incorporated by reference as a state test procedure rather than being adopted as a matter of law due to preemption. Also, these changes are necessary to distinguish the state test procedure for state-regulated battery charger systems from the federal test procedure for federally regulated battery chargers. |
| 265. | §1604 Documents Incorporated by Reference | Add “ C.F.R, Title 10, section 430.23(aa) (Appendix Y of subpart B of part 430 (Jan. 1, 2017)” | The purpose of this change is to incorporate by reference the federal test procedure that is described in section 1604(w)(2).   | This change is necessary to incorporate by reference the required test procedure for small battery charger systems. See change regarding section 1604(w)(2) in Table 2.1 of this document.   |
| 266. | §1604 Documents Incorporated by Reference | Add “C.F.R., Title 10, section 429.56” and “C.F.R., Appendix BB of subpart B of Part 430”      | The purpose of these changes is to incorporate by reference the federal testing procedures that are described in section 1604(k)(4) and Table K-1. The proposed   | These changes are necessary to reduce industry testing burdens and costs. The original state test procedures for state-regulated LED lamps and LED small diameter directional lamp referenced a federal register notice of   |

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|      |   |  | changes incorporate the published federal test procedures for integrated LED lamps at 10 C.F.R. section 430.23(ee) and Appendix BB to Subpart B of part 430. | proposed rulemaking and the underlying industry test procedure with modifications. The proposed changes to the state test procedures reference the final published federal test procedure.  |
| 267. | §1604 Documents Incorporated by Reference | Add “Energy Star Guidelines, “Measuring Interior Volume” (Test for measuring interior volume of commercial hot food holding cabinets)” to the list of documents incorporated by reference  | The purpose of this change is to include a document that was inadvertently left out.   | This change is necessary to include a document that is currently referenced in the regulations but is not referenced appropriately in the documents incorporated by reference section.  |
| 268. | §1604 Documents Incorporated by Reference | Remove the following documents from the list of Documents Incorporated by Reference:<br>-“80 Federal Register 39664 - 39667 (July 9, 2015)”<br>-“ANSI/ASTM F2022-00”<br>-“IEC 62301:2005”<br>-“Pool Heat Pump Manufacturers Association Addendum Test Procedure”<br>-“UL 731-1995” | The purpose of this change is to remove documents that are no longer referenced in the regulations.  | This change is necessary to remove documents incorporated by reference because these state test procedures have been superseded by federal test procedures or, in the case of the federal register reference, by publication in the Code of Federal Regulations, as described in the specific sections above. |
| 269. | §1605.3(a)(2) and Table A-12              | Delete subsection (a)(2) and Table A-12 (state efficiency standards for freezers that are consumer products and exceed 30 ft <sup>3</sup> but do not exceed 39 ft <sup>3</sup> , and are   | The purpose of this change is to remove unnecessary state standard.  | This change is necessary to remove a state standard for a type of consumer product that does not exist in the market. Existing federal standards cover the full scope of consumer and commercial freezers, making this standard unnecessary.  |

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|      |  | manufactured on or after March 1, 2003)   |  |  |
| 270. | §1605.3(c), Table C-11 (previously C-10)         | Renumber Table C-10 to “Table C-11” (state standards for computer room air conditioners) and amend the content                                      | The purpose of these changes is to remove state standards that are preempted by federal law. | This change is necessary to remove outdated state standards that are superseded by federal standards. The federal standards for computer room air conditioners that air-cooled, water-cooled, and glycol-cooled have been in effect since October 29, 2012, and supersede the state standards for these appliances. (See 10 C.F.R. § 431.97, Table 12.)  |
| 271. | §1605.3(f)(1), including exception               | Delete subsection (f)(1) (state standard for hot water dispensers and mini-tank electric water heaters) and renumber the remaining list as a result | The purpose of this change is to remove state standards that are preempted by federal law.   | This change is necessary to remove outdated state standards superseded by federal standards. The federal definitions for consumer water heaters do not place any limitation on the storage volume of water heaters. (See 42 U.S.C. section 6291(27)(A) and (B); 81 FR 96204, 96210-96211.) Thus, the federal standards for consumer water heaters in 42 U.S.C. section 6295(e)(1)(C) supersede the state standards for hot water dispenses and mini-tank electric water heaters. The exception is no longer relevant because the state standards for these products are preempted by federal law. This change will provide greater clarity and certainty to regulated parties. |
| 272. | §1605.3(f)(2) and Table F-4, including exception | Delete subsection (f)(2) and Table F-4 (state standards for small water heaters) and renumber the remaining subsections as a result                 | The purpose of this change is to remove state standards that are preempted by federal law.   | This change is necessary to remove outdated state standards superseded by federal standards. The federal definitions for consumer water heaters do not place any limitation on the storage volume of water heaters. (See 42 U.S.C. section 6291(27)(A) and (B); 81 FR 96204, 96210-96211.) Thus, the federal standards for consumer water  |

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|      |   |   |   | heaters in 42 U.S.C. section 6295(e)(1)(A), (B), and (C) supersede the state standards for the consumer water heaters listed in Table F-4. The exception is no longer relevant because the state standards for these products are preempted by federal law. This change will provide greater clarity and certainty to regulated parties.  |
| 273. | §1605.3(k)(1) and Table K-10, including exceptions            | Amend subsection (k)(1) to reference the federal standards and delete the original Table K-10 (state standards for state-regulated incandescent reflector lamps)  | The purpose of this change is to remove state standards that are preempted by federal law.  | This change is necessary to remove outdated state standards for incandescent reflector lamps. Incandescent reflector lamps are federally regulated products. The federal standards for incandescent reflector lamps found in 10 C.F.R. section 430.32(n) supersede the state standards for these products.  |
| 274. | §1605.3(k)(2), (k)(2)(A), (k)(2)(B), and Tables K-11 and K-13 | Amend subsection (k)(2), delete subsections (A), and (B), and delete Tables K-11 and K-13 (state standards for state-regulated general service incandescent lamps and state-regulated modified spectrum general service incandescent lamps) | The purpose of these changes is to remove references to “state-regulated general service incandescent lamps” and “modified spectrum incandescent lamps” and their associated state standards because they are preempted by federal law.   | This change is necessary to remove outdated state standards for general service incandescent lamps and modified spectrum incandescent lamps. These state standards are superseded by federal standards currently located in section 1605.1(k)(4). General service incandescent lamps are currently subject to federal standards found in 10 C.F.R. section 430.32(x).                                     |
| 275. | §1605.3(k)(2), Table K-8 (previously Table K-12)              | Change “All” to “310 to 2600”   | The purpose of this change is to correct an error identifying the lumen ranges subject to the minimum efficacy standard for state-regulated general service lamps. Instead of “all,” the lumen ranges should reflect the same range as was in former Table K-11 (310 to 2600 lumens). | This change is necessary to correct an error that unintentionally expanded the number of lamps subject to the 45 lumens per watt minimum lamp efficacy standard from those with lumen ranges to 310 to 2600 lumens to any lumens. The original table mimicked the format of former Table K-11 and was intended to collapse the differentiated lumen ranges in former Table K-11 into a single standard in |

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|      |   |   |   | former Table K-12 (now Table K-8). This change clarifies that the same lumen ranges from former Table K-11 apply to new Table K-8.  |
| 276. | §1605.3 Documents Incorporated by Reference | Add “ASME A112.19.2/CSA B45.1-2013 Waste Extraction Test (Section 7.10)” to the list of documents incorporated by reference and add a heading for “AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)”   | The purpose of this change is to include a document that is currently referenced in the regulations.                | This change is necessary to include a document used for determining compliance with state standards that was mistakenly left out of the original regulations adopting these standards, which were adopted through emergency powers granted under Executive Order B-29-15. See Docket # 15-AAER-1.   |
| 277. | §1605.3 Documents Incorporated by Reference | Remove “ANSI C81.61-2006” from the list of documents incorporated by reference  | The purpose of this change is to remove a document that is no longer referenced in this section of the regulations. | This change is necessary to remove a document that applied to state standards that are now obsolete.  |
| 278. | §1606(a) “Exceptions to section 1606(a)”    | 1) Add the word “external” before “power supplies”<br>2) Delete “2. Walk-in coolers and walk-in freezers” and “3. Low-profile ceiling fans” from the list of exceptions<br>3) Add “compressors” as the new “2.” to the list<br>5) Add “small electric motors” as the new “3.” to the list | The purpose of these changes is to specify which appliance types are exempt from certification to MAEDbS.           | 1) This change is necessary to differentiate between regulated external power supplies and non-regulated internal power supplies.<br>2) This change is necessary to reflect the fact that the exceptions for walk-in coolers and walk-in freezers and low-profile ceiling fans are no longer applicable. The federal test procedure for ceiling fans in 10 C.F.R. section 430.23(w) (Appendix U to subpart B of part 430) now applies to low-profile ceiling fans” (aka “hugger fans”), and these hugger fans will become covered under the federal performance standards that take effect on January 21, 2020, making it necessary to collect data on these products to verify compliance with the standards (See 82 Fed. Reg. |

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|      |                    |  |  | <p>6826 (Jan. 19, 2017) (discussing applicability of rules to hugger fans)). And walk-in coolers and walk-in freezers are now required to be certified based on federal standards (10 C.F.R. §431.306) in effect for models manufactured on or after June 5, 2017. See changes to section 1605.1(a) in Table 1 of this document.</p> <p>3) This change is necessary to reflect the fact that “compressors” are not required to be certified. There is a federal test procedure in effect for compressors, but there are no federal or state standards effective for this appliance type. Discussions about appropriate data fields to collect for compressors is ongoing, so it is not appropriate at this time to add fields for proper certification of compressors into MAEDBS.</p> <p>4) This change is necessary to specify that small electric motors are exempt from certification. See change to Table X (S) “electric motors” in Table 2.3 of this document.</p> |
| 279. | §1606(a)(4)(A)5.c. | For distribution transformers, change “complies with the labeling requirements of NEMA Standard TP3-2000” to “has a label or nameplate which states ‘DOE Compliant’ or equivalent” | The purpose of this change is to update the marking requirements for distribution transformers to match current industry standard. | This change is necessary to update an outdated state labeling requirement for distribution transformers. The original marking requirements were based on an industry standard that is no longer maintained.   |
| 280. | §1606(j)           | Delete “(j) Portable Luminaire Sales Data. Beginning January   | The purpose of this change is to remove an unnecessary reporting requirement.  | This change is necessary to reduce reporting burdens. The portable luminaire sales data is no longer needed   |



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|      |   | 1, 2013, portable luminaire manufacturers selling products in California shall submit to the Energy Commission annual unit sales of portable non-screw based halogen luminaires sold in California, by major product class. Data for each calendar year shall be submitted no later than May 1 of the following year” |   | because the information submitted to the MAEDbS to certify these products is a reasonable proxy for the specific sales numbers. Because this information is not useful, the Energy Commission proposes to remove this requirement. This will result in a reduction in reporting requirements for manufacturers of portable luminaires.              |
| 281. | §1606 Documents Incorporated by Reference           | Remove “California Energy Commission Voluntary California Quality Light - Emitting Diode (LED) Lamp Specification (December 2014)” from the list of documents incorporated by reference   | The purpose of this change is to remove a document that is no longer referenced in this section of the proposed regulations.  | This change is necessary to remove a document that applied to the certification requirements for a state-regulated appliance that has been updated in the proposed regulations and no longer includes reference to this document.   |
| 282. | §1607(d)(4) and Documents Incorporated by Reference | Change “comply with the labeling requirements of NEMA Standard TP3-2000” to “have a label or nameplate which states “DOE Compliant” or equivalent” (Distribution Transformers), and delete NEMA Standard TP3-2000 from the documents incorporated by reference  | The purpose of this change is to update the marking requirements for distribution transformers to match current industry standard, and to remove the document from the documents incorporated by reference. | This change is necessary to update an outdated state labeling requirement for distribution transformers. The original marking requirements were based on an industry standard that is no longer maintained. It is necessary to remove NEMA Standard TP3-2000 from the documents incorporated by reference because it is no longer being referenced. |
| 283. | §1607   | Update Voluntary  | The purpose of this   | This change is necessary to   |

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|      | Documents Incorporated by Reference                             | California Quality LED Lamp Specification from December 2014 to December 2017  | change is to update the document incorporated by reference from the outdated 2014 version to the newest 2017 version. | apply the marking requirements related to the Voluntary California Quality LED Lamp Specification to the most current version of this document instead of to an outdated version.   |
| 284. | § 1608(a) “Exceptions to sections 1608(a)(1) and 1608(a)(2)(C)” | <p>1) Add the word “external” before “power supplies”</p> <p>2) Delete “2. Walk-in coolers and walk-in freezers” and “3. Low-profile ceiling fans” from the list of exceptions</p> <p>3) Add “compressors” as the new “2.” to the list</p> <p>4) Add “small electric motors” as the new “3.” to the list</p> | The purpose of these changes is to specify which appliance types are exempt from certification to MAEDbS.             | <p>1) This change is necessary to differentiate between regulated external power supplies and non-regulated internal power supplies.</p> <p>2) This change is necessary to reflect the fact that the exceptions for walk-in coolers and walk-in freezers and low-profile ceiling fans are no longer applicable. The federal test procedure for ceiling fans in 10 C.F.R. section 430.23(w) (Appendix U to subpart B of part 430) now applies to low-profile ceiling fans” (aka “hugger fans”), and these hugger fans will become covered under the federal performance standards that take effect on January 21, 2020, making it necessary to collect data on these products to verify compliance with the standards (See 82 Fed. Reg. 6826 (Jan. 19, 2017) (discussing applicability of rules to hugger fans)). And walk-in coolers and walk-in freezers are now required to be certified based on federal standards (10 C.F.R. §431.306) in effect for models manufactured on or after June 5, 2017. See changes to section 1605.1(a) in Table 1 of this document.</p> <p>3) This change is necessary to reflect the fact that “compressors” are not required to be certified. There is a federal test procedure in effect for compressors, but there are no federal or state standards</p> |

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|  |  |  |  | <p>effective for this appliance type. Discussions about appropriate data fields to collect for compressors is ongoing, so it is not appropriate at this time to add fields for proper certification of compressors into MAEDBS.</p> <p>4) This change is necessary to specify that small electric motors are exempt from certification. See change to Table X (S) “electric motors” in Table 2.3 of this document.</p> |
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**Table 2.2. Changes to the Appliance Certification Procedures<sup>3</sup>**

| No.  | California Code of Regulations, Title 20 | Proposed Change  | Purpose   | Necessity  |
|------|--|--|---|--|
| 285. | §1606(a)                                 | Add “...electronically...” and “...through the MAEDbS...”  | The purpose of this change is to reflect the current certification procedures under the MAEDbS.   | This change is necessary to match the current certification procedures under the MAEDbS and specify that statements required under section 1606(a) must be filed electronically. This change will to provide greater clarify to regulated parties.   |
| 286. | §1606(a)(1)(E)                           | Add “...electronically...” and “...through the MAEDbS...” a delete “...on the same sheet of paper or...” | The purpose of this change is to reflect the current certification procedures under the MAEDbS.   | This change is necessary to match the current certification procedures under the MAEDbS and ease the method that manufacturers use to file multiple statements.  |
| 287. | §1606(a)(2)(A), (B), and (C)             | Amend subsections (a)(2)(A), (B), and (C) (“e-mail address”)   | The purpose of this change is to make mandatory the requirement that manufacturers provide an email addresses, instead of optional requirement. | This change is necessary to improve and accelerate the communication between the Energy Commission and regulated parties. The current process of sending out certified mail to stakeholders is expensive and time consuming. By requiring email addresses, all communication will be able to be done electronically. |
| 288. | §1606(a)(3)(C)                           | Delete Exception 1. to subsection (a)(3)(C) (water heaters)  | The purpose of this change is to align reporting and certification requirements with updates to federal regulations.                            | This change is necessary because the exception to reporting testing and performance information for water heaters is no longer applicable. All regulated water heaters are now subject a to an updated federal test procedure found in 10 C.F.R. section 430.23 (Appendix E to subpart B of part 430).               |
| 289. | §1606(a)(4)(A)4.a.                       | Delete “for wine chillers that are   | The purpose of this change is to align  | These changes are necessary because wine chillers are now  |

<sup>3</sup> See Table 3 for changes to add the term “of this Article”, replace the term “database” with “MAEDbS”, and all other nonsubstantive changes.

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|      |                 | consumer products, the appliance was tested to 10 C.F.R. section 430.23(a) with the modifications referenced in Table A-1”, and renumber the remaining list  | reporting and certification requirements with updates to federal regulations.  | federally regulated coolers subject to a new federal test procedure; therefore wine chillers no longer must be tested under the applicable state test procedure formerly specified in section 1604(a), Table A-1. This change will prevent the submittal of incorrect data to the Energy Commission.            |
| 290. | §1606(a)(4)(B)  | Add “electronically”   | The purpose of this change is to reflect the current certification procedures under the MAEDbS.  | This change is necessary to match the current certification procedures under the MAEDbS and specify the method manufacturers must use to submit declarations required under section 1606(a)(4). This change will provide greater clarify to regulated parties.  |
| 291. | §1606(a)(4)(C)  | Add “electronically through the MAEDbS”, delete “as follows”, and add “by the Executive Director for a period for at least ten years, pursuant to the requirements in section 1606(i) of this Article” | The purpose of this change is to reflect the current certification procedures under the MAEDbS and follow existing procedures to retain records. | This change is necessary to match the current certification procedures under the MAEDbS and to match the procedure for maintaining manufacturers’ declarations with current the retention of records requirements found in subsection 1606(i).  |
| 292. | §1606(a)(4)(C)1 | Delete subsection (a)(4)(C)1 (statements filed on paper)   | The purpose of this change is to manage the retention of records through MAEDbS.   | This change is necessary to transition to electronic communication with stakeholders. Under MAEDbS, manufacturers file their statements electronically, and not on paper. Maintaining records electronically within MAEDbS will save time and money for the Energy Commission and stakeholders that use MAEDbS. |
| 293. | §1606(a)(4)(C)2 | Delete subsection (a)(4)(C)2 (statements filed electronically)   | The purpose of this change is to manage the retention of records through MAEDbS.   | This change is necessary to transition to electronic communication with stakeholders. Under   |

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|      |                              |   |   | MAEDbS, wet-singed paper declarations are not required. Maintaining records electronically within MAEDbS will save time and money for the Energy Commission and stakeholders that use MAEDbS.  |
| 294. | §1606(b)(2)(A) and (B)       | Amend subsections (b)(2)(A) and (B) (informing manufacturer and this party of Executive Director’s determination) | The purpose of this change is to reflect the current certification procedures under the MAEDbS.                     | These changes are necessary to facilitate and accelerate communication with stakeholders. These changes require that the Energy Commission exclusively communicate electronically with manufacturers and third party certifiers regarding Executive Director’s determination, and to communicate specifically to person designated as a contact person under MAEDbS. The changes eliminate the option of informing or sending determinations on paper. |
| 295. | §1606(b)(3)(A), (B), and (C) | Amend subsections (b)(3)(A), (B), and (C)(Nature of Determination)  | The purpose of this change is to reflect the current certification procedures under the MAEDbS.                     | These changes are necessary to facilitate and accelerate communication with stakeholders. The changes specify that the Executive Director and manufacturers must communicate through MAEDbS regarding the rejection or acceptance of statement.  |
| 296. | §1606(c)(3)                  | Add “electronically writing (either via email or directly through the MAEDbS” and “electronic”                    | The purpose of these changes is to require the Executive Director to communicate electronically with manufacturers. | These changes are necessary to facilitate and accelerate communication with manufacturers. The changes specify that the Executive Director may communicate through email or directly through the MAEDbS with manufacturers to seek confirmation of the validity of, or to correct, all information in the MAEDbS listings. The changes eliminate the requirement of communication through physical mail.   |

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| 297. | §1606(c)(3)          | Delete “including but not limited to the appliance’s compliance with any applicable standard adopted since the most recent filing by manufacturer. If, within 30 days after the mailing ...to the same address” and add “calendar” before “days” | The purpose of this change is to allow the Energy Commission to move appliances that no longer meet the current standards from the Approved MAEDbS to the Archived MAEDbS without an additional 30-day notice.   | These changes are necessary to remove the requirement that the Energy Commission provide an additional 30 day notice to manufacturers whose products no longer comply with current standards that the products will be moved to the Archived MAEDbS. Also, specifying that “30 days” means “30 calendar days” is necessary to be consistent with the computation of time used throughout the regulations.  |
| 298. | §1606(c)(3)(A) (new) | Add new subsection (c)(3)(A)   | <p>The purpose of this change is to allow the Energy Commission to move appliances that no longer meet the current standards from the Approved MAEDbS to the Archived MAEDbS without an additional 30-day notice.</p> <p>The purpose of the effective date is to maintain accuracy of the Approved MAEDbS with the most current effective standards.</p> | <p>This change is necessary to eliminate a redundant notification requirement to manufacturers when their appliances no longer comply with current standards. The current regulations permit the Commission to “check” database entries with a 30-day notice to manufacturers, but then requires a subsequent notice if any of those models need to be moved because the model does not comply with the most current efficiency standards. Because appliances manufactured on or after the effective date of a new federal standard are not permitted to be sold in California, it is necessary to immediately archive any models that no longer meet the standards. Manufacturers have other means to become aware of changes in the standards that may affect their appliances, such as the regulations themselves.</p> <p>The necessity of the effective date is to ensure that the Approved MAEDbS reflects the most current effective standards, so that retailers and consumers in California can use the MAEDbS to verify</p> |

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|      |                      |   |  | that their appliances comply with the current effective standards.  |
| 299. | §1606(d)(1)          | Add “(1)” and delete “(including but not limited to non-compliance with standards currently in effect, but not in effect when the statement was filed)” | The purpose of this change is to eliminate a 10-day notice to manufacturers that their models are being moved from the Approved MAEDbS to the Archived MAEDbS when the reason for moving them is that they no longer meet the current effective standard.  | This change is necessary to remove the requirement that the Energy Commission provide an additional 10 day notice to manufacturers whose products no longer comply with current standards that the products will be moved to the Archived MAEDbS. See below, Table 2.1, section 1606(d)(1)(A) for correlating changes.  |
| 300. | §1606(d)(1)          | Add “electronic” and “via email or directly through the MAEDbS”, and delete “by certified mail (registered mail to non-U.S. destinations)               | The purpose of this change is to require the Executive Director to communicate electronically with manufacturers.  | These changes are necessary to facilitate and accelerate communication with manufacturers. The changes specify that the Executive Director may communicate through email or directly through the MAEDbS with manufacturers regarding compliance with the regulations and any statement filed pursuant to the regulations prior to removing an appliance from MAEDbS. The changes eliminate the requirement of communication through certified or registered mail. |
| 301. | §1606(d)(1)(A) (new) | Add subsection (d)(1)(A)  | The purpose of this change is to eliminate a 10-day notice to manufacturers that their models are being moved from the Approved MAEDbS to the Archived MAEDbS when the reason for moving them is that they no longer meet the current effective standard.<br><br>The purpose of the effective date is to | This change is necessary to eliminate a 10-day notice to manufacturers that their models are being moved from the Approved MAEDbS to the Archived MAEDbS when the reason for moving the model is noncompliance with the most current effective standard. Retailers and consumers use the Approved MAEDbS to verify that their appliances are lawful to be sold in California and meet the most currently effective standard. To ensure that the                   |



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|      |   |  | ensure that the Approved MAEDbS reflects the most current effective efficiency standards.       | <p>Approved MAEDbS is up to date, it is necessary to immediately archive any models that do not meet the current effective standards. Manufacturers do not need notice that an efficiency standard has changed and affects their products because the effective dates are discussed in rulemaking proceedings, are included in the regulations themselves, and manufacturers are expected to be aware of the laws and regulations that affect their products.</p> <p>The effective date is necessary to ensure that the Approved MAEDbS reflects the current effective standards, which retailers and consumers use to verify that their appliances comply with those standards and are lawful for sale in California.</p> |
| 302. | §1606(f)(1)(A)1, (f)(1)(B), and (f)(1)(C) | Add “through the MAEDbS”                                 | The purpose of this change is to reflect the current certification procedures under the MAEDbS. | This change is necessary to match the current certification procedures under the MAEDbS, which require the submittal of information electronically, and not by physical means.   |
| 303. | §1606(g)(1)(B) and (C)                    | Delete subsections (g)(1)(B) and (C) (electronic filing) | The purpose of this change is to remove unnecessary certification procedures.                   | This change is necessary to match the current certification procedures under the MAEDbS. The new system does not require the execution, retention, or submittal of paper copies of an electronically filed declaration.  |
| 304. | §1606(g)(2), (g)(2)(B) and (C)            | Add “through the MAEDbS”                                 | The purpose of this change is to reflect the current certification procedures under the MAEDbS. | This change is necessary to match the current certification procedures under the MAEDbS, which require the submittal of information electronically, and not by physical means.   |
| 305. | §1606(h)(1)(A)                            | Add “within the  | The purpose of this   | This change is necessary to  |

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|      | )           | MAEDbS and meets all requirements shown in section 1603(b)”   | change is to manage the certification of trade associations through the use of the MAEDbS.   | allow trade associations to become approved through MAEDbS instead of having to submit a separate paper application, and to clarify that they must meet the requirements in section 1603(b) for approved trade association directories.   |
| 306. | §1608(c)(3) | Change from “written notice by certified mail (registered mail for non-U.S. destination)” to “electronic notice via email or directly through the MAEDbS” | The purpose of this change is to improve the process the Energy Commission uses to update the appliance list in the MAEDbS to reflect test reports submitted by manufacturers. | This change is necessary to reduce costs and accelerate methods of communication between the Energy Commission and regulated parties. The current process of sending out certified mail to manufacturers regarding measures to modify or remove their appliances listed in is MAEDbS is expensive and time consuming. By requiring email addresses, all communication will be able to be done electronically. |
| 307. | §1608(c)(4) | Change from “written notice by certified mail (registered mail for non-U.S. destination)” to “electronic notice via email or directly through the MAEDbS” | The purpose of this change is to improve the process the Energy Commission uses to update the appliance list in the MAEDbS to reflect test reports submitted by manufacturers. | This change is necessary to reduce costs and accelerate methods of communication between the Energy Commission and regulated parties. The current process of sending out certified mail to manufacturers regarding measures to modify or remove their appliances listed in is MAEDbS is expensive and time consuming. By requiring email addresses, all communication will be able to be done electronically. |

**Table 2.3. Changes to Appliance Data Submittal Requirements  
(Table X of Section 1606)<sup>4</sup>**

|      | <b>California Code of Regulations, Title 20</b>   | <b>Proposed Change</b>   | <b>Specific Purpose</b>  | <b>Specific Necessity</b>  |
|------|---|--|--|--|
| 308. | Table X Throughout  | Change the permissible answer of “Yes, no” to “True, false”  | Clarifications   | This change is necessary to accurately reflect the computer programming language of the MAEDbS, which accepts “true/false” but not “yes/no” as the appropriate response.   |
| 309. | Table X (A) Non-Commercial Refrigerators, Non-Commercial Refrigerator-Freezers, Non-Commercial Freezers | <p>1) Change “Style” to “Product Class” in required info and amend permissible answers</p> <p>2) Remove fields that are covered under “product class” (e.g., “defrost system,” “type,” “compact,” etc.)</p> <p>3) Remove “Wine Chiller” required info</p> <p>4) Remove “Chest Refrigerator” from required info</p> <p>5) Add “Adjusted total volume” as a new required field</p> | <p>1) Consistency with federal regulations</p> <p>2) Remove fields</p> <p>3) Consistency with federal regulations</p> <p>4) Remove field</p> <p>5) New field</p> | <p>1) This change is necessary to align with federal regulations, which refer to “product class” to describe multiple characteristics of this appliance type, instead of “style” (see 10 C.F.R. § 430.32(a).) Requiring “product class” will enable the Commission to determine what regulation the appliance model is required to comply with. The Tables described in the permissible response are necessary to cross reference the Tables in sections 1605.1 that identify the different product classes.</p> <p>2) This change is necessary because these fields are now covered under a single entry for “product class” as described above.</p> <p>3) This change is necessary to align with federal regulations, which now consider these products to be “Coolers”, rather than “Wine Chillers.,” Wine chillers previously were certified as a type of consumer refrigeration product when they were regulated under state standards. Rather than split these products out as a</p> |

<sup>4</sup> See Table 3 for changes to add the term “of this Article”, replace the term “database” with “MAEDbS”, and all other nonsubstantive changes.

