

DOCKETED	
Docket Number:	23-FDAS-01
Project Title:	Pool Controls Rulemaking
TN #:	254737
Document Title:	Final Statement of Reasons - Flexible Demand Appliance Standards for Pool Controls
Description:	The document contains the final statement of reasons for pool controls.
Filer:	Nicholaus Struven
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	2/29/2024 11:04:00 AM
Docketed Date:	2/29/2024

CALIFORNIA ENERGY COMMISSION

715 P Street
Sacramento, California 95814

energy.ca.gov

CEC-057 (Revised 1/21)



FINAL STATEMENT OF REASONS
Flexible Demand Appliance Standards for Pool Controls
OAL Z# 2023-0214-03

UPDATE OF THE INITIAL STATEMENT OF REASONS

This rulemaking establishes general provisions that will apply to all flexible demand appliance standards (FDAS) (sections 1690(a), 1690.1, 1691(a), 1692, 1693(a), 1694, 1695, 1696(a) and 1697) and specific provisions that will apply to pool controls that are consumer products (sections 1691(b), 1693(b), 1696(b)).

On October 5, 2023, the CEC published a Final Proposed Regulatory Text for CEC adoption that included two non-substantive changes from the regulatory text published on September 1, 2023. That document contains the final proposed regulations for pool controls, with two non-substantive modifications.

First, section 1693(b)(1) proposes that the effective date be, “the earlier of either the compliance date of the federal energy conservation standards for dedicated purpose pool pump motors with motor total horsepower from 1.15 THP to 5 THP or 2 years after adoption by the Energy Commission”. As DOE has now published in the Federal Register a compliance date of September 29, 2025, which is earlier than October 18, 2025, staff proposes to replace this language with the date “September 29, 2025”.

Second, there is a typographic error in the definition of “pool control”, where the phrase “safety interlock or shutoff controls” is instead written “safety interlock of shutoff controls”. This “of” was changed to “or” in the final text of the regulations. These changes necessary to provide clarity, correcting a typographical error and recording a single date for the effective date for pool controls.

The California Energy Commission (CEC) noted in the Initial Statement of Reasons (ISOR) that, in total, California jobs will increase due to the proposed regulations. As noted in the ISOR and in the Notice of Proposed Action (NOPA), the proposed regulations will eliminate some jobs in California but will lead to the creation of even more, resulting in the net creation of jobs in California. Accordingly, the CEC estimates the proposed regulations will have an overall positive employment impact for California. Jobs created by household utility bill savings will lead to greater job creation and more than offset a possible slight reduction of jobs in the electric utility sector due to reduced spending on utility bills. Consumers will experience an increase in disposable income due to annual reduced electricity bills attributable to the regulations in 2033. The utility sector is estimated to reduce employment by 707 jobs, while an additional 3,459 jobs will be created as a result of the change in discretionary spending of households with

flexible demand pool controls. Net employment is estimated to increase by 2,752 jobs at full stock turnover. Therefore, the CEC has determined that while some jobs may be eliminated, the total number of California jobs will be increased by the proposed regulations.

In response to comments received during the 45-day public comment period, the following changes were made to the proposed regulatory language and provided for 15-day public comments June 23 through July 10, 2023:

1) Changes to Section 1690. Scope.

Subsection (a) Future FDAS rulemakings may apply to devices that are not consumer products. To make this clear, CEC staff removed “as consumer products” from the more general scope section of subsection (a) and added it to subsection (a)(1) for pool controls, which are now defined as “Pool controls that are consumer products designed to use single-phase AC power as input power.” This responds to stakeholder comments and sets the desired scope for this rulemaking without restricting future FDAS rulemakings only to devices that are consumer products.

2) Added Section 1690.1. Rules of Construction

Rules of construction were added to the regulatory text to establish and make clear the meaning of grammatical terms such as singular vs. plural, “and” vs. “or”, and “shall” vs. “may” throughout proposed regulations. These changes were necessary to add clarity for stakeholders where the regulation text uses number, connective and directive grammatical terms.

3) Changes to Section 1691. Definitions

(a) General Definitions. Clarified multiple definitions with input from stakeholders by adding definitions, modifying definitions, and removing obsolete definitions. These changes were necessary to add clarity requested by stakeholders. Many of the changes concern aspects of the internet connectivity of the devices subject to the regulations and align terminology in the regulation with terminology used in the federal Energy Star Program which is well-accepted and understood by the regulated community. Other changes squared the regulation’s definitions of “load serving entity” and “personal information” with definitions in state statutory law. Another change added a definition of “radio broadcast data system receiver” because elsewhere in the regulation a provision was added to establish an option for pool controls to comply with the regulation by responding to radio signals via a radio receiver.

