

DOCKETED

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Comment Received From: Phil Gelhaus

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Introduction: Foundation for Pool & Spa Industry Education

Additional submitted attachment is included below.



California Energy Commission
Re: Docket No. 15-AAER-02
Comments: From February 18, 2016 Staff Workshop

February 29, 2016

Introduction: Foundation for Pool & Spa Industry Education (FPSIE)

Re: Education on Appliance Efficiency for Pool Pumps, Pool Motors, and Portable Electric Spas

To: Ben Fischel, Sean Steffensen, and CEC related parties

From: Philip Gelhaus FPSIE Chairman

Dear Committee,

Michael Orr Executive Director of Education and myself attended the Pre-Rulemaking Appliance Efficiency workshop on February 18, 2016. The CEC workshop presentation was well prepared and enlightening. The leadership role and direction of the State of California and the legislative mandates for energy and environmental conservation in the coming years is monumental. The California Energy Commission has clearly taken on the challenge to meet the State's objectives, which in my opinion will set the bar for standards in a future National standard through the Department of Energy.

During the meeting of February 18, 2016 the initiatives underway for Swimming Pool Pumps, and Hot Tubs are complex in nature. These proposed two tiered energy saving achievement programs for future Title 20 California Code of Regulations, Sections 1601 through 1609, impose greater knowledge throughout the chain of supply, from the manufacture to the consumer, due to the complexities of the design, installation, programming requirements, to achieve the operational optimization of the desired reduced energy consumption goals.

It is without question on Swimming Pool Pumps (VSP pumps and related timer controls) currently available pumps are able to meet the current and future objectives from my understanding of the products now developed, and are actually being promoted by the Pool Industry and many of the California Utilities (largely through utility rebate programs) and actually proactively being installed in relatively large retro replacements. I believe that there are other Swimming Pool related products currently manufactured,



being installed now primarily in newly constructed pools and in ground integral connected hot tubs to swimming pools that will further the opportunity for energy consumption reduction, primarily LED pool lighting in the retro market. Portable Hot Tub outside of using the cover and overall better insulating will be a challenge to save energy because almost all hot tubs require electric heating (resistant heating) that I know of known other heating devices with greater amp draw efficiencies.

With the type of knowledge base required by the trade and the consumer education to operate their pumps is a huge factor (in my opinion) to attain the optimization of meeting the current and future title 20 codes. At the February 18th meeting Education was brought up in discussion as part of the CEC guidelines considerations within the future code requirements. Two people, Gary Frenstrom (PG&E consultant) and Bob Nickels (IPSSA Independent Pool Spa Service Association) strongly voiced their opinion on education. Both mentioned FPSIE as already offering the unbiased education (FPSIE teaches all known Pool & Hot Tub energy saving equipment) to the trade and soon through a SMUD program ready to launch titled Pool Owners 101 consumer education booth offered in classroom and/or online.

I am sure that FPSIE being mentioned as an established Pool Industry Education Center at the February 18, 2016 workshop didn't reinstate with CEC staff?

FPSIE is a 10-year-old 501C3 "trade school" with planning for vocational and consumer training located at 598 Display Way Sacramento California, while also training at strategic locations throughout the state. In 2010 it was clear to the FPSIE board of Director's that the emerging VSP Pumps and related controls would become an industry challenge without a neutral based training program. The education on these products by manufactures were/are as much about sales and installation advantages, but are unique to each manufactures products. That is a biased method of a true objective type learning – objective training is the what and why FPSIE was set-up to achieve. In 2013 FPSIE became engaged with both SMUD and PG&E to write certification courses to enhance the Energy Saving Pool Pump rebate programs that helped drive consumer purchases of energy saving equipment. The reason these two Utilities started to seek an objective training certification program was largely due to consumer complaints, claims of savings on the month consumer utility bill were not being realized but the consumer. Much of the reason is do to bad installation and/or bad or lack of proper programing and informed installers presenting the consumer the right operational information. To try and remedy the complaints two Utilities then sought out FPSIE, and FPSIE along with SMUD and PG&E developed the Certified Aquatic Equipment Installer course (CAEI) as part of the "rebate" programs that where being offered. In 2015 FPSIE has also engaged with SCE



and LADPW on similar certification requirements for their own incentive rebate programs. FPSIE has certified over 1,500 CAEI students in the last three years. 2016 FPSIE is planning on expanding the courses to meet demand for the rebate programs. In the California retro fit market over 1 million old and antiqued swimming pools with energy hogging improperly designed (in today's terms) primary circulating filter pumps. It is my estimate based on canvassing manufacture and distributor 2013- 2016 sales that there has been about a 5 percent replacement of the by gone era of pumps made to date, largely because of Utility rebate programs. With that all said I think it is important the CEC considers continuing education certification and a universal rebate through ALL California based Utilities as part of the "package" of updating through code changes, while doing the core work in the technology research currently being conducted.

I would like to offer the CEC, FPSIE's "test Pool Aka the Tank" to aid CEC on testing and research lab work that FPSIE is willing to make available by appointment at nominal rental rate to CEC staff engineers and scientist. The FPSIE location is less than 10 miles from the state office. The Tank is a totally modular test station electrically and hydraulically equipped to test any brand pool pumps and related equipment.

I could write a book on this subject. I would like to propose that if any of this introduction makes any sense or compelling reason to pursue that FPSIE would be happy to host a meeting and tour of the FPSIE Educational center? If you would like to take a 5-minute visual tour of the FPSIE educational center here is a hyper link www.fpsie.org/about-2/video-tour.

Additionally, I also am currently Board member of California Pool Spa Association (CPSA) and I am sure that the leadership is actively behind properly legislated action that is fair to the trade they represent and to the consumers for which the trade serves. The Association Pool & Spa Professionals (APSP) National also has supporting educational course that FPSIE teaches to further educate the California work force. I am also a former National Board member of APSP 2006-09.

In closing, the work that the CEC has performed to date is admirable, and it is my hope that a fair and workable California code upgrade is in the making for the industry and the greater public benefit.

Swimcerely,

Philip Gelhaus
FPSIE Inc., Chairman