

Who Left This Light Burning?

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If your parents or grandparents lived through the Great Depression, you've probably heard this turn of phrase. Their intonation may have been concerned, exasperated or brusque. When my grandparents, born between 1898 and 1905, heard it as children, it referred to an unattended oil lamp or candle. Then and now, this was a very dangerous oversight. I'm sure they were sternly admonished to never repeat this mistake. By the time they asked us, their angelic grandchildren, it had evolved into a patient "waste not, want not" reminder and a well-meaning object lesson.

To many people, this business of turning off lights (and seeking other apparently insignificant ways to save electricity) seems pointless, annoying, or both. In fact, it is not pointless (just wasteful) and need not be annoying. It really doesn't take much effort to use a switch when you enter a room or when you plug your computer or phone into a power strip.

My father, Ted, was the undisputed World Champion energy conservationist. When he retired after 42 years of service with the New York Telephone Company, his co-workers made him a very nice light switch with a belt clip. They reasoned that once he was home all day and turned out the lights every time my mother left a room, she would soon file for divorce. In theory—if he had the uncontrollable urge to turn out a light—he could use his custom belt-mounted switch. He didn't, of course, and I'll bet he took it apart and added the switch to shoebox of electrical hardware he kept in his small basement workshop. So, when I'm walking down the hallway in the Department of Environmental Conservation [*sic*] at UMass Amherst and see an empty classroom with row upon row of fluorescent lights "burning", I immediately duck in the doorway, turn them out, and think of my Dad.

When I arrive at work in the morning and the night custodian inadvertently left the lights "burning" in the rarely used back stairway, I turn them off without breaking stride. (The staircase has such large windows that you need to look directly at the lights, even on a cloudy day, to determine if they are on or off.) It's an old brown plastic switch that makes a loud, satisfying click. One of my co-workers does the same thing at the other end of the building when she arrives in the morning. After many years, our day-shift custodians have taken up the cause. We all turn out the lights in the main lobby with a two-story window-wall on sunny and partly cloudy days.

A substantial amount of the electricity used in Massachusetts is purchased from Hydro Québec. It's generated by a hydroelectric project that flooded an area the size of Florida on the homelands of the *Eeyou* (the Cree people of the James Bay region)—land that has sustained them for 250 generations. It is delivered to the U.S. via a 1,000-mile long transmission line [clearcut]. I think of my friends and mentors Anna and David Bosum, their family, and the *Oujé-Bougoumou* Cree Nation when I flip that switch in the stairway. Do the operators in the Hydro Québec control room in Montreal note a sudden drop in demand? Of course not. But if thousands of people in southern New England (e.g., Christ Church Cathedral members, and their families, friends, and co-workers) consciously and deliberately shut off lights and unneeded electrical devices, that would be detectable (...and we, the consumers, would save money while doing the right thing).

Here is a seemingly trivial example to convince you that 2% is easily attainable. If you have an automatic garage door opener you know that a light comes on when you push the button on your garage wall or use the remote control in your vehicle. It's usually a 60-Watt incandescent bulb. As you leave the garage and push the button to close the door, you'll recall the light stays on for a few minutes (exactly 5 minutes or 300 seconds; I timed it), then automatically shuts off. But you are on your way out of the garage. You don't need or want the light, but the little computer chip doesn't care. It will not shut it off until exactly 300 seconds have passed.

It only takes 12 seconds for the garage door to close. If you pause at the door, wait those 12 seconds, and push the little switch to shut out the light, you just saved 288 seconds of wasted electricity. Let's assume you use the garage door opener 350 days per year. Over the course of the year you would save 28 hours of use of the 60-Watt bulb in an empty garage. If you read for two hours most evenings with a 60-Watt table lamp, that savings would equal 14 "free" evenings of light. Better yet, if you replace the incandescent light bulb in the table lamp with the equivalent LED bulb, it will draw one-tenth the amount of electricity and last for many years. So, 14 "free" evenings would become 140 evenings ...4.7 months. This all happened because you adopted the simple habit of pausing for 12 seconds when you leave the garage. You did not leave the light "burning."

You may not have a garage door opener, but I'll bet you have plenty of switches (...at home, at work and at Christ Church Cathedral) that you can use. How will you know if you're saving 2% or much more? Compare your electric bill from the same month last year to your current usage. Some of our electricity comes from hydroelectric projects in northern Quebec. The rest of our electricity comes from local and regional power plants that burn natural gas or fuel oil and contribute directly to global climate change.

Still not convinced? ...here is another example. My 120 square-foot faculty office at UMass has two standard fluorescent ceiling lights. You know, the harsh, white, buzzing 40-Watt bulbs ...four of them, totaling 160 Watts. A few years ago, when LED bulbs first became available, I brought in two table lamps from home. The 60-Watt equivalent light on my desk and the 100-Watt equivalent light on the other side of the room provide a pleasant, quiet source of light *if* there isn't already enough sunlight coming through the large windows. The total power consumption of these lights is 20 Watts—that's an 87% savings. When students, staff members, or faculty colleagues say "Hey, I like your lamps. I can't stand those fluorescent lights either. I should get some too." I say "yes ...and while you're at it, remember to get LED bulbs" ...as casually as possible.

When I notice lamps in other Department of Environmental Conservation offices, I think of my grandson.

2% Per Year List

1. Reusable shopping bags
2. Drive rationally
3. Don't "burn" electricity
- 4.

"Do not despair at slow progress; little by little great things have come to pass. Life, and great things are made up of little things, and little things often lead to great results."

Brother Daniel Orcutt, Enfield Shaker Community, Connecticut
Circa 1880