

## DOCKETED

<b>Docket Number:</b>	15-AAER-02
<b>Project Title:</b>	Pool Pumps and Spa Labeling
<b>TN #:</b>	212782
<b>Document Title:</b>	NRDC Comments on Revised Analysis of Efficiency Standards for Pool Pumps and Motors, and Spas
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Natural Resources Defense Council (NRDC)/Lauren Urbanek
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	8/14/2016 6:46:19 AM
<b>Docketed Date:</b>	8/15/2016

*Comment Received From: Lauren Urbanek*

*Submitted On: 8/14/2016*

*Docket Number: 15-AAER-02*

**NRDC Comments on Revised Analysis of Efficiency Standards for Pool Pumps and Motors, and Spas**

*Additional submitted attachment is included below.*



NATURAL RESOURCES DEFENSE COUNCIL

## **NRDC Comments on Revised Analysis of Efficiency Standards for Pool Pumps and Motors, and Spas**

**Docket Number 15-AAER-02**

**August 12, 2016**

**Submitted by:**

Lauren Urbanek, Natural Resources Defense Council

On behalf of the Natural Resources Defense Council and our more than 380,000 members and online activists in California, we respectfully submit these comments on the California Energy Commission's (CEC) Draft Staff Report, Revised Analysis of Efficiency Standards for Pool Pumps and Motors, and Spas.

In general, NRDC supports the proposed standards for pool pump motors and portable electric spas proposed in the Draft Staff Report, Revised. As the CEC's Revised Report demonstrates, the proposed standards and labeling requirements are technically feasible, cost-effective for consumers, and will result in large energy and greenhouse gas emissions reductions in California. In total, the CEC estimates that the standards will save 226 GWh the first year the standards are in effect and 1,438 GWh annually after full stock turnover, reducing energy bills by \$230 million annually. The proposed standards will also reduce annual greenhouse gas emissions by 496 thousand tons of carbon dioxide equivalent, after full stock turn over. We urge the CEC to move forward with standards and labeling requirements for pool pump motors and portable electric spas as proposed in the Draft Staff Report, Revised. We offer the following specific comments on the proposal.

### **Pool Pump Motors**

NRDC supports the CEC's proposed standards for pool pump motors, as outlined in the table below.



**Table 6-3: Proposed Standards for Pool Pump Motors**

<b>Proposed Minimum Efficiency According to Modified CSA C747-09 Test Procedure</b>		
<b>Motor Design</b>	<b>Full-Speed (3450 RPM)</b>	<b>Half-Speed (1725 RPM)</b>
Single-Speed (0 total hp up to 0.49 total hp)	70%	N/A
Single-Speed (0.50 total hp up to 0.99 total hp)	75%	N/A
Variable-/Multiple-/Dual-Speed (1 to 5 total hp)	80%	65%

Source: California Energy Commission

NRDC strongly supports expanding the existing scope of coverage to all pool pump motors under 5 total horsepower (HP) regardless of application. This change helps to eliminate confusion by expanding the requirement to commercial applications in addition to residential applications.

Motors between 1 and 5 total HP will be required to be two-speed, multi-speed, or variable speed. This is an achievable, cost-effective requirement, as this technology is widely available and already in use in the small commercial and multi-family pools where it would apply.

NRDC also supports shifting from a prescriptive to a performance standard for pool pump motors less than 1 horsepower. The proposed levels are realistic and achievable and provide flexibility for manufacturers to meet the standard with a variety of technology options.

*Recommendations:*

NRDC recommends that the CEC require any pool pump motor of 1 total HP or greater to be sold with an onboard control, or be able to operate only with the presence of a control. This requirement will ensure that motors will not be installed to run at a single speed.

NRDC recommends that the CEC work with the Department of Energy and other stakeholders to clarify the interaction between DOE’s pending pool pump standards, the CEC pool pump motor standards, and any future DOE standards.

**Portable Electric Spas**

NRDC supports the clarified scope and definitions for portable electric spas proposed by the CEC, and also supports the uniform standby power performance standard, the new test requirements, and the new labeling requirements. NRDC is particularly supportive of the explicit clarification that inflatable spas, exercise spas, and combination spas are included in the scope of the rulemaking.



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NRDC supports the CEC's amended spa cover requirement. In previous comments, NRDC recommended that the CEC require spas to be sold with the cover they are tested with. CEC's proposed standard allows even higher efficiency covers to be sold with spas, if they are listed as a separate entry within the CEC database. This means that the energy consumption of the spa/cover combination listed on the label will be the least efficient combination allowable, giving the consumer the "worst case" energy consumption scenario. This is an appropriate change that benefits consumers.

In summary, we support the proposed standards for pool pump motors and portable electric spas proposed in the Revised Draft Staff Report and urge the CEC to formally proposed standards based on the analysis. We appreciate the opportunity to submit these comments.

Sincerely,

Lauren Urbanek  
Senior Energy Policy Advocate  
Natural Resources Defense Council