

*Comment Received From: Pool & Hot Tub Alliance and CA Swimming Pool Association
Submitted On: 9/7/2023
Docket Number: 22-BSTD-01*

PHTA CPSA Comments

Additional submitted attachment is included below.



September 7, 2023

Submitted via: [Docket Log 22-BSTD-01](#)

Re: Proposed updates to the CA Energy Code related to pool and spa heating

California Energy Commission Staff:

The Pool & Hot Tub Alliance (PHTA) represents more than 3,650 company members and over 11,000 individual members nationwide, including companies that manufacture pool and spa heating equipment. PHTA has a long history of working with the California Energy Commission (Commission or CEC) and appreciates the opportunity to provide feedback on the initial proposed language.

The California Pool & Spa Association (CPSA) is the statewide trade association that represents more than 230 company members in the state of California, including pool and spa builders, service companies, manufacturers and distributors.

PHTA and CPSA welcomes your careful consideration of these comments in response to the pool and spa-related proposals for the 2025 California Energy Code. If you have any questions on these comments, please contact me at jen@jhatfieldandassociates.com on behalf of PHTA.

Sincerely,

A handwritten signature in black ink that reads 'Jennifer Hatfield'.

Jennifer Hatfield
Government Affairs Consultant
Pool & Hot Tub Alliance

cc: Justin Wiley, PHTA VP of GR, Standards and Codes, jwiley@phta.org

Section 100.1

PHTA and CPSA recommend the following definitions be updated as follows:

POOLS, ANSI/APSP/ICC-5 is the American National Standards Institute and National Spa and Pool Institute document titled "American National Standard for Residential Inground Swimming Pools" 2011 (ANSI/APSP/ICC-5-2011 (R2022)) ~~with Addenda A.~~

POOLS, any structure or product intended for swimming, bathing or wading; designed and manufactured to be connected to a circulation system; and not intended to be drained and filled with each use. This term includes, but is not limited to, inground, aboveground and onground pools; and wading pools.

POOLS, RESIDENTIAL are permanently installed residential in-ground swimming pools intended for use by a single-family home for noncommercial purposes ~~and with dimensions as defined within the scope of ANSI/NSPI 5 ANSI/APSP/ICC-5-2011 (R2022).~~

POOLS, RESIDENTIAL is a pool intended for use that is accessory to a residential setting and available only to the household and its guests, and with specifications as defined within the scope of either ANSI/APSP/ICC-4, 2012 (R2022) or ANSI/APSP/ICC-5, 2011 (R2022).

Reasoning: Pools encompass all types of pools and not just residential inground pools that are covered by the ANSI/APSP/ICC-5 Standard. Therefore, we are suggesting the Commission define "pools" to be consistent with how a "swimming pool" is defined in the International Codes, (ISPSC, IBC, IRC, etc.). Then when defining a "residential pool" the first part comes direct from how the International Swimming Pool & Spa Code (ISPSC) defines a "residential pool" and then provides the additional qualifier that includes all types of residential pools that exist: inground, aboveground and onground, which is captured within the ANSI/APSP/ICC-4 and -5 Standards. We believe these definition updates will provide the intent of what is being captured within this rulemaking and be in alignment with definitions used in national codes and standards.

If the Commission does not support these suggestions, at a minimum we point out errors in the current definitions in terms of references to the "National Spa and Pool Institute" or "NSPI". The latest standard edition uses the Association of Pool & Spa Professionals (APSP) name in what is published and we'd suggest that be updated, along with the removal of "Addenda A", which is also not a correct reference to the current published standard. These changes are only required if the larger scale updates we are suggesting are not made, as those updates also address these errors.

Section 110.4 (a)3. Instructions

PHTA and CPSA recommend at a minimum striking the language highlighted in yellow:

- (a)3. **Instructions.** A permanent, easily readable, and weatherproof plate or card that gives instruction for the energy efficient operation of the pool and/or spa heater, and for the proper care of pool and/or spa water, when a and to cover the pool and/or spa when not in is used; and

Further, we would encourage updating the “energy efficient operation” language to reflect what is put on the pool heater, which is the “energy efficiency rating.”

