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Additional submitted attachment is included below.

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February 29, 2016

California Energy Commission
Docket No. 15-AAER-02
1516 9th Street, MS-4
Sacramento, CA 95814

To Whom It May Concern:

The following is submitted on behalf of the Association of Pool and Spa Professionals (APSP) and its inflatable spa members, in response to the California Energy Commission (CEC) Staff report on the Analysis of Energy Efficiency for Pool Pumps and Motors, and Spas:

Introduction

The inflatable spas first came into the market about 6 years ago with limited distribution. In the past 3 years, these products have gained much wider distribution in response to consumer demand. These products are now sold via mass market retailers such as Walmart, Target, and Kmart. Online sales have also grown with significant volume being generated by Amazon, Walmart.com and VM Innovations. Price points typically range from the low $300 to $600. While there are units available at higher price points, the volume of sales on these units is low.

Product life

Inflatable spas typically include warrantees of less than 2 years. The typical expected useful life for this product is about 3 years.

Target Market

The product is primarily marked to consumers who seek to have the spa experience with a much lower investment than is possible with Portable Spas. These are typically middle class and below consumers many of which are non-homeowners. According to customer service data, 25% of consumers are over the age of 50 with 5% of customer service calls citing the use of the spa for pain relief purposes. The product features 110 volt plug and play connectivity which eliminates the need for dedicated circuits installed by an electrician. The inflatable spa also allows consumers to utilize the product on a more temporary basis as it is simple to setup and take down for easy storage. Accordingly, the product is typically used during the warmer months and stored during inclement and colder weather. Because they are more commonly used on a seasonal basis and because they can be more readily emptied and refiled their use of standby energy is substantially different than that of conventional portable spas.

Product Design Attributes

Inflatable spas are sold as an integrated product that includes an inflatable tub, equipment package, ground insulation pad, and inflatable cover. The products are designed to hold 4 to 6 people and typically contain 200 to 300 gallons of water. The equipment package includes an electronic control panel, a heater and filtration pump, at a minimum. Additionally, the equipment pack may include an air pump and or a jet pump. The control panel allows the consumer to select various modes including filter only (no heat) for a specified period of time, heat to a set temperature and hold, and air pump operation. Some inflatable spas include a limited number of jets (between 4 and 6) that are also controlled by the control panel.

Filter Pump energy usage

The integrated filter pumps utilize low power PMSM type motors rated at about 0.07 horsepower.

Heater usage

The integrated electric heaters are designed to heat the water up to 104 degrees. They are typically rated at 1,200 to 1,400 watts and are controlled by the central processor. The heater operation requires that the filter pump be operating. If the ambient temperature is too low, the heaters typically stop heating after a preset period of time if the target temperature is not reached.

Air injection

Some models include an air injection pump that are typically rated between 1 and 1.2 horsepower.

Jet operation

Massage jet equipped units typically utilize pumps that are powered by capacitor start capacitor run type single speed motors of less than 1 horsepower.

Typical performance data using the current requirement found in the 2015 California Appliance Efficiency Regulations section 1604 G (2), Test Method for Portable Electric Spa indicates a standby power performance in the area of 400 to 500 (E/t) due primarily to the use of an inflatable structure and cover.

Opportunity for energy savings

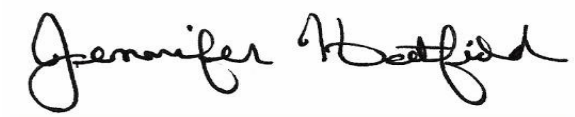
While there may be opportunities to improve the efficiency of this class of spas, it must be noted that the current designs were derived using efficient components so as to maintain a current draw within the limits of normal household 110 volt outlets. The only meaningful gains would necessarily come from the addition of insulation. One can look to the soft sided spas that are currently listed on the CEC database as an example of the insulation changes that would be required. These soft sided spas typically retail over $2,000, are sold by specialty stores, and require truck delivery which would negate the utility and value of the inflatable type of spa.

Proposal

Inflatable spas will be addressed by the APSP-14 committee as a separate category in order to establish a specification and target performance criteria that is achievable by the industry. We are proposing that the CEC database be expanded to include a separate category for inflatable spas with manufacturers

and distributors reporting the energy use of their products so that CEC can gather appropriate data from which a reasonable efficiency target may be established within a reasonable period of time, hopefully in conjunction with the work done on APSP-14.

We thank the CEC for its time and consideration. Respectfully submitted,



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