The changes to section 1691(a) are described in more particularity below:

- i) Modified “Authentication” definition to focus on connected devices.
- ii) Removed “Authentication credential” definition because it was no longer needed.
- iii) Added “Communication layers” definition to help clarify communication definitions and better align with industry developed Energy Star communication requirements.

- iv) Added “Communication link” definition to help clarify communication definitions and better align with Energy Star communication requirements.
- v) Modified “Connected device” definition to help clarify the connected device definitions and better align with industry developed Energy Star connectivity requirements.
- vi) Added “Connected ready device” definition to help clarify connectivity definitions.
- vii) Removed “TCP/IP signal” definition because it was no longer needed to help define a “connected device”.
- viii) Modified “Consent” definition for clarity that consent applies to the consumer or the customer by adding “consumer” to follow customer.
- ix) Modified “Load-serving entity” definition for clarity including reference to the Public Utilities Code, aligning the definition to Public Utilities Code.
- x) Added “Open standards” definition to help clarify open standards and to better align with industry developed Energy Star connectivity requirements.
- xi) Added “Personal information” definition to help clarify data protection scope and to better align with other California state laws.
- xii) Added “Radio broadcast data system receiver” definition to help clarify the compliant connected options because describing a radio broadcast data system receiver was necessary to provide specific details of a compliant connected device that could receive TCP/IP signals from the internet.
- xiii) Modified “Special character” definition to improve clarity, taking two sentences and forming a single sentence.
- xiv) Removed one instance of the “Security feature” definition because it was duplicative.

(b) Pool Control Definitions. Clarified multiple definitions based on input from stakeholders by adding and modifying definitions, and removing definitions no longer needed. These changes were necessary to add clarity requested by industry stakeholders and better align the definitions in the regulation with how the terms are used and understood in the pool control industry, and, in the case of “dedicated-purpose pool pump” to use a definition that is found in federal law. Many of the added definitions call out some of the particular components of pool controls (e.g. switches) to help better define how the regulation would work, and in the case of “integral” help define components of pool controls that the regulation does not affect, in line with changes made to other portions of the regulation. The definition of “pump priming” was eliminated because another change in the regulation deleted a provision dealing with pump priming, which made the definition unnecessary.

The changes to section 1691(b) are described in more particularity below:

- i) Modified “Dedicated-purpose pool pump” definition to add clarity and align with the definition at the U.S. Department of Energy.
- ii) Added “Direct load control switch” definition to help clarify pool control definitions and better align with existing industry terminology.
- iii) Added “Heater switch” definition to help clarify pool control definitions and better align with existing industry terminology.
- iv) Added “Integral” definition to help clarify pool control definitions and better align with existing industry terminology.

- v) Modified “Pool equipment” definition to help clarify pool equipment definitions and better align with existing industry terminology.
- vi) Modified “Pool control” definition to help clarify pool control definitions utilizing definitions provided by stakeholders for “pool timer”, “pool pump switch”, “heater switch”, “direct load control switch”, and better alignment with existing industry terminology.
- vii) Modified “Pool control” definition to only use the singular reference to improve clarity and added clarity exclusion for safety interlock or shutoff controls.
- viii) Modified “Pool filter pump” definition to improve clarity for stakeholders.
- ix) Removed “Pump Priming” definition because it is no longer needed.
- x) Added “Pool pump switch” definition to help clarify pool control definitions and better align with existing industry terminology.
- xi) Added “Pool timer” definition to help clarify pool control definitions and better align with existing industry terminology.
- xii) Added “documents incorporated by reference” section to the end of section 1691 to identify the documents for existing standards utilized in various definitions to provide the public with complete information on the basis for those definitions.

4) Changes to Section 1692. General Requirements

Staff made changes to terms in the cybersecurity provisions of section 1692(c) in the regulation’s General Requirements. Staff clarified section 1692(c)(3) “Data Protection”, section 1692(c)(4) “Passwords”, section 1692(c)(5) “Software Update”, and section 1692(c)(8) “Override Function” by adding or removing text. These changes were necessary to avoid overly prescriptive language, align with state statutory law and add clarity requested by stakeholders.

