

Future for incandescent light bulbs looking dim

July 22 2011, By Curtis Morgan

So, how many members of Congress does it take to screw up a light bulb?

It only sounds like a joke. The fate of the <u>incandescent bulb</u>, the oldest and most common of household electrical devices, has morphed into a political litmus test, one championed by conservative leaders from Rush Limbaugh to Republican presidential hopeful Michele Bachmann.

In a vote along party lines, the House last week blocked a GOP effort to repeal efficiency standards that will begin phasing out the worst wattwasters next year. But backers like Rep. Bill Posey who sees the notion of regulating bulbs as evidence of a "nanny state" run amok, haven't abandoned the right to light fight.

"This is a sore spot with people," said the Florida Republican. "My constituents overwhelmingly don't want the government to decide what kind of light bulb they want."

Whichever way the Washington debate goes, the future is dimming for cheap, old-school filament bulbs, which haven't changed much since Thomas Edison patented his design more than 130 years ago.

Along with now-common compact florescent bulbs, a new generation of light emitting diode (LED) bulbs claiming up to 23 years of life has begun showing up on store shelves and their eye-popping initial prices of \$50-plus have started to drop. Both kinds last years longer and sip



roughly a quarter of the juice of their predecessors.

David Schuellerman, a manager for General Electric Lighting, said demand for standard bulbs has dropped by half over the last five years, a trend he expects to continue as homeowners begin following the LED lead of business, which has already put the technology in everything from refrigerator cases to traffic signals.

Maintenance and energy saving easily justify higher initial costs, he said. "It's compelling when you think that these large companies that have the capacity to crunch the numbers - Starbucks, Walmart, Target - like LED for their stores,"

At <u>Light Bulbs</u> Unlimited in Fort Lauderdale, Fla., purchasing agent Marek Luce has seen increasing interest in LEDs, which are fully dimmable, burn much cooler and are so versatile they come in rope or tape strips now popular under kitchen cabinets. But he's also noted some runs on incandescents by customers worried about "bulb ban" rumors.

"At times, if they need one, they'll buy 10. It's not like they're buying 200 or 300," said Luce, who believes consumer education will ease concerns. "Nobody feels like anybody's opinion was asked. A lot of people are afraid of not being left with a choice."

The backlash has flummoxed environmentalists and energy efficiency advocates.

"Because the light bulb is so iconic, it's being used a poster child for a political debate about how much government should regulate," said Kateri Callahan, president of the Alliance to Save Energy, a Washington, D.C.-based nonprofit whose members include 150 major corporations and organizations. "To me, it's mind-boggling that we would try to take a step backwards from what we've been doing on a regular basis."



The standards - produced with bipartisan congressional support and signed by President George W. Bush in 2007 - were drawn up with the goal of reducing national energy demands and pollution. They mirror regulations that have been applied to appliances from refrigerators to water heaters since the 1970s.

Supporters insist the standards will save consumers billions of dollars over the long haul.

By 2020, when all bulbs will have to be about 28 percent more efficient than current standard bulbs, the average household bill is expected to drop by 7 percent, or \$85 a year, according to an analysis by the National Resources Defense Council. Another study by the American Council for an Energy Efficient Economy put overall savings for Americans at \$12.5 billion a year. The study also claims the new standards would eliminate the need for 33 power plants nationwide.

The rules, which match standards already in place in Europe, have support from lighting manufacturers, trade associations and the Obama administration.

Last week, U.S. Energy Secretary Steven Chu dismissed claims by critics that the standards amounted to a de facto ban of incandescents.

They do effectively phase out the cheapest standard bulbs by 2014, starting with 100-watt ones that are supposed to be off store shelves by January, although the House of Representatives on Friday approved an amendment to delay a ban on sales of the incandescent bulb for nine months, from Jan. 1 to the end of the fiscal year.

Manufacturers say they already have halogen-based incandescents available that offer similar quality light and dimming options but will cost a bit more.



"The only difference is they help American consumers save more money," Chu said.

But to some conservatives, the bulb regulations have become a lightning rod.

Limbaugh, on his radio show, called them an assault on personal choice, proclaiming, "Let there be incandescent light and freedom." Bachmann, the Minnesota representative and tea party favorite who has strong poll numbers among GOP presidential hopefuls, proposed one bill to repeal the standard.

The House voted on a second similar one from Rep. Joe Barton, R-Texas. It won a majority, 233 to 193, but failed because it was introduced under a rule requiring two-thirds approval.

The debate extends beyond Washington. Last month, the Texas Legislature passed a bill allowing use of incandescents - but only if they're made in the state. South Carolina and Pennsylvania are considering similar measures.

Critics point to the high cost of alternatives and pollution concerns from mercury used in compact florescent bulbs, which are supposed to be recycled and require careful cleanup if they're broken - both concerns supporters contend have been exaggerated.

Maureen Martin, senior fellow for legal affairs at The Heartland Institute, a free-market think tank based in Chicago, believes congress has long overstepped its authority with efficiency standards.

"Just because we have always done something in the past doesn't make it right," she said. But she also acknowledged that the debate was bigger than the bulb.



"It has become a symbol for low-flow toilets and all the other restrictions that have been imposed on everyday things," she said. "People are so fed up at the grassroots level."

Florida Rep. Posey supported the repeal, even though it was opposed by an LED manufacturer in his district, Satellite Beach-based Lighting Science Group.

The company's chief executive, Jim Haworth, issued a statement crediting the tougher standards with sparking industry innovation, helping his company grow from 100 to 350 employees in the last year and reducing energy use and pollution. Haworth called lighting, which consumes 19 percent of global electrical output, the "low-hanging fruit" in energy conservation.

Posey, who said he used both traditional and florescent bulbs in his home and offices, stressed the repeal wasn't intended to promote aging light bulb technology but aimed at preserving consumer choice and cutting through the regulatory red tape.

"To have 40 pages of federal code over what kind of light bulb you can have is ridiculous," he said.

Though the repeal failed, those who oppose the ban have pinned their hopes on the House amendment, which would strip the efficiency program of funding. But with the Senate controlled by Democrats, those hopes appear to be flickering.

Bob Keefe, a spokesman for the environmental group NRDC, said GOP ideologues had hijacked a common sense measure that had already made many appliances more efficient.

"I don't think anybody really wants to go back to ice boxes or 1960s



refrigerators, do they?"

(c) 2011, The Miami Herald.

Distributed by McClatchy-Tribune Information Services.

Citation: Future for incandescent light bulbs looking dim (2011, July 22) retrieved 8 April 2024 from https://phys.org/news/2011-07-future-incandescent-bulbs-dim.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.