

## DOCKETED

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# Portable Electric Spas

CEC Staff Workshop

Developed by Energy Solutions  
On behalf of the California IOUs

February 18th, 2016



# IOU Involvement in Spa Energy Efficiency

- 2004** IOUs propose CASE study for portable electric spas
- 2006** Performance standard for standby power takes effect
- 2008** Cal Poly study of portable electric spas verifies savings
- 2013** Current rulemaking begins, CEC asks for labeling proposal

# Current Title 20 Portable Electric Spa Standards

**Portable Electric Spas.** The normalized standby power, as defined in Section 1604(g)(2)(I), of portable electric spas manufactured on or after January 1, 2006, shall be not greater than  $5(V^{2/3})$  watts where  $V$  = the fill volume, in gallons.

# IOU Involvement in Current Rulemaking

**July 29<sup>th</sup>, 2013:** IOUs submit labeling proposal to CEC

**January 2015:** CEC Public Meeting, asks for standards proposal in addition to labeling

**April/ May 2014:** IOUs engage with APSP-14 to negotiate label and updated standards level

**May 15<sup>th</sup>, 2014:** IOUs submits a CASE report to CEC reflecting industry consensus

**September 12, 2014:** APSP-14 creates their new standard “ANSI/APSP/ICC-14 2014” reflecting IOU/ industry consensus

# IOUs Support CEC Staff Proposal

IOUs support the CEC staff proposal and believe the proposed standards are cost-effective, achievable and will lead to significant savings statewide. (~140 GWh)

The CEC Staff proposal makes three important changes to the current Title 20 standards including:

1. Clarification of the definition of portable electric spas
2. An updated portable electric spa standby standard
3. Requiring a labels on all portable electric spa

# Definition of a Portable Electric Spa

## Current T20 Definition:

*“Portable electric spa” means a factory-built electric spa or hot tub, supplied with equipment for heating and circulating water.*

**CEC Staff has proposed the following definitions that clarify that inflatable and exercise spas are included.**

*“Portable electric spa” means a factory-built and free-standing electric spa or hot tub, supplied with equipment capable of for heating and circulating the water inside a rigid, flexible, or inflatable shell.*

