## Appliance Standards Awareness Project American Council for an Energy-Efficient Economy Natural Resources Defense Council Northwest Energy Efficiency Alliance

April 18, 2022

Mr. Jeremy Dommu U.S. Department of Energy Building Technologies Program, EE-5B 1000 Independence Avenue SW Washington, DC 20585

RE: Docket Number EERE–2022–BT–DET–0006/RIN 1904–AF31: Proposed Determination of Portable Electric Spas as a Covered Consumer Product

Dear Mr. Dommu:

This letter constitutes the comments of the Appliance Standards Awareness Project (ASAP), American Council for an Energy-Efficient Economy (ACEEE), Natural Resources Defense Council (NRDC), and Northwest Energy Efficiency Alliance (NEEA) on the proposed determination of portable electric spas as a covered consumer product. 87 Fed. Reg. 8745 (February 16, 2022). We appreciate the opportunity to provide input to the Department.

We strongly support DOE's preliminarily determination that portable electric spas qualify as a covered product under the Energy Policy and Conservation Act (EPCA). Based on data on portable electric spa models in the California Energy Commission (CEC) database, DOE estimates that average standby power consumption<sup>1</sup> is 1,699 kWh/year,<sup>2</sup> which significantly exceeds the 100 kWh/year average annual perhousehold energy use threshold for classification as a covered product under EPCA. Furthermore, this is likely a conservative estimate of energy use since it does not include power consumed in startup mode or active mode,<sup>3</sup> and it also does not account for models sold in non-regulated markets that may not meet the CEC standards. We also support the proposed scope of coverage, which we understand would include standard spas, exercise spas, combination spas, and inflatable spas as defined in ANSI/APSP/ICC-14-2019.

Portable electric spas offer significant potential for energy savings. DOE estimates that the stock of electric spas is more than 5 million.<sup>4</sup> As shown in Figure 1 below, there are models of "standard" portable electric spas available on the market across a wide range of fill volumes that consume significantly less standby power than models just meeting current CEC standards.<sup>5</sup> The most efficient

<sup>&</sup>lt;sup>1</sup> Standby power includes power use to maintain the set temperature and to circulate and filter the water and may also include some ancillary power.

<sup>&</sup>lt;sup>2</sup> 87 Fed. Reg. 8748.

<sup>&</sup>lt;sup>3</sup> DOE notes in the proposed determination of coverage that CEC estimated that standby mode represents 75% of the energy consumed by a portable electric spa.

<sup>&</sup>lt;sup>4</sup> 87 Fed. Reg. 8747. DOE estimates that the stock of residential hot tubs is about 5.5 million and that 95% of these are electric spas.

<sup>&</sup>lt;sup>5</sup> Other states have also adopted standards for portable electric spas that are equivalent to the CEC standards.

models consume less than half the energy of models just meeting the CEC standards. DOE notes in the proposed determination of coverage that technologies available to improve the efficiency of portable electric spas include improved insulation, improved spa cover design, and improved pump and motor system design. We also understand that heat pump technology offers the potential to substantially reduce portable electric spa energy use.

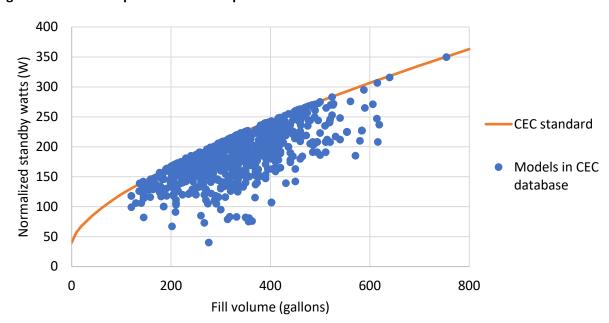


Figure 1. "Standard" portable electric spas in the CEC database<sup>8</sup>

Thank you for considering these comments.

Sincerely,

Joanna Mauer

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<sup>&</sup>lt;sup>6</sup> 87 Fed. Reg. 8747.

<sup>&</sup>lt;sup>7</sup> See, for example: <a href="https://www.arcticheatpumps.com/pool-spa-heat-pumps.html">https://www.arcticheatpumps.com/pool-spa-heat-pumps.html</a>.

<sup>&</sup>lt;sup>8</sup> https://cacertappliances.energy.ca.gov/Pages/Search/AdvancedSearch.aspx. Accessed April 8, 2022.