The changes to section 1692(c) are described in more particularity below:

Section 1692(c)(3) “Data Protection” was amended to clarify that it is the consumer’s data and personal information that are to be protected in accordance with state and federal law and that devices are not to collect data that is not necessary to the functioning of the device. The language utilizes a definition for personal information found in the General Definitions Section 1691 and aligns with other California laws that protect consumer data.

Section 1692(c)(4) “Passwords” was retitled “**Authentication**” because there are several methods of cybersecurity authentication and passwords are an example of but one of those methods. Password character requirements were also broadened and if a plain text-based password is used there is now a minimum requirement that applies to it.

Section 1692(c)(5) “Software Update”, to avoid being overly prescriptive, staff removed the requirement for the device to attempt to receive an update on the initial connection to the internet and replaced it with the requirement for the device to provide the consumer with the ability to check for updates.

Section 1692(c)(8) “Override Function” staff clarified the override function requirement by limiting it to the ability for consumers to program “event response” settings, not override all other settings in the connected device.

5) Changes to Section 1693. Appliance Specific Standards and Requirements

The main changes made to section 1693 were to section 1693(b) and established a September 13, 2024 effective date for the regulations, phased in the introduction of connected-ready and connected devices, provided that pool controls could employ radio broadcast receivers, made refinements to the remote and local setup provisions for connected devices, eliminated the pump priming and multiple preconfigured operating schedule requirements and required open standards be used for all layers of the consumer consent functions. These changes were made in response to comments raising technical feasibility concerns and, in the case of radio broadcast receivers, to broaden the options for pool controls to receive operating signals without needing to be connected to the internet.

The changes to section 1693 are described in more particularity below:

a) **Section 1693(b) Pool Controls.** Clarified communication requirements, connectivity requirements, and clock requirements with input from stakeholder comments by adding and removing text. These changes were necessary to add clarity requested by stakeholders.

- i) Modified **(1)** to add clarity that the standards for pool controls will become effective one year after adoption by the Energy Commission.
- ii) Modified **(2) Flexible demand appliance standards (A)** to add clarity that stakeholders have requested to the minimum communication requirements and amended the compliance dates for specific communication pathways.
- iii) Modified **(2) Flexible demand appliance standards (B) (1) (b)** to add clarity that stakeholders have requested to the clock requirements to synchronize with the local time.
- iv) Added **(2) Flexible demand appliance standards (B) (2) (a)** to add clarity that stakeholders have requested to include options for local and remote setup.
- v) Added **(2) Flexible demand appliance standards (B) (3) (a)** to add clarity that stakeholders have requested to include options for connected device local and remote setup.
- vi) Modified **(2) Flexible demand appliance standards (C) (1) (a) (iii)** by removing “water” to use consistent language within the document.
- vii) Removed **(2) Flexible demand appliance standards (C) (1) (c)** because it is a duplicative requirement and is no longer necessary.
- viii) Removed **(2) Flexible demand appliance standards (C) (2)** because the default schedule requirement is now clearly stated in section **(C) (1)**.
- ix) Modified **(4) Marking** by changing “must” to “shall” adding clarity to the requirement.
- x) Modified **(5) Cybersecurity** by changing “must” to “shall” adding clarity to the requirement.

- xi) Added **(6) Communication** to add clarity that stakeholders have requested for communication, removing ambiguity, and providing a clear requirement for communication aligning with Energy Star communications requirements.

6) Changes to Section 1694. Customer and Consumer Consent

In response to comments from industry stakeholders, changes were made to section 1694(a) to clarify it is the manufacturers' responsibility to provide mechanisms for obtaining customer consent. Sections 1694(b), (c) and (d) were added to provide that connected devices must be able to respond to customer and authorized third-party commands to start, stop and reschedule operations and retain certain data about their power usage. Section 1694(e) was added to establish the communication requirements for pool controls employing radio receivers.

The changes to section 1694 are described in more particularity below:

- i) Modified subsection **(a)** to clarify the requirements.
- ii) Added subsection **(b)** to remove ambiguity and provide clarity for connected appliance communication link functionality minimum requirements.
- iii) Added subsection **(c)** to remove ambiguity and provide clarity for connected appliance communication link functionality minimum requirements.
- iv) Added subsection **(d)** to remove ambiguity and provide clarity for connected appliance communication link functionality minimum requirements.
- v) Added subsection **(e)** to remove ambiguity and provide clarity for radio broadcast data system appliance minimal requirements.

