DOCKETED

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Project Title:	Pool Pumps and Spa Labeling
TN #:	212253
Document Title:	Presentation APSP Review of CEC Staff Report on Portable Electric Spas
Description:	Review of CEC Staff Report, Revised Analysis of Efficiency Standards for Pool Pumps and Motors, and Spas
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APSP
The Association of
Pool & Spa Professionals™

Review of CEC Staff Report Revised Analysis of Efficiency Standards for Pool Pumps and Motors, and Spas Docket Number 15-AAER-02

APSP
The Association of
Pool & Spa Professionals™

Presenters

- Angelo Pugliese

  Chairman APSP-14: Portable Electric Spa Energy Efficiency Committee

- Mike McCague

  Chairman International Hottub Association Technical Committee

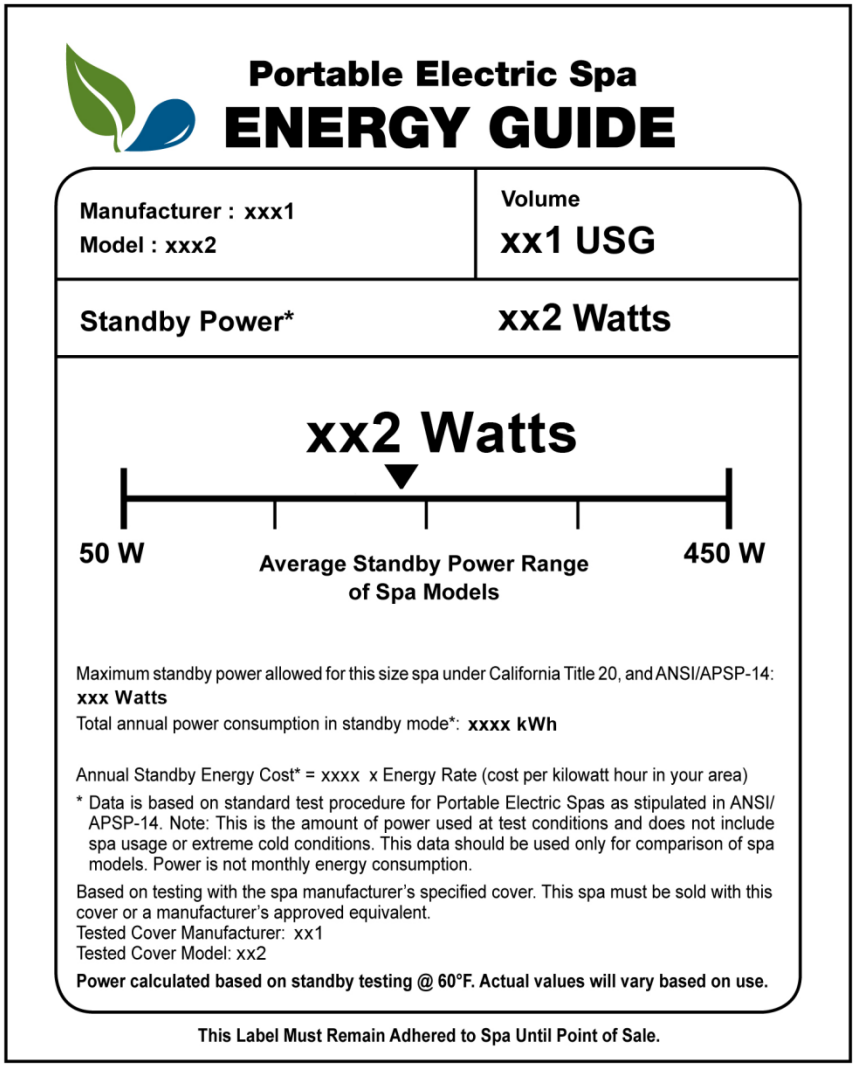
Discussion Topics

- Reference to 6.3.1
- Energy Label
  - Impact of changing the bar graph
  - Combo exercise spas labeling option

Reference to 6.3.1

- The staff report references sections 6.3.1 which in draft language was the exercise spa energy formula of $5*V^{2/3}$
- Published September 2014 Standard references the exercise spa allowed energy formula in 8.2.

