

November 4, 2019

Mr. Rick Perry  
Secretary of Energy  
U.S. Department of Energy  
1000 Independence Avenue, S.W.  
Washington, DC 20585-0121

Attn: Docket No. EERE-2019-BT-STD-0022-0001

Re: Energy Conservation Program: Energy Conservation Standards for General Service Incandescent Lamps 84 FR 46830 (September 5, 2019)

Dear Secretary Perry:

The Pennsylvania Department of Environmental Protection (DEP) submits the following comments in response to the notice of proposed determination entitled *Energy Conservation Program: Energy Conservation Standards for General Service Incandescent Lamps*, published by the U.S. Department of Energy (DOE) on September 5, 2019 (84 FR 46830).

As part of its comments on the proposed determination, DEP incorporates by reference the contemporaneously filed comment letter submitted by the Attorneys General of New York, California, and numerous other states to DOE for Docket No. EERE-2019-BT-STD-0022-0001.

### **Introduction**

In 2007, Congress passed the Energy Independence and Security Act of 2007 (EISA) which amended the Energy Policy and Conservation Act (EPCA) and required DOE to initiate two rulemaking cycles to evaluate energy conservation standards for general service lamps (GSLs). The proposed rule is part of the second rulemaking cycle where DOE is required to determine whether standards in effect for general service incandescent lamps (GSILs) should be amended. GSILs or incandescent light bulbs are a subcategory of GSLs and include “A-lamps” or pear-shaped bulbs, about half of the light bulbs commonly used by U.S. consumers. In the proposed rule, DOE determined that the energy conservation standards for GSILs do not need to be amended.

On January 1, 2020, the minimum efficiency standard for GSLs automatically becomes 45 lumens per watt and DOE must prohibit the sale of GSLs that do not meet that standard as required by the EPCA. (42 U.S.C. 6295(i)(6)(A)(v)). However, this proposed rule ensures that the GSIL subcategory will not have to meet that standard. Thus, DOE’s proposed determination is designed to eliminate the 2020 energy conservation standards for half of the light bulbs commonly used throughout U.S. consumers’ homes and businesses.

## **Comments**

On September 5, 2019, DOE also issued a final rule withdrawing the revised definitions of GSLs, GSILs and other supplemental definitions, that were to go into effect on January 1, 2020 (84 FR 46661). Under that final rule, DOE eliminated higher efficiency standards for 5 sub-categories of commonly available light bulbs, the other half of light bulbs used by U.S. consumers. As a result, homeowners and businesses will not be able to purchase commonly used light bulbs, such as candle- and globe-shaped bulbs, candelabra-based bulbs, and reflector bulbs used in ceiling fixtures or track lighting, at a higher efficiency rating that would have reduced their electric bills and carbon dioxide emissions.

Since the enacted of the EISA in 2007, light-emitting diode (LED) technologies have developed significantly and LED bulbs are now readily available as a replacement option for all GSIL applications. The initial purchase cost of LED bulbs has also drastically decreased, and consumers are realizing that the electricity bill savings outweigh the purchase cost. There is no longer a sufficient reason to maintain a separate efficiency standard for GSILs and doing so wastes energy on outdated and inefficient technologies that produce more waste heat than illumination.

If DOE's proposed rule is adopted, there will be a significant increase in energy consumption, greenhouse gas emissions, and adverse economic impacts to U.S. consumers. Incandescent light bulbs produce only around 10 lumens of useful light output per watt of energy input. The remaining energy is lost as waste heat, which increases the thermal load in lit spaces and results in even more wasted energy in the form of higher cooling energy requirements to offset this lack of efficiency. On the other hand, current LED replacement technologies produce between 100 and 300 lumens per watt making LEDs between 10 and 30 times more efficient than the incandescent technologies which they replace. This results in a tremendous energy and environmental saving, just from using off the shelf and readily available technologies.

PA consumers will use over 58,500 MWh more electricity from the continued use of GSILs, releasing almost 41,400 metric tons of additional carbon dioxide emissions into the atmosphere annually. DOE states that more stringent standards for GSILs are not economically justified; however, this wasted energy will needlessly cost Pennsylvanians almost \$470 million a year.

All of this wasted energy, additional greenhouse gas emissions, and needless economic impact can and should be easily avoided by DOE simply allowing the automatic standards enacted by Congress in 2007 to take effect. Instead of raising the minimum efficiency standard as intended by the 2007 update to the EPCA, DOE is hindering homeowner and business choice, energy savings, and carbon dioxide emission reductions with this proposed rule and the final rule published on September 5, 2019.

## **Conclusion**

DEP strongly recommends that DOE revise this proposed rule by eliminating the GSIL subcategory and requiring a minimum energy efficiency standard of at least 45 lumens per watt for all light bulbs. This proposed rule does not adequately meet DOE's responsibility and

requirements under the EPCA to consider higher efficiency standards, and the long-term consequences for U.S. consumers and the environment are significant. DEP encourages DOE to proceed in a manner consistent with protecting our nation's air, land and water from pollution and to provide for the health, safety and economic interests of its citizens.

Thank you for your consideration in this matter. Should you have questions or need additional information, please contact David Althoff, Director of the Energy Programs Office, by e-mail at [dalthoff@pa.gov](mailto:dalthoff@pa.gov) or by phone at 717.783.0542.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick McDonnell". The signature is fluid and cursive, with a large initial "P" and "M".

Patrick McDonnell  
Secretary