7) Changes to Section 1696. Data Submittal Requirements

Table A-1, Table A-2 and Table B-1 were updated to reflect the changes made in the previous sections. These changes were requested by stakeholders so that the certification information established by the tables tracked the modified requirements of the other portions of the regulation, as discussed above.

The changes to section 1696 are described in more particularity below:

- i) Added line item in Table A-1 to clarify certification for connected devices, connected ready devices and radio broadcast data system capable devices.
- ii) Added line item in Table A-2 to clarify connectivity compliance.
- iii) Modified line item in Table A-2 to clarify communication compliance.
- iv) Modified line item in Table A-2 to clarify data protection for personal information compliance.
- v) Modified line item in Table A-2 to clarify compliance certification for authentication.
- vi) Removed line item in Table A-2 referring to not displaying personal data in plaintext on the user interface because it is no longer needed.
- vii) Modified Table B-1 to clarify compliance certification for local control.
- viii) Added line item in Table B-1 to clarify compliance certification for remote control.
- ix) Modified Table B-1 to clarify the greater than or equal to 50% symbols.

- x) Modified Table B-1 to remove the word “water” from “electric pool heater”.
- xi) Modified Table B-1 to clarify the default operation of the pressure cleaner booster pump.
- xii) Modified Table B-1 to clarify the default operation by removing “at” and replacing with “no earlier than”.

8) Changes to Section 1697. Compliance, Enforcement, and Administrative Civil Penalties

These minor changes were necessary to add clarity requested by stakeholders.

- i) **(b) Administrative Civil Penalties (2) Notices of Violation** removed “or their designee” to provide consistent document language.
- ii) **(b) Administrative Civil Penalties (5) Other Enforcement Procedures** removed “their designee” to provide consistent document language.

In response to comments received during the 15-day public comment period, the following changes were made to the proposed regulatory language and provided for a 2nd 15-day public comments September 1 through September 18, 2023:

1. Changes to Section 1691. Definitions.

(a) General Definitions. Staff modified definitions to add clarity by eliminating unnecessary language from the definition of “consent”, align the definitions of “personal information”, “utilities” and “community choice aggregators” with state statutory law and to address concerns regarding the potential for limiting the effect of the regulations to “consumers” (end-users of appliances) while possibly excluding “customers” of the utilities who own the devices. The new definitions recognize that the concepts of consumer and customer are not mutually exclusive and, in fact, many people who interface with the devices would qualify as both. The definition of “radio broadcast data system receiver” was removed because it was no longer necessary due to the elimination of the radio receiver option from other parts of the regulation in response to comments that raised feasibility, cost and cost-effectiveness concerns.

The changes to section 1691(a) are described in more particularity below:

- i. Modified “Consent” definition by removing unnecessary content in order to improve clarity and conciseness.
- ii. Added “Consumer” definition to improve clarity and language consistency.
- iii. Added “Customer” definition to improve clarity and language consistency.
- iv. Modified “Flexible Demand” definition with a non-substantive edit to improve clarity.
- v. Modified “Load-Serving Entity” definition to ensure consistency with the statutory definitions in Public Resources Code section 25402(f)(7) and Public Utilities Code 331.1.
- vi. Added “Local publicly owned electric utility” definition to improve clarity and language consistency.
- vii. Modified “Personal Information” definition to align to existing California Civil Code section 1798.140(v) and ensure consistency with relevant law.

- viii. Removed “Radio broadcast data system receiver” definition because it is no longer needed in this version of the regulatory language.
- ix. Modified “Security feature” definition to improve clarity and language consistency.

(b) Pool Controls. Staff modified definitions to add clarity and address technical concerns. For example, staff deleted the term “clock operated” from the definitions of “direct load switch”, “heater switch”, “pool pump switch” and “pool timer” in recognition of the fact that under the proposed regulations, these switches may be operated not only by clocks but also by the consumer or third parties with the consumer’s consent. Staff also deleted the definition of “integral” to clear up uncertainty regarding its potential regulatory effect and because it was unnecessary given other changes to the regulations. For example, various changes were made to the description of “pool control” primarily to consolidate the exclusions for pool filter pumps greater than 2.5 horsepower, safety interlock or shutoff controls and integral controls in one place in the regulation, but also to clarify that the regulation covers pool filter pumps and to eliminate the unnecessarily restrictive provision that the pool control operate “independently”, when in fact they will also be controlled by the user or authorized third party. These changes were necessary to help better align with industry terminology, address technical issues and add clarity requested by stakeholders. Finally, a reference to a document concerning radio broadcasting was eliminated from the table of documents incorporated by reference. This document was rendered unnecessary because the radio broadcast option was also deleted from the regulation. These changes were necessary helped to better align the regulations with industry terminology, address technical concerns and add clarity requested by stakeholders.