APSP-14 Energy label



Portable Electric Spa
ENERGY GUIDE

Manufacturer : xxx1 Model : xxx2	Volume xx1 USG
Standby Power*	xx2 Watts

xx2 Watts

50 W — Average Standby Power Range of Spa Models — 450 W

Maximum standby power allowed for this size spa under California Title 20, and ANSI/APSP-14: **xxx Watts**

Total annual power consumption in standby mode*: **xxxx kWh**

Annual Standby Energy Cost* = xxxx x Energy Rate (cost per kilowatt hour in your area)

* Data is based on standard test procedure for Portable Electric Spas as stipulated in ANSI/APSP-14. Note: This is the amount of power used at test conditions and does not include spa usage or extreme cold conditions. This data should be used only for comparison of spa models. Power is not monthly energy consumption.

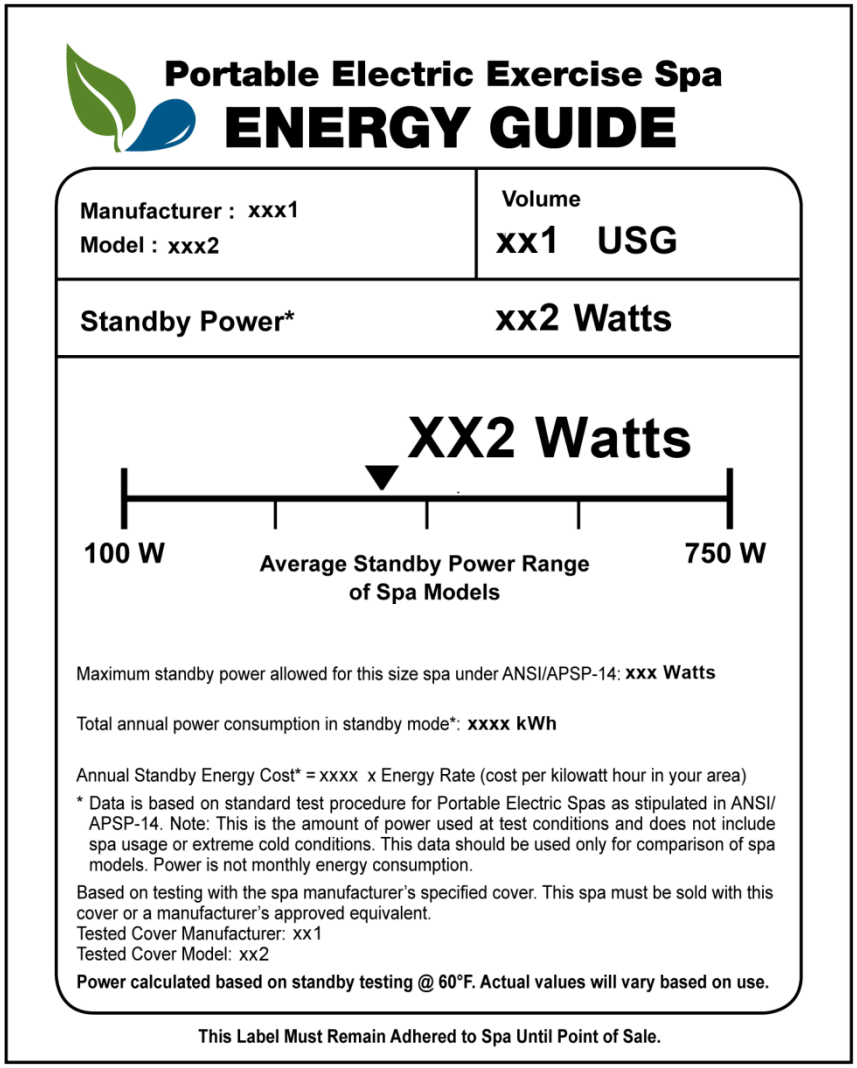
Based on testing with the spa manufacturer's specified cover. This spa must be sold with this cover or a manufacturer's approved equivalent.
Tested Cover Manufacturer: xx1
Tested Cover Model: xx2

Power calculated based on standby testing @ 60°F. Actual values will vary based on use.

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

Spa Energy Label Template

APSP-14 Energy label



Portable Electric Exercise Spa
ENERGY GUIDE

Manufacturer : xxx1 **Model : xxx2**	**Volume** **xx1 USG**
Standby Power*	**xx2 Watts**

XX2 Watts

100 W — **Average Standby Power Range of Spa Models** — **750 W**

Maximum standby power allowed for this size spa under ANSI/APSP-14: **xxx Watts**

Total annual power consumption in standby mode*: **xxxx kWh**

Annual Standby Energy Cost* = xxxx x Energy Rate (cost per kilowatt hour in your area)

* Data is based on standard test procedure for Portable Electric Spas as stipulated in ANSI/APSP-14. Note: This is the amount of power used at test conditions and does not include spa usage or extreme cold conditions. This data should be used only for comparison of spa models. Power is not monthly energy consumption.