Reasoning: Heater manufacturers currently do not include instructions on pool/spa water care or on covering the pool when not in use. When it comes to pool/spa water care, it implies that a heater manufacturer is an expert on such care, which is not the case. Further, what standard or guidance is to be used and considered as “proper water care”. Requiring instructions on covering the pool/spa when not in use has no relation to the pool/spa heater, and may not be applicable if a cover is not onsite. In addition, cover manufacturers are required to provide instructions on the proper use of the product, which includes critical safety information. Consumers should be directed to the cover manufacturer instructions and not heater instructions when it comes to pool/spa covers.

Further, these requirements are outside the scope of what a heater manufacturer is required to know and provide to the consumer. With all the other labeling heater manufacturers are required to do and then adding the amount of information that could be required under the draft provision, which is outside of their expertise, heaters will: (a) look like a Nascar race car, (b) include more information than a consumer will even consider reading and (c) risk not aligning with instructions that do come with pool covers or water care items.

We suggest leave instruction requirements to what a pool heater manufacturer should know about and tell the consumer, which can and should include what the energy efficient rating of the product is. If this is the intent of what “instructions for proper energy efficient operation” is requiring, we suggest the verbiage be updated accordingly. PHTA also understands much of this instruction language was in the current Title 24 language, which we did not catch in past rulemaking cycles, but it is imperative the instructions be updated to be clear on what a pool heater manufacturer is required and with what makes sense based on the scope of their product.

Section 110.4 (b)2. Piping

PHTA and CPSA recommend the following edits:

- (b)2. Piping.** At least ~~18~~³⁶ inches of horizontal or vertical pipe shall be installed between the filter and the heater or dedicated suction and return lines, or built-in or

built-up connections shall be installed to allow for the future addition of solar heating equipment;

Reasoning: PHTA and CPSA urge the Commission to follow the ANSI/PHTA/ICC-15 Standard that has been adopted in countless states and local jurisdictions via adoption of either the International Energy & Conservation Code (IECC) or International Swimming Pool & Spa Code (ISPSC), or direct state code references such as the Florida Energy Code. This standard requires a minimum of 18 inches and although the standard applies to residential pools, there is no difference in commercial versus residential application when adding piping for the future installation of solar heating. Simply put, 18 inches is sufficient in either case.

The 18 inches of horizontal or vertical pipe is more than enough room to provide two Ls and a T with a valve. In addition, 36 inches could not work in some spaces, as there are cases where not enough room will exist on the pool pad or equipment room. In canvassing our members and solar representatives, no one has said 18 inches of pipe for a solar pool heating installation is not adequate. Please also see the drawing of a typical solar piping kit that is available on the market, along with a photo of an install using 2.5" plumbing (attached to submittal). These kits are available with all pre-cut components that then get assembled in the field, using the 18-inch minimum requirement. If these 18-inch kits were not adequate in some instances, installers would let kit manufacturers know. The fact is they do work and we encourage the Commission to align with what is both on the market and in national codes and standards.

Section 110.4(c) Heat Source Sizing

PHTA and CPSA recommend the Commission consider adding in additional exceptions under 110.4(c) as follows:

[Exception 4 to Section 110.4\(c\): Gas heating systems used exclusively for permanent spa applications or where gas utilities already exist on the property.](#)

[Exception 5 to Section 110.4\(c\): Gas heating systems used exclusively for permanent spa applications when there is not adequate solar access for a solar swimming pool or spa heating system to be installed.](#)

Reasoning: Gas pool heaters are federally regulated by the Department of Energy; thus, requiring such heaters to have minimum energy efficiency requirements to be sold. Although the current proposal allows for gas pool heaters as a back-up or to be replaced when already being used by a consumer for their pool or spa, it does not provide allowance in additional situations that should be considered.