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|      |  |   |   | <p>separate appliance type and potentially create confusion, the Energy Commission is treating miscellaneous refrigeration products (which are wine chillers) as a separate product class within the non-commercial refrigeration appliance type.</p> <p>4) This change is necessary to remove an unnecessary field as this product is not identified as a separate product class in refrigerators, but is instead included with the new product classes.</p> <p>5) This change is necessary to add the “Adjusted total volume” field, which provides information that must be provided in order to determine compliance with the federal standard.</p>  |
| 310. | Table X (A)<br>‘Self-contained Commercial Refrigerators with or without doors, Self-contained Commercial Refrigerator-Freezers...’ | <p>1) Remove note about certification of models before Jan 1, 2012</p> <p>2) Remove “wine chiller” from permissible answers</p> <p>3) Rename the field “Multiple compartments number” to “Multiple Compartments Product Code”</p> | <p>1) Remove out of date text</p> <p>2) Consistency with federal regulations</p> <p>3) Consistency with federal regulations</p> | <p>1) This change is necessary to remove unnecessary and outdated language from the regulations, as the effective date of January 1, 2012 has passed.</p> <p>2) This change is necessary to align with federal regulations, which now consider these products to be “Coolers”, rather than “Wine Chillers,” and are covered under the requirements for commercial refrigerators more generally rather than as a separate type of product or cabinet style. See 10 C.F.R. § 431.62, where definitions of “commercial refrigerator” encompass products that would be used as wine chillers (no temperature thresholds).</p> <p>3) This change is necessary to clarify what exactly the field is referring to (the product code). The previous name also sounded redundant, so this change will improve</p> |

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|      |   |   |  | readability.  |
| 311. | Table X (A)<br>“Automatic Commercial Ice-Makers”                    | Remove “Type of Ice Harvested” from required information  | Remove extraneous field  | This change is necessary to remove an extraneous field. It is not necessary to collect information on “Type of Ice Harvested” from manufacturers, because “Ice Maker process type” already provides this information.   |
| 312. | Table X (A)<br>“Water Dispensers”                                   | Remove the erroneous comma from the permissible answers   | Correct typo   | This change is necessary to correct a typographical error.  |
| 313. | Table X (A)<br>“Walk-in Coolers, and Walk-in Freezers: Doors” (new) | 1) Amend the name of this appliance to specify that it is just for doors<br>2) Remove “Ice Hardness Adjustment Factor (for continuous type models” from the required fields<br>3) Add all fields and permissible answers. | 1) Consistency with federal regulations<br>2) Remove requirement that does not apply to walk-in coolers or freezers<br>3) Require reporting of this information to the MAEDbS to allow the Energy Commission to determine compliance with the applicable federal standards | 1) This change is necessary to specify that this appliance type is just the “doors” part of walk-in coolers and freezers. Under federal law, walk-in coolers and freezers are regulated by their component parts (e.g., doors, panels) or as whole “systems,” making it necessary to separate these into multiple appliance types to verify what standards apply and whether the product complies with that standard. (See 10 C.F.R. § 431.306 for the differentiation of appliance types for walk-in coolers and freezers.)<br><br>2) This change is necessary to remove an extraneous field that only applies to automatic ice makers, which was erroneously placed here.<br><br>3) This change is necessary to collect information to determine what federal standard applies to this product and to verify whether the appliance certified to the Commission meets that federal standard. This information aligns with what is required to be reported to the U.S. DOE, |

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|      |   |   |   | and is necessary to ensure that products sold in California meet the applicable federal standards, in the event that the U.S. DOE does not continue to collect this information, is not able to perform appropriate checks on this information, or the underlying regulation is repealed.   |
| 314. | Table X (A)<br>“Walk-in Coolers, and Walk-in Freezers: Panels” (new)                | Add new federally regulated appliance and its required fields | Consistency with federal regulations and database, and require reporting of this information to the MAEDbS to allow the Energy Commission to determine compliance with the applicable federal standards | This change is necessary to add walk-in cooler and walk-in freezer panels as a federally regulated appliance and its required fields based on information collected by federal database. It is necessary to collect the information to determine what federal standard applies to this product and to verify whether the appliance certified to the Commission meets that federal standard. This information aligns with what is required to be reported to the U.S. DOE, and is necessary to ensure that products sold in California meet the applicable federal standards, in the event that the U.S. DOE does not continue to collect this information, is not able to perform appropriate checks on this information, or the underlying regulation is repealed. |
| 315. | Table X (A)<br>“Walk-in Coolers, and Walk-in Freezers: Refrigeration Systems” (new) | Add new federally regulated appliance and its required fields | Consistency with federal regulations and database, and require reporting of this information to the MAEDbS to allow the Energy Commission to determine compliance with the applicable federal standards | Adding this federally regulated appliance and its required fields based to match federal regulations and federal database. It is necessary to collect the information to determine what federal standard applies to this product and to verify whether the appliance certified to the Commission meets that federal standard. This information aligns with what is required to be reported to the U.S. DOE, and is necessary to ensure that   |

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|      |   |   |   | products sold in California meet the applicable federal standards, in the event that the U.S. DOE does not continue to collect this information, is not able to perform appropriate checks on this information, or the underlying regulation is repealed.   |
| 316. | Table X (A)<br>“Refrigerated Bottled or Canned Beverage Vending Machines” | 1) Amend “Equipment Class” field and permissible answers to reflect standards effective Jan 8, 2019<br>2) Remove “Maximum Daily Energy Consumption at 90°F. Ambient Temperature” from the required info<br>3) Remove out of date language: “For models manufactured on or after January 1, 2006”. | 1) Consistency with federal regulations<br>2) Consistency with federal regulations<br>3) Remove out of date text  | 1) This change is necessary to collect the information needed to determine what federal standard applies to the product being certified (See 10 C.F.R. §431.296(a)).<br>2) This change is necessary to remove a field that is no longer being tested under the federal test procedure, and is therefore not able to be reported. (See 80 Fed. Reg. 45793 (July 31, 2015).)<br>3) This change is necessary to remove out of date language, as the effective date for this has passed.                  |
| 317. | Table X (C)<br>“Air Filters manufactured on or after April 1, 2019”       | 1) For the “Minimum Efficiency Reporting Value (MERV)” required field, add note saying “(reportable for models tested to ASHRAE 52.2-2012 only)”<br>2) Remove “or N/A” from the permissible answers   | 1) Clarify that MERV is only required to be reported if the manufacturer uses the ASHRAE 52.2-2012 test procedure<br>2) Clarify that NA is not a permissible answer | 1) This change is necessary to clarify that MERV is only reportable for models tested to ASHRAE 52.2 (2012); AHRI 680 does not provide this information. Because manufacturers are allowed to select which test procedures they use, only models tested to ASHRAE 52.2 will need to report the MERV information.<br>2) This change is necessary to clarify that N/A is not a permissible answer for “Face Velocity Utilized for the test procedure,” because this field is a numeric field in MAEDbS. |
| 318. | Table X (C)<br>“All Central Air Conditioners and Central                  | Change “ARI” to “AHRI”  | Update to correct organization name   | This change is necessary to update the organization’s name from ARI to AHRI, so that there is not confusion about what the organization is.   |

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|      | Air-Conditioning Heat Pumps   |  |   |   |
| 319. | Table X (C)<br>“Air-Cooled, Single Package CAC $\geq 65,000$ and $< 760,000$ Btu/hour and Air-Cooled, Split System CAC $\geq 65,000$ and $< 760,000$ Btu/hour”                            | 1) Add the word “and” between the names of the two appliances in the ‘appliance’ column<br>2) Add required field for “Integrated Energy Efficiency Ratio (IEER) (effective for models manufactured on or after January 1, 2018)” | 1) Formatting/ Consistency<br>2) Consistency with federal regulations | 1) This change is necessary to match similar formatting found throughout Table X.<br>2) This change is necessary to collect information that will be used to determine whether the appliance complies with the applicable federal standard. This information is only necessary for products manufactured on or after January 1, 2018, which is the effective date of the federal IEER standard.   |
| 320. | Table X (C)<br>“Air-Source, Single Package Heat Pumps $\square 65,000$ Btu/hour and $< 760,000$ Btu/hour; and Air-Source, Split-System Heat Pumps $\geq 65,000$ and $< 760,000$ Btu/hour” | Add required field for “Integrated Energy Efficiency Ratio (IEER) (effective for models manufactured on or after January 1, 2018)”   | Consistency with federal regulations                                  | This change is necessary to collect information that will be used to determine whether the appliance complies with the applicable federal standard. This information is only necessary for products manufactured on or after January 1, 2018, which is the effective date of the federal IEER standard.   |
| 321. | Table X (C)<br>“Computer Room Air Conditioners”   | Add “Air Flow Direction” and permissible answers.  | Consistency with federal regulations                                  | This change is necessary to collect information that is used to determine which federal standard, if any applies. Federal efficiency standards apply to computer room air conditioners with downflow or upflow air flow direction, but not horizontal flow. (See DOE Guidance, available at <a href="http://www1.eere.energy.gov/buildings/appliance_standards/pdfs/crac_faq_2015-1-15.pdf">http://www1.eere.energy.gov/buildings/appliance_standards/pdfs/crac_faq_2015-1-15.pdf</a> .) This change will allow manufacturers to choose their airflow, which then determines which efficiency standard applies, if any. |



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| 322. | Table X (C)<br>“Heat pump water-heating packages” | Change the name of the appliance from “Heat pump water-chilling packages” to “Heat pump water-heating packages”   | Correct an error in the name of this appliance type that was corrected when the test procedure was updated   | This change is necessary to reflect changes made to the regulations to address water-heating rather than water-chilling appliances. Changing all references throughout to match updated test procedure.  |
| 323. | Table X (D)<br>“Ceiling Fans”                     | <p>1) Remove the phrase “Except Low-Profile Ceiling Fans”</p> <p>2) Add required fields and permissible answers for ceiling fans manufactured on or after January 21, 2020</p> <p>3) Add note to the “Efficacy” field to explain that this field is only required for models manufactured before 1/21/2020</p> <p>4) In the “Reversible Fan Action Capable” field, change the reference to section “1605.1(d)(1)(C)” to “1605.1(d)(1)(A)3.”</p> <p>5) Remove the “(specify)” from the permissible answers for Light Source Type</p> | <p>1) Consistency with federal standards</p> <p>2) Consistency with federal standards</p> <p>3) Clarification</p> <p>4) Remove a permissible answer where MAEDbS does not permit both a “look up” field of answers and a free form field to allow any answer</p> | <p>1) This change is necessary to collect information for low-profile ceiling fans to determine whether they comply with the new federal standards. Low profile ceiling fans are now regulated as “Hugger fans” which are a subset of ceiling fans. They are part of the federal test procedure (10 C.F.R. Appendix U to subpart B of part 430), and the new performance standards for these products take effect on January 21, 2020, at which point it will be necessary for them to certify to the MAEDbS to verify that they comply with the applicable federal standards.</p> <p>2) This change is necessary to collect information needed to determine whether the ceiling fans meet the new federal performance standards. The new federal standards for ceiling fans go into effect on this date (10 C.F.R. §430.32(s)(2)).</p> <p>3) This change is necessary to clarify that the “efficacy” field only applies to ceiling fans manufactured before the effective date of the new federal standards. Efficiency, not efficacy, will be the new metric under the new federal standards.</p> <p>4) This change is necessary to reflect the correct subsection number due to the renumbering of subsections within section</p> |

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|      |   |   |   | 1605.1(d)(1)(A).<br>5) This change is necessary to remove a permissible answer that is not possible to submit in the MAEDbS. The field “Light Source Type” is not a free response field in the database – instead it has a drop-down menu of permissible answers. MAEDbS cannot have both types of responses in a single field. Manufacturers will need to respond simply with “other,” if applicable. |
| 324. | Table X (D)<br>“Low-Profile Ceiling Fans” | Remove “Low-Profile Ceiling Fans” as an appliance type  | Clarify that low-profile ceiling fans need to certify to MAEDbS as “Ceiling fans” | This change is necessary to clarify that low-profile ceiling fans will need to certify to MAEDbS because they are now covered under the federal efficiency standards for ceiling fans, as “hugger fans.” See above.  |
| 325. | Table X (D)<br>“Ceiling Fan Light Kits”   | In the “Screw-based Lamps Requirement (Screw-base only)” field, change the reference to section “1605.1(d)(2)(A)1. a. or b.” to “1605.1(d)(2)(A)1.” | Clarification   | This change is necessary to reflect the correct subsection number due to the renumbering of subsections within section 1605.1(d)(2).   |
| 326. | Table X (D)<br>“Residential Furnace Fans” | In the field “Airflow at the maximum airflow-control setting (in cfm)” add “Q <sub>Max</sub> ” in parentheses                                       | Clarification   | This change is necessary because the federal standards in 10 C.F.R. part 430.32(y) use the term “Q <sub>Max</sub> ” as shorthand for “Airflow at the maximum airflow-control setting (in cfm)”. Adding the term “Q <sub>Max</sub> ” in parentheses will clarify that they mean the same thing.   |
| 327. | Table X (E)<br>“Boilers”                  | Capitalize the “c” in “copper” in the permissible answers   | Consistency   | This change is necessary to match the format used throughout Table X.  |
| 328. | Table X (F)<br>“All Water Heaters”        | 1) Change “large water heaters” to “water heaters regulated under subpart G of 10   | 1) Consistency with federal standards<br>2) Consistency with federal standards    | 1) This change is necessary to simplify and accurately reflect the current scope of federal standards for water heaters, together with the following   |

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|      |   | C.F.R. part 431 as of January 1, 2017”<br>2) Change “Rated Input” to “Input Rating” and add “(if applicable)” |  | changes to remove various types of water heaters that are now covered under this federal standard.<br>2) This change is necessary to be consistent with how the federal regulations refer to this metric, and to clarify that the field may be left blank if the product does not have an input rating.  |
| 329. | Table X (F) “Booster Heaters”                 | Remove this appliance type and its associated fields  | Remove requirement due to federal preemption | This change is necessary to remove a preempted appliance type. This appliance type is now covered under “Water Heaters Regulated Under 10 C.F.R. section 430.32(d)”, and “Water Heaters Regulated Under 10 C.F.R. section 431, Subpart G, depending on whether the appliance is a consumer or commercial product.  |
| 330. | Table X (F) “Hot Water Dispensers”            | Remove this appliance type and its associated fields  | Remove requirement due to federal preemption | This change is necessary to remove a preempted appliance type. This appliance type is now covered as a type of instantaneous water heater under “Water Heaters Regulated Under 10 C.F.R. section 430.32(d).”   |
| 331. | Table X (F) “Mini Tank Electric Water Heater” | Remove this appliance type and its associated fields  | Remove requirement due to federal preemption | This change is necessary to remove a preempted appliance type. This appliance type is now covered as either an instantaneous water heater (if less than 2 gallons rated storage volume) under “Water Heaters Regulated Under 10 C.F.R. section 430.32(d),” or a consumer water heater (if the storage volume is between 2 and 20 gallons) that is regulated under the federal test procedure for consumer water heaters in 10 C.F.R. section 430.23(e) and Appendix E to Subpart B of Part 430, and subject to the efficiency standards in 42 U.S.C. section 6295(e)(1). |

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| 332. | Table X (F)<br>“Other Small Electric Water Heaters”   | Remove this appliance type and its associated fields   | Remove requirement due to federal preemption              | This change is necessary to remove a preempted appliance type. This appliance type is now covered under either “Water Heaters Regulated Under 10 C.F.R. section 430.32(d).”, or as a consumer water heater (if the storage volume is between 2 and 20 gallons) that is regulated under the federal test procedure for consumer water heaters in 10 C.F.R. section 430.23(e) and Appendix E to Subpart B of Part 430, and subject to the efficiency standards in 42 U.S.C. section 6295(e)(1). |
| 333. | Table X (F)<br>“Large Electric Water Heaters”   | Remove this appliance type and its associated fields   | Remove requirement due to federal preemption              | This appliance type is now covered under “Water Heaters Regulated Under 10 C.F.R. section 431.110 .”  |
| 334. | Table X (F)<br>“Water Heaters Regulated Under 10 C.F.R. section 430.32(d)”  | Change the name of this appliance from “Small Gas Water Heaters and Small Oil Water Heaters” to “Water Heaters Regulated Under 10 C.F.R. section 430.32(d)” and add and amend fields based on federal standards  | Consistency with federal standards                        | This change is necessary to reflect the current scope of federal standards and to collect the information necessary to determine whether the products meet the applicable federal standards. The federal standards and test procedures were recently amended in a way that significantly changed how water heaters were being tested and what the efficiency standards were. (See 10 C.F.R. § 430.32(d) for current federal standards.)   |
| 335. | Table X (F)<br>“Water Heaters Regulated Under 10 C.F.R. Section 431.110 (EXCEPT residential-duty commercial water heaters)” | Change the name of this appliance from “Large Gas Water Heaters and Large Oil Water Heaters” to “Water Heaters Regulated Under 10 C.F.R. Section 431.110 (EXCEPT residential-duty commercial water heaters)” and add and amend fields based on federal | 1) Consistency with federal standards<br>2) Clarification | 1) This change is necessary to collect the information necessary to determine what standards apply to the products being certified and to determine whether the product meets the applicable federal standard. Large water heaters are federally regulated under 10 CFR 431.110. 2) This change is necessary to clarify that electric models must provide standby loss in terms of “%/hr” while fossil-fuel models must provide standby   |

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|      |  | standards<br>2) In the “Standby Loss” field, add notes  |   | loss in “Btu/hr.” Electric appliances do not use British thermal units (Btus) because Btu is a measure of gas, and gas appliances do not yield results in terms of percentages.  |
| 336. | Table X (F)<br>“Heat Pump Water Heaters”                   | Remove this appliance type and its associated fields  | Remove requirement due to a change in how these water heaters are categorized under the federal appliance standards | This change is necessary to remove an appliance type that no longer exists under the federal water heater standards. This appliance type is considered to be part of “electric water heaters” which are covered under “Water Heaters Regulated Under 10 C.F.R. section 430.32(d)”, and is no longer a separate appliance type. Heat pump water heaters need to certify as “small water heaters” under the appliance types above.   |
| 337. | Table X (F)<br>“Residential Duty Commercial Water Heaters” | Add this new appliance type and its associated fields   | Consistency with federal standards  | This change is necessary to add this new federally regulated appliance type and adding in the new fields necessary to determine compliance with the federal standards specified in 10 C.F.R. §431.110(b). Residential-duty commercial water heaters were previously required to certify as a type of commercial water heater. The updated federal regulations made this as a subset of commercial water heaters with its own test procedures and efficiency standards. Therefore, it is necessary to reflect this information here to verify that these products meet the applicable federal efficiency standards. |
| 338. | Table X (G)<br>Heat Pump Pool Heaters                      | 1) Remove the field “Heating Capacity at Spa Conditions Rating”<br>2) Amend the name of the “Average Coefficient of Performance...” | 1) Remove requirement to match test procedure due to federal preemption<br>2) Consistency with federal regulations  | 1) This change is necessary to remove an extraneous and incorrect requirement, as the current federal test procedure no longer tests for this field, and the Energy Commission is preempted from requiring manufacturers to test for this  |

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|      |  | field  |   | field.<br>2) This change is necessary to amend the name of the efficiency metric for clarity and consistency with the federal standard.  |
| 339. | Table X (G) “Pumps”  | Adding new federally regulated appliance “Pumps” and its relevant required data fields. Also adding several footnotes specifically for “Pumps” based on the federal test procedure | Consistency with federal regulations and database, and require reporting of this information to the MAEDbS to allow the Energy Commission to determine compliance with the applicable federal standards | This change is necessary to reflect the current scope of federal standards, and to add fields necessary to determine compliance with federal standards. (See 10 C.F.R. §431.465 and 10 C.F.R. §431.464.) The information proposed to be collected aligns with what is required to be reported to the U.S. DOE, and is necessary to ensure that products sold in California meet the applicable federal standards, in the event that the U.S. DOE does not continue to collect this information, is not able to perform appropriate checks on this information, or the underlying regulation is repealed. |
| 340. | Table X (G) “Residential Pool Pump and Motor combinations” | Correct spelling of “Synchronous”  | Correct typographical error   | This change is necessary to correct a typographical error.   |
| 341. | Table X (H) “Commercial Pre-rinse spray valves”            | Add “Product Class” and “Spray Force (ounce-force (ozf))” as required fields and associated permissible answers.   | Consistency with federal standards  | This change is necessary to collect the information needed to verify compliance with the new federal standards effective on January 28, 2018. (See 10 C.F.R. §431.266.)  |
| 342. | Table X (J) “Fluorescent Lamp Ballasts”                    | Remove the erroneous parentheses that appears in the permissible answers for “Type of Fluorescent Lamp”  | Correct typographical error   | This change is necessary to correct a typographical error.   |
| 343. | Table X (J) “Deep-   | Remove “(answer N/A if not   | Clarification   | This change is necessary because these fields require  |

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|      | Dimming Fluorescent Lamp Ballasts”   | applicable)” from the permissible answers   |   | numeric responses; “N/A” is neither an appropriate or relevant answer. If the response is inapplicable, MAEDbS requires that the field be left blank.  |
| 344. | Table X (K) “Federally regulated general service fluorescent lamps”                          | 1) Remove the hyphen form the word “bi-pin”<br>2) Remove “Nominal lamp Wattage” as a required field                 | 1) Consistency throughout regulations and with federal regulations<br>2) Remove out of date field | 1) This change is necessary for consistency in the regulations and to align with how federal regulations use the word “Bipin”.<br>2) This change is necessary to remove an extraneous and obsolete field only relevant to an outdated standard that no longer appears in the regulations.  |
| 345. | Table X (K) “Federally regulated incandescent reflector lamps”                               | 1) Remove “and state regulated incandescent reflector lamps<br>2) Remove “Nominal lamp Wattage” as a required field | 1) Remove non-existent appliance type<br>2) Remove out of date field                              | 1) This change is necessary to remove an appliance type, “state-regulated incandescent reflector lamps,” that no longer exists due to federal preemption. Incandescent reflector lamps are now exclusively federally regulated.<br>2) This change is necessary to remove an extraneous and obsolete field only relevant to an outdated standard that no longer appears in the regulations. |
| 346. | Table X (K) “Federally regulated Medium Screw Base General Service Incandescent Lamps; OLEDs | 1) Remove “Medium Screw Based LEDs”<br>2) Remove hyphens from lamp/socket types                                     | 1) Remove irrelevant appliance type.<br>2) Consistency with industry formatting                   | 1) This change is necessary to remove an appliance type, “medium screw-based LEDs,” which has been superseded by the appliance type, “State-regulated LED lamps,” and for which there are no federal efficiency standards. 2) This change is necessary to align with how ANSI refers to these products for consistency with industry and the regulations.                                  |
| 347. | Table X (K) “State-regulated general service incandescent                                    | Remove this appliance type and the required fields associated with it   | Remove obsolete appliance type  | This change is necessary to remove an appliance type that has been superseded by new appliance types. General service incandescent lamps are now a part of the appliance   |

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|      | lamps”  |   |  | type “general service lamps,” and are not a separate category, making it unnecessary to collect this information.   |
| 348. | Table X (K)<br>“State-regulated small diameter directional lamps” | <p>1) Remove hyphens from lamp/socket types</p> <p>2) In the “Combined CRI + Efficacy” field, add “(only applies where efficacy &lt; 80 LPW)”</p> <p>3) Add the field “Rated Lifetime Test Completed”</p> <p>4) Add the field “Estimated Rated Lifetime (hours) (when “Rated Lifetime Test Completed = False”</p> <p>5) In the “Rated Lifetime (hours)” field, add “(when “Rated Lifetime Test Completed = True)”</p> | <p>1) Consistency with Industry formatting</p> <p>2) Clarification</p> <p>3) Clarification</p> <p>4) Clarification</p> <p>5) Clarification</p> | <p>1) This change is necessary to align with how ANSI refers to them and for consistency within the regulations.</p> <p>2) This change is necessary to clarify that this field is only applicable if efficacy is under 80 LPW.</p> <p>3) This change is necessary to allow MAEDbS to collect information to determine whether tested lifetime or estimated lifetime is being reported. Under section 1606(a)(3)(C) Exception 5, manufacturers may report estimated rated lifetime pending completion of the rated lifetime test, and need to update estimated lifetime information upon completion of the lifetime test. Adding this field will help the Commission to determine what is being reported and whether it needs to be updated.</p> <p>4) This change is necessary to clarify that this information is only reported if the rated lifetime test has not been completed. If the rated lifetime test has been completed, then manufacturers are not allowed to report an estimated lifetime.</p> <p>5) This change is necessary to clarify that this information is reported if the rated lifetime test has been completed, and not if the rated lifetime is only an estimate. This allows the Energy Commission and consumers to know whether the rated lifetime is based on a manufacturer estimate (and will be updated upon completion of testing) or a</p> |



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|      |   |   |  | tested value.   |
| 349. | Table X (K)<br>“State-regulated medium screw base general service Organic LED (OLED) lamps” | Remove this appliance type and the required fields associated with it   | Remove requirement because appliance type has been superseded by “state regulated LED lamps”   | This change is necessary to remove an obsolete appliance type that is now covered under “State-regulated LED lamps”.  |
| 350. | Table X (K)<br>“State-regulated Light Emitting Diode (LED) lamps”                           | <p>1) Add an asterisk to the “Base Type” field</p> <p>2) Remove hyphens from lamp/socket types</p> <p>3) Add permissible answers to the “Lamp Shape” field</p> <p>4) Remove the “Light Distribution” field</p> <p>5) In the “Minimum Dimming level” and “Reduced Flicker Operation” fields, add “(if Dimmable equals True)”</p> <p>6) Add the field “Rated Lifetime Test Completed”</p> <p>7) Add the field “Estimated Rated Lifetime (hours) (when “Rated Lifetime Test Completed = False)”</p> <p>8) In the “Rated Lifetime (hours)” field, add “(when “Rated Lifetime Test Completed =</p> | <p>1) Clarification</p> <p>2) Consistency with industry formatting and the regulations</p> <p>3) Consistency with state standards</p> <p>4) Remove unnecessary requirement</p> <p>5) Clarification</p> <p>6) Clarification</p> <p>7) Clarification</p> <p>8) Clarification</p> <p>9) Clarification</p> <p>10) New field to allow the Energy Commission to determine if the product needs to report standby power and network connection</p> <p>11) Clarification</p> <p>12) New requirement</p> <p>13) Remove out of date permissible answers</p> <p>14) Remove out of date requirement</p> <p>15) Clarification</p> | <p>1) This change is necessary to clarify that this field is a unique identifier, which determines how other fields apply to the product.</p> <p>2) This change is necessary to align with how ANSI refers to these and for consistency within our regulations.</p> <p>3) This change is necessary to reflect that only certain types of lamp shape are permissible answers.</p> <p>4) This change is necessary to remove a field that is unnecessary to verify compliance with the regulations and has caused stakeholder confusion. The necessary information for determining compliance with the regulations is already obtained in the “Lamp Shape” and “Meets applicable luminous intensity distribution requirements” fields.</p> <p>5) This change is necessary to clarify that these fields are only required for dimmable lamps.</p> <p>6) This change is necessary to allow MAEDbS to collect information to determine whether tested lifetime or estimated lifetime is being reported. Under section</p> |