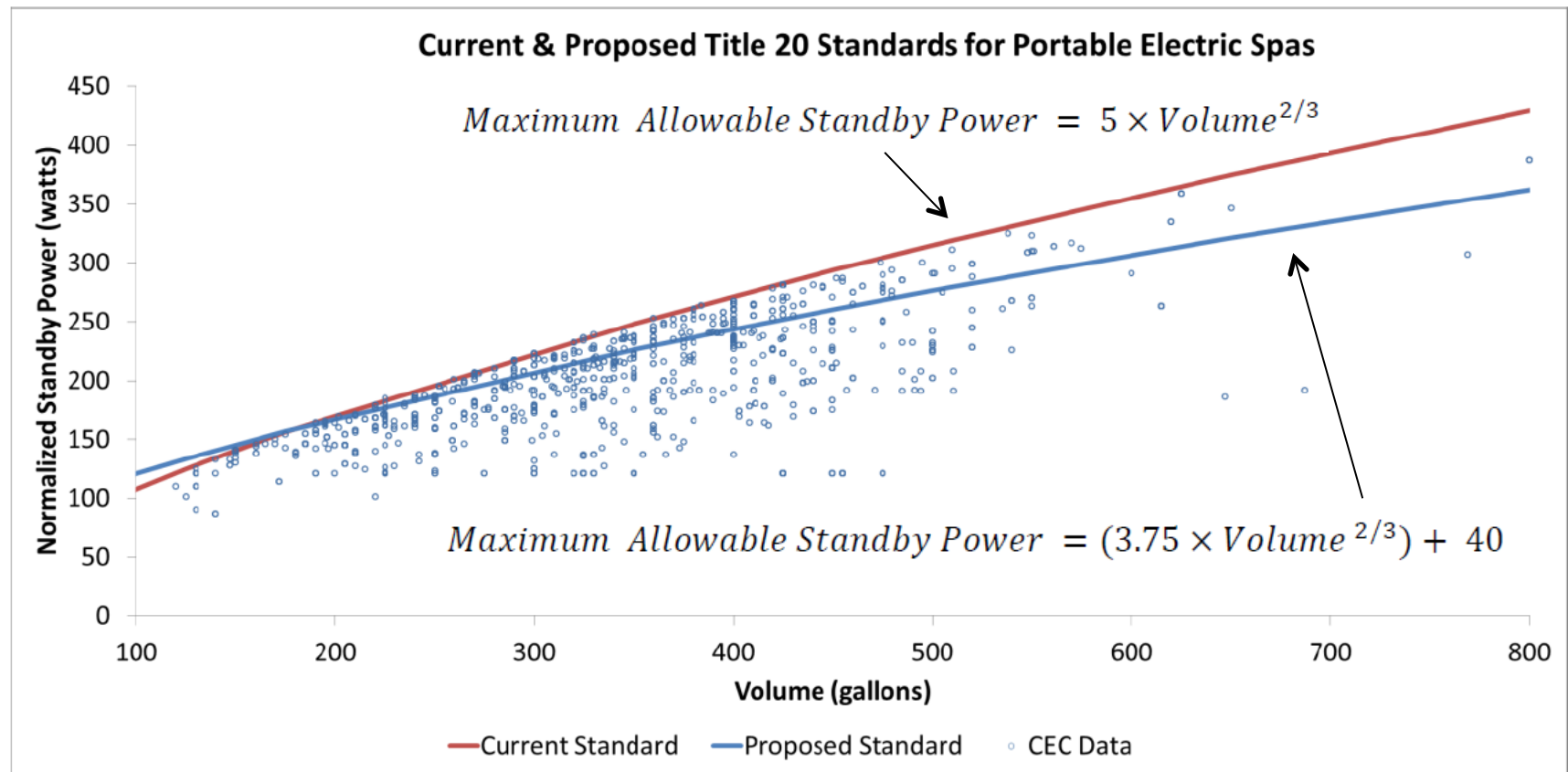
*“Combination spa” means a portable electric spa with separate bodies of water capable of heating each body of water at different temperatures.*

*“Exercise spa” (also known as an “endless pool” or “swim spa”) means a portable electric spa designed to produce a water flow intended for water therapy or fitness training, including swimming in place.*

# Strengthening Standby Standards

IOUs support CEC's adoption of the APSP-14-2014 maximum allowable standby standard.

Updating standard will yield a market weighted savings of 8% & eliminate 28% of spas in CEC database






# IOUs Originally Proposed Two Labels Designs


## Electric Spa Energy Guide

Make: XXX      Model: XXX      Volume: 300 gallons

Standby Power*	<b>150</b> watts
Maximum Allowable Standby Power	224 watts
Yearly Standby Energy Costs	<b>\$210</b>
Based on year-round operation and 16 ¢/ kWh	
Performance compared to CA Spa Standards	
<p>CA 2006 Standard      25%      50%      Most Efficient →</p> <p style="text-align: center;">33%</p>	
<p>This spa uses <b>33%</b> less standby energy than required by California's Title 20 Appliance Standards</p> <p style="font-size: x-small;">*For non-swim spas, Standby Power refers to the power consumed while spa is not in use (cover is on), heated to 100F and the jets, lights, audio etc. are off. For more information see <a href="http://www.energy.ca.gov/appliances/">http://www.energy.ca.gov/appliances/</a></p>	
	
