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From: John R. (Montana)

To: Marilyn R.

Sent: Thursday, October 06, 2011 1:27 PM

Subject: Another flawed (or politically motivated program) - CFL's

Hi-

We all hear about the need to conserve energy. The Feds have outlawed tungsten or incandescent light bulbs and are pushing CFL's to replace them. But is this really going to save that much energy? Is this yet another example of how centralized decision did not result in an intelligent outcome? Would it be better to let people decide what kind of light bulb is best?

A few months ago the engineering community lost one of it's best people - Bob Pease. Here are his comments just a few weeks before he did in a car crash near Palo Alto, CA:

Bob:

I just read your latest column and also the special issue of Electronic Design (May 5, 2011) on new lighting technologies. Once again I saw the statement in the article on page 30 ("LED Lighting Moves Closer To The Mass Market") that "The DoE estimates that if everyone converted to solid-state lighting, then by 2020, enough electricity would be saved to power 32 million homes."

Yes, indeed, solid-state or CCFL lighting is more efficient and thus generates less heat. But this leads me to the obvious question of where this extra heat goes. Is it really totally wasted as apparently everyone is assuming? Well, I live in the Pacific Northwest and you live in San Francisco. For all but about two weeks each year, the good old inefficient tungsten lamps help us heat the house. [Yes, we noticed that. I agree with you completely. /rap] And the roughly two weeks of extra warm weather are in the summer when the days are long and the lights are not on all that much anyway. So where is this dramatic savings in energy? [Nowhere near you or me. /rap]

If forced to convert to non-tungsten lighting, I will just have to run the furnace to compensate. Of course, if you live in Miami the situation is different and the air conditioner has to run extra to remove the heat generated by the lights. [You are quite right. /rap] But shouldn't someone be looking at this data more carefully instead of making wild estimates of how much we will save based only on the efficiency of the light sources? The tungsten lamp is a very benign device. It contains no poisonous materials and is cheap to produce with simple materials such as glass and common metals.

[I have many incandescent lights that are used 1/10 or 1/4 or 1/50 an hour per week. Some idiots have decided that we ought to buy CFLs to put in those places. Well, screw them! I have carefully bought about 80 95-W bulbs to use there so I don't have to buy CFLs with a return on investment of 0.05% per year! /rap]

Solid-state lights contain all kinds of electronics and exotic materials. Are we really going to make the gains that are being touted? For those of us living in temperate climates, I have great doubts that the promised savings will materialize. For me in Seattle, I don't expect to see any noticeable gains at all. I would be interested to hear your thoughts on this along with other Floobydust stuff.

- Aris S.

I think many engineers understand this, even if people don't. So let me set this aside for a while. Of course you are right. Beast regrds. /rap