The changes to section 1691(b) are described in more particularity below:

- i. Modified “Direct load control switch” definition to help clarify pool control definitions by removing “clock-operated”.
- ii. Modified “Heater switch” definition to help clarify pool control definitions by removing “clock-operated”.
- iii. Removed “Integral” definition to help clarify the proposed regulatory language because the word “integral” could be unintentionally interpreted as having regulatory effect.
- iv. Modified “Pool equipment” definition to remove “including, but not limited to,..” and the list of equipment “pool pumps, electric pool heaters, electrolytic chlorinators, lights, cleaners, and water features” to improve the clarity of the definition.
- v. Modified “Pool control” definition to remove “independently” to add clarity to the definition.
- vi. Modified “Pool control” definition to add the word “filter” to clarify for the type of pool pump.
- vii. Modified “Pool control” definition to restructure exclusions to the definition into a list. Items (A) and (B) contain the same content as presented in the first 15-day language. Item (C) adds an exclusion needed to maintain the original scope of the proposed regulatory language.
- viii. Modified “Pool pump switch” definition to remove “clock operated” to allow for cloud-based controls.

- ix. Modified “Pool timer” definition to remove “clock operated” to allow for cloud-based controls.
- x. Modified table of documents that are incorporated by reference in section 1691 to remove the document related to radio broadcast data systems because it is no longer needed in this version of the regulatory language.

2. Changes to Section 1692. General Requirements.

In response to comments, staff made changes to various provisions of the subsection (c) cybersecurity requirements to clarify that these provisions apply to both customers and consumers and to make these provisions consistent with the definitions of those terms that were added to section 1691(a). These changes were made to subsections “(3) Data Protection”, “(4) Authentication”, “(5) Software Update”, and “(8) Override Function”. “NERC” was deleted from the (4) Authentication provision because it was unnecessary given that a reference to NERC appears in the text of subsection (c) Cybersecurity.

The changes to section 1692 are described in more particularity below:

- i. Modified **(3) Data Protection** to add “customer or” to the scope for consistency and to ensure uniform application of data protection requirements.
- ii. Modified **(4) Authentication** to remove “NERC” to avoid confusion and avoid duplication because “NERC” is already referenced in the upper level for this section.
- iii. Modified **(5) Software Update** to add clarity that this section applies to the customer and the consumer. Four locations have been updated within this sub-section.
- iv. Modified **(8) Override Function** to add clarity that this section applies to the customer and the consumer.

3. Changes to Section 1693. Appliance Specific Standards and Requirements.

Changes were made to section 1693 (b) which mainly centered on eliminating references to the radio broadcast data system receiver option, which was deleted from the regulation due to cost, cost effectiveness and feasibility concerns. Staff also clarified the effective date, communication, connectivity, and clock requirements by adding and deleting text. These changes were necessary to add clarity requested by stakeholders. Section 1693(b)(1) proposed that the effective date be, “the earlier of either the compliance date of the federal energy conservation standards for dedicated purpose pool pump motors with motor total horsepower from 1.15 THP to 5 THP or 2 years after adoption by the Energy Commission”. As DOE has now published in the Federal Register a compliance date of September 29, 2025, which is earlier than October 18, 2025. As noted above on p. 1, in the Final Proposed Regulatory Language submitted to the CEC docket for the Pool Controls rulemaking (<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-FDAS-01>), staff replaced the former language with the specific date “September 29, 2025”. Changes were also made to accommodate the addition of regulatory definitions of “customer” and “consumer” and to clarify minimum requirements for the local manual control of the devices and the fact they must be able to start and stop operation of the pool filter pump

and any dependent heaters and booster pumps. Unnecessary language dealing with the strictures prohibiting sales and offers for sale of noncompliant devices in California was eliminated because these issues are adequately addressed in section 1697. Language was also inserted to section 1693 to clarify that its requirements apply to pool controls and not to other connected devices.

