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## NRDC comments on Low Power Modes roadmap

Additional submitted attachment is included below.





# NRDC and ASAP's Response to CEC's Request for Additional Comments on Low Power Mode Roadmap, January 24, 2019 Webinar

Phase 2 Appliance Efficiency Roadmaps
Docket Number 17-AAER-12

April 2, 2019

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The Natural Resources Defense Council on behalf of our more than 95,000 California members who have an interest in receiving affordable energy services while reducing the environmental impact of California's energy consumption, and the Appliance Standards Awareness Project respectfully submit the following comments on the California Energy Commission's (CEC) January 24, 2019 webinar regarding a Low Power Mode Roadmap. Our comments build on the joint comments our organizations submitted in September 2017, and the NRDC comments submitted in August 2018.<sup>1,2</sup>

We strongly support CEC's initiative to develop an energy savings roadmap for non-federally preempted, electrically-powered devices in idle or low power modes. The purpose of this initiative is to limit energy wasted when such devices are connected to the electrical grid but inactive, i.e. are not delivering their primary services to the user (like a TV that has been turned off but still draws a significant amount of power).

#### **Background**

In 2015, NRDC released a report that analyzed smart meter data from 70,000 Northern California homes and found that electricity use by inactive devices represented nearly 23 percent of Northern California household electricity consumption.<sup>3</sup> This idle load is likely to increase as more devices include sensors, network connectivity, and displays.

The large idle load was caused by a large number of inactive devices that individually drew modest amounts of power, and also a few inactive devices that drew significant amounts of power (like hot water recirculation pumps that can draw up to 100 watts continuously, whether or not any hot water is

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<sup>&</sup>lt;sup>1</sup> https://efiling.energy.ca.gov/GetDocument.aspx?tn=219215

<sup>&</sup>lt;sup>2</sup> https://efiling.energy.ca.gov/GetDocument.aspx?tn=224716&DocumentContentId=55275

<sup>&</sup>lt;sup>3</sup> "Home Idle Load: Devices Wasting Huge Amounts of Electricity When Not in Active Use", June 2015, https://www.nrdc.org/resources/home-idle-load-devices-wasting-huge-amounts-electricity-when-not-active-use

being used). In aggregate, such devices account for the largest single category of electricity use in California homes. Much of this inactive or low power mode electricity use can be reduced through modern product design practices that reduce power consumption when a device is in an inactive or low power mode, like those used on smart phones to maximize battery life.

Capturing this energy savings potential is the next frontier of electrical energy efficiency. It is critical for California and the world to achieve the carbon and air pollution emissions reduction targets needed to mitigate climate disruption and reduce pollution-induced public health impacts.

A broad cross-cutting ("horizontal") approach is essential to achieving significant savings for the broad range of electricity using devices capable of entering inactive or low-power modes. This is because, as demonstrated in NRDC's 2015 report, no single category of device accounts for a large share of the energy savings potential. Capturing a significant share of the savings potential will require addressing most devices in the same way as battery charger standards covered most battery chargers.

### **Roadmap Approach**

NRDC and ASAP strongly support CEC's energy savings roadmap initiative. This is a new and innovative policy approach for some product categories that promises a more flexible and faster pathway than a conventional regulatory approach. The objective is to reduce regulatory burden, provide an opportunity for voluntary action by industry, with targets set by CEC to ensure that the level of ambition aligns with the state's climate and clean energy goals. If industry fails to respond to this voluntary approach, CEC can transition from a roadmap to a more traditional regulatory approach.

#### **Data Collection Procedure**

We support the iterative approach of collecting data, modifying scope, setting targets, and evaluating whether or not those targets have been met, as presented by CEC at the January 24, 2019 webinar.

Collecting energy use data and estimating energy savings opportunities for a broad scope of devices will allow CEC to identify and focus on devices that present the greatest savings opportunities. In addition, establishing a data collection procedure will allow manufacturers and other stakeholders to measure and report energy use of a broad range of devices in a consistent manner, and allow all parties to have informed discussions on roadmap scope and targets.

However, the data collection procedure need not be the same as a future regulatory test procedure. In keeping with the flexible nature of the roadmap, the data collection procedure simply aims to allow multiple stakeholders to collect data in a consistent manner, in support of the development of the roadmap.

#### Scope

NRDC and ASAP support CEC's proposal to keep the initial scope of the roadmap and data collection as broad as possible, to allow CEC to identify and focus on devices that present the greatest savings opportunities once energy use data has been collected.

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In closing, we encourage CEC to move expeditiously to finalize the data collection test procedure and start the data collection phase as soon as possible. Despite its simplicity, a roadmap approach will take time, and the magnitude of the energy wasted from devices that do not transition to best practice low power modes when inactive is a major barrier to California's climate and clean energy goals.

We appreciate the opportunity to provide this input and thank CEC for its consideration of our comments.

Respectfully submitted,

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