

Neighborhood

SOME TRUTHS ABOUT UTILITY SMART METERS: SHOULD YOU BE CONCERNED?

By Jill McManus

Have you recently been informed by your utility, such as Con Edison, that they will be installing a digital “smart” meter in your home, or in your apartment building, or in your small business? The company is touting how much it will save you in costs, and how this safe wireless technology can help you lower energy use (not to mention allowing the company to cut employees and save a lot of money that never gets returned to the public.) Did you see a line in tiny script at the end of the notice offering you a chance to opt out? Didn’t do it? Whoops – you have implied that you consent.

The next notice will say you never responded to allow the installation, giving you another 30 days or else you’ll be charged \$100 a month for failure to provide access to your home. If they slip by when you’re out and install one on your wall and you later want it removed, they will also charge you a fee of \$104. Then they will charge you \$9.50 per month to send a meter reader for which you will be billed monthly or bi-monthly. The utility doesn’t reveal, nor does it care about, the health effects from your continuous exposure to radio frequency radiation (RFR) and electromagnetic radiation (EMR) by the



smart meter on your home, nor from the electrosmog, called “dirty electricity,” from oscillations and harmonics that ride the wires back into your rooms. Unlike cell phones, these meters cannot be turned off, so it’s 24/7 exposure. Emissions from your meter, or sometimes from a meter on a street pole nearby, are also blasting passers-by. For those who are electromagnetically sensitive (EMS), exposure to a smart meter can be a fast track to illness and disability, as many people have discovered.

Some of the symptoms of those exposed include: insomnia, headaches, malaise, tinnitus, eye problems, skin rashes, heart palpitations, fatigue, balance problems, brain fog, memory loss and learning difficulties, all signs of radiation sickness.

A Trojan Horse on Your Wall?

Smart meters are part of the Trojan horse

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of experimental 5G technology that we are being brainwashed to believe will improve our lives. While the technology makes some parts of daily life easier and offers engaging distractions, cell phones have taken over our attention, while our natural abilities and social skills have withered. Many people have never looked up from their cell phones to notice the enormous buildout of cell towers and rooftop base-

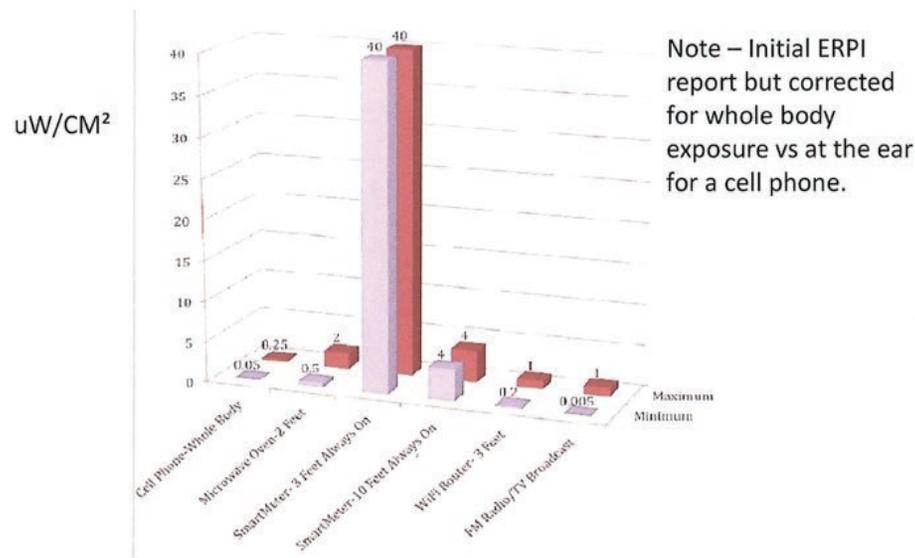


Analog meter with dials

stations sending their invisible electrical pollution through the air, trapping us in a giant fishnet of beamed signals. Nor thought about the ability of these transmitters, using a frequency slicing technique, to deliver blasts of skin-heating microwaves for crowd control (the military’s “Active Denial”). The public is not informed of a tower’s specs such as range, power or exact beam radius, and FOIL requests have so far been unanswered. In our homes, we can at least minimize exposure by going wired, and keeping an analog meter. Our exposure in the streets is involuntary non-consensual, and unavoidable. Are we committing connecticide?

