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Additional submitted attachment is included below.



NRDC Comments in Support of CEC's Proposal to Update the Definition of General Service Lamps

Docket Number 17-AAER-07

September 14, 2018

On behalf of its more than 90,000 California members, the Natural Resources Defense Council (NRDC) respectfully submits its comments in strong support of the California Energy Commission's (CEC) proposal to update the scope of products covered by its energy efficiency regulations for light bulbs sold in the State of California. The CEC proposal aligns the definition of general service lamps (more commonly known as everyday light bulbs) regulated in California with the federal definition that was published by the U.S. Department of Energy (DOE) on January 19, 2017. This update is critically important as the CEC's current definition and efficiency regulations fail to cover the roughly 300 million sockets in California that are estimated to contain an inefficient light bulb today.

Bringing the bulbs that go into these sockets – bulbs like 3-ways, reflector/directional, globe shaped, and candle/flame shaped – into the definition of state regulated general service lamps helps ensure that the replacement bulbs sold in California for these sockets after 2020 will be an energy efficient one and that California is positioned to enforce its standards should non-compliance occur. According to CEC estimates, the incremental savings from simply aligning with the 1/19/2017 DOE definitions, as well as extending the lumen range of lamps covered under the CEC regulations at the low and high ends, California will use 13,600 Gigawatts-hours/yr. less electricity and consumers will save \$2.4 billion each year on their utility bills once the full stock of inefficient bulbs turns over. In addition, much of the energy savings will occur in the early evening hours when the sun is no longer shining and solar power is not being generated.

These comments supplement [NRDC's presentation](#) at the CEC's August 28th workshop and our previously submitted written comments to the docket.

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What's wrong with the existing definition and why should CEC align with the new DOE definition?

The CEC regulations as they exist today are based on the 2007 federal definition of general service lamps (GSLs). That definition – and its exclusions and less stringent levels for certain types of bulbs – was based on the market as it existed more than 10 years ago and did not take into consideration the highly efficient and cost-effective LED products that are widely available today. DOE carefully reviewed the marketplace during its proceeding to update the GSL definition and found that most of the exclusions and wattage limits for certain types of bulbs were no longer warranted.

The updated DOE definition no longer maintains special treatment for lamps simply based on the shape of its enclosure or the type of base it has, except where truly warranted. The old definition, and corresponding minimum efficiency regulations, did not for example cover G, CA or F lamps, those with a round or candle/ flame shape enclosure, that used 40 Watts or less. Also lamps with a candelabra base, the type of screw base commonly found in chandeliers and sconces, were allowed to consume 60 watts under the old definition. As a wide variety of energy efficient LED replacement lamps already exist today for these lamps, these exclusions are no longer warranted. While the LED lamps may cost a few dollars more to purchase than the old inefficient one, they typically save the consumer \$50 to \$100 over their lifetime of 10 to 25 years and have pay back periods of less than a year.

The updated federal definition also brings into scope incandescent reflector lamps, the bulbs that go into recessed cans or downlights, track lighting and flood lights. Its critically important for California to include these lamps in its updated definition and regulations as they represent a very large savings opportunity given their popularity and high hours of use. LED replacements are widely available and in addition to their energy and bill savings, they last much longer, and consumers avoid the hassle of frequent bulb changes. The picture below is illustrative of the range of energy efficient LED reflector bulbs that are on the shelf today at a leading retailer ready to replace the old inefficient halogen and incandescent versions. (Note the wattages shown are of the old incandescent or halogen version and the actual lamp wattage of the LED bulb is typically 6 times lower.)



To demonstrate the savings provided by these bulbs, we provide a closer look at the Cree product shown below. This LED bulb only uses 16 Watts of power to produce the same amount of light as the inefficient version that consumed 100 Watts. In addition, this LED replacement bulb is dimmable, comes in different color temperatures, and has a 10-year warranty.



In summary, we urge the CEC to adopt the 1/19/2017 federal definitions for GSLs to ensure that virtually all of the everyday bulbs in the home are covered by the CEC standards and the potential savings and benefits are achieved in California. Failure to adopt the updated definition would leave CA vulnerable to increased sales of inefficient “loophole” bulbs and other lamps that were initially exempted.

NRDC Supports CEC's proposal to extend the lumen range in its definition for GSLs

The CEC proposes to include lamps between 150 and <310 lumens into its definition for GSLs. NRDC supports this proposal as it will ensure that lamps that are currently marketed as 25 and 40 Watt incandescent and halogen lamps will now be subject to the CA efficiency standards. One can easily imagine the case where a creative manufacturer who currently produces a 350 lumen incandescent lamp creating a new product where they bring down the light output to 300 lumens as a means to avoid the regulations. As we demonstrated at the recent CEC workshop, drop-in LED replacement lamps are widely available for a wide variety of low light output products.

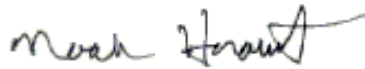
NRDC supports CEC's proposals on effective dates

The CEC's proposed effective date for its updated GSL definition is 1/1/2020. Unlike other regulations, this a “date of sale” effective date and retailers

would not be able to sell through their existing inventory purchased before that date. As the "backstop" in the federal energy bill was triggered, the updated DOE definition deploys the 1/1/2020 date of sale effective date. To be consistent with federal law, CA may not impose a later effective date and is required to apply the date of sale requirement once the federal standard is in effect.

For its proposal to regulate low lumen (150 - <310 lumens) lamps, California has proposed a 1/1/2020 effective date and applies the more conventional date of manufacture or import to California requirement. As these lamps are not included in the updated federal definition and not covered by federal pre-emption, California has flexibility in how it applies its effective date. NRDC supports the date of manufacture/import approach for these bulbs as proposed by CEC.

Submitted by:

A handwritten signature in black ink that reads "Noah Horowitz". The signature is written in a cursive, slightly slanted style.

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