

DOCKETED

Docket Number:	15-AAER-02
Project Title:	Pool Pumps and Spa Labeling
TN #:	212250
Document Title:	Portable Electric Spas CEC Staff Workshop
Description:	N/A
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Organization:	Energy Solutions on behalf of California IOUs
Submitter Role:	Public
Submission Date:	7/12/2016 2:17:51 PM
Docketed Date:	7/12/2016

Portable Electric Spas

CEC Staff Workshop

Developed by Energy Solutions
on behalf of the California IOUs

July 13th, 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

2012- 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 29th, 2013- IOUs submit labeling proposal to CEC

January 2015th - 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 15th, 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

February 18th, 2016- IOUs participated in CEC Staff workshop and submitted comments

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. (~160 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 spas

Definition of a Portable Electric Spa

Current T20 Definition:

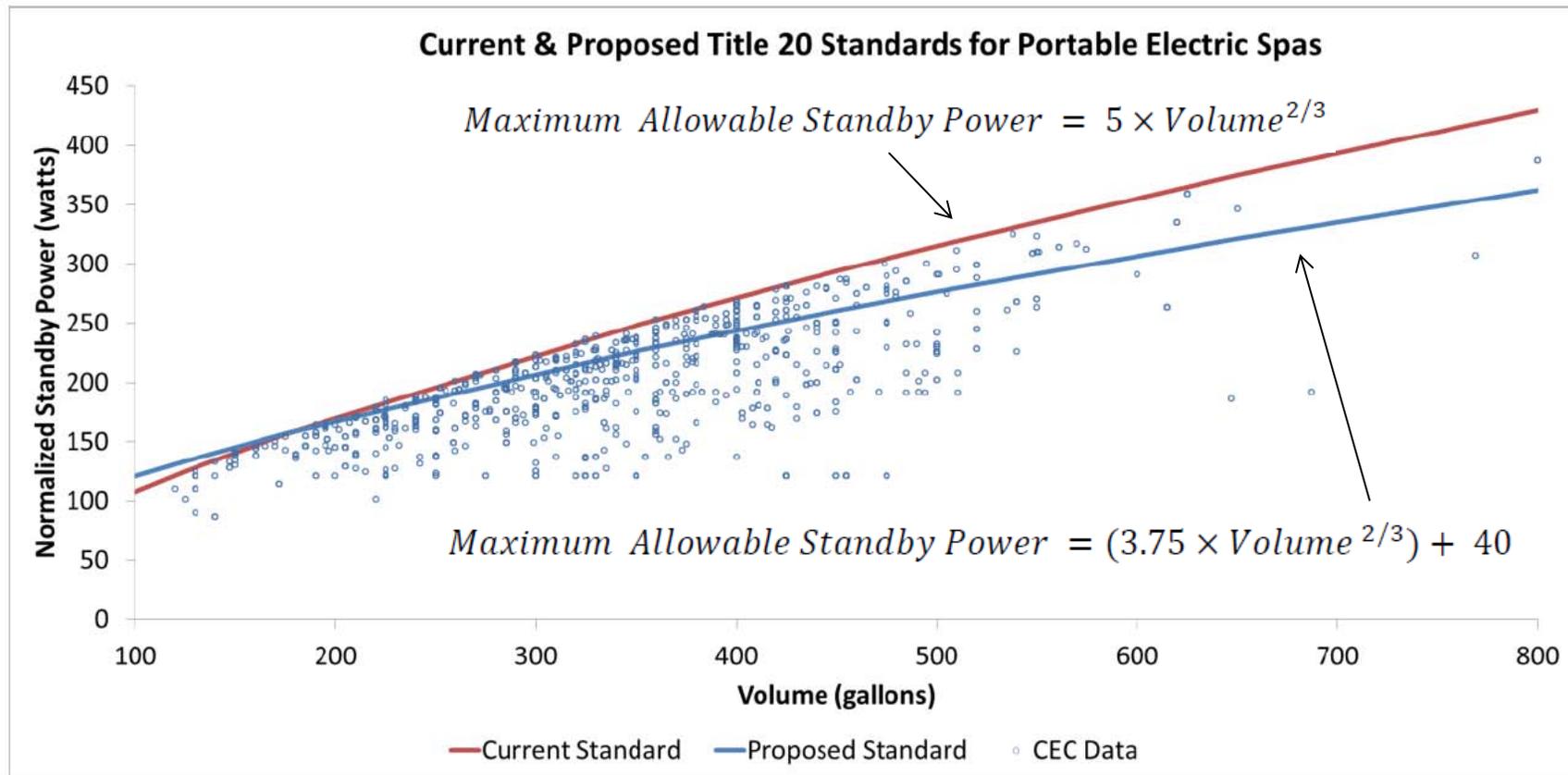
“Portable electric spa” means a factory-built electric spa or hot tub, supplied with equipment for heating and circulating water.