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|  |  | <p>True)”</p> <p>9) In the “Lifetime test environment temperature” add the superscript “2”</p> <p>10) Add new field “Standby Mode”</p> <p>11) Add “(if applicable)” to the “Standby Power (watts)” field</p> <p>12) Add new field “Connected network type (if applicable)”</p> <p>13) In the “Meets applicable luminous intensity distribution requirements” field, remove some of the permissible answers</p> <p>14) Remove the “Warranty length (years)” field.</p> <p>15) For the “Audible Noise at 100% ... 20%” and “Dimming Control Capability” fields, add “(if Dimmable equals True)”</p> <p>16) Remove the field “Marked in accordance with Title 24 JA8”</p> <p>17) Remove “Meets the Voluntary California Quality</p> | <p>16) Remove requirement</p> <p>17) Remove out of date requirement</p> | <p>1606(a)(3)(C) Exception 5, manufacturers may report estimated rated lifetime pending completion of the rated lifetime test, and need to update estimated lifetime information upon completion of the lifetime test. Adding this field will help the Commission to determine what is being reported and whether it needs to be updated.</p> <p>7) This change is necessary to clarify that this information is only reported if the rated lifetime test has not been completed. If the rated lifetime test has been completed, then manufacturers are not allowed to report an estimated lifetime.</p> <p>8) This change is necessary to clarify that this information is reported if the rated lifetime test has been completed, and not if the rated lifetime is only an estimate. This allows the Energy Commission and consumers to know whether the rated lifetime is based on a manufacturer estimate (and will be updated upon completion of testing) or a tested value.</p> <p>9) This change is necessary because this field is a requirement of JA8 (title 24), which is optional under the Title 20 regulations (see section 1604(k)). So adding the superscript “2” to indicate that this field is voluntary for state-regulated LED lamps.</p> <p>10) This is necessary to determine if other fields related to standby are applicable.</p> |
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|  |  | <p>Specification 2.0 requirements...” field</p> | <p>11) This change is necessary to clarify that this field is only required if the lamp has a standby mode.</p> <p>12) This change is necessary to determine which network protocol was used during testing, as specified in the federal test procedures referenced in section 1604(k).</p> <p>13) This change is necessary to remove some of the permissible answers that are left over from a version of the California Quality LED Lamp Specification that has been superseded; therefore, these responses no longer apply.</p> <p>14) This change is necessary to remove a field relevant to a version of the California Quality LED Lamp Specification that has been superseded. This field no longer applies.</p> <p>15) This change is necessary to clarify that these fields are only required for dimmable lamps.</p> <p>16) This change is necessary to remove a field that is not necessary for this appliance type. The information is already obtained when the manufacture submits data for JA8 as required under Title 24, Part 6.</p> <p>17) This change is necessary to remove a field relevant to a version of the California Quality LED Lamp Specification that has been superseded and is now obsolete.</p> |
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| 351. | Table X (N)<br>“Portable Luminaires”                        | 1) Remove hyphens from lamp/socket types in the required information and permissible answers<br>2) Change the phrase “Color Correlated” to “Correlated Color”  | 1) Consistency with industry formatting and the regulations<br>2) Consistency with phrasing in test procedure          | 1) This change is necessary to align with how ANSI refers to these and for consistency within our regulations.<br>2) This change is necessary for consistency with the terminology used in the test procedure required under section 1604(n).   |
| 352. | Table X (P)<br>“Clothes Washers that are consumer products” | 1) Remove the phrase “federally regulated”<br>2) Change the field “Energy Factor” to “Integrated Modified Energy Factor”<br>3) Change the field “Water Factor” to “Integrated Water Factor”  | 1) Clarification<br>2) Consistency with federal standard<br>3) Consistency with federal standard                       | 1) This change is necessary to reflect that all clothes washers are federally regulated, hence there is no need to include federally regulated in the appliance name, which may cause confusion, and to properly distinguish between consumer and commercial clothes washers.<br>2) This change is necessary to reflect the metric used in the current federal standard in order to verify compliance with the federal standards.<br>3) This change is necessary to reflect the metric used in the current federal standard in order to verify compliance with the federal standards. |
| 353. | Table X (P)<br>“Commercial Clothes Washers”                 | 1) Remove the phrase “...that are not federally regulated consumer products”<br>2) Change “Energy Factor” to “Modified Energy Factor”<br>3) Add note to the “Water Factor” field to specify that it is only required for models manufactured before January 1, 2018<br>4) Add new field for “Integrated Water Factor” with | 1) Clarification<br>2) Consistency with federal standards<br>3) Clarification<br>4) Consistency with federal standards | 1) This change is necessary to reflect that all clothes washers are federally regulated, hence there is no need to include federally regulated in the appliance name, which may cause confusion, and to properly distinguish between consumer and commercial clothes washers.<br><br>2) This change is necessary to reflect the current federal standard for “Modified Energy Factor” to verify that the product complies with the federal standard.<br>3) This change is necessary because the standard changed from “Water Factor” to   |

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|      |  | a note to specify that it is required for models manufactured on or after January 1, 2018.                   |   | “Integrated Water Factor” on January 1, 2018 (see section 1605.1(p)), so this field is only applicable to products manufactured before the effective date.<br>4) This change is necessary to collect information on integrated water factor to verify that the product complies with the federal standard, which is effective on January 1, 2018.   |
| 354. | Table X (R)<br>“Consumer Product Cooking Products” | Amend the permissible answers for “Type”   | Consistency with federal definitions and our definition in 1602                                 | This change is necessary to reflect updated federal definitions for this appliance type, and to ensure consistency with the regulations.  |
| 355. | Table X (S)<br>“Electric Motors”                   | Remove the statement “(data required for small electric motors manufactured on or after March 9, 2015 only)” | Remove reporting requirement  | This change is necessary to remove the requirement for small electric motors to be certified to MAEDbS. Small electric motors are federally regulated, but are except from certification to DOE per federal register 81FR41389. Discussions about appropriate fields to collect for small electric motors are ongoing, so it is not appropriate at this time to add fields for proper certification of small electric motors into MAEDBS. |
| 356. | Table X (T)<br>“Distribution Transformers”         | Change “BIL KV <sub>a</sub> ” to “BIL KV”  | Consistency with federal regulations  | This change is necessary to accurately reflect the parameter for medium-voltage dry-type transformers. (See section 1605.1(t) and 10 C.F.R. § 431.196(c).)  |
| 357. | Table X (U)<br>“External Power Supplies”           | Add the word “External” before “Power Supplies”  | Clarification   | This change is necessary to clarify the scope of the regulations. There are internal power supplies in computers, but these are not within the scope of the regulations.  |
| 358. | Table X (V)<br>“Computer Monitors”                 | 1) In the “Backlight Type” field, replace “OLED” with “None” as a permissible answer                         | 1) Amend permissible answers to reflect backlight types<br>2) Replace two redundant fields with | 1) This change is necessary to correct an erroneous field entry. OLED monitors are not backlit, thus would not have a backlight type and would need   |

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|      |  | <p>2) Combine the fields “EPD sRGB” and “EPD Adobe RGB” into a new field called “EPD” with “True, False” as the permissible answers</p> <p>3) Combine the fields “KVM” and “KMM” into one new field called “KMM_KVM” with “True, False” as the permissible answers</p>  | <p>one new field</p> <p>3) Combine two fields into one to accurately reflect the information</p>   | <p>to select “None” as an answer.</p> <p>2) This change is necessary to remove redundant information from being submitted. Some of the information obtained in “EPD sRGB” and “EPD Adobe RGB” is already obtained in the field “Color Gamut”. Adding the new “EPD” field will cover what is not obtained in the “Color Gamut field”. This change will reduce the total number of data fields required to be submitted, while preserving the same amount of information.</p> <p>3) This change is necessary because the “KVM” field refers to a computer mouse which cannot work independently; it operates with the “KMM” component. Combining these two fields to reflect the fact that they are not independent components.</p> |
| 359. | Table X (V)<br>“Medical Computer Monitors” | Remove the fields “manufacturer name”, “brand name”, and “model number” and add note specifying that no additional data is required for his appliance type.   | Clarification  | This change is necessary to remove unnecessary fields, since this information is included at the beginning of Table X for “all appliances”, and to clarify that no data is required for these appliance types other than what is required for “all appliances”.   |
| 360. | Table X (V)<br>“Computers”                 | <p>1) Change the field “Video Surveillance Card” to “Total Number of Video Surveillance Cards” and remove “True, False” as a permissible answer</p> <p>2) Change the field “Wired Ethernet or Fiber Card with a transmit rate of 10 GB/s or greater” to “Total Number of Wired Ethernet or Fiber Cards with a</p> | <p>1) Amend field to allow for numerical values</p> <p>2) Amend field to allow for numerical values</p> <p>3) Add new field for database validation purposes</p> | <p>1) These changes are necessary because this parameter needs to be answered numerically for database validation purposes. This field is informational and does not require any additional testing to be conducted.</p> <p>2) These changes are necessary because this parameter needs to be answered numerically for database validation purposes. This field is informational and does not require any additional testing to be conducted.</p> <p>3) This new field is necessary</p>   |

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|      |   | transmit rate of 10 GB/s or greater” and remove “True, False” as a permissible answer<br>3) Add new field “Total Number of System Memory Channels Used”   |   | to validate other data fields submitted for this appliance type. This field is informational and does not require any additional testing to be conducted.   |
| 361. | Table X (W) “Small Battery Charger Systems” | 1) Add new field “*Consumer Product Model Number”<br>2) Remove permissible answers in the “Product type” field<br>3) Add new field “Battery Test Procedure Used”<br>4) Add new field “Consumer Product (T/F)” | 1) Add a field to allow for reporting of the consumer product model number, and clarification of the permissible answers.<br>2) Remove required permissible answers to allow for free form responses<br>3) To add a field to allow manufacturers to report what test procedure applies<br>4) Add new field to determine if the product is a consumer product or not | 1) This change is necessary to require manufacturers to report the consumer product model number, which may be different from the battery charger model number and which is necessary to compare the model number of the end-use product with the model numbers in the database to help verify compliance.<br>2) This change is necessary to allow for a free form response to this question instead of requiring the certifier to select from a set of permissible answers. Having required permissible answers would require constant update when new product types become available.<br>3) This change is necessary to ensure the correct test procedure was used based on if the product is federally regulated consumer product or not.<br>4) This change to add a new field is necessary to determine which test procedure is required to be conducted for certification. The specific test procedure used is dependent on if the product is a consumer product or not. |
| 362. | Table X (W) “Large Battery Charger Systems” | 1) Remove permissible answers in the “Product Type” field   | 1) Remove required permissible answers to allow for free form responses<br>2) Remove an outdated  | 1) This change is necessary to allow for a free form response to this question instead of requiring the certifier to select from a set of permissible   |

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|      |   | 2) Remove “Family certification” as required field                   | field                              | answers. Having required permissible answers would require constant update when new product types become available.<br>2) This change is necessary to remove an outdated field. Family certification was allowed for large battery charger systems until July 1, 2014. Exception 4 to section 1606(a)(3)(C) specified this condition, and is being deleted since it is now obsolete.  |
| 363. | Table X (W) “Federally Regulated Battery Chargers (manufactured on or after June 13, 2018)” (new) | Add new federally regulated appliance type and its associated fields | Consistency with federal standards | This change is necessary to add this new federally regulated appliance. The required fields are taken from the federal database template and are necessary to ensure that products sold in California meet the applicable federal standards, in the event that the U.S. DOE does not continue to collect this information, is not able to perform appropriate checks on this information, or the underlying regulation is repealed. |

**C. Nonsubstantive Changes to Correct Typographical Errors, Improve Clarity and Maintain Consistency**

The purpose of this portion of the rulemaking action is to correct typographical errors, improve clarity, and maintain consistent terms and format in the regulatory language. In addition, to improve the clarity of the regulations, this rulemaking deletes federal language that has been superseded by more recent federal standards or federal test procedures. These changes are nonsubstantive because they clarify without materially altering existing requirements, rights, responsibilities, conditions, or prescriptions contained in the Appliance Efficiency Regulations.

The proposed nonsubstantive changes listed in Table 3 are necessary to provide greater clarity and regulatory certainty to regulated parties and consumers of appliances.

Table 3 provides a comprehensive list of the proposed nonsubstantive changes to the Appliance Efficiency Regulations and the specific purpose and necessity for each proposed change.



**Table 3. Changes to Correct Typographical Errors, Improve Clarity and Maintain Consistency**

| No.  | California Code of Regulations, Title 20 | Proposed Change  | Purpose                    | Necessity  |
|------|--|--|----------------------------|--|
| 364. | §1601 through §1609                      | Change all references to “Section,” “Part,” and “Subpart” to lower case (e.g., “section,” “part,” and “subpart”) | Consistency                | These changes are necessary to discontinue inconsistent formats used within the regulations and to follow the format used in the California Style Manual and Bluebook.   |
| 365. | §1601 through §1609                      | Add “of this Article” when referencing internal cross-references   | Consistency                | These changes are necessary to maintain consistent language for internal cross-references throughout the regulations.  |
| 366. | §1601 through §1609                      | Delete hyphens used after words ending in “ly”   | Correct typos              | These corrections are necessary because the use of a hyphen (-) after a word ending in “ly” is grammatically inaccurate.   |
| 367. | §1601 through §1609                      | Add or remove serial commas as appropriate   | Correct typos              | These changes are necessary to reduce confusion and improve clarity by ensuring proper use of serial commas throughout.  |
| 368. | §1601 through §1609                      | Delete hyphen in “GU-24”, “E-12”, “E-17”, and “E-26”   | Correct typo               | This change is necessary throughout the regulations because ANSI does not use hyphens (e.g., GU24) in their designations of lamp base types. Removing these hyphens will improve consistency between these regulations and the industry. |
| 369. | §1606 through §1609                      | Add “Energy” before “Commission”   | Clarification, consistency | This change is necessary to clarify the regulations and consistently use the same term to refer to the Energy Commission.  |
| 370. | §1606 through §1609                      | Change all references to “database” and “Database” to “MAEDbS”   | Consistency                | This change is necessary to consistently use the official name of the new online system which manufacturers must use to electronically certify to the Energy Commission that their appliances comply with the applicable standards.      |
| 371. | §1602-1608,                              | Update   | Consistency                | This change is necessary to  |

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|      | Documents Incorporated by Reference | <a href="http://ecfr.gpoaccess.gov">http://ecfr.gpoaccess.gov</a> to <a href="http://www.ecfr.gov">www.ecfr.gov</a>                   |                            | update the website to find the code of federal regulations. ecfr.gpoaccess.gov is no longer maintained by the U.S. government.   |
| 372. | §1601(a)                            | Add “and miscellaneous refrigeration products”  | Clarification              | This change is necessary to specify that subsections (a) in the regulations apply to federally regulated miscellaneous refrigeration products and therefore this product type falls within the scope of the regulations. |
| 373. | §1601(c)                            | Change from “heat pump water-chilling packages” to “heat pump water-heating packages.”  | Consistency                | This change is necessary because the state test procedure title for this type of heat pump changed from “water-chilling packages” to “water-heating packages.”   |
| 374. | §1601(d)                            | Change “spot” air conditioners to “portable” air conditioners   | Clarification              | This change is necessary to clarify that spot air conditioners are a subset of federally regulated portable air conditioners.  |
| 375. | §1601(e)                            | Add the word “space” such that it states “vented and unvented infrared gas space heaters”   | Clarification, consistency | This change is necessary to provide clarity and use consistent terms.  |
| 376. | §1601(g)                            | Add “and pumps”   | Clarification              | This change is necessary to specify that subsections (g) in the regulations apply to federally regulated pumps and therefore this product type falls within the scope of the regulations.                                |
| 377. | §1601(g)                            | Delete “Gas pool heaters, oil pool heaters, electric resistance pool heaters, heat pump pool heaters” and replace with “Pool heaters” | Clarification              | These changes are necessary to clarify that “pool heaters” includes all types of pool heaters and to simplify the list of products that are equivalent to “pool heaters.”  |
| 378. | §1601(h)                            | Add “kitchen” before the term “replacement aerators” and add “lavatory replacement  | Clarification              | These changes are necessary to specify the type of replacement aerators actually regulated rather than using general terms.  |

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|      |                     | aerators”  |               |  |
| 379. | §1601(j)            | Change “Fluorescent Lamp Ballasts” to “Fluorescent lamp ballasts” (last two words lower-case)  | Consistency   | This change is necessary to use consistent terms and format throughout the regulations.  |
| 380. | §1601(k)            | Delete the term “state regulated” before the term “general service incandescent lamps”   | Clarification | This deletion is necessary to clarify that “general service incandescent lamps” are not a state regulated lamp; error to include in the regulations.   |
| 381. | §1601(m)            | Delete “traffic signal lamps”  | Clarification | This change is necessary to because traffic signal lamps are not a federally or state-regulated appliance; it was an error to include this term in the regulations.  |
| 382. | §1601(s) and (s)(2) | Add “and compressors, which are” to subsection (s) and add “(2) compressors, which are federally regulated commercial and industrial air compressors”  | Clarification | This change is necessary to specify that subsections (s) in the regulations apply to federally regulated commercial and industrial air compressors and therefore these fall within the scope of the regulations.                     |
| 383. | §1601(s)(1)         | Add “(1) electric motors”  | Clarification | This change is necessary to distinguish electric motors from compressors, which are both product types covered in subsections (s) throughout the regulations.  |
| 384. | §1601(t)            | Add “Distribution transformers which are....liquid-immersed distribution transformers, and medium voltage dry-type distribution transformers” and delete “that are designed to operate at a frequency of 60 Hertz, and that have a rated power | Clarification | This change is necessary to describe distribution transformers in similar terminology to the remainder of section 1601 (scope), rather than to define distribution transformers, which should be done in section 1602 (definitions). |

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|      |   | output of not less than 15 kV”   |                            |   |
| 385. | §1601(w)(6)   | Add “International Electrotechnical Commission” and putting parentheses around ‘IEC’ acronym | Clarification              | This change is necessary because this is the first place the IEC acronym is referenced. As such, the term it references should be spelled out.    |
| 386. | §1601 Documents Incorporated by Reference                               | Change the phrase “The following documents are...” to “The following document is...”         | Correct grammar            | This change is necessary to correct the use of plural “documents are” where only one document is being incorporated by reference.                 |
| 387. | §1602(a)  | Change “Energy Policy Act of 2005” to “EPACT 2005”   | Consistency                | This change is necessary to match similar language used to reference federal statutory language.  |
| 388. | §1602(a) “Active mode”  | Add colon  | Correct typo, consistency  | This change is necessary to add a missing colon and to match similar format used throughout the regulations.                                      |
| 389. | §1602(a) “Approved industry certification program”                      | Delete most of the text from this definition   | Clarification              | This deletion is necessary to avoid duplication since most of the text is now included in section 1603(b)(1).                                     |
| 390. | §1602(a) “Basic model” of a federally regulated consumer product...     | Deleted the words “Basic model of any other appliance means...” from this definition         | Clarification              | This deletion is necessary to make a stand-alone definition for the term “Basic model of any other appliance.”                                    |
| 391. | §1602(a) “Basic model” of a distribution transformer                    | Delete this definition from section 1602(a)  | Clarification, consistency | This deletion is necessary to move all product-specific “Basic model...” definitions to the specific subsection of section 1602 where they apply. |
| 392. | §1602(a) “Basic model” of a federally regulated electric motor          | Delete this definition from section 1602(a)  | Clarification, consistency | This deletion is necessary to move all “Basic model...” definitions to the specific subsection of section 1602 where they apply.                  |
| 393. | §1602(a) “Basic model” of a federally regulated residential furnace fan | Delete this definition from section 1602(a)  | Clarification, consistency | This deletion is necessary to move all “Basic model...” definitions to the specific subsection of section 1602 where they apply.                  |
| 394. | §1602(a) “Basic model”  | Delete this definition from  | Clarification, consistency | This deletion is necessary to move all “Basic model...”   |

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|      | of a federally regulated small electric motor    | section 1602(a)  |                            | definitions to the specific subsection of section 1602 where they apply.   |
| 395. | §1602(a)<br>“Basic model of any other appliance” | Add this stand-alone definition                              | Clarification              | This change is necessary to include a definition for “basic models” that are not related to specific federally regulated appliances with their own distinct definitions.   |
| 396. | §1602(a)<br>“Candelabra base incandescent lamp”  | Move this definition from section 1602(k) to section 1602(a) | Clarification              | The move of the term “candelabra base incandescent lamp” from a subsection containing definitions relating to lamps to a subsection of general definitions is necessary because this term is referenced in more than one subsection.   |
| 397. | §1602(a)<br>“C.F.R.”                             | Add missing quotation mark                                   | Correct typo, consistency  | This change is necessary to correct a typographical error and to match format used throughout the regulations.   |
| 398. | §1602(a)<br>“Commission”                         | Delete the definition for “Commission”                       | Clarification              | This deletion is necessary because this definition is being replaced by a new definition, “Energy Commission.”   |
| 399. | §1602(a)<br>“Consumer product”                   | Add a parenthesis and change format of definition            | Clarification              | These changes are necessary to make the definition clearer.  |
| 400. | §1602(a)<br>“Database”                           | Delete the definition for “Database”                         | Clarification              | This change is necessary to replace the term “database” with the term “MAEDbS,” which is the official name of the new online system, which manufacturers must use to electronically certify to the Energy Commission that their appliances comply with the applicable standards. |
| 401. | §1602(a)<br>“Date of sale”                       | Delete the definition for “Date of sale”                     | Clarification              | This change is necessary because this term is not used and not found anywhere else in the regulations.   |
| 402. | §1602(a)<br>“EISA”                               | Add in “...42 U.S.C. section 6291 et seq.”                   | Clarification, consistency | This change is necessary to provide the specific citation to the United States Code where the relevant federal statutes are found.   |
| 403. | §1602(a)<br>“EPAAct”                             | Change “section 6311” to “section                            | Correct typo               | This change is necessary to provide the correct citation to  |

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|      |  | 6291”  |               | the U.S. Code.  |
| 404. | §1602(a)<br>“EPAAct of<br>2005”        | Change “section<br>6311” to “section<br>6291”  | Correct typo  | This change is necessary to<br>provide the correct citation to<br>the U.S. Code.  |
| 405. | §1602(a)<br>“Energy<br>Commission”     | Add this new<br>definition for<br>“Energy<br>Commission”   | Clarification | This addition is necessary to<br>change “Commission” to<br>“Energy Commission”<br>throughout the regulations.   |
| 406. | §1602(a)<br>“Executive<br>Director”    | Add the word<br>“Energy” before<br>“Commission”  | Consistency   | This change is necessary to<br>consistently use the term<br>“Energy Commission”<br>throughout the regulations.  |
| 407. | §1602(a)<br>“ft <sup>3</sup> ”         | Add in this new<br>definition for “ft <sup>3</sup> ”   | Clarification | This change is necessary<br>because there was previously<br>no definition for this term<br>although it is used throughout<br>the regulations.   |
| 408. | §1602(a)<br>“LPG” or<br>“LP-gas”       | Delete the phrase<br>“average lamp<br>efficacy (LPW)”<br>from this definition                    | Clarification | This deletion is necessary<br>because “average lamp<br>efficacy (LPW)” has no<br>bearing on the term being<br>defined.  |
| 409. | §1602(a)<br>“MAEDbS”                   | Add in this new<br>definition for<br>“MAEDbS”  | Clarification | This addition is necessary to<br>specify the official name of the<br>new online system where<br>manufacturers electronically<br>certify to the Energy<br>Commission that their<br>appliances comply with the<br>applicable standards. |
| 410. | §1602(a)<br>“Manufacturer<br>”         | Add in the phrase<br>“...or commercial<br>and industrial<br>equipment”                           | Clarification | This change is necessary to<br>match the federal definition for<br>“manufacturer” found in both<br>10 C.F.R. sections 430 and<br>431.   |
| 411. | §1602(a)<br>“Standby<br>mode”          | Change “Stand by”<br>to “Standby”,<br>making “To”<br>lowercase, and<br>“Continuous”<br>lowercase | Correct typos | These changes are necessary to<br>remove the space from “Stand<br>by” and to maintain consistent<br>language and terms used<br>throughout the regulations.  |
| 412. | §1602(a)<br>“UUT”                      | Delete the<br>definition for<br>“UUT”  | Clarification | This deletion is necessary<br>because this term is not found<br>anywhere else in the<br>regulations.  |
| 413. | §1602(b)<br>“Adjusted<br>total volume” | Delete definition  | Clarification | This change is necessary<br>because the term (as it relates<br>to consumer product<br>refrigerators/freezers) is not<br>defined anywhere in 10 C.F.R.   |

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|      |   |  |               | section 430.  |
| 414. | §1602(b)<br>“Annual walk-in energy factor (AWEF)” | Add definition found in AHRI Standard 1250 (I-P) 2014                                      | Clarification | This change is necessary to describe the federal standard for walk-in cooler and walk-in freezer refrigerator systems, which is not defined directly in 10 C.F.R. section 430 or 431.   |
| 415. | §1602(b)<br>“Built-in refrigerator-freezer”       | Add this definition  | Correction    | This addition is necessary to correct a publisher error. The Energy Commission adopted this definition in Docket # 13-AAER-1, which OAL approved on April 22, 2014, OAL Matter Number 2014-0310-02 (see also Notice File Number Z2013-1210-08). This term is missing from the California Code of Regulations. |
| 416. | §1602(b)<br>“Freezer Compartment”                 | Delete this definition   | Clarification | This deletion is necessary because this term no longer appears in 10 C.F.R. sections 430 or 431, and is not needed in the state regulations.  |
| 417. | §1602(b)<br>“Ice cream freezer”                   | Move definition to follow “Ice cream cabinet,” and delete hyphen between “ice” and “cream” | Correct Typos | This change is necessary to correct typographical errors and to list the term in the correct alphabetical order in section 1602(b).   |
| 418. | §1602(b)<br>“Internal freezer refrigerator”       | Delete this definition   | Clarification | The deletion of this definition is necessary because the addition of the federal definition for “special compartment” eliminates the need for this state definition.  |
| 419. | §1602(b)<br>“Non-commercial freezer”              | Delete “a freezer...” from the start of each sentence and add it before the list begins    | Consistency   | This change is necessary to use consistent language across similar lists throughout the regulations.  |
| 420. | §1602(b)<br>“Non-commercial refrigerator”         | Delete the phrase “...or a wine chiller that is a consumer product”                        | Clarification | This deletion is necessary to align with federal law in 10 C.F.R. section 430, which uses the term “cooler” instead of “wine chillers.”   |
| 421. | §1602(b)<br>“Refrigerated multi package beverage” | Delete this definition   | Clarification | This deletion is necessary because this term no longer appears in 10 C.F.R. sections 430 or 431, and is not needed  |

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|      | vending machine”   |  |                            | in the state regulations.   |
| 422. | §1602(b)<br>“Service over the counter, self-contained, medium temperature commercial refrigerator” | Delete the hyphen and replace it with a colon  | Consistency                | This change is necessary to use a consistent format throughout the regulations.   |
| 423. | §1602(b)<br>“Total volume”   | Delete this definition   | Clarification              | This deletion is necessary because the definition is not found in 10 C.F.R. sections 430 or 431, as related to refrigeration.   |
| 424. | §1602(b)<br>“Water dispenser”  | Replace “or” with “and”  | Clarification              | This change is necessary to further clarify that water dispensers are defined only as those devices that both cool and heat water, and do not include “hot only” or “cold only” dispensers. |
| 425. | §1602(b)<br>“Wine Chiller”   | Delete this definition   | Clarification              | This deletion is necessary to align with 10 C.F.R. section 430, which uses the term “cooler” instead of “wine chillers,” which is a term not used in the federal regulations.               |
| 426. | §1602(c) Title   | Change subsection title from “Heat Pump Water-Chilling Packages” to “Heat Pump Water-Heating Packages” | Clarification, Consistency | This change is necessary to match the appliance name used in the test procedure for this appliance type.  |
| 427. | §1602(c)<br>“Air filter depth”   | Delete the definition and place above “Air filter media”   | Consistency                | This change is necessary to place definitions in the correct alphabetical order and thereby make the definitions easier to locate within the regulations.                                   |
| 428. | §1602(c)<br>“Airflow rate”   | Add the phrase “...of an air filter...”  | Clarification              | This change is necessary to specify that this term applies to air filters only.   |
| 429. | §1602(c)<br>“Compressor motor nominal horsepower”  | Remove definition  | Clarification              | This change is necessary because this definition is not found in federal air conditioner definitions and is not necessary to include in this subsection.                                    |
| 430. | §1602(c)<br>“Compressor  | Amend definition   | Clarification              | This change is necessary to specify that this term only   |



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|      | power”  |  |                           | applies to packaged terminal air conditioners and packaged terminal air-conditioning heat pumps.                                    |
| 431. | §1602(c)<br>“db”                                  | Delete definition  | Clarification             | This change is necessary because this term is not used anywhere else in the regulations and the definition is not needed.           |
| 432. | §1602(c)<br>“Dust holding capacity”               | Add the phrase<br>“...of an air filter...”   | Clarification             | This change is necessary to specify that this term applies to air filters only.   |
| 433. | §1602(c)<br>“Face area”                           | Add the phrase<br>“...of an air filter...”   | Clarification             | This change is necessary to specify that this term applies to air filters only.   |
| 434. | §1602(c)<br>“Face velocity”                       | Add the phrase<br>“...of an air filter...”   | Clarification             | This change is necessary to specify that this term applies to air filters only.   |
| 435. | §1602(c)<br>“Final resistance”                    | Add the phrase<br>“...of an air filter...”   | Clarification             | This change is necessary to specify that this term applies to air filters only.   |
| 436. | §1602(c)<br>“Ground source closed-loop heat pump” | Add a colon before list begins and add each list number on a new line                                | Correct typo, consistency | This change is necessary to correct a typographical error and maintain consistent formats and thereby make the regulations clearer. |
| 437. | §1602(c)<br>“Ground water-source heat pump”       | Add a colon before list begins and add each list number on a new line                                | Consistency               | This change is necessary to maintain consistent formats and thereby make the regulations clearer.                                   |
| 438. | §1602(c)<br>“Heat pump water-heating package”     | Change all references from “Heat Pump Water-Chilling Packages” to “Heat Pump Water-Heating Packages” | Consistency               | This change is necessary to match the appliance name used in test procedure for this appliance type.                                |
| 439. | §1602(c)<br>“Initial resistance”                  | Add the phrase<br>“...of an air filter...”   | Clarification             | This change is necessary to specify that this term applies to air filters only.   |
| 440. | §1602(c)<br>“Integrated part load value (IPLV)”   | Delete definition  | Clarification             | This change is necessary because this term is not used anywhere else in the regulations and the definition is not needed.           |
| 441. | §1602(c)<br>“Maximum rated airflow rate”          | Add the phrase<br>“...of an air filter...”   | Clarification             | This change is necessary to specify that this term applies to air filters only.   |
| 442. | §1602(c)  | Add the phrase   | Clarification             | This change is necessary to   |