By adding an exception for consumers who already have gas utilities or who are simply looking to heat a permanent spa, it provides a practical heating solution. Consumers want choice. The fact the federal government allows for gas pool heaters that meet energy

conservation standards, but then a citizen of California would not be allowed to utilize this option (in cases where it makes sense), limits practical and energy efficient options for consumers.

By adding an exception for allowing gas heating systems used exclusively for permanent spa applications, when there is not adequate solar access to install a solar heating system, this provides another way for a consumer to utilize a practical heating solution.

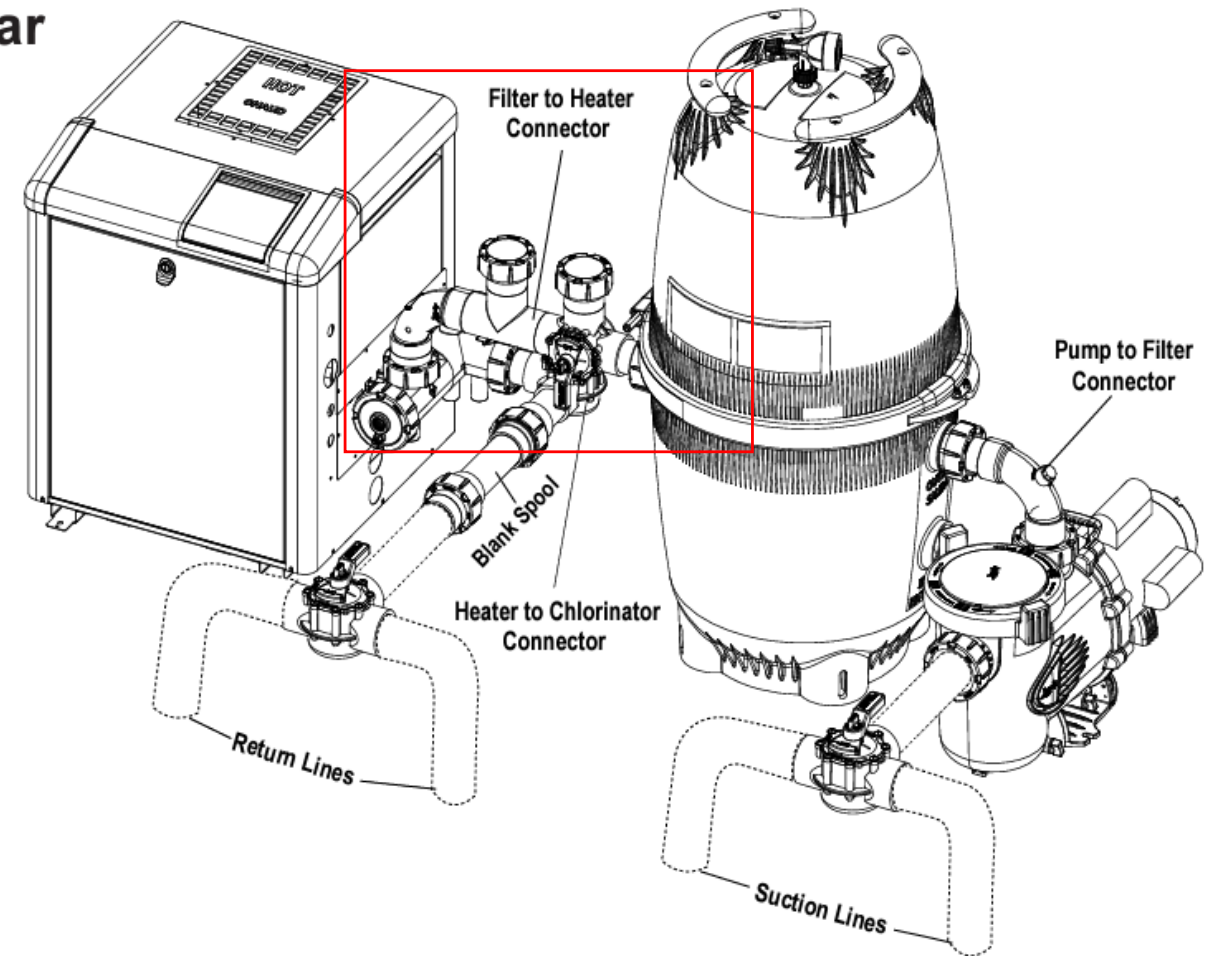
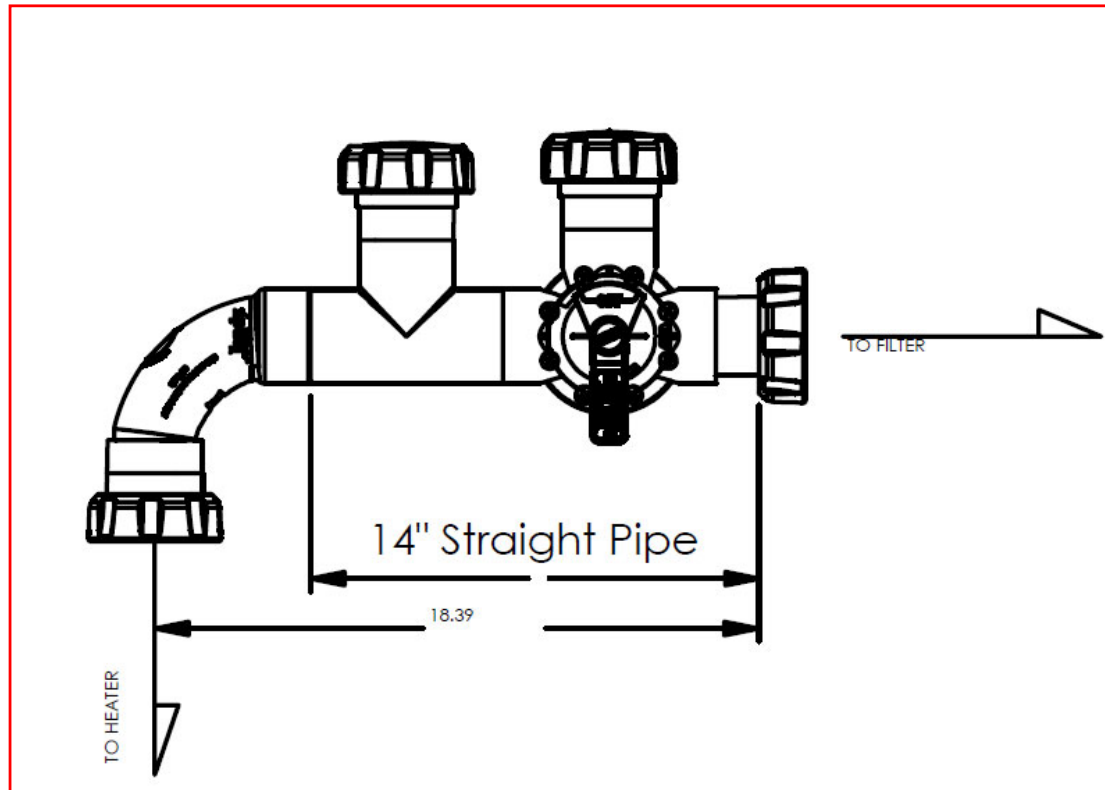
In closing, PHTA and CPSA would also encourage the CEC to explore ways to make it clearer that back-up systems to the solar and heat pump requirements, even in new installations, can be gas heaters. It is not currently clear in the proposed language but it is our understanding that is the intent, along with listed exceptions.

Typical Solar collector plumbing kit available in market

- Jandy VPK-CVSLR
- Accommodates 2" and 2-1/2" plumbing.
- 14" Straight pipe requirement



CV Solar



Installed Solar Plumbing Kit Using 2-1/2" Pipe