<b>This Label Must Remain Adhered to Spa Until Point of Sale.</b>	

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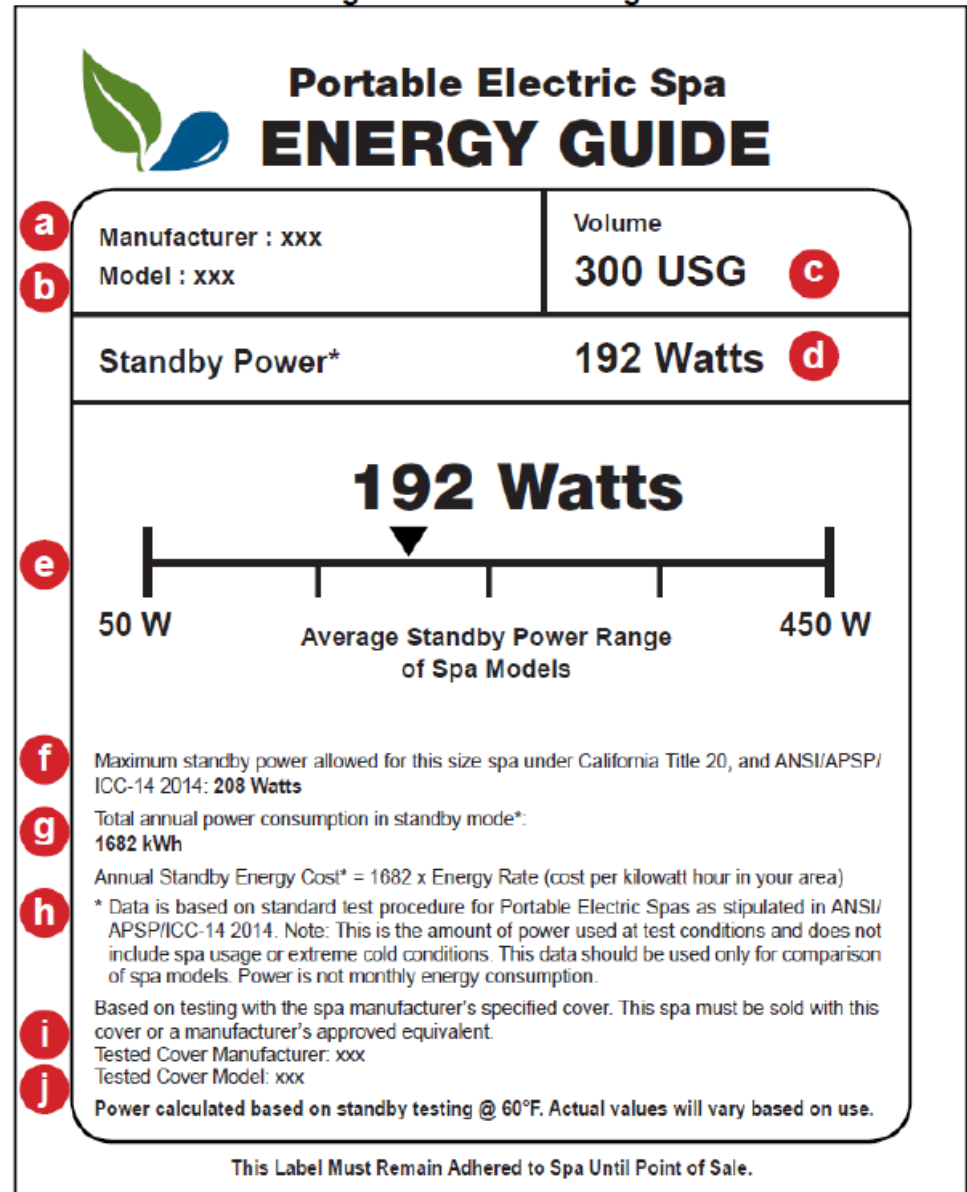
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# Spa Label

CEC staff proposed to adopt APSP/ IOU consensus label.

IOUs support this label design and concept as it will provide valuable information to consumers.

Figure 24: Label Design



Source: ANSI/APSP-2014

# Suggestions for Improvement

The IOUs broadly support the staff proposal, although recommend to increase clarity including:

- Require that portable electric spas are sold with the cover in which they are tested.
- Clarify the exception to APSP-14-2014 is supposed to be 6.3.1, not 6.3.
- Developing a separate scale of energy consumption for exercise spas
- Clarifying how “combination spas” are reference in the standard