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|      | “Minimum efficiency reporting value (MERV)”                                      | “...of an air filter...”                   |               | specify that this term applies to air filters only.   |
| 443. | §1602(c)<br>“Particle size”  | Add the phrase<br>“...of an air filter...” | Clarification | This change is necessary to specify that this term applies to air filters only.   |
| 444. | §1602(c)<br>“Particle size efficiency”   | Add the phrase<br>“...of an air filter...” | Clarification | This change is necessary to specify that this term applies to air filters only.   |
| 445. | §1602(c)<br>“Pressure drop”  | Add the phrase<br>“...of an air filter...” | Clarification | This change is necessary to specify that this term applies to air filters only.   |
| 446. | §1602(c)<br>“Room air conditioning heat pump”                                    | Delete definition                          | Clarification | This change is necessary because this term is not used anywhere else in the regulations and the definition is not needed.   |
| 447. | §1602(c)<br>“Space constrained product”  | Add colon before list begins               | Consistency   | This change is necessary to match similar lists within the regulations.   |
| 448. | §1602(c)<br>- “Split system central air conditioner”<br>“Split system heat pump” | Delete definitions                         | Clarification | These deletions are necessary because these definitions are being replaced with the new federal definition for “Split system” set forth in the test procedure that applies to central air conditioners and heat pumps that are consumer products (10 C.F.R. section 430, Appendix M to Subpart B), and therefore the existing definitions are no longer needed or used. |
| 449. | §1602(c)<br>“Through-the-wall air conditioner and heat pump”                     | Delete definition                          | Clarification | This change is necessary because this definition is being replaced with the new federal definitions for “Through-the-wall central air conditioner” and “Through-the-wall central air conditioning heat pump” set forth in 10 C.F.R. section 430.2; therefore the existing definition is no longer needed or used.   |
| 450. | §1602(c)<br>“wb”   | Delete definition                          | Clarification | This change is necessary because this term is not used anywhere else in the   |

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|      |   |  |                            | regulations and the definition is not needed.  |
| 451. | §1602(d)  | Change “spot” air conditioners to “portable” air conditioners and add “and residential furnace fans” in the subsection’s title | Clarification              | These changes are necessary to clarify that section 1602(d) also covers residential furnace fans and portable air conditioners.  |
| 452. | §1602(d)<br>“Airflow efficiency”  | Delete definition  | Clarification              | This deletion is necessary because the term “airflow efficiency” is being replaced with the federal term “ceiling fan efficiency” defined in 10 C.F.R. section 430, Appendix U to Subpart B; therefore the definition for the term “airflow efficiency” is no longer needed or used. |
| 453. | §1602(d)<br>“Basic model” of a federally regulated residential furnace fan” | Add definition   | Consistency                | This change is necessary because all appliance- or equipment-specific “basic model” definitions are being moved from general section 1602(a) to the product specific subsection of section 1602 where they apply.  |
| 454. | §1602(d)<br>“Cooling efficiency ratio (CER)”                                | Delete definition  | Clarification, consistency | This change is necessary because “portable air conditioner” is replacing “spot air conditioner” throughout regulations, and the new test procedure for “portable air conditioners” does not require CER.   |
| 455. | §1602(d)<br>“Spot air conditioner”  | Amend definition   | Clarification              | This change is necessary to clarify that spot air conditioners are a subset of federally regulated portable air conditioners.  |
| 456. | §1602(e)<br>“Annual Fuel Utilization Efficiency (AFUE)”                     | Add hyphen   | Correct typo               | This change is necessary to add a missing hyphen.  |
| 457. | §1602(e)<br>“Radiant coefficient”   | Change reference from “infrared heater” to “infrared gas space heater”   | Clarification              | This change is necessary to specify the type of infrared space heater the definition applies to.   |
| 458. | §1602(e)  | List various types   | Clarification              | This change is necessary to  |

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|      | “Space heater”   | of space heaters                      |               | provide examples of the various types of appliances that fall within the definition of space heaters.  |
| 459. | §1602(f)<br>“Energy input rate”                            | Delete definition                     | Consistency   | This change is necessary to remove the definition of “energy input rate” because, as a result of removing test procedures and reporting requirements for booster water heaters, this term does not appear anywhere else in the regulations, making it unnecessary. |
| 460. | §1602(f)<br>“Heat pump water heater”                       | Delete definition                     | Clarification | This deletion is necessary because this definition no longer appears in 10 C.F.R. sections 430 or 431, and is not needed in the state regulations.   |
| 461. | §1602(f)<br>-“Large water heater”<br>-“Small water heater” | Delete definitions                    | Clarification | These changes are necessary because these terms are not used to describe or define federally regulated water heaters in 10 C.F.R. sections 430 or 431, and they are not needed in the state regulations.   |
| 462. | §1602(f)<br>“Storage water heater”                         | Delete definition                     | Clarification | This deletion is necessary because this definition no longer appears in 10 C.F.R. section 430, and it being replaced with a new federal definition for the term “storage water heater” found in 10 C.F.R. section 431.102.   |
| 463. | §1602(f)<br>“Tabletop water heater”                        | Delete definition                     | Clarification | This deletion is necessary because this definition no longer appears in 10 C.F.R. sections 430 or 431, and is not needed in the state regulations.   |
| 464. | §1602(f)<br>“Uniform energy factor”                        | Amend definition                      | Clarification | This changed is necessary to specify that this definition only applies to federally regulated consumer products.   |
| 465. | §1602(g)   | Add “and Pumps” to subsection’s title | Clarification | This change is necessary to clarify that subsection 1602(g) also covers to pumps.  |
| 466. | §1602(g)<br>“Heat pump pool heater”                        | Delete definition                     | Clarification | This deletion is necessary because the new federal definition for “electric heat pump pool heater” is replacing  |

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|      |   |  |               | the definition for this term to align with the federal regulation and make the regulations clearer.  |
| 467. | §1602(g)<br>“Low temperature rating”          | Delete definition  | Clarification | This deletion is necessary because this term is only found in the original Table G-1 in section 1604(g), which is being struck-out.  |
| 468. | §1602(g)<br>“Spa conditions rating”           | Delete definition  | Clarification | This change is necessary because testing to this parameter is no longer part of the applicable test procedure for portable electric spas and “spa conditions rating” is being struck-out throughout the regulations.   |
| 469. | §1602(g)<br>“Standard temperature rating”     | Delete definition  | Clarification | This deletion is necessary because this term is only found in the original Table G-1 in section 1604(g), which is being struck-out.  |
| 470. | §1602(g)<br>“Total horsepower” of an AC motor | Delete parentheses and move end of the quotation after the word “horsepower” | Consistency   | This change is necessary to match the language used in similar definitions throughout the regulations.   |
| 471. | §1602(h)<br>“Push-type tub spout diverter”    | Add definition   | Correction    | This change is necessary to correct an inadvertent deletion of this term. The Energy Commission adopted the definition of “push-type tub spout diverter” in its 2002 appliance efficiency rulemaking, approved by OAL and effective November 2002. This definition was in effect until the Energy Commission’s 2014 appliance efficiency rulemaking, when it was inadvertently deleted. This change correctly restores the missing definition. |
| 472. | §1602(i)<br>“Blowout type bowl”               | Delete definition  | Clarification | This deletion is necessary because this term is being replaced by the term “blowout toilet” found in 10 C.F.R. section 430.2, and is no longer needed or used in the regulations.  |

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| 473. | §1602(j)<br>“Ballast efficacy factor”                  | Delete definition   | Clarification             | This deletion is necessary because this term is already defined in section 1602(a) and therefore it is redundant.   |
| 474. | §1602(j)<br>“Mercury vapor lamp”                       | Delete definition   | Clarification             | This deletion is necessary because the definition for this term is being moved to Section 1602(a).  |
| 475. | §1602(j)<br>“Mercury vapor lamp ballast”               | Delete definition   | Clarification             | This deletion is necessary because the definition for this term is being moved to Section 1602(a).  |
| 476. | §1602(j)<br>“Weighted ballast luminous efficacy”       | Change the reference within this definition from “1604(j)(3)(D)” to “1604(j)(2)(D)” | Clarification             | This change is necessary because the original section 1604(j)(2)(D) is being struck-out and the subsequent subsections are being renumbered.  |
| 477. | §1602(k)<br>“Average lamp efficacy (LPW)”              | Amend definition  | Clarification             | This change is necessary to specify that this term also applies to light-emitting diode (LED) lamps and to accurately reflect the type of lamps covered in the regulations.   |
| 478. | §1602(k)<br>“Bipin lamp”                               | Change all references from “Bi-pin” to “Bipin” for consistency                      | Correct typo, consistency | This change is necessary to correct a typographical and to use consistent language and terms throughout the regulations.  |
| 479. | §1602(k)<br>“Candelabra base incandescent lamp”        | Delete definition   | Clarification             | This change is necessary because this definition is being moved to section 1602(a), to reflect the applicability of this term to multiple sections of the regulations.  |
| 480. | §1602(k)<br>“Colored incandescent lamp”                | Add the title of the document referred to in the definition                         | Clarification             | This change is necessary to clearly identify the document incorporated by reference in the definition.  |
| 481. | §1602(k)<br>“Enhanced Spectrum” or “Modified Spectrum” | Delete definition   | Clarification             | This change is necessary because the term “Enhanced spectrum” is not used or found anywhere else in the regulations and the definition is being amended to match the federal definition for the term “Modified spectrum;” this new definition is being moved to the correct alphabetical order. |
| 482. | §1602(k)   | Change  | Correct typo              | This change is necessary to   |

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|      | “Fluorescent lamp”  | “florescing” to “fluorescing”   |               | correct a word that was misspelled.   |
| 483. | §1602(k)<br>“Lamp Efficacy”                                 | Delete (“LE”) and add the word “input”  | Clarification | This change is necessary because the abbreviation “LE” is not used elsewhere in the regulations and the word “input” is needed to be consistent with the federal definition in 10 C.F.R. section 430.2. |
| 484. | §1602(k)<br>“Mercury vapor lamp”                            | Delete definition   | Clarification | This deletion is necessary because the definition for this term is being moved to Section 1602(a) to reflect the applicability of this term to multiple sections of the regulations.                    |
| 485. | §1602(k)<br>“Mercury vapor lamp ballast”                    | Delete definition   | Clarification | This deletion is necessary because the definition for this term is being moved to Section 1602(a) to reflect the applicability of this term to multiple sections of the regulations.                    |
| 486. | §1602(k)<br>“Mine service lamp”                             | Make the “S” and “L” lowercase in the term “Mine Service Lamp” and make the “M” in “Mine” lowercase within the text | Correct typos | These changes are necessary to follow the same format used throughout section 1602 and to use correct capitalization within the text.   |
| 487. | §1602(k)<br>“R20 short lamp”                                | Edit definition   | Consistency   | The change is necessary to follow the same format used for fraction numbers used in the regulations.  |
| 488. | §1602(k)<br>“Rough service lamp”                            | Delete hyphens from “C-7A”, “C-11”, “C-17”, and “C-22”  | Correct typos | This change is necessary because ANSI does not use dashes in their base designations for lamp/socket types.   |
| 489. | §1602(k)<br>“Self-ballasted compact fluorescent lamp”       | Delete definition   | Clarification | This change is necessary because this term no longer appears in 10 C.F.R. section 430.2 and is not used or needed in the regulations.   |
| 490. | §1602(k)<br>“Shatter-resistant lamp, shatter-proof lamp, or | Add “(2007)” to the NSF/ANSI reference  | Clarification | This change is necessary to specify the publication date of document (NSF/ANSI-51) incorporated by reference in the regulations.  |

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|      | shatter-protected lamp”   |   |               |   |
| 491. | §1602(k)<br>“Soft white type lamp”                              | Change “emmissive” to “emissive”                                  | Correct typo  | This change is necessary to correct a word that was misspelled.   |
| 492. | §1602(k)<br>“State-regulated general service incandescent lamp” | Delete definition   | Clarification | This change is necessary because the definition of “state-regulated general service incandescent lamp” predates the federal Energy Independence and Security Act of 2007, which updated the definition of a “general service incandescent lamp” to match what is currently referred to in Title 20 as a “federally regulated general service incandescent lamp,” making this definition obsolete. |
| 493. | §1602(k)<br>“State-regulated incandescent reflector lamp”       | Delete definition   | Clarification | This change is necessary because “incandescent reflector lamps” are exclusively federally regulated.  |
| 494. | §1602(k)<br>“State-regulated Light Emitting Diode (LED) lamp”   | Change “2200-K” and “7000-K” to “2200K” and “7000K”, respectively | Consistency   | This change is necessary to match format used in the regulations.   |
| 495. | §1602(k)<br>“State-regulated small diameter directional lamp”   | Organize list into correct parenthetical numbers                  | Consistency   | This change is necessary to match format used in the regulations.   |
| 496. | §1602(k)<br>“Vibration service lamp”                            | Delete hyphens from “C-5”, “C-7A”, and “C-9”                      | Correct typos | This change is necessary because ANSI does not use dashes in their base designations for lamp/socket types.   |
| 497. | §1602(m)  | Delete “and Traffic Signal Lamps” in subsection’s title           | Clarification | This change is necessary to because traffic signal lamps are not a federally or state-regulated appliance; it was an error to include this term in the  |



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|      |  |   |                           | regulations.  |
| 498. | §1602(m)<br>“Power consumption”                  | Delete “or a traffic signal lamp”   | Clarification             | This change is necessary to because traffic signal lamps are not a federally or state-regulated appliance; it was an error to include this term in the regulations.   |
| 499. | §1602(m)<br>“Traffic signal lamp”                | Delete definition   | Clarification             | This deletion is necessary because there is no test procedure, no federal or state standard, and no data collection requirement for traffic signal lamps.   |
| 500. | §1602(n)<br>“Color correlated temperature (CCT)” | Replace the term “color correlated temperature (CCT)” with the term “correlated color temperature (CCT)” and make the “C” in “Color” lowercase. | Correct typo              | This change is necessary to match the term used in the test procedure (IESNA LM016-93) and the federal regulations.   |
| 501. | §1602(n)<br>“compact fluorescent lamp (CFL)”     | Delete definition   | Clarification             | This change is necessary because this term applies to both lamps in section 1602(k) and some luminaires in section 1602(n), and therefore this definition is being moved to section 1602(a), which applies to the regulations in general. |
| 502. | §1602(n)<br>“correlated color temperature (CCT)” | Relocate definition   | Consistency               | This change is necessary to place the term “correlated color temperature (CCT)” in correct alphabetical order.  |
| 503. | §1602(n)<br>“LED array or module”                | Relocate definition and add “to” between “connect” and “the load side”  | Consistency, correct typo | These changes are necessary to place this term in the correct alphabetical order and to make the definition clearer.  |
| 504. | §1602(n)<br>“LED lamp, non-integrated”           | Relocate definition   | Consistency               | This change is necessary to place this term in the correct alphabetical order.  |
| 505. | §1602(n)<br>“Occupant sensor, lighting”          | Replace the word “is” with the word “means”   | Consistency               | This change is necessary to match similar language used in other definitions in section 1602.   |
| 506. | §1602(n)<br>“portable luminaire”                 | Replace the parenthetical capitalized letters   | Consistency               | This change is necessary to match the format used within the definition in section 1602.  |

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|      |   | with parenthetical numbers   |                            |  |
| 507. | §1602(p)<br>“Integrated modified energy factor”   | Correcting “cubic feet” to “ft <sup>3</sup> ” throughout the regulations and reorganizing numbered list  | Consistency                | These changes are necessary to maintain consistent format throughout the regulations and remove redundant words.   |
| 508. | §1602(r)<br>- “Conventional range”<br>- “Microwave/conventional cooking top”<br>- “Microwave/conventional oven”<br>- “Microwave/conventional range” | Delete definitions   | Clarification              | These deletions are necessary because these terms no longer appear in 10 C.F.R. section 430.2 and are not used or needed in the regulations.   |
| 509. | §1602(s)  | Add “and Compressors” to subsection’s title  | Clarification              | This change is necessary to clarify that section 1602(s) also covers to compressors.   |
| 510. | §1602(s)<br>- “Basic model” of a federally regulated electric motor   | Relocate this definition from section 1602(a) to section 1602(s)   | Consistency, clarification | This change is necessary to ensure that all appliance- or equipment-specific “basic model” definitions are located in the specific subsection where they apply, thereby making the regulations clearer and more accessible.  |
| 511. | §1602(s)<br>“Basic model” of a federally regulated small electric motor   | Relocate this definition from section 1602(a) to section 1602(s) and also change the term “nominal average full load efficiency standards” to “average full load efficiency standards” | Consistency, clarification | This change is necessary to ensure that all appliance- or equipment-specific “basic model” definitions are located in the specific subsection where they apply, thereby making the regulations clearer and more accessible. Also, federally regulated small electric motors have efficiency standards for “average”, not “nominal”, full load so it is necessary to specify the appropriate standard here. |
| 512. | §1602(s)<br>“Efficiency” of an electric motor   | Delete definition  | Clarification              | This deletion is necessary because the term is not defined in 10 C.F.R. sections 431.12 or 431.442 and is not used   |

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|      |  |  |                            | elsewhere in the regulations.  |
| 513. | §1602(s)<br>- “Input power”<br>- “Multi-voltage electric motor”              | Delete definitions   | Clarification              | These deletions are necessary because these terms no longer appear in 10 C.F.R. section 431.12 and are not used or needed in the regulations.  |
| 514. | §1602(t)<br>“Basic model” of a federally regulated distribution transformer” | Relocate this definition from section 1602(a) to section 1602(t) and include “federally regulated” to definition | Consistency, clarification | These changes are necessary to ensure that all appliance- or equipment-specific “basic model” definitions are located in the specific subsection where they apply and to specify that distribution transformers are federally regulated equipment, thereby making the regulations clearer and more accessible.   |
| 515. | §1602(t)<br>“BIL”  | Change “isolation” to “insulation”   | Correct typo               | This change is necessary to correct a typographical error and to match the correct terminology used in the definition of “Basic model” of 10 C.F.R. section 431.192.   |
| 516. | §1602(t)<br>- “Harmonic transformer”<br>- “Impedance transformer”            | Delete definitions   | Clarification              | These deletions are necessary because these definitions are no longer found in 10 C.F.R. section 431.192 nor in 10 C.F.R. section 431, Subpart K, and are not used or needed in the regulations.   |
| 517. | §1602(t)<br>“Special-impedance transformer”                                  | Correct reference to tables; change “Tables 1 and 2” to “T-1 and T-2”  | Correct typo               | This change is necessary to reference the specific tables referred to in the definition, which makes the regulation clearer.   |
| 518. | §1602(u)   | Add “External” prior to “Power Supplies” in the section’s title  | Clarification              | This change is necessary to follow the same terminology used in 10 C.F.R §430 concerning an external power supply circuit used to convert household electric current into DC current or lower-voltage AC current to operate a consumer product and thereby differentiate between what is regulated and what is not regulated (e.g., internal power supplies inside computers). |

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| 519. | §1602(u)<br>- “Computer”<br>- “Digital camera”<br>- “Mobile phone”<br>- “Personal digital assistant (PDA)”<br>- “Wireline telephone”  | Delete definitions   | Clarification  | These definitions apply exclusively to state-regulated external power supplies. These definitions are being deleted because they are only found in the original Table U-3 in section 1605.3(u) for state standards. These state standards were replaced by standards effective on July 1, 2008. These new standards do not include the terms listed to the left, so these terms are now obsolete and the definitions are no longer needed. |
| 520. | §1602(v)<br>“Combination TV”  | Correct definition so that it ends with a period and not a semicolon                               | Correct a typo | This change is necessary to correct a typographical error.   |
| 521. | §1602(v)<br>“Component TV”  | Relocate definition to above “composite video” from its prior location below “computer sleep mode” | Consistency    | This change is necessary to list the term “component TV” in correct alphabetical order.  |
| 522. | §1602(v)<br>- “Digital versatile disc (DVD) player”<br>- “Digital versatile disc (DVD) recorder”<br>- “Video Cassette Recorder (VCR)” | Delete hyphens after the word “commercially”   | Correct a typo | This change is necessary to correct a typographical error.   |
| 523. | §1602(v)<br>“Small Volume Manufacturer”   | Change cross reference from 1606(k) to 1606(j)   | Consistency    | This change is necessary to update the cross reference for small volume manufactures. Section 1606 was renumbered due to the removal of subdivision (j) regarding portable luminaire reporting.  |
| 524. | §1602(v)<br>“Very high performance monitor”   | Delete duplicate definition  | Correction     | This change is necessary to correct a publisher error. Two identical definitions for “Very high performance monitor”   |

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|      |   |  |               | appear in this section. The Energy Commission adopted this definition in Docket # 16-AAER-02, which OAL approved on August 22, 2017, OAL Matter Number 2017-0711-05 (see also Notice File Number Z2016-0830-07). This term only appears once in the approved rulemaking.   |
| 525. | §1602(w)                                  | Add “Battery Chargers” to subsection’s title   | Clarification | This change is necessary to specify that section 1602(w) covers both state regulated battery charges and federally regulated battery charger systems.  |
| 526. | §1602(w)<br>“USB charger system”          | Delete definition  | Clarification | This change is necessary to remove a term that is no longer necessary in the regulations. The exception in section 1605.3(w)(2) for USB charger systems became obsolete on Jan. 1, 2014. It is no longer necessary to include any reference to USB charger systems in the regulations since the exception is not in effect. Therefore, a definition for the term “USB charger system” is no longer needed. |
| 527. | §1602 Documents Incorporated by Reference | For the following documents, reformat the phone number, fax number, website, and/or address listed to match similar formatting throughout:<br>- “Adobe RGB (1998)”<br>- “CSA C390-10”<br>- “Ecma International Standard ECMA-383 (2010)”<br>- “Journal of Optical Society of America, Volume 58 (1968)”<br>- “Advanced | Consistency   | This change is necessary to match the format used in similar subsections throughout the regulations.   |

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|      |  | Configuration and Power Interface Specification Revision 5.0...”   |                            |   |
| 528. | §1603(a) Testing Requirements                            | Delete exception to section 1603(a) regarding water heaters  | Clarification              | The updated the federal test methods for residential water heaters apply to the state-regulated water heaters. This change is necessary because federal law preempts the state test procedures for state-regulated water heaters; therefore the exception in section 1603(a) is obsolete.   |
| 529. | §1603(b) Approved Industry Certification Program         | Move description of “approved industry certification program” in section 1602(a) to section 1603(b) and update the numbering of the paragraphs in this subsection  | Consistency, clarification | This change simplifies and clarifies the regulations by resolving an issue where lengthy and substantive program descriptions were improperly described in the definitions section. Properly placing the substantive requirements for approved industry certification programs in its own section is necessary to ensure the regulations are consistent, clear, readable, and accessible. |
| 530. | §1603(b) (end – specifically the “Note” and “Reference”) | Delete references to section 25553(b) of the Public Resources Code   | Correct typo               | These deletions are necessary to remove references to a non-existent Public Resources section.  |
| 531. | §1604(a)(1) and Table A-1                                | Delete Table A-1 and amend section 1604(a)(1) to (1) add “designed for the refrigerated storage of food at temperatures above 32°F, configured for general refrigerated food storage” before the term “non-commercial refrigerators,” (2) include “miscellaneous | Clarification              | These changes are necessary to remove wine chillers from Table A-1 since they are federally covered miscellaneous refrigeration products with the same test procedure as the other appliance types listed in Table A-1, and therefore a table is no longer useful.  |

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|      |   | refrigeration products,” and (3) include federal test procedure previously listed in the Table A-1.         |               |   |
| 532. | §1604(a)(2), Table A-1 (previously Table A-2) | Change “Table A-2” to “Table A-1”   | Clarification | This change is necessary because Table A-1 is being deleted and only one table is needed in section 1604(a).  |
| 533. | §1604(a)(4)                                   | Amend the format used in the “EXCEPTION”  | Consistency   | This change is necessary to match similar format used in other exceptions in the regulations.   |
| 534. | §1604(c)                                      | Change “Heat Pump Water-Chilling Packages” to “Heat Pump Water-Heating Packages” in the subsection’s title  | Consistency   | This change is necessary to use the same term used to identify this type of heat pump in the test procedure (ANSI/AHRI 550-590 (I-P) 2011) for this appliance. The title of the test procedure is “Performance Rating of Water-Chilling and Heat Pump Water-Heating Packages Using the Vapor Compression Cycle” |
| 535. | §1604(c)(4)                                   | Add paragraph header “Air Filters” in bold  | Consistency   | This change is necessary to match the format used in similar subsections in the regulations.  |
| 536. | §1604(c)(4), Table C-2                        | Add a footnote to Table C-2 that states “MERV not reportable for models being tested to AHRI 680-2009 only” | Clarification | This change is necessary to specify that the minimum efficiency reporting value (MERV) is only reportable for air filters being tested under a specific test procedure.   |
| 537. | §1604(c)(5)                                   | Add paragraph header “Heat Pump Water Heating Packages” in bold   | Consistency   | This change is necessary to match the format used in similar subsections throughout the regulations.  |
| 538. | §1604(c)(5)                                   | Change “chilling” to “heating”  | Consistency   | This change is necessary to use the same term used to identify this type of heat pump in the updated test procedure , ANSI/AHRI 550-590 (I-P) 2011, for this appliance. The title of the test procedure is “Performance Rating of Water-Chilling and Heat Pump  |

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|      |  |   |                            | Water-Heating Packages Using the Vapor Compression Cycle.”  |
| 539. | §1604(d)                                   | Change “Spot” to “Portable,” and include “and Residential Furnace Fans” in the subsection’s title   | Clarification              | These changes are necessary to reflect that section 1604(d) also covers portable air conditioners and residential furnace fans; changing “spot” to “portable” is necessary because a spot air conditioner are a type of portable air conditioner.   |
| 540. | §1604(d), Table D-3 (previously Table D-1) | Change “Table D-1” to “Table D-3,” change “Spot” to “Portable” and include “and Residential Furnace Fan” in Table D-3’s title, and delete “Except Low Profile Ceiling Fans” | Clarification, consistency | These changes are necessary to maintain consistent format, match changes proposed in section 1604(d), and remove an exception that is no longer accurate. The federal test procedure for ceiling fans in 10 C.F.R. section 430.23(w) (Appendix U to subpart B of part 430) now applies to low-profile ceiling fans” (also known as “hugger fans”). (See 81 Fed. Reg. 48619 (July 25, 2016) (describing change in “ceiling fan” scope to include hugger fans, and the test procedure updates relevant to hugger fans, among other products).). The table is being renumbered due to the addition of new “D” tables in section 1602(D). |
| 541. | §1604(e)(1)                                | Add paragraph header “Gas Space Heaters and Oil Space Heaters” in bold  | Consistency                | This change is necessary to match the format used in similar subsections throughout the regulations.  |
| 542. | §1604(e)(2)                                | Add paragraph header “Natural Gas and LPG Space heaters” in bold  | Consistency                | This change is necessary to match the format used in similar subsections throughout the regulations.  |
| 543. | §1604(e), Table E-1                        | Delete the terms “gas-fired”  | Clarification              | These deletions are necessary to remove redundant terms.  |
| 544. | §1604(f)(2)                                | 1) Change “Large water heaters” to “Water heaters that are regulated under  | Clarification              | This change is necessary to more clearly distinguish federal test procedures for water heaters that are not   |