Based on testing with the spa manufacturer's specified cover. This spa must be sold with this cover or a manufacturer's approved equivalent.
Tested Cover Manufacturer: xx1
Tested Cover Model: xx2

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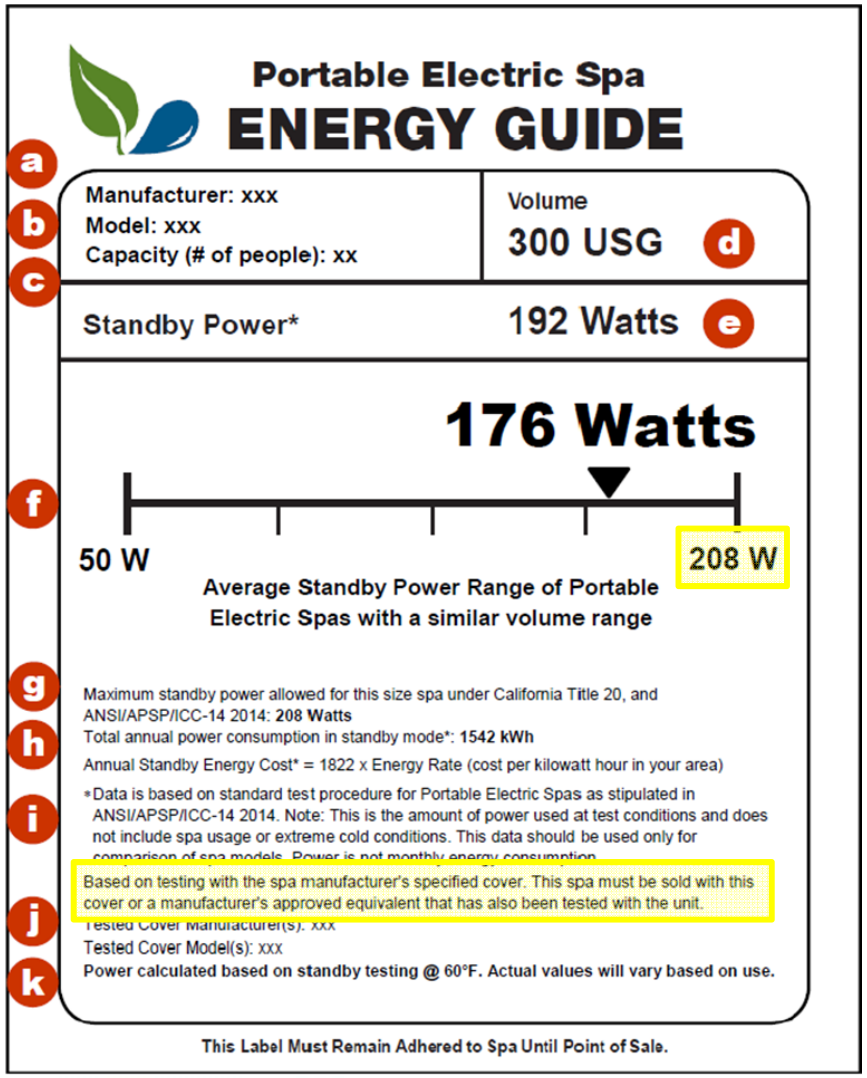
Exercise Spa Energy Label Template

CEC Proposed Energy label



Changes:

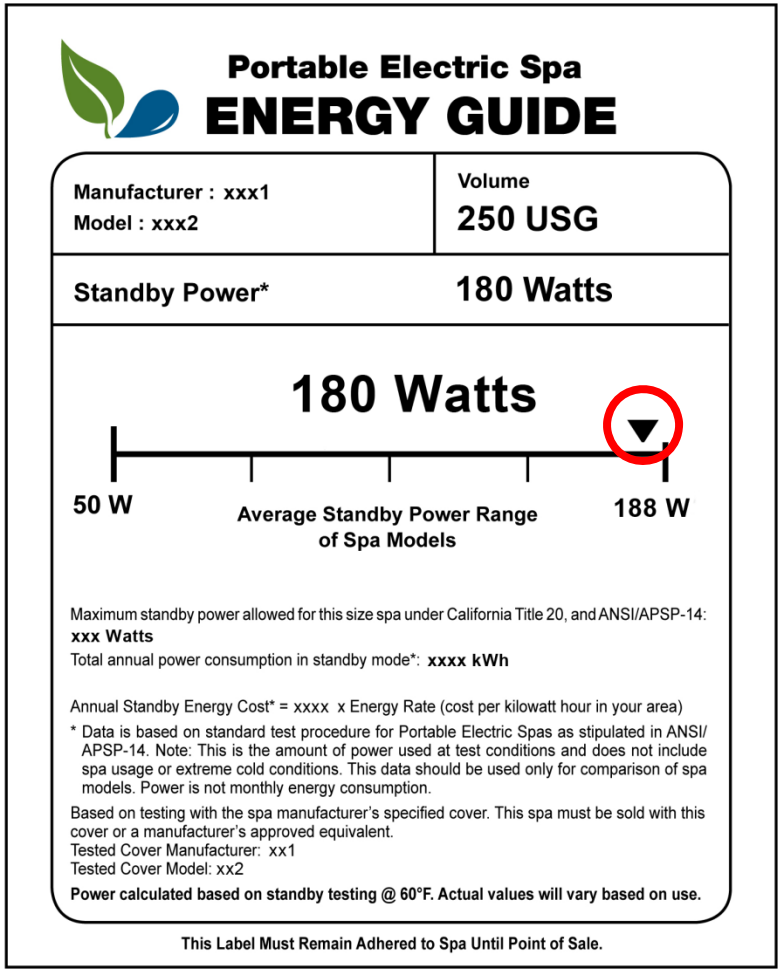
- Bar chart maximum limit set by individual spa's max allowed energy.
- Additional language specifying cover must be tested on the spa.

How People Shop for Spas

- Over all size
- Cosmetic appeal (color and seating)
- Listed features and functions
- Performance numbers

Which Spa is Better?

SPA: A?



Portable Electric Spa
ENERGY GUIDE

Manufacturer : xxx1 Model : xxx2	Volume 250 USG
Standby Power*	**180 Watts**

180 Watts

50 W — Average Standby Power Range of Spa Models — 188 W

Maximum standby power allowed for this size spa under California Title 20, and ANSI/APSP-14: **xxx Watts**

Total annual power consumption in standby mode*: **xxxx kWh**

Annual Standby Energy Cost* = xxxx x Energy Rate (cost per kilowatt hour in your area)

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Tested Cover Model: xx2

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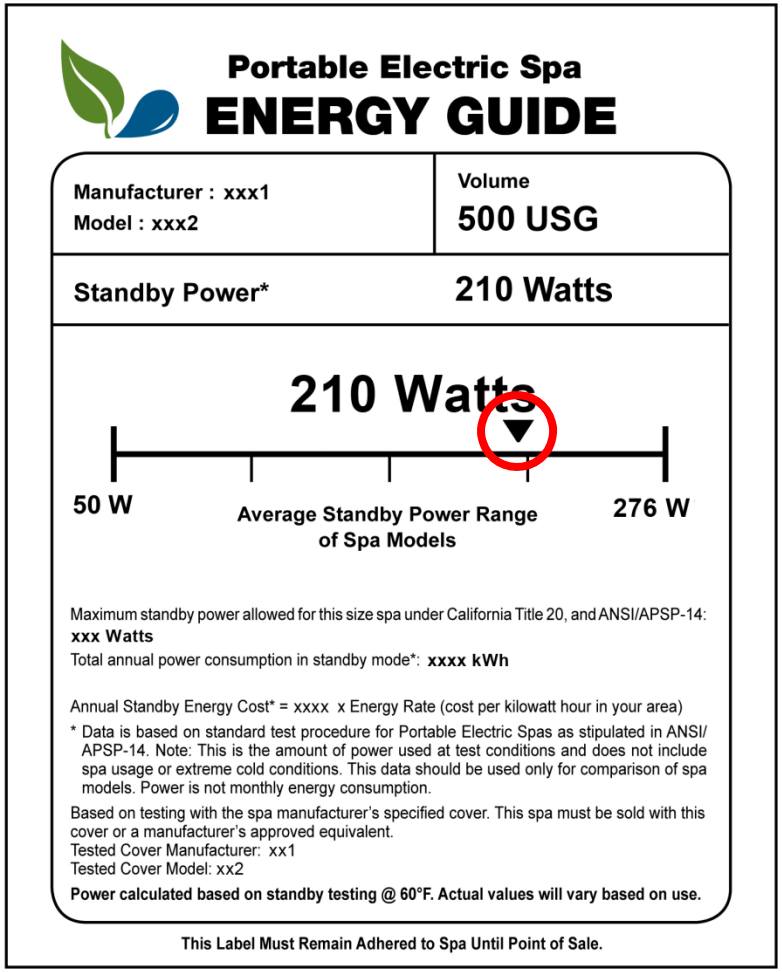
This Label Must Remain Adhered to Spa Until Point of Sale.