Scientific studies are finding that the accumulated exposures, even at low levels, are causing oxidative stress that affects our

The Truth on RF Emissions



Source – Dr. Daniel Hirsch on the CCST Report

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organs, and lowers our immune system. <https://pubmed.ncbi.nlm.nih.gov/36605238/>

Allowing corporations to endanger public health for short-term profit while creating future debts for us is, unfortunately, an ingrained habit of unregulated capitalism. Most insurance companies do not cover radiation harms. Major telecom companies, including T-Mobile, AT&T and Verizon,



“Smart” meter with digital readout

acknowledge the future liabilities in their annual reports. Self-driving cars, if safety is to be achievable, will be covered with radar instruments, linking to the beams of traffic control at all times (and thus controllable by others).

Unlike cell phones that radiate radio frequencies mostly into the head and ear (or breast or testicles if carelessly carried), smart meters radiate through the whole body and all living things nearby, and can emit as much power as a cell tower. [INSERT: Chart –The Truth on RF Emissions –CSST Report]

A generally recommended minimum safe distance from a smart meter is 40 feet, while their emissions can extend some 1,500 feet. Yet the Federal Communications Commission (FCC) radiation emissions “guideline” only calls

for keeping a distance of 20 centimeters, or about 8 inches, from the front of a meter. Some are installed right next to mailboxes by a front door or in a hallway.

However, the FCC guidelines, set in 1996, are now in question. After the agency’s refusal in 2019 to review their outdated guidelines, a lawsuit was brought by the Environmental Health Trust/ and Children’s Health Defense Fund. In August, 2021, the D.C. District Court of Appeals ruled that the FCC’s decision not to review – despite 11,000 pages of scientific evidence and personal testimonies to the biological harms that occur at levels well below the current limits – was “arbitrary and capricious.” The FCC was remanded to return to court and explain the reason for their refusal. To date they have not done so. Regulatory lag will cost lives

The old analog utility meters, which work safely for 30-50 years, measure the total amount of power used over a period of time, and must be read by an employee, although some homeowners obtain and report their own readings to the utility. An early version of wireless meters (AMR) was “one-way” and allowed collection from a passing truck.

The new digital “smart” meters (Advanced Metering Infrastructure, or AMI) which have already been placed in more than 111 million homes since 2009, have enabled companies to cut staff and save money. These meters use two-way wireless transmission (typically at 902-928 MHz or 2.4-2.48 GHz frequencies, but others such as 60MHz are also used) to record the details such as times and frequency of use of each appliance. This data, although being recorded slightly behind real time, allows the company to charge higher rates for hours of high usage, and enables it to turn off your service for non-payment. AMI meters transmit from house to house in a neighborhood through a mesh system to a main node, which then transmits the data to the company. So while a company may say it only collects data a few times a day, there is almost constant chatter on the meters between houses. [.]

Both one-way and two-way “smart” meters can affect people who are electromagnetically sensitive.

“Smart” Meters Have Operational Risks

Unlike analog meters, digital meters present operational risks. The most dangerous omission in digital meters is earth grounding to protect them from power surges when power is turned back on after an outage, or from lightning, which can cause fires. Smart meters installed by untrained workers may overload old house wiring, which can cause the current to arc and heat up the setting. Since the metal setting of analogs has been replaced by cheaper plastic, the setting offers no sink for the heat, which can start a fire simmering

