RESTORE THE ANALOG METER AS A METER OF CHOICE

Digital and other Smart Meters have Billing Problems as well as contribute to health issues due to the mechanisms contained within them that impact the wiring and health of those in the home. Analogs don't have these problems and would be fair and equitable to consumers to have the analog meter restored as a meter choice--not just to residents who have already have them, but as a policy for all who should be informed regarding them and to be able to request them.

Some main points as quoted by Bill Bathgate's, expert testimony at the Michigan House Energy Committee Meeting from that website on the Billing Issue is at https://smartmeterharm.org/2018/02/25/electrical-engineer-explains-to-michigan-legislature-why-smart-meters-are-causing-high-bills-video/

- These Smart Meters and digital meters have a switched mode power supply inside that creates harmonics, also known as transients.
- The transients travel on the wiring throughout the home.
- Transients are seen by the current sensors and voltage sensors in the meter and are counted as consumed electricity.
- Other electric appliances have "EMC" filters in them to filter out transients.
 Smart Meter manufacturers did not put "EMC" filters in Smart Meters or digital meters.
- No agency mandated "EMC" filters in Smart Meters or digital meters.
- Transients on the wiring equate to higher bills. Bill Bathgate has seen 16-40 volts peak-to-peak of transients.
- ANSI, which creates standards and tests meters, is a private industry-funded organization. It is not a federal standards agency.
- ANSI allows meter manufacturers to remove the electronics from digital meters before they are tested for compliance, including testing their ability to handle surges.
- ANSI's definition of accuracy is very, very different, and ANSI does not address the precision of Smart Meters to consistently and repeatedly give the right reading.
- Analog meters are transparent; a customer can verify their bill by looking at the meter.
- Smart Meters and digital meters' calculations and algorithms are known only
 to the utility company and cannot be verified by the customer. Contrary to
 utility company and Smart Meter manufacturer claims, the customer is NOT
 in control of their bill. Example of one customer who complained, and his bill
 dropped for no reason.

Contrary to the statements on the City of Ashland Electric Dept. website that the analog is not available or purchasable, This is simply not true. I've enclosed evidence, and it is purchasable below the \$30 price paid for the other meters. From ElectraHealth.com with discounts.

Request you charge the Electric Dept with complying with the Resolution. Analog meters have been changed out without notification to customers. Please address this right away as there was a claim in the newspaper Feb 21 Ashland was rolling out smart meters.

RESOLUTION NO. 2012-14

A RESOLUTION ADOPTING AN OPT OUT POLICY FOR THE AUTOMATED METER READING PROGRAM

Recitals:

- A. The City currently has a program to read utility meters automatically utilizing radio frequency technology.
- B. The City recognizes that some individuals believe there is a health concern related to exposure to radio frequency technology and would appreciate an alternative method of gathering readings at their place of residence.
- C. The City desires to establish a policy in which a customer may choose to reduce possible exposure to radio frequency transmissions by electing to not have such technology used to collect utility readings from their place of residence.

THE CITY OF ASHLAND RESOLVES AS FOLLOWS:

SECTION 1. The City hereby establishes an "opt out" policy for meter reading.

<u>SECTION 2.</u> There will be no fees or charges for the customer electing to "opt out" of the radio frequency meter reading program.

SECTION 3. This resolution was duly PASSED and ADOPTED this	of
Burbara Christenses	
Barbara Christensen, City Recorder	
SIGNED and APPROVED this day of May, 2012.	
John Stromberg	
John Stromberg, Mayor	
Reviewed as to form:	