Which Spa is Better?

SPA: B?



Portable Electric Spa
ENERGY GUIDE

Manufacturer : xxx1 Model : xxx2	Volume 500 USG
Standby Power*	**210 Watts**

210 Watts

50 W — Average Standby Power Range of Spa Models — 276 W

Maximum standby power allowed for this size spa under California Title 20, and ANSI/APSP-14: **xxx Watts**

Total annual power consumption in standby mode*: **xxxx kWh**

Annual Standby Energy Cost* = xxxx x Energy Rate (cost per kilowatt hour in your area)

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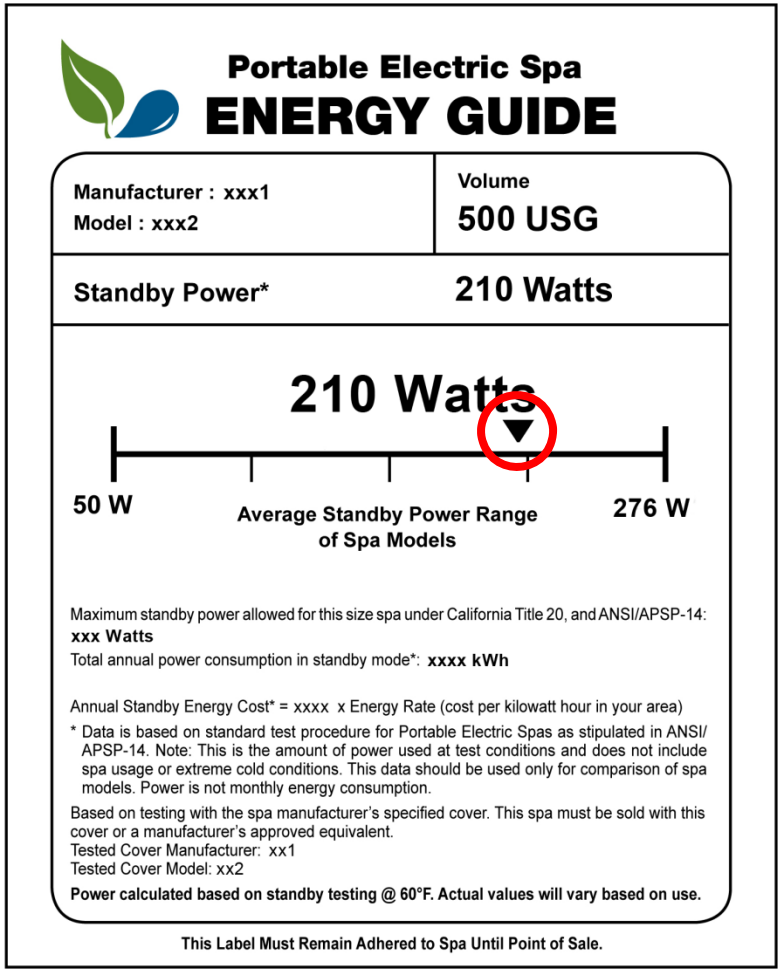
Which Spa is Better?

SPA: B?

Spa B is better. The label tells me it is more efficient.



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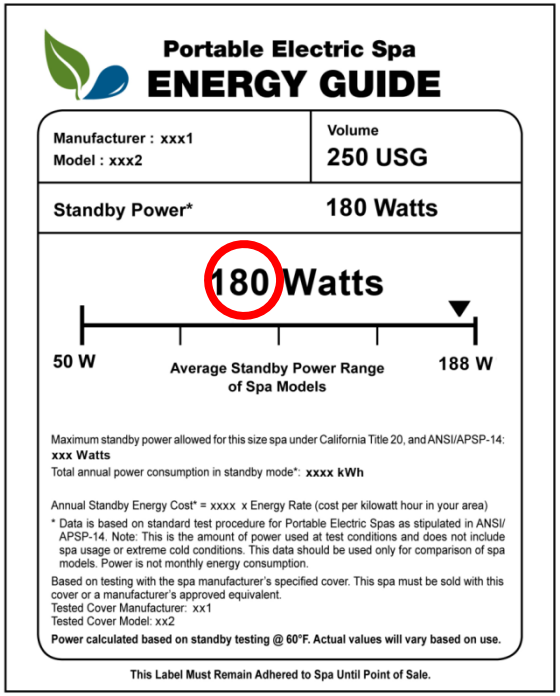
Which Spa is Better?