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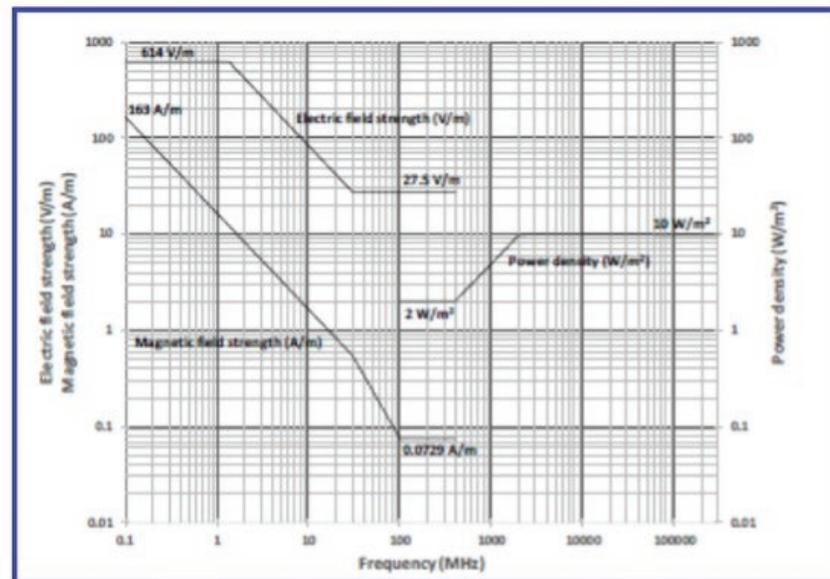
ELECTRICAL ENGINEER EXPLAINS HOW “SMART” METERS CAN LEAD TO HIGHER BILLS

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consumption rate of that appliance from that moment for the next fifteen minutes, or until the next measurement. This alone can add hundreds of dollars a year to your bill.

Claims that AMI meters are more accurate than analogs are false. The smart meter is populated with dozens of electronic components that have tolerance swing of up to 10% which varies with temperatures and humidity. The analog meters must meet the same ANSI C12 (American National Standards Institute) specs as AMI meters, but there are no electronic components. The AMI meter does not meet the same specs as analog meters in many ways. In fact, they don't synchronize the clocks of an electronic opt-out meter with Universal time so the calibration of measurement within certain time periods is not always accurate, and there is “drift.” The analog meter has precision gears that directly convert to KWh's and there is no need for a clock reference. How does a device which calculates KWh's do that accurately if the clock drifts?

Also, light bulbs vary in power use by plus or minus 10% and LED bulbs combined with dimmer switches lead to greater inaccuracy in readings.” For an example, testing at the University of Twente in 2016 showed very high smart meter inaccuracies of 582% (<https://www.utwente.nl/en/news/2017/3/313543/electronic-energy-meters-false-reading-s-almost-six-times-higher-than-actual-energy-consumption>)



with current transformers. AMI meters are generally accurate to within $\pm 10\%$. That is a 20% range. So, claims by utilities that the AMI is more accurate are highly suspect. This is only true in a very tightly controlled setting such as ten 100-watt incandescent bulbs in a temperature-controlled room, not with electronic appliances, motors, CFL's, LED's etc. (Note - a 100-watt light bulb can vary 5%). The only way to have an accurate load is with a large carbon pile which is unaffected by temperature and humidity.”

Personal privacy with AMI smart meters is also a key issue for Bathgate. Your information is collected and sold to third parties, whoever they may be. And there is no security. If you're away from home, it can be detected by hackers. Wireless networks, which use software and offer so many connection points, are easy to hack. Many

in the U.S. Government, and others such as former FCC Chairman Tom Wheeler, agree and are aware that 5G wireless technology is a national security issue.

What about meter shielding and filters? Bathgate doesn't believe most of the products offered online actually work, and full metal shields may cause the radiation to reflect back. He has developed a product that he feels can lower the RF emissions, called the Iron Maiden. “You can shield the front of the smart meter with metal screens or other special materials to block the RF up to a point, and that can be helpful,” Bathgate says, “but they don't block the electromagnetic emissions. There's no way to fix this without earth grounding of the smart meter, which means redesign.” He thinks the utilities should shield the back of the meters where emissions go through the wall, and also shield the electric closets and

nearby rooms in apartment buildings where banks of smart meters are placed. But “they will fight tooth and nail about this adaptation for millions of meters, he says, “and they will complain they can't read the meters. It will be left to property owners.”