The changes to section 1693 are described in more particularity below:

- i. Modified **(1) Effective date** to recognize and align to pending changes to federal law and provide an outer limit on effective date if said changes are subject to delay.
- ii. Removed **(2) Flexible demand appliance standards (A) (1)** based on concerns relating to feasibility, cost and cost effectiveness of the requirement and the need for additional analysis.
- iii. Modified **(2) Flexible demand appliance standards (A) (2)** to remove radio broadcast data system receiver requirement and, separately, to remove specification of effective date. Subsection numbering updated from “2” to “1” because subsection “1” is now removed.
- iv. Modified **(2) Flexible demand appliance standards (B)** to add clarity for the minimum local controls required.
- v. Modified **(2) Flexible demand appliance standards (B) (1)(b)** to remove radio broadcast data system receiver requirement based on concerns relating to feasibility, cost and cost effectiveness of the requirement and the need for additional analysis.
- vi. Modified **(2) Flexible demand appliance standards (B)(2)** to specify minimum local manual control requirements as applicable only to basic start and stop operation of the pool filter pump and any dependent heaters and booster pumps.
- vii. Removed **(2) Flexible demand appliance standards (B)(2)(a)** to improve clarity and language consistency requiring pool controls to at least have a local start/stop functionality while allowing other controls to be accessed via an app or other methods.
- viii. Modified **(2) Flexible demand appliance standards (B)(3)** to improve clarity and language consistency.
- ix. Modified **(2) Flexible demand appliance standards (B)(3)(a)** to improve clarity and language consistency to allow for app-base or other interfaces as long as there is a local start/stop on the device.
- x. Modified **(6) Communication (A)** to remove “sold or offered for sale in California and” because it is duplicative and unnecessary and remove specific section 1694 reference to improve clarity and language consistency.
- v. Modified **(6) Communication (B)** to clarify that this provision applies to connected pool controls and not all connected “devices”.
- vi. Modified **(6) Communication (B)** to add clarity and consistency for the use of “customer and consumer”.
- vii. Modified **(6) Communication (B)** to remove specific section 1694 reference to improve clarity.
- viii. Removed **(6) Communication (C)** because radio broadcast data receiver content requirements are no longer required in this version of the regulatory language.

- ix. Added new subsection **(6) Communication (C)** to add clarity and to move the requirement from a general section to a pool control specific section, because at this time this provision is intended to only apply to pool controls.
- x. Added **(6) Communication (D)** to add clarity and consistency for connected pool controls that are capable of communicating additional information from a general section to a pool control specific section, because at this time these requirements are only relevant to pool controls.

4. Changes to Section 1694. Customer Consent.

These changes were necessary to add clarity requested by stakeholders.

The changes to section 1694 are described in more particularity below:

- i. Modified subsection **(b)** to remove ambiguity and provide clarity for connected and connected capable appliance communication link functionality minimum requirements consistent with statutory direction.
- ii. Removed subsection **(c)**, **(d)**, and **(e)** to remove real time power draw requirement, radio broadcast data system requirements, to improve clarity, and to move content that at this time is only relevant to pool controls from a general section to a pool control specific section.

5. Changes to Section 1695. Certification Requirements.

Adding Authority and Reference Section for clarity. These changes were necessary to add clarity requested by stakeholders.

The changes to section 1695 are described in more particularity below:

- i. Modified **(a) Filing of Statements (2) (H) 3** to ensure the attestation of compliance covered all elements prescribed by the Article.
- ii. Added an Authority and Reference Section note at the end of Section 1695 to provide clarity and consistency with other sections of the regulation.

6. Changes to Section 1696. Data Submittal Requirements.

Table A-1, Table A-2 and Table B-1 were updated to reflect the changes made in the previous sections. These changes were requested by stakeholders so that the certification information required by the tables tracked the modified requirements of the other portions of the regulation, and accurately reflect other changes to the regulatory language as discussed above.

The changes to section 1696 are described in more particularity below:

- i. Modified **Table A-1** to remove “Permissible” and replace it with “Possible” to provide clarity that the table entries show the answers that will be made possible by the filing

materials provided for the submission of model data and is not intending to imply that filers need or lack permission to provide information about their products.

