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Docket Number:	18-AAER-02		
Project Title:	Appliance Efficiency Standards Rulemaking for Portable Electric Spas and Battery Charger Systems		
TN #:	223187		
Document Title:	Presentation - Portable Electric Spas and Battery Charger Systems and the Negative Declaration		
Description:	Staff presentation at the adoption hearing held on April 11, 2018 on Appliance Efficiency Regulations for Portable Electric Spas and Battery Charger Systems		
Filer:	Jessica Lopez		
Organization:	California Energy Commission		
Submitter Role:	Commission Staff		
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### Energy Efficiency Standards Rulemaking for Portable Electric Spas and Battery Charger Systems

#### April 11, 2018 Business Meeting

Jessica Lopez Associate Energy Specialist Appliances and Outreach & Education Office Efficiency Division





# **Portable Electric Spas**





### **Statewide Use**









Standard Spas

Exercise/ Swim Spas

**Combination Spas** 

Inflatable Spas

Spa Type	Standard	Exercise	Combination	Inflatable	Total
Stock (Effective Year)	880,895	46,670	8,751	18,233	954,548
Energy Use (GWh/yr)	1,829	253	55	43	2,180



### **Statewide Benefits**

- Reduces electricity demand
- Reduces greenhouse gas emissions
- Energy Savings:

	First-Year Sa	avings (2019)	Complete Stock Turnover Savings (*2021, **2028)	
Туре	Energy Consumption (GWh/yr)	Savings (\$ Million)	Energy Consumption (GWh/yr)	Savings (\$ Million)
Inflatable Spas	7.4	1.4	23.8 <sup>*</sup>	4.4
Standard, Exercise, Combo Spas	18.6	3.4	218.2**	40.5
Total	26	4.8	242	44.9





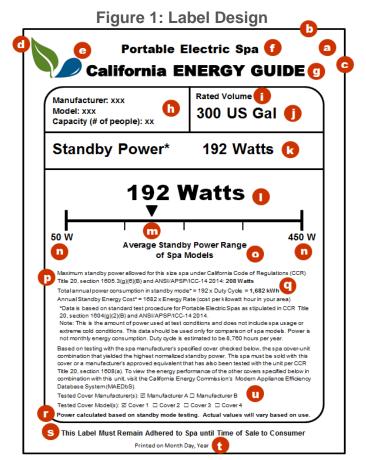
# Portable electric spas would maintain the existing broad scope that includes:



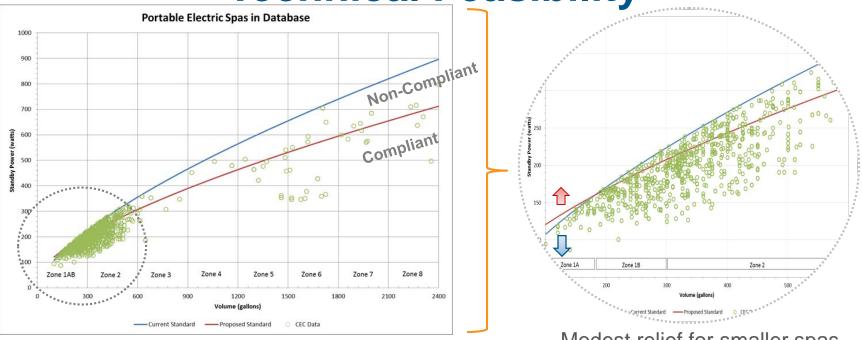
# **Proposal for Portable Electric Spas**

- Clarifies the scope
- Updates the performance standard for standard, exercise, and combination spas
- Creates a new separate performance standard for inflatable spas
- Updates the test procedure
- Updates certification & test lab report requirements
- Adds a labeling requirement

### Effective Date: June 1, 2019



### **Technical Feasibility**

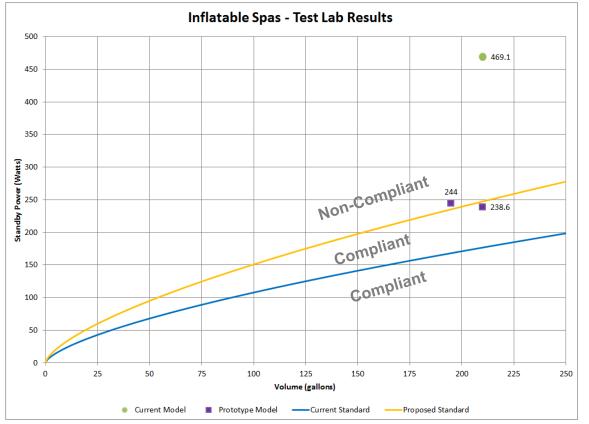


#### Table 3: Compliance Rates

#### Modest relief for smaller spas

Spa Type	Zones	Compliant (%)	Non-Compliant (%)
Standard Spas	1AB to 3	79	21
Exercise Spas	4 to 8	58	42
Combo Spas	-	44	56
All Certified Units		77	23

### **Technical Feasibility – Inflatable Spas**



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### Table 4: Compliance Rates forInflatable Spas

Year	Compliant (%)	Non- Compliant (%)	
Present	0	100	
Effective Year	33	67	



### **Life-Cycle Cost and Benefits**

Table 5: Unit Energy Savings and Life-Cycle Costs/Benefits

	Design Life (years)	Energy Savings (kWh/year)	Life-Cycle Costs (\$/unit)	Life-Cycle Benefit (\$/unit)
Standard Spas	10	307	\$ 100.34	\$ 569
Exercise Spas	10	1,426	\$ 230.34	\$ 2,645
Combination Spas	10	1,643	\$ 231.51	\$ 3,047
Inflatable Spas	3	1,180	\$100.83	\$ 657



## **Recent Updates**

- 15-day language:
  - Clarifies the label shall be placed on the unit's retail packaging for inflatable spas
  - Allows manufacturers to list additional spa covers on the label
- 15-day comment period:
  - Deadline April 6, 2018
  - No substantive comments were received



# **Battery Charger Systems**



# **Proposal for Battery Charger Systems**

- Clarifying the marking requirement shall apply to only state-regulated battery chargers
- Upcoming federal efficiency standards do not include a marking requirement for these products.





# Initial Study and Proposed Negative Declaration

for Portable Electric Spas and Battery Charger Systems



# **Initial Study and Negative Declaration**

- This initial study demonstrates that the proposed energy efficiency regulations for portable electric spas and battery chargers **will not** have any significant adverse effect on the environment.
- Therefore, a negative declaration is the appropriate environmental document.
  - Comment period ended on March 19, 2018.



# **Questions & Comments**

