



*The Association of  
Pool & Spa Professionals®*

REFLECT SUCCESS

March 30, 2015

CALIFORNIA ENERGY COMMISSION  
Attention: Docket No. 15-BSTD-01  
Dockets Office 1516  
Ninth Street, MS-4  
Sacramento, CA 95814

California Energy Commission

**DOCKETED**

**15-BSTD-01**

**TN 75597**

**MAR 30 2015**

To Whom It May Concern:

The Association of Pool & Spa Professionals (APSP) welcomes the opportunity to comment on Docket No. 15-BSTD-01 with regard to the swimming pool and spa provisions found within Title 24, Part 1, Chapter 10, and Part 6 (California Energy Code) 2016 Building Energy Efficiency Standards. Since 1983, APSP has been accredited by The American National Standards Institute (ANSI) as the Standards Development Organization for the nation's pool and spa standards and currently counts 13 American National Standards under its purview. These national consensus standards establish voluntary minimum guidelines that, when adopted by governments and agencies, have the force of law. Two of our standards are relevant to this rulemaking: ANSI/APSP/ICC-5 Standard for Residential Inground Swimming Pools and ANSI/APSP/ICC-15a 2013 Standard for Residential Swimming Pool and Spa Energy Efficiency.

Currently the rule references the 2003 edition of the APSP-5 Standard and we would suggest this be updated to reflect the 2011 edition. The APSP 5-2011 Standard addresses safety associated with the Virginia Graeme Baker Act, which changed ANSI standards significantly after 2007. Further, it contains additional safety related language regarding means of exit/entry, which is another important aspect to drowning prevention.

APSP also suggests that the CEC consider referencing the APSP-15 Standard as a substitute for the current/proposed CEC residential swimming pool and spa energy efficiency code requirements that are provided in Sections 110.4, 110.5 and 150.0. The requirements found in these sections are all part of the APSP-15 Standard with very little deviation. We believe this national consensus standard would continue to provide the energy efficiency the CEC requires for pools and spas, and at the same time ensure consistency with what is currently referenced and required within the International Swimming Pool & Spa Code and the International Energy Conservation Code.

Further, by referencing the APSP-15 Standard the following areas found within section 150.0 would be addressed:

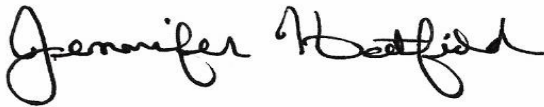
- (p)1.B. requires pump flow rates to be calculated using  $H=Cx F^2$  where C is the coefficient for Curve A or C. This flow rate is what is published in the APSP and CEC pump databases and is not relevant in the body of the rule itself, as it makes the rule confusing and unnecessarily burdensome.
- (p)1.C. limits pump selection/performance just as APSP-15 did prior to the addenda A that was adopted in 2013. This addendum limits the maximum filtration flow rate to only multi and variable speed pumps; clarifying that it does not apply to single speed pumps. The reason is that the small pools that utilize a single speed pump of less than 1 HP are so limited in pump size/performance that head pressure is too low to allow heaters and sanitizers to work, neither of which are considered auxiliary loads, and they need to run during the normal filtration cycle. This problem was identified in Florida and the same problem exists in California. Pools utilizing the single speed pumps cannot follow the current CEC requirements when it comes to maximum filtration flow rates due to the fact the pool system will not work properly;

therefore the change provided in APSP-15 addenda A needs to be considered in California.

- (p)2.B. requires pool piping to be sized based on auxiliary load, meaning a vanishing edge pool that needs a high flow rate to make it work, also requires pool filtration pipe to be sized according. The impact, a pool with a thirty-foot vanishing edge requires the whole pool be piped using 4" pipe, assuming 140 gpm to make the vanishing edge work properly (max flow rate for 3" pipe @ 6 fps = 138 gpm). This issue is also addressed in the APSP-15 standard.
- (p)3. provides for filter sizing that is ambiguous and unclear to the user of the rule as to what it means. The filter sizing requirements found in APSP-15 we believe are clear, concise and consistent with the CEC requirements.

These are some of the areas we believe can be improved upon by removing the pool and spa requirements and replacing them with a requirement to follow the APSP-15 Standard. If there are concerns with adopting this standard in total we welcome the opportunity to discuss this with the Commission going forward. We respectfully request the Commission to please review the electronic copy of the APSP-15 Standard we have enclosed with this comment. In addition, we have enclosed a copy of the 2011 edition of the APSP-5 Standard.

Respectfully submitted,

A handwritten signature in black ink that reads "Jennifer Hatfield". The signature is fluid and cursive, with the first name and last name clearly distinguishable.

**Jennifer Hatfield**

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