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|      |                     | subpart G of 10 C.F.R. part 431”  |                            | residential water heaters and subject to federal test procedures located in 10 C.F.R. part 430.   |
| 545. | §1604(f)(2)(A)<br>) | 2) Delete “(A)” and “large”, add “that are regulated under subpart G of 10 C.F.R. part 431, and delete “except for large heat pump water heaters”           | Clarification              | These changes are necessary to specify where the federal test procedures for commercial water heaters are located, remove an exception for large heat pump water heaters that is incorrect, remove the word “large” because it is not a term used in the federal regulations for water heaters, and to improve the overall clarity of the regulation.   |
| 546. | §1604(f)(2)(B)<br>) | Delete “(B) There is no test procedure for large heat pump water heaters”   | Clarification              | This change is necessary to delete an error in the regulations. It is not correct that there is no test procedure for large heat pump water heaters because the federal test procedure for commercial water heating equipment applies to large heat pump water heaters. (See 10 C.F.R § 431.106(b)(2)(v) and Appendix E to Subpart G of Part 431 – Uniform Test Method for the Measurement of Energy Efficiency of Commercial Heat Pump Water Heaters.) |
| 547. | §1604(g)            | Add “pump” to the subsection’s title  | Clarification              | This change is necessary to specify that section 1604(g) covers pumps.  |
| 548. | §1604(g)(3)(C)<br>) | In the “Curve C” equation”, make the “2” a superscript  | Correct typo               | This change is necessary to correct a typo and accurately reflect the correct equation.   |
| 549. | §1604(h)(1)-(4)     | Add the following paragraph headers in bold:<br>“Commercial Pre-Rinse Spray Valves,”<br>“Showerheads,”<br>“Other Plumbing Fittings,” and<br>“Showerhead-tub | Consistency, clarification | These changes are necessary to make the regulations clearer and match the format used in similar subsections throughout the regulations.  |

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|      |                       | spout diverters combinations”  |                            |  |
| 550. | §1604(h)(5)           | Delete language in subsection (h)(5) and delete “(6)”  | Clarification              | These changes are necessary to remove obsolete language. The federal test procedure that applies to tub spout diverters manufactured on or after June 1, 2016, has already taken effect. It is no longer necessary to refer to the federal test procedure for tub spout diverters manufactured before June 1, 2016.  |
| 551. | §1604(h)(5)           | Add paragraph header “Tub Spout Diverters”   | Consistency                | This change is necessary to match the format used in similar subsections throughout the regulations.   |
| 552. | §1604(j)(1) and (2)   | Add the following paragraph headers in bold: “Fluorescent Lamp Ballasts Except Deep-Dimming Fluorescent Lamp Ballasts” and “Deep-Dimming Fluorescent Lamp Ballast” and renumber the paragraphs | Consistency, clarification | These changes are necessary to make the regulations clearer and match the format used in similar subsections throughout the regulations.   |
| 553. | §1604(j)(1)           | Delete “as applicable for models manufactured before November 14, 2014”  | Clarification              | This change is necessary to remove outdated language. The federal test procedure that applies to fluorescent lamp ballasts (except deep-dimming fluorescent lamp ballasts) manufactured on or after November 14, 2014, has already taken effect. Therefore, it is no longer necessary to refer to the federal test procedure for models manufactured before November 14, 2014. |
| 554. | §1604(j), “Table J-1” | 1) Add the title “Table J-1”<br>2) Within the Table, change “no” to “No” for correct formatting  | Clarification, consistency | This change is necessary to identify a table that was previously unnumbered and untitled and to match the format used throughout the regulations.  |

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|      |                               | (capitalization)  |               |   |
| 555. | §1604(j)(2)                   | Delete “The test method for fluorescent lamp ballasts is 10 C.F.R. section 430.23(q) (Appendix Q1 to Subpart B of part 430) as applicable for models manufactured on or after November 14, 2014.” | Clarification | This change is necessary to remove an outdated reference. The federal test procedure that applies to fluorescent lamp ballasts (except deep-dimming fluorescent lamp ballasts) manufactured on or after November 14, 2014, is no longer found in Appendix Q1. The federal test procedure for this product type is found in 10 C.F.R. §430.23(q); Appendix Q to Subpart B of 10 C.F.R. part 430. |
| 556. | §1604(k)(2)                   | Delete “state-regulated general service incandescent lamps” and “state-regulated incandescent reflector lamps”  | Clarification | These deletions are necessary to clarify that general service incandescent lamps and incandescent reflector lamps are not state regulated lamps because these types of lamps are subject to federal test procedures and federal standards.  |
| 557. | §1604(k), Table K-1           | Change from “Lumens per Watt” to “LPW”  | Consistency   | This change is necessary to use the same nomenclature throughout the regulations. The term “lumens per watt” is defined in section 1602(k) and “LPW” is the acronym for this term.  |
| 558. | §1604(k), Table K-1, footnote | Capitalize the “t” in “Table X”   | Correct typo  | This change is necessary to correct a typographical error.  |
| 559. | §1604(k)(5)                   | Delete “federally-regulated light-emitting diode (LED) lamps”   | Clarification | This change is necessary because there is a new federal test procedure that applies to LED lamps; therefore it is no longer correct to state that there are no federally prescribed test procedures for federally regulated LED lamps.  |
| 560. | §1604(m)                      | Delete “and Traffic Signal Lamps” in the subsection’s title   | Clarification | This deletion is necessary because traffic signal lamps are not a federally or state-regulated appliance; it was an error to include this term in the regulations.  |

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| 561. | §1604(m)(1)         | Add paragraph header “Traffic Signal Modules” in bold, change “are” to “is,” and change “test methods” to “test method”  | Consistency, correct typo  | These changes are necessary to match the format used in similar subsections in throughout the regulations and to correct typographical errors.   |
| 562. | §1604(m)(2)         | Delete language in subsection (2) regarding traffic signal lamps and remove the number (1) and (2).                      | Clarification              | These changes are necessary because there is no test procedure for traffic signal lamps. The deletion of the numbers is necessary because there will be only one item in section 1604(m).                |
| 563. | §1604(n)(2)         | Replace “2005” with “2004”   | Correct typo               | This change is necessary to correct a typographical error. 10 C.F.R. section 431.323(b)(1) references ANSI C-78.43-2004, not “2005.”   |
| 564. | §1604(n)(3)         | Add a hyphen to “Under-cabinet” and add “(Appendix Q to subpart B of part 430 (2015))”                                   | Consistency                | These changes are necessary to use consistent nomenclature and use the same format for the referenced federal test procedure in section 1604(n)(3).  |
| 565. | §1604(n)(4)(B)      | Delete “lamps and”   | Clarification              | This deletion is necessary because LED lamps are already covered in section 1604(k). Section 1604(n)(4)(B) covers LED luminaries using LED light engines, not LED lamps.                                 |
| 566. | §1604(p)(1)         | Add paragraph header “Clothes Washers that Are Consumer Products” in bold and delete “and commercial clothes washers is” | Consistency, clarification | These changes are necessary to match the format used in similar subsections throughout the regulations and to include the federal test procedure for commercial clothes washers in a separate paragraph. |
| 567. | §1604(s)            | Add “compressors” to the subsection’s title  | Clarification              | This change is necessary to specify that section 1604(s) covers compressors.   |
| 568. | §1604(s)(1) and (2) | Add paragraph headers “Electric Motors, Except Small Electric Motors” and “Small Electric Motors” in bold                | Consistency                | These changes are necessary to match the format used in similar subsections throughout the regulations.  |

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| 569. | §1604(u)   | Add “External” before “Power Supplies” in the subsection title   | Clarification              | This change is necessary to specify that the regulations only apply to “external” power supplies. There are internal power supplies in computers; the test procedure referenced in this subsection does not apply to internal power supplies.   |
| 570. | §1604(u)(1)  | Amend to include “federally regulated direct operation external power supplies” and “federally regulated indirect operation” Class A external power supplies   | Clarification              | These changes are necessary to specify the two types of federally regulated external power supplies that are subject to the federal test procedure for external power supplies.   |
| 571. | §1604(v)(1), (2), (3) (previously (4)), and (4) (previously (5)) | Add paragraph headers “Consumer Audio and Video Equipment,” “Televisions and Signage Displays,” “Computer Monitors,” and “Computers” and renumber the subsections from “(4)” to “(3)” and “(5)” to “(4)” | Consistency                | These changes are necessary to match the format used in similar subsections throughout the regulations and to accurately list the paragraphs listed in this subsection.   |
| 572. | §1604(v)(3) (old)  | Delete language in subsection (v)(3)   | Clarification              | These deletions are necessary to remove outdated language. The federal test procedure that applies to televisions manufactured on or after April 14, 2014, has already taken effect. Therefore, it is no longer necessary to include the federal test procedure for televisions manufactured before April 24, 2014. |
| 573. | §1604(v)(4) (previously (5))                                     | Within this subsection for computers, change the reference from section “1604(v)(5)(B)(2)” to “1604(v)(4)(B)2.”  | Clarification, consistency | These changes are necessary to accurately reference the correct subsections due to the deletion of the original §1604(v)(3) and the renumbering of subsequent subsections as a result while also matching the format used throughout the regulations.   |

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|      |  | And change the reference from “1604(v)(5)(B)(3)” to “1604(v)(4)(B)3.”        |               |  |
| 574. | §1604(v)(4)(B)1. (previously “...(v)(5)(B)1.”)     | Add a period inside the closing quote for “remote wake”                      | Consistency   | This change is necessary to match the formatting used throughout the regulations   |
| 575. | §1604(w)   | Add “Battery Chargers and....” to the subsection’s title                     | Clarification | This change is necessary to specify that section 1604(w) covers both state-regulated battery charger systems and federally regulated battery chargers.   |
| 576. | §1604(w)(2)(B) and (C) (previously “...(w)(1)...”) | Change references from “Table W-2” to “Table W-3”                            | Clarification | This change is necessary to accurately reference the correct table due to the addition of a new Table W-1 in section 1605.1(w) and the renumbering of subsequent “W” tables as a result  |
| 577. | §1604(w)(2)(D) (previously “...(w)(1)(D)”)         | Change from “2011” to “Jan. 1, 2017” and change “Table 5.2” to “Table 3.3.2” | Clarification | These changes are necessary to correct a reference to the state test procedure for small battery charger systems. The 2011 version of the test procedure does not contain the values (end of discharge voltage) referenced in subsection (w)(2)(D). (See 76 Fed. Reg. 31750 (Jun. 1, 2011).) However, the current version of the test procedure does. (See 10 C.F.R. section 430.23(aa) (Appendix Y to subpart B of part 430)(Jan. 1, 2017).) Therefore, these changes are necessary to match the reference in subsection (w)(2)(D) with the current test procedure for small battery charger systems. Also, changing the table number is necessary to match what is found in the referenced test procedure. |
| 578. | §1604(w)(3) (new)                                  | Add “(3) Test Method for Battery   | Clarification | This change is necessary to clarify that battery backup and  |

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|      |             | <p>Backups and Non-Federally Regulated Uninterruptible Power Supplies. The test method for battery backups and non-federally regulated Uninterruptible Power Supplies is 10 C.F.R. section 430.23(aa) (Appendix Y to subpart B of part 430) (Jan. 1, 2016)”</p> |               | <p>non-federally regulated uninterruptible power supplies are still subject to the federal test procedure for battery chargers issued on January 1, 2016. “Battery backups” and “uninterruptible power supplies” are types of state-regulated “small battery charger system.” (See Section 1602(w).) The federal test procedure for battery chargers covered battery backup and uninterruptible power supplies until June 20, 2016, because the federal test procedure was updated and specifically excluded battery backups and uninterruptible power supplies. (See 81 Fed. Reg. 31827 (May 20, 2016), at 31842.) On January 11, 2017, the federal test procedure for battery chargers was updated to cover federally regulated uninterruptible power supplies. (See 81 Fed. Reg. 89806 (Dec. 12, 2016), at 89823.) Currently, battery backups and non-federally regulated uninterruptible power supplies still fall within the scope of the old version of the federal test procedure before the June 20, 2016 update. (See 76 Fed. Reg. 31750 (Jun. 1, 2011), at 31777.) Therefore, section 1604(w)(3) merely clarifies existing state testing requirements for battery backups and non-federally regulated uninterruptible power supplies, and does not modify, remove, or add requirements to the regulations.</p> |
| 579. | §1604(w)(4) | Change “(2)” to “(4)” and add “that are not federally regulated battery chargers or   | Clarification | These changes are necessary to clarify what type of large battery chargers systems are not subject to the state test procedure referenced in   |

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|      |   | federally regulated uninterruptible power supplies”   |               | subsection (w)(2) (renumbered “(4)”). It is possible for a “large battery charger system” to be a “federally regulated battery charger” or an “uninterruptible power supply.” Therefore, it is necessary to specify which ones are subject to the state test procedure. Also, it is also necessary to renumber this subsection because the preceding subsections are being renumbered. |
| 580. | §1604 Documents Incorporated by Reference | Add “ C.F.R, Title 10, section 430.23(aa) (Appendix Y of subpart B of part 430 (Jan. 1, 2016)”  | Clarification | This change is necessary to incorporate by reference the required test procedure for battery backups and non-federally regulated uninterruptible power supplies. See change regarding section 1604(w)(3) in Table 3 of this document.  |
| 581. | §1604 Documents Incorporated by Reference | Add “C.F.R., Title 10, section 431 subpart G”   | Clarification | This change is necessary to incorporate by reference the federal water heaters referred to under 10 C.F.R. § 431, subpart G (commercial water heaters) to distinguish them from residential water heaters in the regulations. See change regarding section 1604(f)(2) in Table 3 of this document.   |
| 582. | §1604 Documents Incorporated by Reference | For the document “C.F.R., Title 10, sections 431.203 and 431.204” remove the reference to “431.203” and change “431.204” to “431.204(b)” to accurately reflect what is referenced in section 1604(l). | Clarification | This change is necessary to remove a document incorporated by reference that does not appear in the regulations, either existing or proposed.  |
| 583. | §1604 Documents Incorporated by Reference | For the document “C.F.R., Title 10, sections 431.223 and 431.224” remove the  | Clarification | This change is necessary to remove a document incorporated by reference that does not appear in the regulations, either existing or  |



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|      |   | reference to “431.223” to accurately reflect what is shown in section 1604.  |                            | proposed.   |
| 584. | §1604 Documents Incorporated by Reference | 1) For the document “ANSI/ASHRAE 133”, amend the year from “2001” to “2008”<br>2) For the document “ANSI/ASHRAE 143” amend the year from “2000” to “2007”              | Clarification              | These changes are necessary to reflect the accurate versions of these documents specified in Section 1604. The 2008 and 2007 versions are specified in the text, correcting the inaccurate reference here in the Documents Incorporated by Reference section. |
| 585. | §1604 Documents Incorporated by Reference | 1) Add the heading “UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (EPA)”<br>2) Amend the name of ENERGY STAR” to “ENERGY STAR®”  | Clarification, Consistency | 1) This change is necessary to match format used in other sections across the regulations.<br>2) This change is necessary to match the exact name used per EPS’s “ENERGY STAR®” program criteria.   |
| 586. | §1604 Documents Incorporated by Reference | For the document “ANSI C78.43-2004”, change the year from “2004” to “2005”   | Clarification              | This change is necessary because the document referenced in 10 C.F.R. §431.323(b)(1) is the 2005 version. The intention was to reference the same version here.   |
| 587. | §1604 Documents Incorporated by Reference | Remove the word “THE” in the heading “THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)” and amend the contact phone number listed to match the number listed online | Consistency, clarification | This change is necessary to accurately reflect the name and contact phone number of the organization.   |
| 588. | §1604 Documents Incorporated by Reference | For the document “ANSI/HI 1.6-2000” update the mailing address   | Clarification              | This change is necessary to reflect the current address of the “Hydraulic Institute”  |

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| 589. | §1604 Documents Incorporated by Reference | For the document “ IES LM-84-14” change “Luminaries” to “Luminaires”  | Correct typo  | This change is necessary to correct a misspelled word.   |
| 590. | §1604 Documents Incorporated by Reference | For the document “Advanced Configuration and Power Interface Specification Revision 5.0...”, reformat the website and FAX number listed | Consistency   | This change is necessary to match format used in other sections across the regulations.  |
| 591. | §1604 Documents incorporated by Reference | Documents incorporated by reference. Delete “IEC 62301(2011)(E)”  | Correct typo  | This change is necessary to delete a duplicative reference to a test procedure. The same test procedure appears two lines down. It is not necessary to include it twice in this list.  |
| 592. | §1605(e)                                  | Add the word “section” before “1604”  | Consistency   | This change is necessary to maintain consistent format throughout the regulations.   |
| 593. | §1605(f)                                  | Delete “either”   | Correct typo  | This change is necessary to remove unnecessary language and make the regulation clearer.   |
| 594. | §1605.1(a)(1)(A)                          | Re-number paragraph to include “A”  | Clarification | This change is necessary to distinguish existing federal standards from the federal standards for miscellaneous refrigeration products being added in the new section 1605.1(a)(1)(B).   |
| 595. | §1605.1(a)(1)(A)                          | Delete “internal freezers”  | Clarification | This change is necessary because the state definition for “internal freezers” is being removed from section 1602(b) given that the federal definition for “special compartment” eliminates the need for this state definition. |
| 596. | §1605.1(a)(1) and tables                  | Change “Table A-3” to “Table A-2” and renumber all subsequent “Table A-”  | Clarification | These changes are necessary because the deletion of Table A-1 in section 1604(a) requires the renumbering of all subsequent Table A-# in the regulations.  |
| 597. | §1605.1(a)(1), Table A-2                  | Reformat Table A-2  | Clarification | These changes clarify without materially altering the  |

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|      | (previously Table A-3)            |  |                            | requirements in the original table and are necessary to match the format used in 10 C.F.R. section 430.32(a). Also a footnote was added to Table A-2 to provide information in the federal regulations that will facilitate calculating whether the standards for non-commercial refrigerators, refrigerator-freezers, and freezers are met.            |
| 598. | §1605.1(a)(2)(A)                  | 1) Delete existing language in “(A)” and renumber subsequent paragraphs<br>2) Delete “the effective dates shown” and replace with “March 27, 2017”<br>3) include “and A-6” | Clarification              | These changes are necessary to delete existing language in paragraph “A” that is no longer found in the federal regulations, and to specify that the updated federal standards in Tables A-4, A-5, and A-6 apply only to commercial refrigerators and commercial freezers manufactured on or after March 27, 2017, per the 10 C.F.R. section 431.66(e). |
| 599. | §1605.1(a)(2)(B) (previously “C”) | Change “January 1, 2012” to “March 21, 2017”   | Clarification              | This change is necessary to specify that the updated federal standards included in Table A-6 apply only to commercial ice cream freezers manufactured on or after March 27, 2017, per 10 C.F.R. section 431.66(e).  |
| 600. | §1605.1(a)(3)(A)                  | Add paragraph header “Cube Type”   | Clarification, consistency | This change is necessary to specify that this subsection applies to cube type automatic commercial ice makers manufactured, and to match the format used in similar subsections throughout the regulations.   |
| 601. | §1605.1(a)(3)(A), Table A-7       | Reformat Table A-7   | Clarification              | These changes clarify without materially altering the requirements in the original table and are necessary to remove repetitive language and to provide a clearer format.   |
| 602. | §1605.1(a)(3)(B)                  | Add paragraph header “Batch Type”  | Clarification, consistency | This change is necessary to specify that this subsection applies to batch type automatic commercial ice makers, and to match the format used in   |

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|      |                               |   |                            | similar subsections throughout the regulations.  |
| 603. | §1605.1(a)(3)(B)(1)           | Add “Batch type automatic commercial ice makers include cube type automatic commercial ice makers for purposes of the standards for models manufactured on or after January 28, 2018” | Clarification              | This change is necessary to clarify that section 1605.1(a)(3)(B) applies to both batch type and cube type automatic ice makers manufactured on or after January 28, 2018, because the federal definition of “batch type” includes “cube type” automatic commercial ice makers. |
| 604. | §1605.1(a)(3)(B), Table A-8   | Reformat Table A-8  | Clarification              | These changes clarify without materially altering the requirements in the original table and are necessary to merge cells with identical text to save space and to remove duplicative language.  |
| 605. | §1605.1(a)(3)(C)              | Add paragraph header “Continuous Type”  | Clarification, consistency | This change is necessary to specify that this subsection applies to continuous type automatic commercial ice makers, and to match the format used in similar subsections throughout the regulations.   |
| 606. | §1605.1(a)(3)(C), Table A-9   | Reformat Table A-9  | Clarification              | These changes clarify without materially altering the requirements in the original table and are necessary to merge cells with identical text to save space and to remove duplicative language.  |
| 607. | §1605.1(a)(4)(C), (E) and (F) | Reorder subsections from (i), (ii), (iii) to 1., 2., and 3., respectively   | Consistency                | These changes are necessary to maintain consistent format throughout the regulations.  |
| 608. | §1605.1(a)(5)(C)              | (1) Capitalize the letter “i” in “if”, (2) add hyphen to “anti-sweat”, and (3) a colon after the word “heater”  | Consistency                | These changes are necessary to maintain consistent format throughout the regulations and to match the terminology used in section 1602 for the definition of “anti-sweat.”   |
| 609. | §1605.1(a)(7)(                | Delete “refrigerated  | Clarification,             | These changes are necessary to   |

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|      | A)                             | canned and bottled beverage vending machine manufactured before August 31, 2012” and add the “consumer refrigerator coolers manufactured before October 28, 2019” | consistency                | be consistent with other proposed changes to section 1605.1(a). Specifically, “refrigerated canned and bottled beverage vending machine manufactured before August 31, 2012” is being deleted because this language is obsolete given that products manufactured after this date are subject to the federal standards shown in section 1605.1(a)(6)(A) and (B). Moreover, “consumer refrigerator coolers manufactured before October 28, 2018” is being added to clarify that coolers manufactured prior to October 28, 2018 – before the federal standards take effect – are subject to the state standards in section 1605.3(a). |
| 610. | §1605.1(a)(7)(B)               | Add “that do not exceed 39 ft3” and delete “wine chillers”  | Clarification, consistency | These changes are necessary to be consistent with other proposed changes to section 1605.1(a) and to clarify what are the types of products covered by section 1605.3(a).  |
| 611. | §1605.1(b)(1)(A) and Table B-2 | Delete paragraph (A) and Table B-2  | Clarification              | These changes are necessary because the federal standards for room air conditioners and room air-conditioning heat pumps manufactured on or after October 1, 2000, and before June 1, 2014, are obsolete given that the federal standards in 10 C.F.R section 430.32(b) for products manufactured on or after June 1, 2014 have taken effect.  |
| 612. | §1605.1(b)(1)(B) (Tables)      | Change “Table B-3” to “Table B-2” and renumber all subsequent “Table B-”  | Consistency                | These changes are necessary because the deletion of Table B-2 requires the renumbering of all subsequent Table B-# in the regulations.   |
| 613. | §1605.1(b)(2) and Table B-5    | Change October 8, 2012” to January 1, 2017” and delete Table B-5  | Clarification              | These changes are necessary because the federal standards for standard size packaged terminal air conditioners and   |

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|      |                          |  |               | standard size packaged terminal heat pumps manufactured after October 8, 2012, and before January 1, 2017, are obsolete given that federal standards in Table 7 and 8 of 10 C.F.R. section 431.97 for products manufactured after January 1, 2017 have taken effect.   |
| 614. | §1605.1(c)               | Add “Air Filters, and Heat Pump Water-Heating Packages” in the subsection’s title  | Consistency   | These changes are necessary to match the title used in other subsections that cover the same appliances.   |
| 615. | §1605.1(c)(1)            | Add “and C-9”  | Clarification | This change is necessary to specify that this subsection includes a new table that provides the federal standards for central air conditioners.  |
| 616. | §1605.1(c)(1)            | Move “Exception to Section 1605.1(c)(1)” immediately before section 1605.1(c)(1) Table C-4 and amend the exception to state the specific appliance types that this exemption applies to. | Clarification | This change is necessary to emphasize that “single package vertical” “double-duct...” and others are not covered in Table C-4 and that the federal standards for these specific appliance types are found in other tables. The exception is being amended to state the specific appliance types, which are exempt from Table C-4. The appliance types were not previously specified. |
| 617. | §1605.1(c)(1), Table C-3 | Delete federal standards effective January 23, 2006 and reformat Table C-3   | Clarification | These changes are necessary to delete federal standards for air conditioner and heat pump systems that are outdated. The table is also being reformatted to match the format used in the federal regulation (with product classes). These are not new federal standards.   |
| 618. | §1605.1(c)(1), Table C-8 | Reformat Table C-8   | Clarification | The changes include adding acronyms in the “heating type” column to reduce space and remove duplicative text. These acronyms are defined in the new footnote at the bottom of the table. These changes are   |

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|      |   |   |                             | necessary to make the table easier to read.  |
| 619. | §1605.1(c)(3)   | Delete reference to section 1605.2(c)   | Clarification               | This deletion is necessary because standards for central air conditioners no longer appear in section 1605.2. Since there are no standards in section 1605.2(c) it is not accurate to include the cross-reference to standards that do not exist.  |
| 620. | §1605.1(c)(4)   | Change “Heat Pump Water-Chilling Packages” to “Heat Pump Water-Heating Packages”  | Consistency                 | This change is necessary to maintain consistent terminology throughout the regulations.  |
| 621. | §1605.1(c)(5)   | Add “Air Filters. There are no energy efficiency standards or energy design standards for air filters”  | Clarification               | This addition is necessary to clarify that there are no federal or state standards air filters.  |
| 622. | §1605.1(d)  | Change “Spot” to “Portable,” and include “and Residential Furnace Fans” in the subsection’s title   | Clarification               | These changes are necessary to reflect that section 1605.1(d) also covers portable air conditioners and residential furnace fans; changing “spot” to “portable” is necessary because a spot air conditioner is a type of portable air conditioner.   |
| 623. | §1605.1(d)(1)(A)                                      | Remove the comma after “2007” and reformat and renumber the subsection  | Correct typo, clarification | These changes are necessary to correct a grammatical error and to clarify the regulations to differentiate between the current federal standards and future federal standards for ceiling fans.  |
| 624. | §1605.1(d)(3)(A) and Table D-9 (previously Table D-2) | 1) Add header “(A) Dehumidifiers Manufactured On or After October 1, 2012 and Before June 13, 2019.”<br>2) Change “found” to “shown”<br>3) Replace “the effective dates shown” with | Consistency                 | 1) This change is necessary to specify the specific dates in which these standards are effective and to separate this subsection from the standards which become effective on and after June 13, 2019 (as shown in “(B)”.<br>2) This change is necessary to maintain consistent language throughout the regulations. |

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|      |                            | <p>“October 1, 2012 and before June 13, 2019”</p> <p>4) Rename Table D-2 to “Table D-9”</p>  |                            | <p>3) This change is necessary to specify the specific dates in which these standards are effective.</p> <p>4) This change is necessary due to the addition of new “D” tables in previous subsections</p>   |
| 625. | §1605.1(d)(5)              | Change “Spot” to “Portable” and delete “and ceiling fan light kits”  | Clarification, Consistency | These changes are necessary to be consistent with the other proposed changes to section 1605.1(d). The word “spot” is being changed to “portable” because spot air conditioners are a type of portable air conditioners. Further, noting that there are no efficiency standards for “ceiling fan light kits” is obsolete language because there are new federal energy efficiency standards for ceiling fan light kits, which are being included in section 1605.1(d)(2). |
| 626. | §1605.1(e)(1), Table E-2   | Amend Table E-2  | Clarification              | This change is necessary to accurately reflect the current federal standards for gas wall furnaces, floor furnaces, and room heaters in 10 C.F.R. section 430.32(i)(2) and to delete federal standards that are outdated.   |
| 627. | §1605.1(e)(2)              | Add serial comma in heater to subsection and change nomenclature from “be not less than the applicable values” to “meeting all requirements” | Clarification              | This change is necessary to make the regulations clearer and to reflect that the standards for gas- and oil-fired central boilers and electric residential boilers, shown in Tables E-3, E-4, E-5, and E-6 of section 1605.1(e)(2), require a minimum AFUE and maximum consumption values.  |
| 628. | §1605.1(e)(2)(A) (3) & (4) | Change “clauses” to subsections 1605.2(e)(2)(A)1., 1605.2(e)(2)(A)2., and/or 1605.2(e)(2)(A)3.   | Clarification              | These changes are necessary to specify which sections of the regulations are being referenced and to maintain consistency throughout the regulations for all internal references.   |
| 629. | §1605.1(e)(2), Table E-4   | Add “commercial” to the table’s  | Clarification              | These changes are necessary to clarify that the federal   |



