

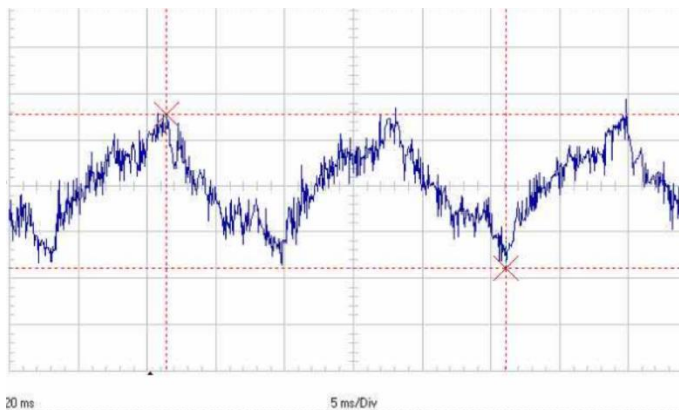
Dirty Electricity

It's Not Just Wireless That's Causing Health Problems

DTE's so-called opt-out meter is just a smart meter with the wireless turned off. It will hurt you nearly as much as the smart meter because of the “dirty electricity” generated by the meter. If you wish to avoid the health (and privacy) problems associated with smart meters, then you must [keep your analog meter](#).

Turning off the radiofrequency will not solve the health (or the [privacy](#)) problems associated with DTE and Consumers Energy smart meters. Digital meters—whether or not “smart”—cause dirty electricity to flow through your home's wiring. The problem is what is called the “switched mode power supply.” Switched mode power supplies are used to run the digital meter (whether a smart meter or DTE's radio-off opt-out meter). In order for a smart meter to be powered, the 240 volts coming off the power line to the meter must be stepped down to 4–10 volts. A switched mode power supply is the device used to step down the voltage from 240 volts to 4–10 volts. This generates an enormous amount of what is commonly known as “dirty electricity” and referred to by electricians and electrical engineers as “voltage transients,” “voltage harmonics,” “line noise,” and “power quality issues.”

Dirty electricity is a spiky, pulsed, highly variable electrical current that rides through all the circuitry of a building. It has devastating health effects. Many people are already experiencing those effects, which include high blood pressure, tinnitus, insomnia, and cognitive difficulties. The Nevada Consumer Protection Bureau reached an agreement with the Nevada Public Utilities Commission to [allow individuals to keep their analog meters](#) in part *because of health problems associated with the switched mode power supplies*. [Prevention Magazine](#) reports on the hazards of dirty electricity.



People who have had their smart meter's wireless turned off are [experiencing the same health problems](#) as people with smart meters, just to a slightly lesser degree (click [here](#) to read their personal testimony and [here](#) for another story). Our cells cannot handle a highly variable current, and build up a sugar coating around themselves, which means it's harder for nutrients to get in and wastes to get out. In addition, these electromagnetic currents cause the bonds

holding DNA together to break, increasing the risk of cancer. Think of a jackhammer going off and on every day, 24/7. That is what the cells in your body experience. Even though you can't feel it, it's still hurting you. Brain cancers take 10 years to develop, and few people feel the

cancer. In addition to all that, the electromagnetic frequencies knock calcium ions off the cell membrane, causing a [host of effects](#).

DTE's so-called opt-out meter is just a smart meter with the wireless turned off. It will hurt you nearly as much as the smart meter. Many older-style digital meter do not seem to create the dirty electricity problems that smart meters and so-called opt-out meters do. The reason is this: the older-style digital meters do not measure electricity in the fine-grained manner that the new meters do. These meters are constantly active, recording data and making computations at up to millisecond intervals. This means they are cycling—on-off, on-off—constantly. It is this on-off cycling that is part of what creates the spiky dirty electricity. These new meters have what's called a chopper circuit—the name is illustrative of what we've just been talking about—which rapidly switches the voltage on and off. In so doing, it creates ultra-high frequencies, and very sharp, fast transient voltage spikes, up to 70,000 volts/second. Part of the reason some people hear their smart meter making sounds is that the ultra-high frequencies they generate can be picked up by some human ears.

The magnetic field generated is a huge part of the problem. The current running through your house is an *electromagnetic* current. When the *electric* current runs through the wiring, it generates a *magnetic field* at right angles to the electric current. This means that you are surrounded in every dimension by an electromagnetic current—it's like being at the center of a hurricane, with the wiring on all the walls, the ceiling lights, and the wires running through the basement completely encapsulating you.

Broadband over powerline (BPL) and wind turbines cause the same dirty electricity problems.

See the following links for more information on switched mode power supplies:

- [Switched Mode Power Supplies and Smart Meters](#)
- [How Do Switched Mode Power Supplies Work](#)—from “Things I Should Probably Know” blogspot
- [How Do Switched Mode Power Supplies Work and Why Do They Bother People So Much?](#)
- [Dirty Electricity, Phillips](#). Transients are created when current is repeatedly interrupted. This manipulation of current creates a wildly fluctuating and potentially dangerous electromagnetic field that not only radiates into the immediate environment but also can back up along home or office wiring.
- [Magnetic Neighborhood](#). Blog of a careful Ann Arbor researcher trained in health studies. An excerpt: “*Once again, I've found my way to this same conclusion: the smart meter does not suppress line noise the way the analog meter did. Rather, it augments and even causes line noise.*”
- [Morgan, High-Frequency Transients on Electrical Wiring](#)
- [Stray Voltage, Stray Currents, Dirty Electricity](#)

See these links for pictures and more information on dirty electricity and/or switched mode power supplies.

- [Main sources of voltage transients.](#)
- [Compact fluorescent dirty electricity vs incandescent light bulbs.](#)
- [Windmills \(wind turbines\) and their dirty electricity signature.](#)

Your [privacy](#) is still invaded. The radio-off opt-out meter still collects the same fine-grained usage data as a smart meter. The only thing that has been turned off is the radio-transmitter. None of the data-collection software has been turned off.

Newsletter, Facebook—Stay Up to Date

Stay up to date by [subscribing](#) to our newsletter (it comes out every 1 to 4 weeks). We constantly update our website, so check back often. You can find updates and time-sensitive actions to take under our “[Alerts and Breaking News](#)” box. We also use [Facebook](#) to send out quick news updates. (While we understand the privacy concerns with Facebook, at this point in time it is a useful tool for us, and is a great way to spread the word about smart meters. If you only wish to use Facebook for access to our updates, you can get an account without revealing personal information—it’s all in what you choose to share, and you can give them any name or birthdate you like.)

Our newsletter comes out every 1 to 4 weeks. It will keep you informed and tell you what actions you can take to fight smart meters. **Note that most email programs will filter out our newsletter unless you adjust your email settings.** Even though you may receive individual emails from us, when we send the newsletter out to a large group, the emails may be placed in a folder other than your inbox. This happened to us! We weren’t even getting our own newsletter.. Please make sure you look for emails from [smartmetereducationnetwork@ gmail. com](mailto:smartmetereducationnetwork@gmail.com) in your Promotions, Spam, Junk, or other folders. Please contact your email provider to learn how to adjust your settings, or search on the internet.

