<b>Docket Number:</b>	15-AAER-02
Project Title:	Pool Pumps and Spa Labeling
TN #:	220517
<b>Document Title:</b>	Presentation - Efficiency Standards for Pool Pumps and Motors
<b>Description:</b>	By Jeff Farlow and Chris Wellborn of Pentair, August 3, 2017
Filer:	Sean Steffensen
Organization:	Pentair
Submitter Role:	Public
<b>Submission Date:</b>	8/2/2017 1:13:28 PM
<b>Docketed Date:</b>	8/2/2017

# **Efficiency Standards for Pool Pumps and Motors**

Docket Number 15-AAER-02



Aug 3, 2017

Comments Presented by:

Jeff Farlow – Program Manager Energy Initiatives Chris Wellborn – Regulatory Compliance Engineer









### Pentair's focus on Energy Efficiency

Pentair supports
the CEC efforts to
minimize the
energy
consumption of
swimming pools.



Eliminate the Energy Hogs!

### Pentair's Commitment to Energy Efficiency

Pentair has a long history of supporting efforts in CA and beyond to minimize swimming pool energy use.

- Development of innovative energy efficient products
- Pentair models represent 85 of the 242 pool pumps (35%) listed in the CEC Appliance database
- Support of utility incentive programs
- Significant investment in training
  - CEC Regulations, compliance, operation, etc.



ENERGY STAR Partner of the Year – 2014, 2015, 2016, 2017









#### Alternative #4 Approach

- Pentair supports harmonization with the U. S. DOE DPPP efforts and the *Motor-Weighted Energy Factor (MWEF)* appears to be a good measure and superior to using the typical *motor efficiency*. It is important that the motor and MWEF performance metric accounts for the energy saved through the affinity law.
- Before a full throated endorsement, Pentair would like the opportunity to test motors to evaluate the specific impact of the proposed MWEF levels.
- Pentair is concerned with an unintended consequence where a motor used on a compliant "finished good" pump, may not qualify as it's own replacement part.
- Pentair recommends that provisions be made to always allow compliant pump components be used as repair parts for those pumps.

#### Don't eliminate a pump's own repair part

### U. S. DOE Alignment & Implementation Dates

Pentair supports the U. S. DOE efforts to minimize pool pump energy consumption. Pentair was also very vocal on the need to close the replacement motor loophole. DOE has responded with a commitment to resolve that loophole and the initial meeting is scheduled next week, August 10, in Washington DC. The intent is to have the motor loophole issue resolved prior to the July 19, 2021 implementation date for DPPP.

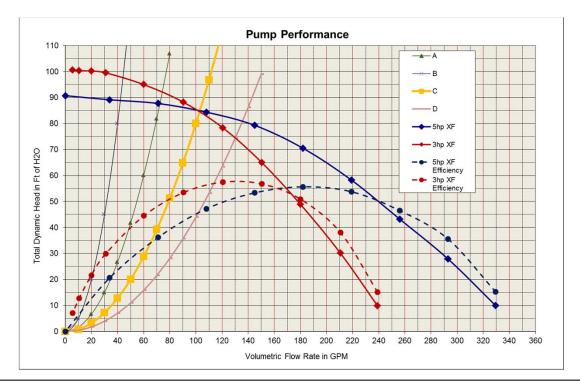
Pentair is concerned that due to the lack of inspector presence at a retrofit/replacement motor installation, a CA-only regulation would be unenforceable due to the inability to prevent sales across state lines from other markets and/or the Internet. As such, we would urge CEC to work through the DOE process to adopt Federal legislation that would be more enforceable.

#### Let the DOE process proceed without conflict

### 5 HP designs on Curve C systems

5 Hp pump designs are entering the market to address the low-head and high-flow conditions prevalent in the vanishing edge and water feature applications. Pentair is concerned that evaluating these products on a Curve C system can lead to unintended consequences and an elimination of very energy efficient options in

this category of product.



Additional System Curves - Curve C is too limiting for larger HP pumps

# Thank you for the opportunity to participate in this important endeavor.

## **Efficiency Standards for Pool Pumps and Motors**

Docket Number 15-AAER-02



Aug 3, 2017

Comments Presented by:

Jeff Farlow – Program Manager Energy Initiatives
Chris Wellborn – Regulatory Compliance Engineer