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|      |                          | heading and amend Table E-4  |               | standards in Table E-4 apply to commercial gas- and oil-fired packaged boilers and to delete federal standards that are outdated.  |
| 630. | §1605.1(e)(2), Table E-6 | Delete “Compliance Date” column in Table E-6   | Clarification | These changes are necessary to remove unnecessary language given that all the effective dates for the standards in Table E-6 are past.   |
| 631. | §1605.1(e)(3)            | Change “infrared gas heaters” to “infrared gas space heaters”  | Clarification | This change is necessary to match the term as defined in section 1602(e) and therefore use consistent terminology in the regulations.  |
| 632. | §1605.1(e)(5)            | Add “combination space-heating and water-heating appliances”   | Clarification | This change is necessary to specify that the standards for combination space-heating and water-heating appliances are located in another section of the regulations.   |
| 633. | §1605.1(f)(1)            | Delete the term “Large, add “regulated under 10 C.F.R. section 430.32(d)”, and delete “manufacturing during the applicable time period”      | Clarification | These changes are necessary to use accurate terminology found in the federal regulations for water heaters, which do not use the term “large” water heaters, and to specify that subsection (f)(1) only applies to water heaters regulated under C.F.R. section 430.32(d).   |
| 634. | §1605.1(f)(2)            | Change “(2)” to “(3)” and delete “Small” and add “water heaters regulated under 10 C.F.R. section 431.110.                                   | Clarification | This change is necessary to use accurate and consistent terminology found in the federal regulations for water heaters, which do not use the term “small” to describe commercial water heaters, and to specify that subsection (f)(3) only applies to water heaters, which are regulated under C.F.R. section 431.110. |
| 635. | §1605.1(f)(3)(A)1.       | Add “Packaged Boiler Exclusion. Any packaged boiler that provides service water that meets the definition of “commercial packaged boiler” in | Clarification | This change is necessary to clarify that packaged boilers are excluded from the commercial water heaters regulated under 10 C.F.R. section 431.110 and are instead subject to applicable regulations in section  |

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|      |  | section 1602(e) of this Article, but does not meet the definition of “hot water supply boiler” in section 1602(f) of this Article, must meet the requirements that apply to it under section 1605.1(e) of this Article.” |               | 1605.1(e).  |
| 636. | §1605.1(f)(3)                                  | Delete “Booster Water Heaters. There is no energy efficiency standard or energy design standard for booster water heaters”   | Clarification | This change is necessary to delete references to efficiency standards for booster water heaters. Booster water heaters are a type of water heater and are covered under federal efficiency standards for consumer and commercial water heaters. The federal standards do not distinguish between booster water heaters and other types of water heaters, so it is necessary to remove “booster water heaters” as a separate product category. |
| 637. | §1605.1(f)(4) and (5)                          | Delete subsection “(4)” and renumber subsection “(5)” to “(4)” as a result   | Clarification | This change is necessary to delete a reference to state-standards that are being struck-out; there are no longer state standards for “other water heaters” in section 1605.3(f).  |
| 638. | §1605.1(g)                                     | Add “Pump” to the subsection’s title   | Clarification | This change is necessary to reflect that section 1605.1(g) also covers federally regulated pumps.   |
| 639. | §1605.1(g)(1)                                  | Change “Gas-Fired and Oil-Fired” to “Fossil-Fuel Fired”  | Consistency   | This change is necessary to match the terminology used in the federal test procedures for pool heaters (See 10 C.F.R. §430.23, Appendix P to Subpart B of part 430.)  |
| 640. | §1605.1(g)(1) Table G-1 (previously Table G-2) | Renumber Table G-2 as “Table G-1” and remove the outdated standards  | Clarification | This change is necessary to delete outdated federal standards that are no longer in effect for fossil fuel-fired pool   |

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|      |   |   |               | heaters and to renumber the table due to the removal of the original Table G-1 in section 1604(g)(1).   |
| 641. | §1605.1(g)(7)                               | Renumber paragraph from “(6)” to “(7)”  | Clarification | This change is necessary because a new subsection paragraph was added to include the standards for federally regulated pumps.   |
| 642. | §1605.1(h)(1), Table H-1, footnote 1        | Remove hyphen after “independently”   | Correct typo  | This change is necessary because a hyphen after a word ending in “ly” is grammatically inaccurate.  |
| 643. | §1605.1(h)(4)(A)                            | Move language from subsection (h)(5)(A) to (h)(4)(A), and add “before January 28, 2019” | Clarification | This change is necessary to correct an error in the regulations. The existing language in subsection (h)(5)(A) - regarding standards for commercial pre-rinse spray valves - should be located under subsection (h)(4)(A). This change is also necessary to specify that the federal standards in subsection (h)(4)(A) only apply to products manufactured before January 28, 2019, given that there are new federal standards in effect after that date. |
| 644. | §1605.1(h)(4)(C)                            | Move language from subsection (h)(5)(B) to (h)(4)(C)                                    | Clarification | This change is necessary to correct an error in the regulations. The existing language in subsection (h)(5)(B) - regarding design standards for commercial pre-rinse spray valves - should be located in subsection (h)(4)(C).  |
| 645. | §1605.1(h)(5)(A) & (B)                      | Delete subsections (h)(5)(A) and (B)  | Clarification | These deletions are necessary to correct an error in the regulations. These subsections should be located under section 1605.1(h)(4) because they contain standards and references regarding commercial pre-rinse spray valves.   |
| 646. | §1605.1(j)(1)-(j)(2) and Tables J-1 and J-2 | Delete subsections (j)(1) through (j)(2), including Table J-1 and Table                 | Clarification | These changes are necessary to remove outdated federal standards for fluorescent lamp ballasts.   |

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|      |   | J-2   |                            |  |
| 647. | §1605.1(j)(3)                                     | Renumber subsection (j)(3) as subsection “(j)(1)”.  | Consistency                | This change is necessary because subsections (j)(1) and (j)(2) are being removed.  |
| 648. | §1605.1(j)(1)(new)                                | Add paragraph header for “Fluorescent lamp ballasts (other than dimming ballasts).”   | Consistency, clarification | These changes are necessary to specify the type of appliances covered by the new subsection (j)(1) and to match the format used in similar subsections throughout the regulations.   |
| 649. | §1605.1(j)(1)(new)                                | Change reference to section 1605.1(j)(4) to “sections 1605.1(j)(2) and 1605.1(j)(3)”  | Consistency, clarification | This change is necessary because subsections (j)(1) and (j)(2) are being removed and subsequent sections are being renumbered.   |
| 650. | §1605.1(j)(1)(new) and Table J-2 (previously J-3) | Renumber Table J-3 to Table “J-2”   | Consistency                | This change is necessary because subsections (j)(1) and (j)(2) are being removed, including Tables J-1 and J-2.  |
| 651. | §1605.1(j)(1)(new), Table J-2 (previously J-3)    | Add heading to subsection, rename Table J-2 as “Table J-3”, amend table title to add “Except for Certain Dimming”, delete “Luminous Efficiency”, change “Ballast” to “Ballasts”, and change “1605.1(j)(3)” to 1605.1(j)(1)” | Clarification              | These changes are necessary to clarify that the federal standards in the table only apply to fluorescent lamp ballasts described in new subsection (j)(1), which excludes certain dimming ballasts. Removing “luminous efficiency” from the title is necessary because it is no longer necessary to distinguish this table from the previous efficiency standards for fluorescent lamp ballasts, which did not measure in terms of “Ballast Luminous Efficiency.” This is now the only table with standards for these fluorescent lamp ballasts. Also, updating the subsection reference due to the deletion of subsections (j)(2) and (j)(3). Also, renumbering the Table due to the deletion of previous “J” tables. |
| 652. | §1605.1(j)(2) (previously ... (j)(5)), Table J-3  | In the Table heading, change the reference from section   | Clarification              | This change is necessary to accurately reference the subsection due to the deletion of earlier subsections and   |

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|      | (previously J-4)                                  | “1605.1(j)(5)” to “1605.1(j)(2)”  |                            | renumbering of subsequent subsections as a result.   |
| 653. | §1605.1(j)(3)(C)                                  | Delete subsections (j)(3)(C)(4) through (6)   | Clarification              | This change is necessary to remove outdated language no longer found in 10 C.F.R. section 430.32(m)(1).  |
| 654. | §1605.1(j)(4)                                     | Delete entire subsection (j)(4)   | Consistency                | This change is necessary to move the exceptions found in subsection (j)(4)(A) through (C) below new subsection (j)(2) in order to locate exceptions after the subsections containing the applicable federal standards, and therefore match the format used throughout the regulations. |
| 655. | §1605.1(j)(5)                                     | Renumber subsection (j)(5) as (j)(2)  | Consistency                | This change is necessary because subsections (j)(1), (j)(2), and (j)(4) are being removed, and (j)(3) is being renumbered as (j)(1).   |
| 656. | §1605.1(j)(2)(new)                                | Add paragraph header for “Certain Dimming Ballasts.”  | Consistency, Clarification | These changes are necessary to specify the type of appliances covered by the new subsection (j)(2) and to match the format used in similar subsections throughout the regulations.   |
| 657. | §1605.1(j)(2)(new)                                | Delete “Each fluorescent lamp ballast”, add “Except as provided in section 1605.1(j)(3) of this Article, each dimming ballast:” | Clarification              | These changes are necessary in order to reflect that the exceptions found in subsection (j)(4)(A) through (C) are being moved to new subsection (j)(3).  |
| 658. | §1605.1(j)(2)(new) and Table J-3 (previously J-4) | Renumber Table J-4 as “J-3” and renumber reference to Table J-4 as “J-3”  | Consistency                | These changes are necessary to renumber the tables that follow the deletion of tables J-1 and J-2.   |
| 659. | §1605.1(j)(2)(new)                                | Add “Certain Dimming” to table title.   | Clarification              | This change is necessary to clarify that the federal standards in the table only apply to certain dimming ballasts described in new subsection (j)(2),   |
| 660. | §1605.1(j)(6)                                     | Renumber subsection (j)(6) as “(j)(3)”  | Consistency                | This change is necessary because subsections (j)(1), (j)(2), and (j)(4) are being  |

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|      |  |  |                            | removed, and other sections have been renumbered.  |
| 661. | §1605.1(j)(7)                                      | Delete subsection (j)(7)   | Clarification              | These changes are necessary because this subsection is no longer correct, as there are federal standards for the ballasts listed in subsection (j)(7).   |
| 662. | §1605.1(k)(1) and Table K-2                        | Delete subsection (k)(1)(A), including the original Table K-2.   | Consistency                | This change is necessary to remove outdated federal standards for general service fluorescent lamps and therefore clarify which federal standards are in effect.   |
| 663. | §1605.1(k)(1) and Table K-2 (previously Table K-3) | Delete “(B)” from paragraph header, delete “General Service Fluorescent Lamps Manufactured On or After July 15, 2012”, delete “The correlated color temperature and minimum average lamp efficacy (LPW) of”, add “Each of the following”, add “manufactured on or after the effective dates shown”, delete “be not less than”, add “meet or exceed”, delete “applicable values”, add “lamp efficacy standards”, and renumber Table K-3 as “K-2.” | Clarification              | These nonsubstantive changes are necessary to reflect the changes to Table K-2 and clarify the regulation.   |
| 664. | §1605.1(k)(2)                                      | Delete “Federally-Regulated Incandescent Reflector Lamps” from the subsection (2) heading and add “Federally Regulated” to the paragraph heading,  | Clarification, Consistency | This change is necessary because subsection (2)(B) (outdated federal standards) is being removed, which means the original subsection (2)(A) is no longer needed. The current standards for federally regulated incandescent reflector lamps are now |

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|      |  | delete “(A)” and renumber the remaining list   |               | reflected in Table K-3 (previously K-5).   |
| 665. | §1605.1(k)(2)  | Delete “Before” and replace with “On or After” and delete “November 2, 1995 and manufactured before” | Clarification | These changes are necessary to remove and replace the effective date of outdated federal standards for incandescent reflector lamps. The current standards went into effect on July 15, 2012 and are reflected in Table K-3 (previously K-5).          |
| 666. | §1605.1(k)(2)  | Add the phrase “with a rated lamp wattage between 40-205 watts, and”                                 | Clarification | This change is necessary to add language that applies to the current standards for federally regulated incandescent reflector lamps and is taken directly from subsection (2)(B), which is now deleted because it contains outdated federal standards. |
| 667. | §1605.1(k)(2)(A)2.   | Delete “2.” and add “EXCEPTION to Section 1605.1(k)(2)”  | Consistency   | This change is necessary to maintain a consistent format throughout the regulations.   |
| 668. | §1605.1(k)(2)(A)   | Renumber bulleted list beneath exception from (a, b, c) to (1, 2, 3)                                 | Consistency   | This change is necessary to maintain a consistent format throughout the regulations.   |
| 669. | §1605.1(k)(2)(A)   | Delete “and R20 short lamps” from exception  | Clarification | This change is necessary to remove language that no longer appears in 10 C.F.R. section 430.32(n)(7)(i)(B).  |
| 670. | §1605.1(k)(2)(A),<br>Table K-4                                 | Delete the original Table K-4 and change references to Table K-4 in the text to Table K-3            | Clarification | This change is necessary to remove outdated federal standards for incandescent reflector lamps. The current federal standards are reflected in Table K-3 (previously K-5).   |
| 671. | §1605.1(k)(2)(B) and<br>Table K-3<br>(previously<br>Table K-5) | Renumber Table K-5 as “K-3” and change references to Table K-5 to “K-3”                              | Consistency   | This change is necessary because Tables K-2 and K-4 have been deleted, and the subsequent tables are being renumbered.   |
| 672. | §1605.1(k)(2)(B)   | Delete the text “(B) Incandescent Reflector Lamps Manufactured on or After July 15, 2012.            | Clarification | This change is necessary to move the language in subsection (2)(B) under subsection (2) given that the original subsection (2)(A) is no  |

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|      |   | The average lamp efficacy of federally-regulated incandescent reflector lamps with rated lamp wattage between 40 – 205 watts, and manufactured on or after July 15, 2012, shall be not less than the applicable values shown in Table K-5” |               | longer needed. The current standards for federally regulated incandescent reflector lamps are now reflected in Table K-3 (previously K-5).   |
| 673. | §1605.1(k)(3) and Table K-4 (previously Table K-6)                          | Renumber Table K-6 as “K-4” and change references to Table K-6 to “K-4”  | Consistency   | This change is necessary because Tables K-2 and K-4 have been deleted, and subsequent tables are being renumbered.   |
| 674. | §1605.1(k)(4) Tables K-5, K-6 (previously Tables K-7 and K-8, respectively) | Renumber Tables K-7 and K-8 as “K-5” and “K-6” respectively, and change references from K-7 and K-8 as “K-5” and “K-6” respectively  | Consistency   | This change is necessary because tables have been deleted and renumbered in this subsection.   |
| 675. | §1605.1(k)(4)(A)  | Renumber bulleted list from (i, ii, iii, iv) to (1, 2, 3, 4)   | Consistency   | This change is necessary to maintain a consistent format throughout the regulations.   |
| 676. | §1605.1(k)(5) Table K-7 (previously Table K-9)                              | Renumber Table K-9 as “K-7” and change references to Table K-9 to “K-7”  | Consistency   | This change is necessary because tables have been deleted and renumbered in this subsection.   |
| 677. | §1605.1(k)(6)   | Delete “(6) See Section 1605.3(k) for energy efficiency standards for state-regulated general service incandescent lamps and state-regulated incandescent reflector lamps”   | Clarification | This change is necessary because there are no state regulated general service incandescent lamps or state regulated incandescent reflector lamps in section 1605.3(k). These appliances are exclusively federally regulated. |
| 678. | §1605.1(m)  | Delete “and Traffic Signal Lamps” from subsection’s title  | Clarification | This change is necessary because there are no federal or state test procedures or standards for traffic signal   |



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|      |   |   |                            | lamps.  |
| 679. | §1605.1(n)(1)(A)  | Delete subsection (n)(1)(A)   | Clarification              | This change is necessary to remove irrelevant language that was erroneously included in the regulations.  |
| 680. | §1605.1(n)(2)(B)  | Delete “in the following table” and add “shown in Table N-1”  | Consistency                | This change is necessary to maintain a consistent format throughout the regulations, which references tables included in the regulations.   |
| 681. | §1605.1(n)(2), Table N-1  | Amend Table N-1 and add “Standards for Metal Halide Lamp Fixtures Manufactured On or After February 10, 2017” to the table’s title  | Clarification              | These changes are necessary to improve the clarity and readability of the regulations and to remove unnecessary language from Table N-1. It is not necessary to cite to where industry documents are incorporated by reference in federal law because they are incorporated by reference in the appliance efficiency regulations. |
| 682. | §1605.1(n)(2)   | Delete “Except as provided in subsection (D) of this section, m”, add “M”, delete “(D)”, add “EXCEPTION to Sections 1605.1(n)(2)(B) and 1605.1(n)(2)(C)”, add “1605.1(n)(2)(B)” and “1605.1(n)(2)(C)” | Consistency                | This change is necessary to maintain a consistent format throughout the regulations, which uses paragraph headers to identify exceptions.   |
| 683. | §1605.1(n)(2) EXCEPTION to Sections 1605.1(n)(2)(B) and 1605.1(n)(2)(C) | Add “metal halide lamp fixtures:” and delete repetitive “metal halide lamp fixtures” in bulleted list. Also, replace the hyphen with a semicolon to begin the list.                                   | Clarification, consistency | This change is necessary to remove unnecessary repetitive words and phrases from the regulations and to match the formatting used throughout.   |
| 684. | §1605.1(o), Table O   | Amend Table O   | Clarification              | This change is necessary to delete federal standards for dishwashers effective January 1, 2018, that are now outdated, and to clarify which federal   |

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|      |  |   |                            | standards remain in effect.  |
| 685. | §1605.1(p)(1) and Table P-1                        | Delete the original Table P-1 and amend language in subsection (p)(1)   | Clarification, consistency | These changes are necessary to delete federal standards for residential clothes washers manufactured on or before March 7, 2015, that are outdated and therefore clarify that the federal standards in the new Table P-1 (previously Table P-2) for residential clothes washers manufactured after March 7, 2015, are the only standards in effect for this type of appliance. Also, changes to subsection (p)(1) are necessary to match the format used in new subsection (p)(2). |
| 686. | §1605.1(p)(1), Table P-1 (previously Table P-2)    | Rename Table P-2 as “Table P-1”   | Clarification              | This change is necessary because the original Table P-1 is being deleted.  |
| 687. | §1605.1(p)(2)                                      | Delete “Energy Design Standard for Top-Loading Semi-Automatic Clothes Washers and Suds-Saving Clothes Washers. Top-loading semi-automatic clothes washers that are consumer products and suds-saving clothes washers that are consumer products shall have an unheated rinse water option and do not need to meet the Modified Energy Factor standard shown in Table P-1” | Clarification              | This change is necessary because federal design standards for top loading semi-automatic clothes washers and suds-saving clothes washers no longer appear in 10 C.F.R. section 430.32(g) for the current federal standards effective on or after March 7, 2015.  |
| 688. | §1605.1(p)(3) and Table P-2 (previously Table P-3) | Renumber subsection (3) to “(2)” and rename Table P-3 as “Table P-2”  | Clarification              | These changes are necessary because section 1605.1(p)(2) is being deleted and the deletion of the original Table P-1 requires the renumbering of all subsequent tables in this   |

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|      |  |  |                               | subsection.   |
| 689. | §1605.1(p)(3),<br>Table P-2<br>(previously<br>Table P-3) | Change “cu.ft.” to<br>“ft <sup>3</sup> ”   | Correct typo,<br>consistency  | This change is necessary to accurately reflect the integrated water factor (standard metric) for commercial clothes washers and to use the same nomenclature throughout the regulations.  |
| 690. | §1605.1(q)(1)<br>and (2) and<br>Table Q-1                | Delete subsection<br>(q)(1), and the<br>original Table Q-1<br>(also delete<br>subsection numbers<br>“(1)” and “(2)”)   | Clarification                 | These changes are necessary to delete federal standards for clothes dryers manufactured before January 1, 2015, that are outdated and to clarify that the federal standards in Table Q (previously Table Q-2) for residential clothes dryers manufactured on or after January 1, 2015, are the only standards in effect for clothes dryers. |
| 691. | §1605.1(q),<br>Table Q<br>(previously<br>Table Q-2)      | Rename Table Q-2<br>as “Table Q”   | Clarification                 | This change is necessary because the original Table Q-1 is being deleted and there are no other “Q” tables in the regulations other than the original Table Q-2.  |
| 692. | §1605.1(r)(1)(<br>A)&(B)                                 | Add paragraph<br>headers “Gas<br>Cooking Products<br>Equipped with an<br>Electric Supply<br>Cord” and “Gas<br>Cooking Products<br>Not Equipped with<br>an Electric Supply<br>Cord” | Clarification,<br>consistency | These changes are necessary to specify the type of appliances covered by section 1605.1(r)(1) and to match the format used in similar subsections throughout the regulations.   |
| 693. | §1605.1(s)   | Add “and<br>Compressors” to<br>the subsection’s title  | Clarification                 | This change is necessary to specify that section 1605.1(s) covers compressors.  |
| 694. | §1605.1(s)(1)(<br>A) and Table<br>S-1                    | Delete subsection<br>(s)(1)(A) and the<br>original Table S-1   | Clarification                 | These deletions are necessary because section 1605.1(1)(A) and Table S-1 contain outdated federal standards for electric motors and therefore clarify that the only standards in effect are included in new Tables S-1, S-2, and S-3.   |
| 695. | §1605.1(s)(1)(<br>B) and Table                           | Delete subsection<br>(s)(1)(B) and the   | Clarification                 | The language in subsection (s)(1)(B) and the original   |

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|      | S-2  | original Table S-2  |               | Table S-2 is being moved to subsection (s)(5) and Table S-4 (new), respectively. This subsection reorganization is necessary to improve the clarity of the regulations.   |
| 696. | §1605.1(s)(1)(C)   | Delete subsection (s)(1)(C)   | Clarification | The language in subsection (s)(1)(C) is being moved to subsection (s)(6). This subsection reorganization is necessary to improve the clarity of the regulations.  |
| 697. | §1605.1(s)(5) and Table S-4 (new)  | Move text in subsection (s)(1)(B) to the new (s)(5) and move the original Table S-2 immediately below subsection (s)(5) and rename as “Table S-4” | Clarification | This subsection reorganization and renumbering is necessary to improve the clarity of the regulations.  |
| 698. | §1605.1(s)(6)  | Move text in subsection (s)(1)(C) to (s)(6)   | Clarification | This subsection reorganization is necessary to improve the clarity of the regulations.  |
| 699. | §1605.1(s)(7)  | Add “(7) Compressors. There are no standards for federally regulated compressors.”  | Clarification | This change is necessary to clarify that although section 1605.1(s) covers compressors there are currently no federal or state standards for federally regulated compressors.   |
| 700. | §1605.1(s)(2), (s)(3), (s)(4), (s)(5) and Table S-3 (old), Table S-4 (old), Table S-5, Table S-6 | Delete subsections (s)(2), (s)(3), (s)(4), (s)(5) and Table S-3 (old), Table S-4 (old), Table S-5, and Table S-6                                  | Clarification | These deletions are necessary because the federal standards in subsections (s)(2), (s)(3), (s)(4), (s)(5) and Table S-3 (old), Table S-4 (old), Table S-5, Table S-6 for electric motors are outdated. The outdated standards are being replaced with updated federal standards included in new Tables S-1, S-2, and S-3. |
| 701. | §1605.1(t)(1) and Table T-3  | Change “effective dates shown” to January 1, 2016” in subsection (t)(1) and amend Table T-3   | Clarification | These changes are necessary to specify the effective of the federal standards for low-voltage dry-type distribution transformers and to remove outdated standards for this appliance types.   |
| 702. | §1605.1(t)(2) and Table T-4  | Change “effective dates shown” to   | Clarification | These changes are necessary to specify the effective date of the  |

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|      |  | January 1, 2016” in subsection (t)(2) and amend Table T-4   |               | federal standards for liquid-immersed distribution transformers and to remove outdated standards for this appliance types.  |
| 703. | §1605.1(t)(3) and Table T-5 (previously Table T-6)           | Change “2010” to “2016” and rename Table T-6 to “Table T-5”   | Clarification | This change is necessary to specify that January 1, 2016 is the effective date for the federal standards for medium-voltage dry-type distribution transformers and to delete a date that is no longer relevant. The table is being renamed due to the deletion of the original Table T-5. |
| 704. | §1605.1(u)   | Add “External” to the subsection’s title  | Clarification | This change is necessary to differentiate between regulated power supplies and those found within computers (e.g., “internal”), which are not state- or federally regulated.  |
| 705. | §1605.1(u)(1) and (u)(2), including Tables U-1 and U-2 (old) | Delete subsections (u)(1) and (u)(2) and the original Tables U-1 and U-2  | Clarification | These changes are necessary to delete outdated federal standards for external power supplies. The outdated standards are being replaced by new federal standards included in new subsections (u)(1) through (u)(7), and Tables U-1, U-2, and U-3.   |
| 706. | §1605.1(w)   | Add “Battery Chargers and” to the subsection’s title  | Clarification | This change is necessary to clarify that section 1605.1(w) covers both state-regulated battery charger systems and federally regulated battery chargers.  |
| 707. | §1605.1(w)   | Delete “there are no energy efficiency standards or energy design standards for battery charger systems”                    | Clarification | This change is necessary because on June 13, 2018 the federal standards for battery chargers will take effect; it is no longer correct to state that there are no energy efficiency standards for battery chargers.   |
| 708. | §1605.1(w)(2) (new)  | Add “(2) See section 1605.3(w) of this Article for energy efficiency standards for state-regulated battery charger systems” | Clarification | This change is necessary to specify where the standards for state-regulated battery charger systems are located in the regulations.   |

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| 709. | §1605.2(a)    | Delete existing language and replace with subsections (a)(1) (“Federally Regulated Refrigerators, Refrigerator-Freezers, Freezers, and Other Refrigeration Equipment”) and (a)(2) (“Coolers, Freezers, and Water Dispensers”)  | Clarification, consistency | These changes are necessary to improve the clarity of section 1605.2(a) and to ensure it follows the same format used throughout the regulations. Previously, the section 1605.2(a) provided little or no specificity about the scope of products it addressed, stating only “for refrigeration equipment.” These changes specifically clarify what “refrigeration equipment” includes. |
| 710. | §1605.2(c)    | Add “, Air Filters, and Heat Pump Water-Heating Packages” to the subsection’s title  | Clarification              | This change is necessary to reflect that section 1605.2(c) also covers air filters and heat pump water-heating packages.  |
| 711. | §1605.2(c)(1) | Add “Central Air Conditioners” as subsection header  | Consistency                | This change is necessary to follow the same format used throughout the regulations.   |
| 712. | §1605.2(c)(3) | 1) Add “Air Filters and Heat Pump Water -Heating Packages” as subsection header<br>2) Replace the text “There is no energy efficiency standard or energy design standard for gas-fired air conditioners or gas-fired heat pumps” with “There are no energy efficiency standards or energy design standards for air filters and heat pump water-heating packages. | Consistency, clarification | This change is necessary to follow the same format used throughout the regulations, and to remove an error in redundant language regarding gas-fired air conditioners or gas-fired heat pumps, which language appears immediately above in 1605.2(c)(2).  |
| 713. | §1605.2(d)    | Change “Spot” to “Portable” and add “and Residential Furnace Fans” in the subsection’s title   | Clarification              | This change is necessary to reflect that section 1605.2(d) also covers portable air conditioners, and residential furnace fans; changing “spot” to “portable” is necessary  |

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|      |                                      |   |                            | because a spot air conditioner is a type of portable air conditioner.  |
| 714. | §1605.2(d)(1)                        | Add “Ceiling Fans, Ceiling Fan Light Kits, Dehumidifiers, and Residential Furnace Fans” as subsection header  | Consistency, clarification | This change is necessary to improve the clarity of the subsection (d)(1) and follow the same format used throughout the regulations.   |
| 715. | §1605.2(d)(1)(A) and (B), and (d)(2) | Add “(A)” and “(B)” “See section 1605.1(d) of this Article for energy efficiency standards for ceiling fan light kits, dehumidifiers, and residential furnace fans,” and delete subsection (d)(2) | Consistency, Clarification | These changes are necessary to match the format used throughout the regulations, clarify where the energy efficiency standards for ceiling fan light kits, dehumidifiers, and residential furnace fans are located within the regulations, and delete a redundant statement. |
| 716. | §1605.2(d)(3)                        | Delete “(3)”, replace “spot” with “portable”, add “energy”, delete “and ceiling fan light kits.”  | Clarification              | These changes are necessary because the regulations are being updated to reflect that spot air conditioners are a type of portable air conditioner and ceiling fan light kits are subset to federal energy efficiency standards.   |
| 717. | §1605.2(e)(1)                        | Add “Gas and Oil Space Heaters” as subsection header, and add “including but not limited to furnace and boilers”  | Consistency, Clarification | This change is necessary to match the format used throughout the regulations and to clarify that furnaces and boilers are types of gas- and oil- space heaters covered under this subsection.  |
| 718. | §1605.2(e)(2)                        | Add “Combination Space-Heating and Water-Heating Appliances” as subsection header, and add “energy efficiency” before the word “standards”  | Consistency, Clarification | These changes are necessary to match the format used throughout the regulations, and to clarify that the subsection refers to energy efficiency standards.   |
| 719. | §1605.2(f)(1)                        | Add “Water Heaters” as subsection header, delete “energy  | Consistency                | These changes are necessary to match the format used throughout the regulations. Removing the term “energy   |

