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Docket Number:	17-AAER-14
Project Title:	Appliance Efficiency Standards Certification Rulemaking for Residential Air Filters, Residential Pool Pump and Motor Combinations, and Replacement Residential Pool Pump Motors
TN #:	217978
Document Title:	APSP Storable Pool Pumps Workshop Slides
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Docket Number:	17-AAER-03
Project Title:	Appliance Efficiency Standards Emergency Rulemaking for Residential Pool Pump and Motor Combinations
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Presenters

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Chairman APSP-14 Committee
- Mike McCague
Chairman International Hottub Association
Technical Committee
- Matthew Vartola
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Discussion Topics

- CEC collaboration with APSP
- Exercise Spas
- Inflatable spas
- Energy Label
- Storable Pool Pumps

Storable Pool Pumps



Storable Pool Pumps

- In 2015 51,550 (estimated) storable pool sets were sold in California
- CEC data collection on pool pumps has not considered this category of product
- Storable Pool pumps range from 0.04HP to 0.95HP
- Storable Pool pumps are generally one of two types: Capacitor Start Capacitor Run and Permanent Magnet Synchronous Motor (PMSM).
- Currently PMSM pumps are not an option for CEC database listing
- PMSM pumps currently can't meet the proposed motor efficiency targets
- 46,359 PMSM pumps were sold in California in 2015

Only option: Replace PMSM Pumps with Capacitor Pumps:



**160% increase in
annual energy use**



Storable Pool Pumps

Estimated annual power usage:

Based on 2015 sales: 6.0 GWh

Replacing PMSM pumps with Capacitor Pumps: 15.6 GWh

Increase in annual energy consumption: 9.6 GWh

Additional energy cost to consumer: \$1,475,708

Storable Pool Pumps

- Current annual energy use by PMSM Storable Pool Pumps is insignificant
- Improving efficiency of these pumps is not feasible and any possible savings realized would be insignificant
- The proposed regulation will drastically increase energy consumption in direct conflict with it's stated goal

Therefore:

PMSM Storable Pool Pumps should be exempted from the regulation