Spa A is the true better spa for California. It uses less energy over all.



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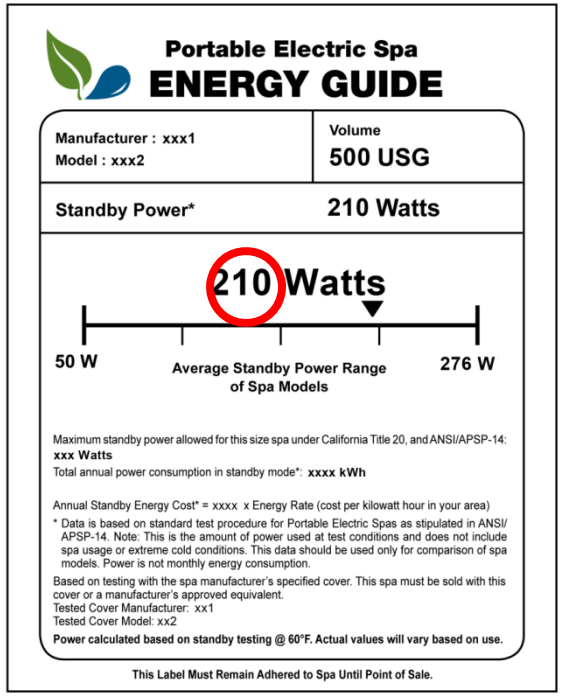

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Problems with Proposal

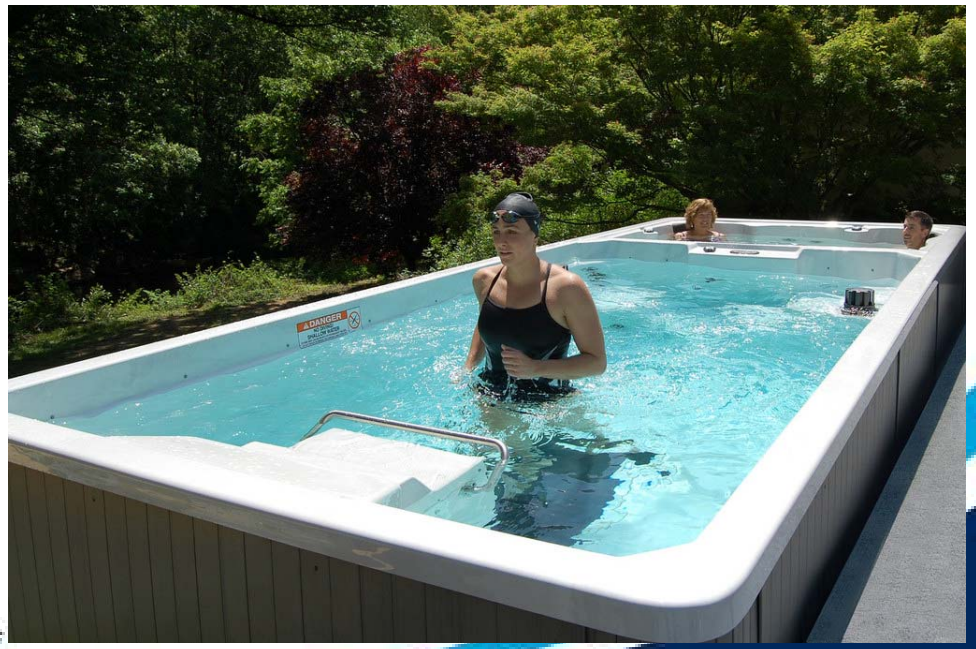
- An energy bar chart based on spa maximum allowable energy by volume is only comparable to itself.
- The visual guide can drive people to purchase higher energy using spas.

Label Recommendation

- Use the existing industry label comparing the industry spas as a whole.
- The label could push people to purchase spas that use less energy.

Combo Exercise Spa Label

- Proposed is a new single label showing energy individually for the therapy and exercise portions of the spa.



Recommendation

- Allow the option to apply a separate spa label and exercise spa label

Rational

- Very few combo spas are built
- Spa OEMs typically only have one model
- Extra burden and cost to produce a low usage label when the OEM is already producing separate spa and exercise spa labels in volume.

Thank you for your consideration