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|      |                     | efficiency”, and delete “and 1605.3(f)”  |                            | efficiency” is necessary because the standards in sections 1605.1(f) and 1605.3(f) are both performance standards (see definition of “energy efficiency standards” in section 1602) and design standards. Also, deleting the reference to section 1605.3(f) since there are no longer state standards for water heaters, only federal standards. |
| 720. | §1605.2(f)(2)       | Add “Combination Space-Heating and Water-Heating Appliances” as subsection header  | Consistency                | This change is necessary to match the format used throughout the regulations.  |
| 721. | §1605.2(g)          | Add “Pumps” to the subsection heading  | Clarification              | This change is necessary to reflect that section 1605.2(g) also covers federally regulated pumps.  |
| 722. | §1605.2(g)(1)       | Add “Pool Heaters” as subsection header  | Consistency                | This change is necessary to match the format used throughout the regulations.  |
| 723. | §1605.2(g)(2)       | Add “Portable Electric Spas, Residential Pool Pump and Motor Combinations, and Replacement Residential Pool Pump Motors” as subsection header, and delete “and” before the term “residential pool pump and motor combinations” | Consistency, correct typo  | These changes are necessary to match the format used throughout the regulations, and to correct a typographical error.   |
| 724. | §1605.2(g)(3) (new) | Add new subsection “(3)” to cross-reference section 1605.1(g)(6) for “pumps”   | Clarification, consistency | This change is necessary to match the format used throughout the regulations and to inform the reader of where the standards for federally regulated “pump” are located.   |
| 725. | §1605.2(j)(1)       | Add “Federally Regulated Fluorescent Lamp Ballasts” to paragraph header subsection (j)(1)  | Consistency                | This change is necessary to match the format used throughout the regulations.  |



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| 726. | §1605.2(j)(2)       | Add “State-Regulated Deep-Dimming Fluorescent Lamp Ballasts” as subsection header and add a hyphen between “state” and “regulated” within the text                                      | Consistency                | These changes are necessary to match the format used throughout the regulations  |
| 727. | §1605.2(l)(1)       | Change “Emergency Lighting” to “Illuminated Exit Signs” in the paragraph header   | Consistency                | This change is necessary to match the format used throughout the regulations.  |
| 728. | §1605.2(m)          | Delete “and Traffic Signal Lamps” from subsection’s title, “and traffic signal lamps” from paragraph  | Clarification,             | These changes are necessary to reflect the fact that there are no state or federal standards or test procedures for traffic signal lamps.  |
| 729. | §1605.2(n)(1) (new) | Add new (n)(1) “Torchieres. See section 1605.1(n) of this Article for energy efficiency standards and energy design standards for torchieres manufactured on and after January 1, 2006” | Clarification              | These changes are necessary to clarify that the federal standards for torchieres manufactured on and after January 1, 2006 are included in section 1605.1(n).  |
| 730. | §1605.2(n)(2)(new)  | Re-number subsection (1) as “(2)”, add “Federally Regulated Metal Halide Light Fixtures” as subsection header, and delete “and torchieres”  | Consistency, clarification | These changes are necessary to match the format used throughout the regulations, and to clarify the distinction between metal halide light fixtures and torchieres, which is addressed in a separate, new subsection (n)(1). |
| 731. | §1605.2(n)(3)(new)  | Re-number subsection (2) as “(3)”, add “Under-Cabinet Luminaires” as subsection header,   | Consistency, clarification | These changes are necessary to match the format used throughout the regulations, and to remove references to outdated state standards for metal halide luminaires.   |

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|      |                       | delete subsection (n)(2)(A), and delete “(B)”  |                             |   |
| 732. | §1605.2(p)(1)         | Delete “(1)”, add “Energy Efficiency and”, add “and Commercial”, add “energy efficiency and”, and “and commercial”   | Clarification               | These changes are necessary to merge reference to the energy- and water-efficiency standards for both residential and commercial washers in one paragraph and thereby remove redundant language.  |
| 733. | §1605.2(p)(2) and (3) | Delete subsections (1) and (2)   | Clarification               | These changes are necessary to remove redundant and unnecessary language since both energy- and water-efficiency standards for both residential and commercial washers are found in section 1605.1(p).  |
| 734. | §1605.2(s)            | Add “and Compressors” to subsection’s title  | Clarification               | This change is necessary to reflect that section 1605.2(s) also covers compressors.   |
| 735. | §1605.2(s)(1)         | Add “(1) “Electric Motors” as subsection header  | Consistency                 | This change is necessary to match the format used throughout the regulations.   |
| 736. | §1605.2(s)(2)         | Add “(2) Compressors. There are no energy efficiency standards for federally regulated compressors”  | Clarification, consistency  | This change is necessary to clarify that, although section 1605.2(s) covers compressors, currently there are no federal or state standards that apply to them, and to match the format used in similar subsections in the regulations.  |
| 737. | §1605.2(u)            | Add “External” to subsection’s title   | Clarification               | This change is necessary to differentiate between regulated power supplies and those found within computers (e.g., “internal”) which are not state- or federally regulated.   |
| 738. | §1605.2(u)(1)         | Delete “(1)” and “Class A external”, add “federally regulated external”, and delete “that are federally regulated and manufactured on or after July 1, 2008” | Clarification               | This change is necessary to reflect the correct scope of coverage of federally regulated external power supplies, which includes removing Class A external power supplies because the scope of power supplies covered under federal standards is potentially broader than “Class A. |
| 739. | §1605.2(w)            | Add “Battery Chargers and” to  | Clarification, correct typo | This change is necessary to reflect that section 1605.1(w)  |

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|      |  | subsection's title and delete "there are no energy efficiency standards or design standards for battery charger systems"   |               | covers both federally regulated battery chargers and state-regulated battery charger systems, and to correct an erroneous statement given that battery charger systems are currently subject to state standards in section 1605.3(w).   |
| 740. | §1605.2(w)(1) and (2) (new)                          | Add "(1) Federally Regulated Battery Chargers. See section 1605.1(w) of this Article for energy efficiency standards for federally regulated battery chargers" and "(2) State-Regulated Battery Charger Systems." See section 1605.3(w) of this Article for energy efficiency standards for battery charger systems" | Clarification | This change is necessary to distinguish federally regulated battery chargers from state-regulated battery charger systems and clarify where the standards for these products are located within the regulations.  |
| 741. | §1605.3(a)(1) and Table A-15 (previously Table A-11) | Change "wine chillers" to "coolers", add "manufactured before October 28, 2019 that are", and renumber Table A-11 as "Table A-15"  | Clarification | A wine chiller is a type of miscellaneous refrigeration product and means a "cooler" as defined in 10 C.F.R. section 430.2. This change is necessary to use terms that are consistent with the terms used in the federal regulations and thereby improve the clarity of the regulations. The federal standards in section 1605.1(a)(1)(B)1. are effective for models manufactured on or after October 28, 2019, so it is necessary to indicate that the state-standards are only applicable to models manufactured before this date. The table is renumbered because new tables in the A-series are being added to earlier sections of the regulations. |

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| 742. | §1605.3(a)(3) | Delete subsection (a)(3)   | Clarification | This change is necessary to remove outdated standards. The state energy design standards for lighting of cabinets and wine chillers manufactured before January 1, 2012, are no longer in effect. The standards for this type of products have been superseded by standards for commercial refrigeration equipment located in section 1605.1(a)(2). |
| 743. | §1605.3(a)(4) | Delete subsection (a)(4)   | Clarification | This change is necessary to delete erroneous language in the regulations. There are no state energy design standards for walk-in coolers and walk-in freezers.  |
| 744. | §1605.3(a)(5) | Delete subsection (a)(5)   | Clarification | This change is necessary to remove outdated standards. The state standards for wine chillers that are not consumer products and are manufactured before January 1, 2012 are no longer in effect. The standards for this type of products have been superseded by standards for commercial refrigeration equipment located section 1605.1(a)(2).     |
| 745. | §1605.3(a)(6) | Re-number “(a)(6)” as “(a)(2)”   | Clarification | This change is necessary due to the deletions of subsections noted immediately above.   |
| 746. | §1605.3(a)(6) | Re-number “(a)(7)” as “(a)(3)” and amend paragraph   | Clarification | This change is necessary due to the deletions of subsections noted immediately above. Also, subsection (a)(3) (new) is being amended to specify where the federal standards for the appliances covered under subsection (a) are found.  |
| 747. | §1605.3(c)    | Change “Heat Pump Water-Chilling Packages” to “Heat Pump Water-Heating Packages” in the subsection’s title | Consistency   | This change is necessary to use the same term used to identify this type of heat pump in the test procedure (ANSI/AHRI 550-590 (I-P) 2011) for this appliance. The title of the test procedure is “Performance Rating of Water-Chilling and Heat Pump Water-Heating   |

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|      |  |  |                            | Packages Using the Vapor Compression Cycle”  |
| 748. | §1605.3(c)(1) and Table C-10 (previously Table C-9)  | Add the term “close-loop” after “ground source” and rename Table C-9 as “Table C-10”                                 | Consistency, clarification | These changes are necessary to match both the terms used in definition (section 1602(c)) and the test procedure (section 1604(c)) for heat pumps and to maintain accurate numbering of the “C” tables.   |
| 749. | §1605.3(c)(2) and Table C-11 (previously Table C-10) | Rename Table C-10 as “Table C-11”  | Clarification              | This change is necessary to maintain accurate numbering of the “C” tables.   |
| 750. | §1605.3(c)(4)  | Delete “and 1605.2(c)”   | Clarification              | This change is necessary to remove an outdated reference. The state standards originally found in section 1605.2(c) did not take effect and were removed from that section under Docket # 13-AAER-1.   |
| 751. | §1605.3(c)(5)  | Change “Water-Chilling” to “Water-Heating” and add “pursuant to”   | Consistency, clarification | The test procedure title changed from water-chilling to water-heating. This change is necessary to use consistent terminology throughout the regulations. The words “pursuant to” are being added to clarify the regulations.                      |
| 752. | §1605.3(c)(5)  | Add “Air Filters. There is no energy efficiency standard or energy design standard for air filters.”                 | Clarification              | This change is necessary to clarify that there are no standards for air filters.   |
| 753. | §1605.3(d)   | Change “Spot” to “Portable,” delete “and,” and include “and Residential Furnace Fans” in the subsection’s title      | Clarification              | These changes are necessary to reflect that section 1605.1(d) also covers portable air conditioners and residential furnace fans; changing “spot” to “portable” is necessary because a spot air conditioner is a type of portable air conditioner. |
| 754. | §1605.3(d)(1)  | Replace “design” with “efficiency,” Remove “and ceiling fans,” and add “dehumidifiers, and residential furnace fans” | Clarification              | These changes are necessary to accurately reflect which products are subject to federal energy efficiency standards. Ceiling fans are covered in subsection (2).   |

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| 755. | §1605.3(d)(2)                    | Replace “design” with “efficiency,” remove “dehumidifiers,” and add “ceiling fans”  | Clarification | These changes are necessary to accurately reflect which products are subject to federal energy design standards.   |
| 756. | §1605.3(d)(3)                    | Change “spot” to “portable” and delete “and ceiling fan light kits”   | Clarification | These changes are necessary to clarify that spot air conditioners are a subset of portable air conditioners and to clarify that ceiling fan light kits are subject to federal standards. |
| 757. | §1605.3(e)(1) and (e)(1)(A)      | Delete “unit heaters” and move “and”  | Clarification | This change is necessary to accurately reflect which appliances are covered in section 1605.3(e)(1).   |
| 758. | §1605.3(e)(1)(A)<br>Table E-8    | Add the word “Central” to the title of Table E-8  | Clarification | This change is necessary to accurately reflect which appliance is covered in Table E-8 (“Central Furnaces”).   |
| 759. | §1605.3(e)(1)(C)                 | Convert this subsection into a list, add the appliances and equipment with federal standards, and delete “effective for models” | Clarification | These changes are necessary to explain to the reader which appliance types have federal standards and to remove unnecessary language.  |
| 760. | §1605.3(e)(3)(A)                 | Delete “and 1605.3(f)”  | Clarification | This change is necessary to remove the reference to section 1605.3(f) since there are no longer state standards for water heaters, only federal standards. See changes in Table 2.1.     |
| 761. | §1605.3(f)                       | Renumber the list in this subsection  | Clarification | This change is necessary due to the removal of the original subsections (1) and (2). See change in Table 2.1   |
| 762. | §1605.3(f)(4) (previously “(2)”) | Add “Other”, delete “Energy Efficiency” and “consumer products or federally-regulated commercial and industrial equipment”      | Clarification | This change is necessary to help find where the federal standards for federally regulated water heaters are located within the regulations.  |

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| 763. | §1605.3(f)(5)                                      | Delete “(5) Energy Efficiency Standards for Booster Water Heaters. There is no energy efficiency standard or energy design standard for boosted water heaters” | Clarification | This change is necessary to delete references to efficiency standards for booster water heaters. Booster water heaters are a type of water heater and are covered under federal efficiency standards for consumer and commercial water heaters. The federal standards do not distinguish between booster water heaters and other types of water heaters, so it is necessary to remove “booster water heaters” as a separate product category. |
| 764. | §1605.3(g)   | Add “Pumps” to the subsection’s title  | Clarification | This change is necessary to specify that section 1605.3(g) covers pumps.  |
| 765. | §1605.3(g)(3)                                      | Delete the terms “Coefficient of Performance” and the parentheses around “COP”   | Consistency   | This change is necessary to use consistent terms throughout the regulations.  |
| 766. | §1605.3(g)(4)                                      | Change “gas- and oil-fired” to “fossil-fuel fired”   | Consistency   | This change is necessary to match the terminology used in the federal test procedures for pool heaters (See 10 C.F.R. §430.23, Appendix P to Subpart B of part 430.)  |
| 767. | §1605.3(g)(5)(A)                                   | Change hyphen to be a double hyphen in “start—induction  | Correct typo  | This change is necessary to correct punctuation.  |
| 768. | §1605.3(h)(1) and Table H-3 (previously Table H-2) | Rename Table H-2 as “Table H-3”  | Clarification | This change is necessary to maintain accurate numbering of the “H” tables due to the addition of a new Table H-2 in section 1605.1 (h).   |
| 769. | §1605.3(h)(1)(A)                                   | Add “Showerhead tub spout diverter combinations” as subsection header  | Consistency   | This change is necessary to match the format used in similar subsections throughout the regulations.  |
| 770. | §1605.3(h)(2)                                      | Add “manufactured on or after July 1, 2016” and “1.2 gpm at 60 psi” and delete “the applicable values shown in Table H-3”                                      | Clarification | These changes are necessary to specify the current state standards and effective date for lavatory faucets and aerators. The current state standards and effective date are currently located in Table H-3, which is being deleted.   |

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| 771. | §1605.3(h)(2)(A) and (B)                     | Move footnotes 1 and 2 in Table H-3 to subsection (h)(2) as (A) and (B) | Clarification               | This change is necessary to include the current state standards for lavatory faucets and aerators within subsection (h)(2) given that Table H-3 is being removed.   |
| 772. | §1605.3(h)(2), Table H-3                     | Delete Table H-3  | Clarification               | This change is necessary to delete outdated state standards for lavatory faucets and aerators, and therefore clarify which state standards are in effect. The current state standards for these products are being included within subsection (h)(2). |
| 773. | §1605.3(h)(3)                                | Add “sold or offered for sale on or after January 1, 2016”              | Clarification               | This change is necessary to clarify what is the effective date of the current state standards for kitchen faucets and aerators and public lavatory faucets and aerators.  |
| 774. | §1605.3(h)(3), Table H-4                     | Amend Table H-4   | Clarification               | These changes are necessary to delete outdated state standards for kitchen faucets and aerators and public lavatory faucets and aerators. The effective date of the current state standards is being deleted and moved to subsection (h)(3).          |
| 775. | §1605.3(h)(5), Table H-5                     | Amend Table H-5   | Clarification               | These changes are necessary to delete outdated state standards for showerheads and clarify which state standards are currently in effect.   |
| 776. | §1605.3(h)(6)                                | Delete “consumer products”  | Clarification               | This change is necessary to clarify that the federal standards in section 1605.1(h) for plumbing fittings do not only apply to consumer products. Currently, section 1605.1(h) includes federal standards for commercial pre-rinse spray valves.      |
| 777. | §1605.3(i)(1)                                | Change “no” to “not”  | Consistency                 | This change is necessary to match similar format used throughout the regulations.   |
| 778. | §1605.3(i)(1) Table I (previously Table I-2) | Amend Table I and rename it from “Table I-2” to “Table I”               | Clarification, correct typo | These changes are necessary to remove outdated state standards and clarify which state standards are currently in   |



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|      |   |  |                             | effect. This is the only “I” table in the regulations; it was previously named “I-2” erroneously.  |
| 779. | §1605.3(i)(2)   | Add “on”   | Correct typo                | This change is necessary to add a word that was inadvertently omitted.   |
| 780. | §1605.3(j)(1)(C)  | Change “luminous” to “luminous” and change “is shorthand for” to “represents” and include section 1602 “(j)” and section 1604 “(j)(4)” | Correct typo, clarification | These changes are necessary to correct a misspelled word and to clarify the regulations.   |
| 781. | §1605.3(k)(2), Table K-8 and Table K-9 (previously Tables K-12 and K-14 respectively) | Renumber Table K-12 and Table K-14 as “K-8” and “K-9” respectively   | Consistency                 | This change is necessary because Tables K-10 and K-11 are being removed and previous Tables in section 1605.1(k) now renumbered.   |
| 782. | §1605.3(k)(2)(C) and (D)  | Change subsection (C) and (D) to “(A)” and “(B)”, respectively, and change “watts” to “watt”   | Consistency, correct typo   | These changes are necessary due to deletions of subsections (k)(2)(A) and (k)(2)(B) and to correct a typographical error.  |
| 783. | §1605.3(l)(2)   | Add hyphen in “Self-Contained” and capitalize the first letters in “Manufactures On or After” in subsection’s header                   | Consistency                 | These changes are necessary to use the same terminology and match the format used in similar subsections in the regulations.   |
| 784. | §1605.3(l)(2)(G) Table L (previously Table L-1)                                       | Rename Table L-1 as “Table L”  | Correct Typo, consistency   | This change is necessary to properly name the table. This is the only “L” table that appears in the regulations, so a number designation is not needed. It was previously named “L-1” erroneously. |
| 785. | §1605.3(m)  | Delete “and Traffic Signal Lamps” in subsection’s title  | Clarification               | This deletion is necessary because traffic signal lamps are not a federally or state-regulated appliance; it was an error to include this term in the  |

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|      |  |  |               | regulations.   |
| 786. | §1605.3(n)(1)(B)1.   | In the list, renumber i and ii as “a” and “b”, respectively  | Consistency   | This change is necessary to use consistent format throughout the regulations.  |
| 787. | §1605.3(n)(1)(B)4.   | In the list, renumber i, ii, iii, and iv as “a”, “b”, “c”, and “d”, respectively, and update the reference to the list in the text to reflect this   | Consistency   | This change is necessary to use consistent format throughout the regulations.  |
| 788. | §1605.3(n)(1)(C) (new)   | Add “(C) Federally Regulated Metal Halide Luminaires. See section 1605.1(n) of this Article for energy efficiency standards for metal halide luminaires rated under 150 W and above 500 W” | Clarification | This change is necessary to distinguish the state standards in section 1605.3(n) from federal standards for a subset of metal halide luminaires that are federally regulated.                          |
| 789. | §1605.3(n)(1) “Exception 3.c. to sections 1605.3(n)(1)”                          | Change “50 degrees C” to “50°C”  | Consistency   | This change is necessary to maintain a consistent format when expressing temperature throughout the regulations.   |
| 790. | §1605.3(n), Table N-2 and Table N-3 (previously Tables N-1 and N-2 respectively) | Renumber Table N-1 and N-2 as “Table N-2” and “Table N-3”, respectively, and update the text that references them  | Consistency   | These changes are necessary because section 1605.1(n) already includes a table titled as “Table N-1”.  |
| 791. | §1605.3(n), Table N-3 (previously Table N-2)                                     | Change “Color Correlated Temperature” to “Correlated Color Temperature”  | Clarification | This change is necessary to match the terminology in the title of the test procedure (IESNA LM016-93) for portable LED luminaires.   |
| 792. | §1605.3(p)(1) and (p)(2)   | Delete subsections (1) and (2), and add “Energy Efficiency and Water Efficiency Standards for Residential and Commercial Clothes Washers. See section 1605.1(p) of this                    | Clarification | These changes are necessary to remove redundant and unnecessary language since both energy- and water-efficiency standards for both residential and commercial washers are found in section 1605.1(p). |

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|      |   | Article for energy efficiency and water efficiency standards for residential and commercial clothes washers” |                            |  |
| 793. | §1605.3(s)                                    | Add “and Compressors” to the subsection’s title  | Clarification              | This change is necessary to reflect that section 1605.1(s) also covers compressors.  |
| 794. | §1605.3(s)(1)                                 | Add “(1) Electric Motors.”   | Clarification, consistency | This change is necessary to distinguish the reference to the standards for electric motors from the reference to compressors, which is being added to section 1605.3(s), and to match the format used in similar subsections in the regulations.     |
| 795. | §1605.3(s)(2)                                 | Add “(2) Compressors. There are no energy efficiency standards for federally regulated compressors”          | Clarification, consistency | This change is necessary to clarify that, although section 1605.3(s) covers compressors, currently there are no federal or state standards that apply to them, and to match the format used in similar subsections in the regulations.               |
| 796. | §1605.3(u)                                    | Add “External” to subsection’s title   | Clarification              | This change is necessary to differentiate between regulated power supplies and those found within computers (e.g., “internal”) which are not state- or federally regulated.  |
| 797. | §1605.3(u)(1)                                 | Add “(1)”, delete “Table U-3 and”  | Clarification              | These changes are necessary due to the addition of the new subsection (2) and the deletion of the original Table U-3.  |
| 798. | §1605.3(u), including exception and Table U-3 | Delete the exception in subsection (u) and delete Table U-3  | Clarification              | These changes are necessary to remove an outdated exception that has not been in effect since July 1, 2013, and to delete standards for external power supplies that are outdated and superseded by existing standards in effect since July 1, 2008. |
| 799. | §1605.3(u)(2)                                 | Add “(2) See section 1605.1(u) of this Article for energy efficiency standards for federally regulated       | Clarification              | This change is necessary to distinguish state standards for external power supplies from the federal standards for federally regulated external power supplies and to specify  |

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|      |  | external power supplies.”   |                            | where these federal standards are found.  |
| 800. | §1605.3(v)(3)  | Add “Televisions and Signage Displays Manufactured On or After January 1, 2011” as subsection header, and delete “and”          | Consistency, correct typo  | These changes are necessary to correct a typographical error and to match the format used in similar subsections throughout the regulations.  |
| 801. | §1605.3(v)(3)(D)   | Delete “(D)” and “1.”, add “the standards found in sections 1605.3(v)(2) and 1605.3(v)(3) of this Article do not apply to”      | Clarification, consistency | These changes are necessary to match the format used in exceptions included throughout the regulations and to make the exception clearer.     |
| 802. | §1605.3(v)(4)(A)   | Change reference to section “1604(v)(4)” to section “1604(v)(3)”  | Clarification              | This change is necessary to accurately reference the correct subsection due to the removal of the original section 1604(v)(3)                 |
| 803. | §1605.3(v)(4)(E) and (F)   | Delete the “(E)” and “(F)” before the exceptions  | Consistency                | These changes are necessary to match the format used in the exceptions included throughout the regulations.                                   |
| 804. | §1605.3(v)(4) “Exceptions to section 1605.3(v)(4)” and “Exception to 1605.3(v)(4)” (for medical computers) | Change reference to section “1604(v)(4)” to section “1604(v)(3)”  | Clarification              | This change is necessary to accurately reference the correct subsection due to the removal of the original section 1604(v)(3).                |
| 805. | §1605.3(v)(5)(C) and (D)   | Delete “(C)” and “(D)”, and add “EXCEPTION to Section 1605.3(v)(5)(B)” and “EXCEPTION to Section 1605.3(v)(5)(A)”, respectively | Consistency                | These changes are necessary to match the format used in the exceptions included throughout the regulations and to make the exception clearer. |
| 806. | §1605.3(v)(5) Table V-6  | Delete “Small Scale Servers” as a computer type in  | Clarification              | This change is necessary to accurately reflect which computer types are required to   |

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|      |  | Table V-6   |               | comply with the standards in this table. Small scale servers are specifically excluded from Table V-6 in the text in "EXCEPTION to Section 1605.3(v)(6)(D)"   |
| 807. | §1605.3(v)(6)                                      | Add "EXCEPTION to section 1605.3(v)(6)(D):"   | Consistency   | This change is necessary to match the format used in the exceptions included throughout the regulations and to make the exception clearer.  |
| 808. | §1605.3(v)(6)(D)                                   | Change reference to section "1604(v)(5)" to section "1604(v)(4)"  | Clarification | This change is necessary to accurately reference the correct subsection due to the removal of the original section 1604(v)(3).  |
| 809. | §1605.3(v)(7)(A)1.                                 | Remove the parentheses around the "(2)" and add period in the reference to section "1605.3(v)(5)(B)(2)" | Consistency   | This change is necessary to maintain consistent numbering conventions in references within the regulations  |
| 810. | §1605.3(v)(7)(B)                                   | Remove the parentheses around the "(2)" in the reference to section "1605.3(v)(7)(A)(2)." ."            | Consistency   | This change is necessary to maintain consistent numbering conventions in references within the regulations  |
| 811. | §1605.3(v)(7)(C)                                   | Change reference to section "1604(v)(5)" to section "1604(v)(4)"  | Clarification | This change is necessary to accurately reference the correct subsection due to the removal of the original section 1604(v)(3).  |
| 812. | §1605.3(w)   | Add "Battery Chargers and" to the subsection's title  | Clarification | This change is necessary to reflect that section 1605.1(w) covers both state-regulated battery charger systems and federally regulated battery chargers.  |
| 813. | §1605.3(w)(1) and Table W-2 (previously Table W-1) | Add "and that are not federally regulated battery chargers," and rename Table W-1 as "Table W-2"        | Clarification | This change is necessary to clarify that only non-federally regulated battery chargers are subject to the state standards for large battery charger systems in section 1605.3(w)(1), Table W-1. Also, renumbering the table |

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|      |   |   |                            | due to the addition of the new Table W-1.   |
| 814. | §1605.3(w)(2)                                   | Add the word “sections” and delete 1605.3(w)(2)(D) and replace with “1605.3(w)(5)”  | Clarification              | This change is necessary to replace an erroneous reference with the correct reference. Section 1605.3(w)(2)(D) does not exist.  |
| 815. | §1605.3(w)(2), Table W-3 (previously Table W-2) | Rename Table W-2 as “Table W-3”   | Clarification              | This change is necessary to renumber the table due to the addition of the new Table W-1.  |
| 816. | §1605.3(w)(2) (A)                               | Add “and before June 13, 2018” and delete -“except for USB charger systems that have a battery capacity of 20 watt-hours or more and are manufactured before January 1, 2014” | Clarification              | These changes are necessary to clarify that the state standards for small battery charger systems are effective only for products manufactured before June 13, 2018. The deletion is necessary because the exception for USB charger systems became obsolete on January 1, 2014. It is no longer necessary to include any reference to USB charger systems in the regulations since the exception is not in effect. |
| 817. | §1605.3(w)(2) (B)                               | Delete “consumer products that are USB charger systems with a battery capacity of 20 watt-hours or more and are manufactured on or after January 1, 2014; and”                | Clarification              | This change is necessary because the exception for USB charger systems became obsolete on January 1, 2014. It is no longer necessary to include any reference to USB charger systems in the regulations since the exception is not in effect.   |
| 818. | §1605.3(w)(3)                                   | Add “and before June 13, 2018 and inductive charger systems that are not federally regulated battery chargers manufactured on or after February 1, 2013”                      | Clarification              | This change is necessary to clarify that the state standards apply to inductive chargers manufactured before the federal standards take effect (June 13, 2018). But they also apply to all inductive chargers manufactured after February 1, 2013, that do not fall within the scope of “federally regulated” battery chargers.   |
| 819. | §1605.3(w)(4)                                   | Add “Non-Federally  | Clarification, consistency | These changes are necessary to reflect the fact that all battery  |