CEC Staff has clarified that this definition covers traditional, storable, exercise, and combination above-ground spas.

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*	150 watts
Maximum Allowable Standby Power	224 watts
Yearly Standby Energy Costs	\$210
Based on year-round operation and 16 ¢/ kWh	

Performance compared to CA Spa Standards

CA 2006 Standard 25% 50% Most Efficient →

33%

This spa uses **33%** less standby energy than required by California's Title 20 Appliance Standards

*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 <http://www.energy.ca.gov/appliances/>

This Label Must Remain Adhered to Spa Until Point of Sale.

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Energy Efficiency Performance

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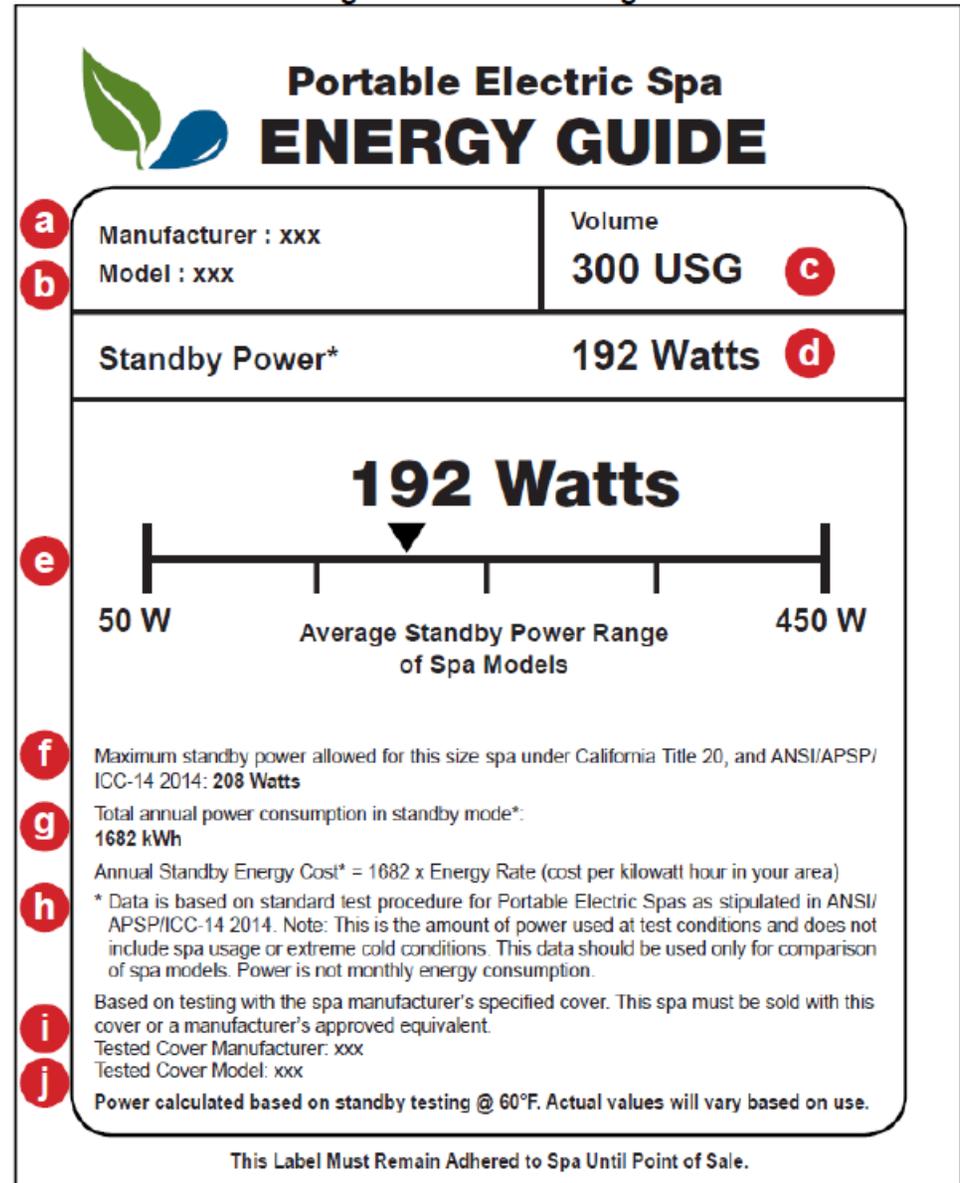
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Spa Label

CEC staff proposed to adopt APSP/ IOU consensus label.

IOUs broadly 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, but will make recommendations to improve the proposal:

- We support the upper limit of the label to represent a different fixed value for each category of portable, exercise and combo spas as opposed to maximum allowable standby level.
- We support combination spas having just one label and that they be tested as specified in APSP-14-2014.