Bathgate concludes: “We need a law that says the emissions from a smart meter should not exceed 100 microwatts per meter squared. That would make present AMI meters unusable.”

Finally, there is subterfuge. Says Bathgate, “Staff for the utility companies make statements like the AMI meter is less than a cell phone. This is provable as untrue and was concluded from a clearly biased study done by the CCST, where they compared the emissions of a smart phone at the ear but not for the whole body, but they used the whole-body measurement for the AMI meter. (See CCST Study chart in adjoining smart meter story.) Bathgate calls the comparison “totally apples and oranges. And he says, “Those that state this lie should sleep with a smart meter under their pillow every night and get ready for the diagnosis of cancer very soon.”

Bathgate suggest that readers check out the scientific studies such as the Bio-initiative Report on cancers and tumors from exposure in rats <https://bioinitiative.org/category/new>,

Could add this line to What You Can Do legislation box? Everyone who pays electric bills need to understand this information and demand that smart meters are replaced with traditional analog meters. Let your state legislators know today.

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through the house wiring. Due to its uneven bursts of pulses at millions of times per second, momentary spikes in power can cause wear and tear on the device, and on house wiring and connected appliances, just as they can on our bodies. Spikes in the pulses that go above FCC guidelines are often disguised because the guideline test averages power levels over a period of 30 minutes. If you check with your own meter you will see them. <https://mdsafetech.org/wp-content/uploads/2019/10/fire-and-electrical-hazards-report.pdf>

Engineer Timothy Schoechle, Senior Research Fellow with the National Institute for Science, Law and Public Policy (and author of “Getting Smarter About the Smart Grid”

<https://gettingsmarteraboutthesmartgrid.org/pdf/Smart%20Grid%20Report%203-15-13.pdf>) says that electrical power should be municipalized, and installation of current “smart” meters should be stopped. By

inserting a small part that costs less than a dollar, he writes, companies could provide a fiber optic or electrical connector and get rid of the problem of radiation, making current meters obsolete, and people a lot safer.

A practical, forward-looking society would heed this advice.

For more information on smart meters see these sites:

Ehtrust.org
Physicians for Safe Tech
(MDsforSafeTech.org)
Americans for Responsible Tech.org
NewYorkers4WiredTech.com

WHAT YOU CAN DO

Support Upcoming Smart Meter Legislation: NY S.5623

No Federal agencies are measuring or monitoring our levels of exposure to radiation, but local legislators are responsible for protecting the safety and well-being of their constituents. There have been several proposed bills in NY to regulate smart meters since 2013. Due to an uninformed public, and to the weighted

power of the appointed Public Service Commission that oversees electrical utilities, they all died in committee.

NY State Senator Pete Harckham introduced a bill last year (S. 8765), that would allow people to opt out of having a smart meter without a fee or monthly charge, and retain their analog if they wished. For those who already have a smart meter, the bill would enable the customer to instruct the utility to remove it. For those physically affected by the meter it must be removed within 10 days, and 30 days for anyone else who preferred their trusted analog meter.

In March, Harckham has reintroduced the bill, now called S. 5623, and expanded it to include digital water and gas meters as well. Although questions such as multi-family buildings, small businesses, and amendments for building and fires codes remain to be resolved, this bill would be a major problem solver, especially for those who are electromagnetically sensitive.

S. 5623 is also right in keeping with New York's Environmental Rights Amendment,

passed in 2021. As The National Law Journal (March 17, 2023) pointed out: “The new “green amendment” or Environmental Rights Amendment” (ERA) places New York alongside six other states with similar provisions in their state constitutions ...These amendments may introduce new avenues for those aiming to enforce environmental laws in anticipation of harm and may invite novel protection litigation claims. (Our italics.)

Let's help Senator Harckham get S. 5623 passed! The NY State legislature is in session to June 4. Right now is the time for the process to take place that will require utilities to protect the health and privacy of New York residents as a matter of law. Please call and/or email Senator Harckham's office to support and applaud his efforts to get S.5623 passed! harckham@nysenate.gov, phone 518-455-2340. Ask your NY Assembly Member to sponsor or co-sponsor a companion bill.

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