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|      |   | Regulated”, “that are” and “(A)” and “(B)”   |                            | backups are non-federally regulated, but some uninterruptible power supplies are federally regulated. Also, modified the text to follow the formatting used in similar subsections throughout the regulations.  |
| 820. | §1605.3(w)(5)                               | Add “(5) Standards for Federally Regulated Battery Chargers Manufactured on or After June 13, 2018. See section 1605.1(w) of this Article for standards for federally regulated battery chargers manufactured on or after June 13, 2018”                     | Clarification, consistency | This change is necessary to help identify where the federal standards for battery chargers are located in the regulations. Adding a cross-reference to section 1605.1(w) to match similar subsection structure throughout the regulations.  |
| 821. | §1605.3 Documents Incorporated by Reference | 1) Amend the name of ENERGY STAR” to “EPA ENERGY STAR®”<br>2) Add “December 2008” to the document “ EPA ENERGY STAR® Program Requirements for CFLs”<br>3) Delete “Copies available from: Superintendent of Documents, U.S. Government Printing Office,” etc. | Clarification, Consistency | 1) This change is necessary to match the exact name used per EPS’s “EPA ENERGY STAR®” program criteria<br>2) This change is necessary to specify the date of the document to match how it is referenced in 1605.3(n)(3)(A)4.<br>3) This change is necessary to delete an erroneous source of copies. The ENERGY STAR program maintains its own copies, and the source of those copies is shown immediately above this text. |
| 822. | §1606(a)(1)(D)                              | Add “model of that”  | Clarification              | This change is necessary to clarify that manufacturers must separately submit a statement for each model of an appliance type.  |
| 823. | §1606(a)(3)(C), Exception 1                 | Re-number Exceptions 2 and 3,  | Consistency, clarification | This change is necessary because Exception 1 to section   |

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|      | and 2<br>(previously<br>Exceptions 2<br>and 3)                  | as “1” and “2”,<br>respectively  |                               | 1606(a)(3)(C) is being deleted<br>and therefore the subsequent<br>exceptions need to be<br>renumbered.  |
| 824. | §1606(a)(3)(E<br>)  | Renumber<br>subsection “(E)” as<br>“(D)”   | Correct typo                  | This change is necessary to<br>correct a typographical error in<br>the regulations.   |
| 825. | §1606(a)(3)(C<br>) , Exception 4                                | Delete Exception 4<br>to section<br>1606(a)(3)(C)  | Clarification                 | This change is necessary<br>because this exception to the<br>testing and certification<br>requirements for battery charge<br>systems is no longer applicable<br>since it applies to testing<br>conducted before July 1, 2014.   |
| 826. | §1606(a)(4)(A<br>)2.  | Delete “if the<br>statement is being<br>filed electronically,<br>that”   | Clarification                 | This change is necessary<br>because this text is no longer<br>needed given that<br>manufacturers must file all<br>statements electronically.  |
| 827. | §1606(a)(3)(C<br>) , Exception 3<br>(previously<br>Exception 5) | Renumber<br>Exception 5 as “3”<br>(Exception<br>regarding state-<br>regulated LED<br>lamps) and move it<br>after Exception 2 | Clarification,<br>consistency | This change is necessary to<br>properly number the Exception<br>due to the deletion of the<br>original Exceptions 1 and 4<br>and to move this Exception<br>immediately after Exception 2<br>(previously Exception 3) for<br>correct formatting.   |
| 828. | §1606(a)(4)(A<br>)4.a. (old)                                    | Delete this<br>subsection “a.”<br>regarding “wine<br>chillers” and<br>renumber the<br>remaining list as a<br>result          | Clarification                 | This change is necessary to<br>reflect that federally regulated<br>“coolers” (previously called<br>‘wine chillers’) no longer have<br>applicable testing<br>modifications. The current test<br>method for “coolers” can be<br>found in section 1604(a)(1) as<br>“miscellaneous refrigeration<br>products” |
| 829. | §1606(a)(4)(A<br>)4.e.<br>(previously<br>...”f.”)               | Change the<br>references to<br>“Table D-1” to<br>“Table D-3”   | Clarification                 | This change is necessary to<br>reference the correct Table.<br>The “D” tables have been<br>renumbered throughout due to<br>the addition of new Tables D-1<br>and D-2 in section 1602(d).  |
| 830. | §1606(a)(4)(A<br>)4.h. (old)                                    | Delete this<br>subsection “h.”<br>regarding “heat<br>pump pool heaters”<br>and renumber the<br>remaining list as a<br>result | Clarification                 | This change is necessary to<br>remove an obsolete appliance<br>type from the list. “Heat pump<br>pool heaters” are now federally<br>regulated as “electric heat<br>pump pool heaters”. The<br>current test method for   |



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|      |   |  |                            | “electric heat pump pool heater” can be found in section 1604(g)(1) and has no testing modifications   |
| 831. | §1606(a)(4)(A)4.g. (previously ...”i.”) | Change reference to section 1606(a)(3)(E) to “1606(a)(3)(D)” and delete the period at the end of the paragraph and replace it with “; and” | Clarification, consistency | These changes are necessary to correctly reference a subsection that has been renumbered and to maintain consistent list format throughout the regulations   |
| 832. | §1606(a)(4)(A)4.h. (previously ...”j.”) | Add “to” and delete “E”  | Correct typos              | These changes are necessary to correct grammatical and typographical errors.   |
| 833. | §1606(a) Exceptions to §1606(a)(4)(A)4. | Delete “(1) large heat pump water heaters” from the list of exceptions   | Clarification              | This change is necessary because it is incorrect to state that there are no test procedures for large heat pump water heaters found in section 1604. Large heat pump water heaters are subject to the federal test procedure for commercial heat pump water heaters found in 10 C.F.R. sections 431.105 and 431.106, which is referenced in section 1604(f)(2).                  |
| 834. | §1606(a) Exceptions to §1606(a)(4)(A)4  | Delete “(2) federally regulated light emitting diode (LED) lamps” from the list of exceptions, and renumber the remaining list             | Clarification              | This change is necessary because it is no longer correct to state that there are no test procedures for federally regulated LED lamps. Federally regulated LED lamps are now subject to a federal test procedure for integrated LED lamps found in 10 C.F.R. section 430.23(ee) (Appendix BB to subpart B of part 430), which is being referenced in section 1604(k), Table K-1. |
| 835. | §1606(a) Exceptions to §1606(a)(4)(A)4  | Add “(7) self-contained lighting controls”, and delete the word “and” in “(5)” and add the word “and” to “(6)”                             | Clarification              | This change is necessary to clarify that there is no test procedure for “self-contained lighting controls.”  |

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| 836. | §1606(b)(2)(A)                     | Change “Direcotr” to “Director”  | Correct typo                | This change is necessary to correct a misspelled word.   |
| 837. | §1606(b)(3)(A)                     | Delete phrase “and with any other information it wants to file.”   | Clarification               | This change is necessary to delete language that is not necessary. All data the manufacture needs to submit is explained in Table X, MAEDbS, and in the certification instructions online.   |
| 838. | §1606(c)                           | Add “Modernized Appliance Efficiency” to the subsection’s title  | Clarification               | This change is necessary to specify official name of the Appliance Efficiency database, also known as “MAEDbS.”  |
| 839. | §1606(c)(1)                        | Add “known as the Modernized Appliance Efficiency Database (MAEDbS)”   | Clarification               | This change is necessary to specify official name of the Appliance Efficiency database, also known as MAEDbS.  |
| 840. | §1606(c)(1)(A), (c)(3)             | Change “Active Database” to “Approved MAEDbS” throughout the regulations and delete “Sections” in subsection (c)(1)(A) | Clarification, correct typo | This change is necessary to match the term used in MAEDbS to refer to the current compliant data, and to correct a grammatical error.  |
| 841. | §1606(c)(1)(B), (c)(3), and (e)(2) | Change “Historical Database” to “Archived MAEDbS” throughout the regulations   | Clarification               | This change is necessary to match the term used in MAEDbS to refer to the non-current data.  |
| 842. | §1606(e)(1)                        | Delete “only”, add “all”, delete “modified”, add “for the appliance, including”, and delete “for”                      | Clarification               | This change is necessary to match the requirements for using MAEDbS. The old database required only the modified data and unique criteria to be submitted. The current database, MAEDbS, requires that all data be submitted for changes to characteristics listed in Table X. |
| 843. | §1606(e)(1)(A) (new)               | Add “(A) If no data currently certified for a specific appliance has   | Clarification               | This change is necessary to clarify when it is not required to submit a notice of modification regarding   |

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|      |                             | changed, no notification of modification is necessary, nor will it be accepted in MAEDbS”      |               | changes to the information of a listed appliance in MAEDbS.   |
| 844. | §1606(e)(2)(A)1 and 2 (new) | Add subsections e)(2)(A)1 and 2  | Clarification | These changes are necessary to clarify when appliances that cease to be sold or offered for sale in California must be removed from Approved MAEDbS. The current regulations do not address circumstances when an appliance is discontinued and the manufacturer fails to file a statement so stating. These changes clarify that the Energy Commission staff may independently remove appliances from the Approved MAEDbS if they are discontinued.  |
| 845. | §1606(f)(1)(A)1.            | Add “including but not limited to updated test procedures, standards, and filing requirements” | Clarification | This change is necessary to clarify that third parties certifiers must also comply with updates to standards, test procedures, and filing requirements, as they are standing in the place of manufacturers when filing as a third party certifier.  |
| 846. | §1606(f)(1)(B)1.b.          | Add “b. that no unmodified data is being submitted”  | Clarification | This change is necessary to emphasize a certification requirement. The requirement that no unmodified data be submitted is found in section 1606(e)(1) (referring to a statement containing only the identifiers and the modified information). This existing requirement is being added to the declaration a manufacturer must submit. This change is necessary to ensure sufficient database capacity for appliance models by preventing manufacturers from submitting duplicate appliance information over and over as “changes” where no change |

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|      |                             |  |               | has occurred.   |
| 847. | §1606(g)(1)                 | Remove the semicolon and the following letter “(A)”  | Clarification | This change is necessary since a list format is no longer appropriate in this subsection. The content in “(B)” and “(C)” is being removed, so only one of the original three items remains. See change in Table 2.2   |
| 848. | §1606(h)(1)(F)              | Change to “sections 1601-1609” instead of “sections 1601-1608”                                   | Clarification | This change is necessary to reflect the entire regulations (1601-1609) as originally intended.  |
| 849. | §1606(j) (previously “(k)”) | Change the “(k)” to “(j)” in the subsection title “Small Volume Manufacturers”                   | Clarification | This change is necessary because section 1606(j) “Portable Luminaire Sales Data” is being deleted (see Table 2.2).  |
| 850. | §1607                       | Change “§” to “Section” in the section’s title   | Consistency   | This change is necessary to maintain consistent format and terminology throughout the regulations.  |
| 851. | §1607(a)                    | Delete “this” and add “1607” to subsection’s title   | Clarification | This change is necessary to clarify that the scope of subsection (a) applies only to section 1607.  |
| 852. | §1607(b)(1)                 | Delete “or, if applicable, the designated manufacturer specified pursuant to Section 1606(1)(F)” | Clarification | This change is necessary because section 1606(f)(1)(F) no longer appears in the regulation and therefore the cross-reference to section 1606(f)(1)(F) is outdated and not valid.  |
| 853. | §1607(d)(2)                 | Add “Unless otherwise specified in Table Y”  | Clarification | This change is necessary to clarify that federally regulated commercial and industrial equipment listed in Table Y must comply with the marking requirements in Table Y, which provides some exceptions to the general rule in (d)(2) (for example, split-system central air conditioners do not need to be marked on the unit itself, but are be marked instead on printed material only). |
| 854. | §1607(d)(5)                 | Add the word “section” before  | Consistency   | This change is necessary to match the same format used  |

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|      |                          | “1605.1(l)” in the last sentence   |                            | for cross-references throughout the regulations   |
| 855. | §1607(d)(5), (6) and (7) | Change the sign “ ” to “inches”  | Consistency                | This change is necessary to match the same format and terminology used throughout the regulations.  |
| 856. | §1607(d)(8)(A)           | Add “Federally Regulated External Power Supplies” as subsection’s header, add “subject to the standards in section 1605.1(u)(1)”, and change “ the International Efficiency Marking Protocol for External Power Supplies, Version 3.0, September 2013” to “10 C.F.R. section 430.32(w)(4)” | Consistency, clarification | This change is necessary to use consistent format and clarify the regulations as well as to clarify that federally regulated external power supplies should be marked with what is required by the U.S. DOE. The Energy Commission does not have authority to require this mark to be different than what is required by the U.S. DOE, even if the U.S. DOE updates its marking requirements (although the Commission may require additional marking, if it desired). |
| 857. | §1607(d)(8)(B)           | Add “State-Regulated External Power Supplies” as subsection’s header   | Consistency                | This change is necessary to match the format used in similar subsections throughout the regulations.  |
| 858. | §1607(d)(13)             | Add “State-Regulated LED lamps” as subsection’s header and add a hyphen between the words “state” and “regulated” throughout this subsection   | Consistency                | This change is necessary to match the format used in similar subsections throughout the regulations.  |
| 859. | §1607(d)(13)(A) and (B)  | Re-number (1), (2), and (3) to “1.”, “2.”, and “3.” respectively   | Consistency                | This change is necessary to use consistent format throughout the regulations.   |
| 860. | §1607(d)(13)(B)1.        | Change “Color Correlated Temperature” to “Correlated Color Temperature” and change the symbol for Kelvin from “k” to “K”   | Clarification              | These changes are necessary to use consistent terminology throughout the regulations and to match the title of the test procedure (IESNA LM016-93) for portable LED luminaires.   |

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| 861. | §1607(d)(13)                                  | Add “Exception to section 1607(d)(13)(B): Section 1607(d)(13)(B) does not apply to incandescent wattage equivalency claims”                                      | Clarification              | This change is necessary to clarify to regulated parties that a lamp may include incandescent equivalency claims (e.g., “this lamp is equivalent to a 40W light bulb”) without also having to meet requirements for lamps that compare themselves to an incandescent (e.g., “this lamp replaces your incandescent lamp”). An incandescent wattage equivalency claim is not intended to be the same thing as claiming that the lamp is like an incandescent. |
| 862. | §1607(d)(13)(C)                               | Add a hyphen in the phrase “state regulated”, and add “no less than the values shown”  | Consistency, clarification | These changes are necessary to use correct grammar and to clarify the scope of the existing lumen output requirements in Table K-10 and to match the format used in similar subsections throughout the regulations.   |
| 863. | §1607(d)(13)(C), Table K-10 (previously K-15) | Re-number “Table K-15” to “Table K-10”   | Clarification              | This change is necessary to maintain proper table numbering due to the deletion of several “k” tables in preceding subsections.   |
| 864. | §1608(a)                                      | Add “Sections 1608(a)(1) and 1608(a)(2)(C)” to the “Exceptions” to subsection (a) and also add the word “to” after “Exceptions”                                  | Consistency                | This change is necessary to maintain consistent language and format of all the exceptions included in the regulations.  |
| 865. | §1608(c)(1)                                   | Delete “the appliance is a commercial refrigerator, commercial refrigerator-freezer, commercial freezer, large storage water heater, or plumbing fitting, or if” | Clarification              | This change is necessary because submittal of test reports for the appliances noted in subsection (c)(1) as part of the certification process is no longer a requirement. The Energy Commission removed this requirement as part of the changes made to the Appliance Efficiency Regulations under Docket #13-AAER-1. This requirement should have also   |

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|      |   |   |                            | been removed from section 1608(c)(1).   |
| 866. | §1608(e)(1)(A) and (B), (e)(2)(A) and (B) | Add “Third-Party Certifier”   | Clarification              | This change is necessary to clarify that a third party certifier may have certified the appliance, instead of the manufacturer, as permitted under section 1606(f).   |
| 867. | §1608(e)(3)                               | Change “a” to “an” before “Energy Commission”   | Clarification              | This change is necessary to make the sentence grammatically correct.  |
| 868. | §1608(i)                                  | Change “Staff” to “staff”   | Consistency                | This change is necessary to follow the format used in the Energy Commission’s Style Guide.  |
| 869. | §1608 Documents Incorporated by Reference | Change the phrase “The following documents are...” to “The following document is...”  | Correct grammar            | This change is necessary to correct the use of plural “documents are” where only one document is being incorporated by reference.   |
| 870. | §1609                                     | Change “§” to “Section” in the section’s title  | Consistency                | This change is necessary to maintain consistent format and terminology throughout the regulations.  |
| 871. | §1609(a)(1)                               | Change “Appliance Efficiency Database” to “MAEDbS”  | Consistency                | This change is necessary to consistently use the official name of the new online system which manufacturers must use to electronically certify to the Energy Commission that their appliances comply with the applicable standards. |
| 872. | §1609(a)(3)                               | Change “sections 1609(a)(1) or (a)(2)” to “sections 1609(a)(1) or 1609(a)(2)”   | Consistency, clarification | This change is necessary to clarify the regulation and use consistent format in the cross references included in the regulations.   |
| 873. | §1609(c)                                  | Change “or his designee” to “or his or her designee”  | Clarification              | This change is necessary to use language that avoids bias toward a particular sex or gender.  |
| 874. | §1609(e)(5)                               | Change the references to “subsection (e)(4)” and “subsection (b)(3)” to “section 1609(e)(4)” and “section 1609(b)(3)”, respectively and | Consistency                | These changes are necessary to maintain consistent format for cross-references throughout the regulations.  |

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|  |  | remove the word<br>“above” at the end |  |  |
|--|--|---------------------------------------|--|--|

**IV. TECHNICAL, THEORETICAL, AND EMPIRICAL STUDIES, REPORTS, AND SIMILAR DOCUMENTS RELIED UPON (Gov. Code, §11346.2(b)(3))**

Federal Requirements

The federal definitions, test procedures, and efficiency standards included in the Appliance Efficiency Regulations can be found at 10 C.F.R. section 430 and 10 C.F.R. section 431, and the Energy Policy and Conservation Act, as amended, beginning at 42 U.S.C. 6291. No reports or studies were relied on in incorporating the federal regulations.

State Requirements

The proposed changes to the state-specific requirements in the Appliance Efficiency Regulations remove outdated state test procedures and efficiency standards and align state testing, labeling, and reporting requirements for certain appliances with current federal test procedures and standards for those appliances. These changes do not increase or decrease the expected energy savings from the state standards. Therefore, no reports or studies were relied on to support the changes to the state-specific requirements in the Appliance Efficiency Regulations.

**V. CONSIDERATION OF REASONABLE ALTERNATIVES, INCLUDING THOSE THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS (Gov. Code, § 11346.2(b)(4))**

No reasonable alternatives to the proposed regulations have been proposed that would lessen any adverse impact on small business or that would be less burdensome and equally effective in achieving the purposes of the regulation in a manner that achieves the purposes of the statute being implemented.

Federal Requirements

The purpose of the proposed changes to the federal requirements in the Appliance Efficiency Regulations is to reflect the most current federal efficiency regulations. Because the proposed changes are mandated federal regulations, there is no discretion to consider alternatives to the federal regulations.

Substantive Changes to State Requirements



For the proposed substantive changes to state-specific requirements in the Appliance Efficiency Regulations, the Energy Commission considered a “no change” alternative. Under this alternative, the Energy Commission would not make any updates to the state test procedures, efficiency standards, and labeling requirements or the appliance certification procedures and data submittal requirements through MAEDbS. This would have the overall effect of increasing testing burden, maintaining certain unnecessary reporting requirements, preventing the Energy Commission from being able to monitor compliance through reporting to the MAEDbS, increasing the Energy Commission’s costs to notify manufacturers of changes in the MAEDbS, and preventing timely communication of changes in MAEDbS to manufacturers. Therefore, the Energy Commission has not identified, and no other person has identified, any reasonable alternative that would be as effective and less burdensome to affected small business, or more cost effective to affected small business and equally effective in implementing the statutory policy or other provision of law.

### Nonsubstantive Changes

As noted above, the proposed nonsubstantive changes to the Appliance Efficiency Regulations include changes to correct typographical errors, clarify ambiguous language, use consistent terms and format, and remove federal language that has been superseded by more recent federal standards or federal test procedures. The Energy Commission is unaware of any reasonable alternative beyond the proposed nonsubstantive changes. Not making these nonsubstantive changes will result in continued ambiguity and more burdensome compliance with the appliance efficiency requirements.

## **VI. MANDATE OF SPECIFIC TECHNOLOGY OR EQUIPMENT (Gov. Code, § 11346.2(b)(1))**

### Federal Requirements

The proposed changes to update the federal requirements in the Appliance Efficiency Regulations do not mandate a specific technology or equipment, but provide a recitation of federal regulations.

### Substantive Changes to State Requirements

The proposed substantive changes to the Appliance Efficiency Regulations do not mandate a specific technology or equipment. These substantive changes instead remove outdated state test procedures and efficiency standards and align state testing, labeling, and reporting requirements for certain appliances with current federal test procedures and standards. The proposed changes to the appliance certification procedures do not require the use of a specific technology or

equipment, but merely reflect the current procedures that manufacturers use to electronically certify to the Energy Commission's MAEDbS compliance with existing federal and state appliance efficiency regulations and improve the method of communications between the Energy Commission and regulated parties. The changes to the appliance data submittal requirements only align reporting requirements with updates to both federal and state regulations and do not mandate any specific technology or equipment.

#### Nonsubstantive Changes

The proposed nonsubstantive changes to the Appliance Efficiency Regulations do not mandate a specific technology or equipment, but improve the readability of the language of the existing regulations.

### **VII. DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS (Gov. Code, § 11346.2(b)(6))**

#### Federal Requirements

The Appliance Efficiency Regulations contain outdated federal regulations, which conflict with current federal regulations. The purpose of the proposed changes is to ensure consistency with current federal regulations.

To the extent that federal law preempts state regulations, citations to the applicable federal regulations are provided as a courtesy to regulated parties and consumers of appliances to increase transparency, accessibility, and ease compliance burdens, rather than to create duplicative requirements. To the extent that federal regulations are repealed, state regulations provide that they immediately become effective as California state law in the event that the federal regulations are repealed. Therefore, there is no duplication or conflict with federal regulations.

#### State Requirements

The proposed changes to the state-specific requirements in the Appliance Efficiency Regulations do not duplicate or conflict with federal regulations.

### **VIII. EVIDENCE SUPPORTING FINDINGS OF NO SIGNIFICANT ADVERSE ECONOMIC IMPACT ON BUSINESS (Gov. Code, § 11346.2(b)(5)(A))**

The Energy Commission has determined that the proposed changes to the Appliance Efficiency Regulations will not have a significant adverse economic impact on business.

## Federal Requirements

The proposed changes to the federal requirements in the Appliance Efficiency Regulations will have no adverse economic impact on business because manufacturers are already obligated to comply with the current federal appliance efficiency regulations. These changes ensure that the Appliance Efficiency Regulations accurately reflect federal law.

## State Requirements

The proposed changes to the state-specific requirements in the Appliance Efficiency Regulations do not impose any significant adverse economic impact on business because they do not increase expected efficiency requirements for appliances or increase the underlying testing burdens for appliance manufacturers, retailers, or distributors.

The changes to state-specific requirements include removal of inconsistent state test procedures and standards that are preempted by federal law. There are no adverse economic impacts associated with the repeal of state test procedures and standards that are inconsistent with federal test procedures or standards. The changes to align state test procedures with federal test procedures where appropriate, or remove state test procedures when testing is unnecessary, will benefit appliance manufacturers by reducing industry testing burdens and costs. Therefore, there are no adverse economic impacts on business affected by this type of proposed changes.

The changes to other state-specific requirements for certain appliances will not have a significant adverse economic impact on business. Removing the requirement to report sales data of certain portable luminaires will result in a reduction in reporting requirements for manufacturers of portable luminaires. Changing the marking requirements for distribution transformers to remove obsolete industry standards and replace with a simple “DOE compliant” mark will have an initial cost of about \$350 per distribution transformer manufacturer, which will allow for retooling or reprogramming to change the mark, and no ongoing costs or benefits, as labeling was required before the proposed regulations. Aligning the battery charger test procedures between state and federally regulated battery chargers will provide a one-time benefit of \$300 in reduced testing burdens.

The changes to the Energy Commission’s appliance certification procedures will not have an adverse economic impact on business. These changes reflect the current procedures for utilizing MAEDbS to certify appliances to the Energy Commission and improve the method of communications between the Energy Commission and regulated parties. These changes do not adversely impact manufacturers, who are still required to certify that their appliances comply with the applicable efficiency standards.

The changes to the data submittal requirements to certify to the Energy Commission's MAEDbS that appliances comply with applicable federal and state efficiency standards will not have a significant adverse economic impact on business. The changes to align with current federal and state test procedures and standards merely require manufacturers to report the data from those test procedures, with no additional cost to submit that information to the Energy Commission, while ongoing costs will remain the same as before the proposed changes, as reporting was already required.

The changes to add new reporting obligations for newly federally regulated products, such as pumps, low-profile ceiling fans, and walk-in coolers and freezers, will result in an initial cost of \$500 per manufacturers to put the information into the template and submit it to the Energy Commission. The ongoing cost to certify new models of these newly federally regulated products is estimated to be about \$100 a year. These changes do not have a significant adverse economic impact on business.

Finally, the proposed nonsubstantive changes to the Appliance Efficiency Regulations do not impose any additional obligations on business. Therefore, there will not be any adverse impacts on business. On the contrary, the proposed changes will make compliance easier by removing ambiguity and improving readability of the Appliance Efficiency Regulations.

## **IX. ECONOMIC IMPACT ASSESSMENT (Gov. Code, §§ 11346.2(b)(2)(A), 11346.3(b))**

Based on the nature of the proposed regulatory changes and a review of the criteria set forth by the Department of Finance, staff has determined that the proposed rulemaking is not a major regulation requiring a Standardized Regulatory Impact Analysis under Government Code section 11346.3(c).

### **A. Creation or elimination of jobs within the state:**

No new jobs will be created and no existing jobs will be eliminated by the proposed changes to the Appliance Efficiency Regulations because appliance manufacturers and retailers are already required to comply with federal regulations related to testing, efficiency standards, labeling requirements. The proposed changes to the state-specific regulations would not create or eliminate jobs within the state because the total costs and benefits associated with the regulations of up to \$500 per affected manufacturer are not sufficient to support the creation or elimination of any jobs.

### **B. Creation of new businesses or the elimination of existing businesses within the state:**

No new businesses will be created and no existing businesses will be eliminated by the proposed changes to the Appliance Efficiency Regulations because appliance manufacturers and retailers are already required to comply with federal regulations related to testing, efficiency standards, and labeling requirements. Moreover, the proposed changes to the state-specific regulations would not create or eliminate existing businesses within the state because they do not add any additional obligations on manufacturers or retailers related to the increase or decrease of expected efficiency requirements for any appliance and they do not increase the underlying testing and compliance burdens for manufacturers of regulated appliances. Where the Energy Commission has added or removed reporting requirements, the additional costs and benefits associated with the reporting requirements, of up to \$500 per affected manufacturer, would not support creating or justify eliminating any business within the state. Where the Energy Commission has aligned state test procedures with federal test procedures to reduce the burden associated with different tests, the benefits assumed of about \$300 per affected manufacturer would not support creating or eliminating any business within the state. Where the Energy Commission has modified labeling requirements, the additional costs of about \$350 per affected manufacturer, would not support creating or justify eliminating any business within the state.

**C. Expansion of businesses currently doing business within the state:**

The Energy Commission estimates that no existing businesses will expand due to the proposed changes to the Appliance Efficiency Regulations because appliance manufacturers and retailers are already required to comply with federal regulations related to testing, efficiency standards, and labeling requirements. Moreover, the proposed changes to the state-specific regulations would not support expanding any businesses within the state because they do not add any additional obligations on manufacturers or retailers related to the increase or decrease of expected efficiency requirements for any appliance and they do not increase the underlying testing and compliance burdens for manufacturers of regulated appliances. Where the Energy Commission has added or removed reporting requirements, the additional costs and benefits associated with the reporting requirements, of up to \$500 per affected manufacturer, would not support the expansion of any business within the state. Where the Energy Commission has aligned state test procedures with federal test procedures to reduce the burden associated with different tests, the benefits assumed of about \$300 per affected manufacturer would not support expansion of businesses currently doing business within the state. Where the Energy Commission has modified labeling requirements, the additional costs of about \$350 per affected manufacturer, would not support the expansion of businesses currently doing business within the state.

**D. Benefits of the regulation to the health and welfare of California residents:**

The proposed changes to the Appliance Efficiency Regulations benefits the health and welfare of California residents by improving compliance with and enforcement of existing regulations,

which ensures that consumers receive the benefits of the federal and state efficiency standards, including reduced energy demand and reduced need for new power plants.

**E. Benefits of the regulation to worker safety:**

The Energy Commission does not anticipate any benefits to worker safety as a result of the proposed changes to the Appliance Efficiency Regulations because the changes will not impact working conditions or worker safety.

**F. Benefits of the regulation to the state's environment:**

The proposed changes to the Appliance Efficiency Regulations do not result in new benefits to the state's environment but improve compliance with existing regulations, which ensures that the anticipated energy and associated pollution reduction levels from the underlying regulations are met.