

Radiofrequency Radiation: The Invisible Hazards of “Smart” Meters

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Global Research, August 19, 2011

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Region: [USA](#)

Theme: [Environment](#), [Science and Medicine](#)

This incisive article by the late Dr. Ilya Perlingieri was first published in August 2011

“The Seletun Scientific Statement recommends that lower limits be established for electromagnetic fields and wireless exposures, based on scientific studies reporting health impacts at much lower exposure levels. Many researchers now believe that existing safety limits are inadequate to protect public health because they do not consider prolonged exposure to lower emission levels that are now widespread. Current US...standards for radiofrequency and microwave radiation from wireless technologies are entirely inadequate. They were never intended to address this kind of exposure from wireless devices that now affect over 4 billion people.” The Seletun Scientific Statement, Feb. 3, 2011

Do You Have a New “Smart” Meter?

Over the past year-and-a-half, various power companies have been removing the analogue [disc-like] meters placed on your homes, apartments and businesses, and installing what they call their new “Smart” Meters. This is part of the larger plan throughout the US and Canada where these meters have already been installed. “According to the Edison Foundation, more than 8 million Smart Meters have been deployed by electric utilities in the US and nearly 60 million should be in place by 2020.”(1) In Canada, 2 million of these meters are planned. “BC Hydro has a \$930-million rollout of ‘Smart’ Meters” installation that began on July 4.(2)

The US nationwide program is “driven, in part by funding for the Smart Grid Program approved as part of the American Recovery[sic] and Reinvestment Act [AARA] of 2009.”(3) “There is great concern because exposure to microwave and radiowave radiation from these meters is involuntary and continuous. The transmitting meters may not even comply with FCC ‘safety’ standards. ...These standards [are totally outdated and] were not designed to protect a diverse population from non-thermals effects of continuous exposure to microwave and radiowave radiation. Therefore, these ‘safety’ standards were not designed to protect the public from health problems under the circumstances which the meters are being used.”(4)

As Marti Oakley has just written, the best way to look at what’s happening is to: “follow the money. In late October 2009, the [US] Department of Energy announced the \$3.4 billion in stimulus grants under AARA. Award selections were announced for 100 smart grid projects that are intended to lead to the rollout of approximately 18-million smart meters, 1-million in-home energy management displays, and 170,000 smart thermostats, as well as numerous advanced transformers and load management devices.”(5)

Smart-grid projects are supposed to “meet strict cyberspace guidelines”(6); but that has not happened, because greed trumped everything else: our health, safety, precaution, and any remnants of law. Government corruption is endemic, while Wall Street behind-the-scenes manipulation and the bankers theft of trillions of taxpayer dollars is ignored. White-collar crime is rarely prosecuted, because (1) there are few honest people left in government; and (2) those in charge are part of the bigger problem. All Precaution was thrown out in the race to compete for millions of fiat dollars. Without an informed and educated public and with the mass media compliant to elite and secret plans, no one is told the truth.

There has been no public discussion on the known biological hazards, both to humans and our pets, with these new meters. There has been no testing of these meters for any kind of safety. However, utilities Public Relations “spin” includes that: they will cut power costs to consumers, thus lowering your monthly bills; help customers reduce power consumption during peak times; and the meters can be read anytime, via a planned new “grid” in the works for the entire country that will use these meters. Utility companies insist these meters are safe.

“Smart” Meters are a new type of electronic device that monitors electricity, natural gas, and water usage via radio frequency (RF or rf) in an invisible but dangerous range, between 2.4GHz [GigaHertz] and 5.8Ghz. This corresponds to the electrical signals frequency used to produce radio waves. The worldwide digital wireless communications network is based upon this. RF has both an electric and magnetic components both of which can cause damage.

Malfunctioning Meter Problems In many areas, customers were given no notice that their meters would be changed, or the new meter was put in a day after a brief notice was sent. In all cases, customers were never notified of the dangers involved with these new so-called “Smart” Meters. It was a “done deal” behind closed doors. No one was given any choice about keeping an old analogue meter. According to educator Susan Brinchman, Director of San Diego, CA’s www.electrosmogprevention.org, almost 98% of San Diego has already had these meters installed in home, apartments, and businesses. Here are some of the “Smart” Meter problems already being reported where they have been installed: *Radiofrequency interference that causes malfunctioning of wireless equipment, such as Wi-Fi and Netflix (7) *Radiofrequency interference that causes malfunctioning of medical and critical-care equipment, such as pacemakers, wireless insulin pumps, pain pumps, ventilators, and baby monitors *Radiofrequency spikes causing appliances to break or malfunction, such as garage doors that won’t open or close properly *Cyber-security breaches [e.g., illegal access to 179,000 accounts at Hydro Toronto] *Excessive billing and inaccurate readings *Interception of personal identity information (electronic eavesdropping) *Safety risks: Electrical fires and explosions(8)

