VIEWPOINTS

Thomas Edison would not be happy with Energy Department

BY C. BARRY EDISON SLOANE AND J. HEYWOOD EDISON SLOANE New York Times Printed in the Sacramento Bee, 4-17-19

Among Thomas Edison's 1,000-plus inventions, his development of his patented incandescent light bulb surely was among his greatest. Yet Edison, our great-grandfather, recognized how wasteful the bulb was from the start. It gave off almost 90% of its energy as heat instead of light. Still, though the bulb worked extremely well in its own time, he never saw it as the endgame.

Our great-grandfather took out multiple patents on multiple inventions, including the light bulb, always with the idea that they could and should be improved.

It took more than a century before others came up with significantly more efficient incandescent bulbs. In the past two decades, the pace of improvement gained rapid momentum, leading to super-efficient, long-lasting light bulbs that save people agreat deal of money on electricity. That's the kind of progress Thomas Edison would have eagerly welcomed.

Despite these monumental advances, the Department of Energy now wants to roll back new efficiency standards signed into law by President George W. Bush and updated, as required, during the Obama administration. The latest update added inefficient three-way, reflector, globe-shaped and candelabra-style bulbs to the list covered by the standards. These incandescent and halogen bulbs are used in up to 2.7 billion lighting sockets.

The new standards, which would require these bulbs to be as efficient as widely used pear-shaped bulbs and would phase out inefficient incandescents and halogens, were approved in 2017 in the waning days of the Obama administration after a rule-making process of more than two years. Manufacturers and retailers have been preparing since then for the new rules to become effective on Jan. 1, 2020.

Unfortunately, the Trump administration plans to step back from that decision and exempt these bulbs from the standards. If that happens, American consumers will miss out on an estimated \$12 billion in annual savings on their utility bills, or about \$100 for each household, according to the Appliance Standards Awareness Project. It also means more electricity will need to be generated – 25 coal-burning 500-megawatt power plants' worth, based on calculations by the Natural Resources Defense Council – creating the same amount of pollutionthat spews from the tailpipes of 7 million cars a year.

Congress and the public need to register their strong opposition with the Energy Department by May 3 to increase the odds that the agency will do the right thing and maintain these new energy-saving standards, not narrow their scope.

In addition to abandoning the standards on those incandescent and halogen bulbs, the Trump administration may opt to not enforce standards that require traditional pear-shaped bulbs and others to be at least 65% to 70% more efficient than old incandescents, beginning next year. The state of California imposed such a requirement last year, but an Energy Department lawyer testified at an administrative hearing in February that the department did not consider itself obligated to do so nationally, though a decision had not been made.

These actions come as we face increasing threats from climate change. As the NRDC has noted, few actions can reduce the carbon dioxide emissions that are warming the planet as cheaply and easily as replacing energy-wasting bulbs with highly efficient ones.

Regrettably, special interests have reared their heads once again. Big bulb manufacturers supported by the Energy Department prefer totake the cheap, inefficient and environmentally harmful path for short-term profits.

Our great-grandfather's light bulb helped change the world. But it's almost 140 years old, and it's time tomodernize. Thomas Edison would have been the first to say so.

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There is a widely-known story prior to incandescent light bulb success where a reporter expressed amazement that Edison had tried 5,000 combinations of materials for the bulb but failed. Edison pooh-poohed the expectation of his quitting future attempts by saying he had successfully eliminated the 5,000 things that wouldn't work and was now much closer to success.

People of vision, curiosity, and science/engineering drive have always taken our society farther than it could have otherwise progressed. In medicine, we might still be using leaches and bleeding as treatment. In transportation the Transcontinental Railroad might have stopped at the Mississippi River. In lighting, without Edison we could still be burning gaslights inside buildings with too many fires. And in heating and cooling, we could still be stuck with the primitive absorption process, using vast amounts of gas for a few Btus of summer relief, instead of using efficient refrigerant compression.

For decades, the U.S. Department of Energy has striven for improvments, new technologies, and greater efficiencies—all of which make our economy strong and competitive while raising living standards for U.S. citizens. We have to hope that a combination of individual states' progress and policy will continue, and that DOE will return to its senses on lighting efficiency after the next election cycle. A few ideologues and politically-motivated actors should not be credited their "freedom" arguments, favoring stupidity over continued progress through appropriate regulation and market development.

America deserves to seek its best and to be its best. Throwing out years of efficiency progress in lighting technology so we can burn more coal to generate the necessary dirty electrons is a waste. In this time of climate defense awareness and necessary action, the costs of not cutting carbon are unthinkable, and we will not be able to afford them. Forrest Gump had it right, "Stupid is as stupid does." Damn straight!