Election For Mechanical Analog Meters Only

Electric & Water Dept. Account Residence Address: Daytime phone: Cell: Email address: Phone: I (we), who reside at the above residence elect the protections afforded by mechanical analog meters only. I am, we are a new resident(s) Established resident (s) My/ Our concerns are based on possible negative health effects, the potential for a breach of privacy, lack of insurance coverage in the event of a fire with automated meters, and the potential for errors in billing that may result from the use now or upgrades to other types of meters in the future. By signing below, I (we) request that any mechanical, analog meters at our residence REMAIN in place. By signing below, I (we) also elect the protections from any NON mechanical meters that have been installed at our residence, to be replaced with mechanical analog meters. We request that this be done within a very short time period, of one month or less. Account Holder(s) Printed Name(s) & Signature(s): Date: Are you renting? You must have your landlord's permission. Landlord's Printed Name and Signature Landlord's phone and email: Disclosure: I (we) understand smart meters which include non-RF digital meters are not mandatory. I (we) understand that should anyone in a single family home, multi-unit building, apartment, or complex not agree to the most protective measure, the "precautionary principle" dictates that the most preventive measure shall apply. The ALARA principles on radiation dictate "As Low as Reasonably Achievable" related to distance, intensity and frequency, and shielding from radiation emitting devices. Individual needs and abilities vary related to absorbability and removal of radiation; and smart meters meters have not been assessed by the government for health, nor has any utility revealed to residents the pros and cons of these devices as radiation emitting or transient producing devices. It is known, however, that an analog meter has zero (0) exposure to transients that run through the wiring of a house and emit no microwave			Dept . Ph:: (541) 488-5357 Fax: (541)552-2436
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Account holders(s) Initials Landlord's initials	mandatory. I (we) underst building, apartment, or co "precautionary principle" ALARA principles on radidistance, intensity and frequenceds and abilities vary relameters have not been assess residents the pros and considevices. It is known, however unthrough the wiring of a otherwise be deployed on customer control over the natheat same location 24/7 as the to choose to minimize my/my/our living spaces with weighed the risks and berinsurance, billing or other comparison.	and that should omplex not as dictates that the dictates that the dictate "A dictate "A dictate "A dictate to absorbable and by the gover so of these devices of these devices, that an analog house and emit our living space on-RF meter or the safe analog mour risks of variout undue stress defits of knowledges.	If anyone in a single family home, multi-unit gree to the most protective measure, the e most preventive measure shall apply. The As Low as Reasonably Achievable" related to ding from radiation emitting devices. Individual ility and removal of radiation; and smart meters ment for health, nor has any utility revealed to es as radiation emitting or transient producing og meter has zero (0) exposure to transients that a no microwave emitting radiation which would ces 24/7. There are currently no warnings or other RF-1 or RF-2 or other devices placed on meter. I /We understand that I (we) have a right rious types of radiation exposure in and around so or financial penalty to achieve this, and have mg my/ our energy usage vs health, privacy,
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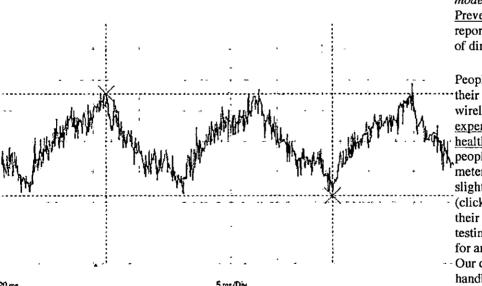
Dirty Electricity

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 <u>privacy</u>) 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?
- <u>Dirty Electricity</u>, <u>Phillips</u>. 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.

This is from http://www.SmartMeterEducationNetwork.com

Cost / Benefit Ratio Should be Obvious even without \$\$ figures! Analog Electro Mechanical Meters (Non-RF, no dirty electricity) vs Radio Frequency and/or Smart Meters

According to some experts / reports by consumers:	perts / reports by	
RF Radiation Exposure	No	YES
Part of mesh network that blankets community with RF radiation	No	YES
Health complaints	No	YES
AAEM physicians' association warnings about health effects	No	YES
Santa Cruz Health Dept. warnings about RF radiation emissions	No	YES
Privacy Intrusion	No	YES
Hackable	No	YES
Utility collects personal energy use data	No	YES
Data on your personal energy use may be provided to 3rd parties	No	YES
Can cause "dirty electricity" emissions on wiring	No	YES
Can be used to power down or shut off your appliances	No	YES
Can be used to remotely shutoff your utility service	No	YES
Can be used to charge for Time-of-Use rating	No	YES
Higher bills complaints	No	YES
Appliance Burnout Complaints	No	YES
Associated with numerous house fires	No	YES
Interference w/ wireless devices	No	YES
Safety complaints	No	YES
Can contribute to electrical grid failure	No	YES
Meter has short life	No – last 30-50 years	YES – last 12-15 years

Sourced from:

http://www.electrosmogprevention.org/stop-ca-smart-meter-news/san-diego-county-smart-meter-news/benefits-of-analog-meters-vs-smart-meters-why-you-should-opt-out-today/