- ii. Modified line item in **Table A-1** to remove “both” as a possible answer because by the proposed regulatory definitions it is not possible to be both a connected device and a connected ready device.
- iii. Modified line item in **Table A-1** to remove “false” as a possible answer and add “Neither” as a possible answer.
- iv. Removed line item in **Table A-1** for radio broadcast data systems because it is no longer needed in this version of the regulatory language.
- v. Relocated **Table A-2** line items relating to use of open standards for communication to Table B-1, as it is a requirement specific to pool controls, and reduced to a single entry to eliminate redundancy.
- vi. Removed **Table A-2** line item for updating on initial setup as it is no longer required in regulation.
- vii. Modified **Table A-2** to remove “Permissible” and replace it with “Possible” to provide clarity that the table entries show the answers that will be made possible by the filing materials provided for the submission of model data, and is not intending to imply that filers need or lack permission to provide information about their products.
- viii. Modified **Table A-2** line item in two locations to remove “users” and replace with “entities” for clarity and language consistency.
- ix. Modified **Table A-2** line item relating to the unique logical identifier to include specifying that the identifier was accessible to authorized entities.
- x. Added **Table A-2** line items relating to plain text passwords consistent with cybersecurity requirements.
- xi. Modified **Table A-2** line item relating to software updates to use clearer language that is more consistent with associated regulatory text.
- xii. Modified **Table A-2** line items to merge two items relating to device security into a single item.
- xiii. Modified **Table A-2** line item to remove “at any time”, consistent with removal of similar language from regulation.
- xiv. Modified **Table A-2** line item to remove “the factory” to avoid introducing an unneeded term that could require a regulatory definition.
- xv. Modified **Table B-1** to make formatting changes to the headings for consistency and to remove “Permissible” and replace it with “Possible” to provide clarity that the table entries show the answers that will be made possible by the filing materials provided for the submission of model data, and is not intending to imply that filers need or lack permission to provide information about their products.
- xvi. Added **Table B-1** line item for communicating using open standards, relocating the item from Table A-2. This addition was needed to be moved from the table for data submittal for all connected device to data submittal table specific to pool controls, allowing flexibility for future FDAS connectivity requirements.
- xvii. Modified **Table B-1** line items relating to control interfaces for consistency with changes to regulatory requirements. This change is needed to align the text in Table B-1 with the changes in the body of the regulatory text.

xviii. Added **Table B-1** line item to cover marking requirements applicable to regulated pool controls. This addition was needed because the data submittal line item regarding marking was missing from table B-1.

LOCAL MANDATE DETERMINATION

The CEC has determined that this action will not result in a local mandate on local agencies or school districts.

CONSIDERATION OF ALTERNATIVE PROPOSALS

The CEC determined pursuant to Government Code Section 11346.9(a)(4) that no alternative before it would be more effective in carrying out the purpose for which this action is proposed; no alternative would be as effective as and less burdensome to affected persons than the adopted regulation; and no alternative would be more cost effective to affected private persons and equally effective in implementing the statutory policy or other provision of law.

As discussed in more detail in the Final Staff Report, “Analysis of Flexible Demand Standards for Pool Controls,” and in staff’s responses to comments, staff considered a number of alternatives to the adopted regulations and found that none was more effective and less burdensome than the adopted regulation.

The adopted regulations will not have a significant adverse economic impact on small business and no alternatives were proposed that would lessen any adverse economic impact on small business.

INCORPORATION BY REFERENCE

In the first 15-day notice the CEC incorporated two documents by reference into Section 1691: Definitions, specifically for the definition of “radio broadcast data system receiver” and the definition of “dedicated-purpose pool pump.” These documents incorporated by reference are:

- International Electrotechnical Commission, IEC 62106-9:2021 (“radio broadcast data system receiver”)
- Code of Federal Regulations Title 10, Part 431, Subpart Z (2021) (“dedicated purpose pool pump motors”)

However, modifications to the regulatory text in the second 15-day notice eliminated the reference to the International Electrotechnical Commission document but retained the reference to the Code of Federal Regulations.

The documents are incorporated by reference because it would be cumbersome, unduly expensive, and impractical to publish in the California Code of Regulations. The documents were made available upon request directly from the Energy Commission throughout the course of this rulemaking action.

SUMMARY OF RESPONSES TO PUBLIC COMMENTS RECEIVED

All responses to public comments, including acceptance of recommendations and justification when recommendations were not accepted, are hereby incorporated by reference to this Final Statement of Reasons, and included in the final record under tab 17, The Final Response to Comments Matrix.