“Smart” meters have not been tested by Underwriters Laboratories and do not carry the “UL” label, required for electronic devices. With their 116-year record and having developed more than 1,000 standards for safety, why is UL certification missing on these meters? The EMR Policy Institute further notes that “components of Smart Meters are out of compliance with the National Electric Code (NEC) because they trip the Ground Fault Interrupters and Arc Fault Interrupters, creating a fire hazard. ...Un-intentional re-radiation of RF/MW signal (with its higher energy) on the electrical wires may overload wires, particularly in poorly grounded or ungrounded homes, or homes with older wiring or faulty wiring.”(9)

In addition, several types of PG&E [Pacific Gas and Electric] meters with a “switching mode power-supply” (SMPS) “emit sharp spikes of millisecond burst constantly, 24/7.” They have been measured “to emit spikes of up to 50,000Hz and higher. These spikes are known as “dirty electricity,” the subject of physician and epidemiologist Dr. Sam Milham’s new book, “Dirty Electricity: Electrification and the Diseases of Civilization.”(10) Dr. Milham documents a relationship between the high frequency found on buildings and cancer [now at an all-time epidemic high where 1 out of every 2 person will develop it]. Another term for dirty electricity is electrical pollution. Dr. Milham calls that the “universal carcinogen, and ‘Smart’ Meters and oxymoron.” See his interview: www.youtube.com/watch?v=ci5GGqEPeCE

See also: “The Dark Side of Smart Meters”: www.youtube.com/watch?v=ionX4ckX8e8

Hertz, abbreviated Hz, is a unit to measure Alternating Current (AC), sound and ocean waves, and electromagnetic waves. It is an internationally recognized measurement equal to 1 cycle per second: e.g., 1,000 cycles per second = 1,000 Hz. It is well known in scientific community that over 33 Hz, these invisible waves of energy damage many aspects of our biology and our ability to think clearly.

In a excellent and informative Brainwave Chart, “Think of Energy, Frequency and Vibration,” done by Bevolution in Denmark, it is clear what this invisible energy does to all living things:

<http://www.bevolution.dk/pdf/BrainwavemodelBevolutionGB.pdf>

These new meters can be read any time via their continuous wireless linking to the cell-towers. They can detect all your household usage of appliances, lights, etc. This information can be shared with and/or sold to other companies, so you no longer have any privacy. It is a spying device. These meters are not secure. They also can be hacked into, so it is possible for someone to know if you are not home (by lack of power usage). There are also “collector” meters used to gather and transmit RF/microwave radiation signals from various surrounding buildings and then “retransmit RF information for somewhere between 500-5,000 homes or buildings.” In addition, the utility company now also has the ability to control your own usage. Via these new meters, the power company can shut off your home usage, your block or community, or city usage without notifying you. What excuse will people be given, if power is shut off without any notification to customers? Do you remember the Enron debacle, and the enormous overcharging of millions of Californians?

As part of the placement of a nationwide “smart grid,” there are additional plans to have individual power transmitters built into in all new appliances to measure the energy use of each one (washing machines, clothes dryers, dishwashers, etc.). This means that in every home or apartment there may be dozens of power transmitters for kitchen and laundry appliances that will send energy use, via wireless radio frequency, back to the “Smart” Meter. In addition to a complete lack of safety, are these power transmitters part of untested nano-technology? Are consumers told at point-of-purchase that a new appliance has a power transmitter in it? A consumer must be willing to have these new appliances constantly transmitting power usage to the utility company. Or, they may be mandated via federal legislation.

Where is there any legal federal mandate for any of this? Marti Oakley's August 15 article notes: "THERE IS NO FEDERAL SECURITY MANDATE FOR SMART METERS, according to George W. Arnold the national coordinator for smart-grid interoperability at the National Institute of Standards and Technology [NIST]. This agency of the US Department of Commerce is said NOT [author emphasis] to be involved in regulations but is only tasked with promoting standards among industries. While both the 2005 and 2007 faux energy bills were codified into public laws, NO part of them creates a federal law pertaining to individual consumers or dictating that the public must be forced to comply with provisions of SMART grid. Contrary to the bleating of manufacturers and utility talking heads, who claim there is no "op out," the fact is you, the consumer must be offered the meter, or request a meter 'OPT IN.' No one can be forced to comply with an unrevealed contract between private corporations, and to which you were never a party and had no knowledge of."(12)

So far, "Smart" Meters have not been "optional" in most areas around the US and Canada. This is another illegal invasion of our privacy, health, and safety. However, in northern California more than 44 municipalities, including eight counties, "have criminalized the installation of, banned or taken resolutions out against 'smart' meters." In Maine, Central Maine Power Company [CMP], has a \$200-million meter project [half of it funded by the federal government] and plans to install 600,000 new meters throughout the state. CMP was taken to court because numerous people became ill, once a new digital "Smart" Meter was installed. A landmark legal decision was made on May 25, 2011, "that represents the first time any [US] state had ordered an electric utility to permit customers the choice to opt out of a smart meter program." Did the attorneys handling this case not know that there was no federal mandate?

Now, Mainers can choose to "opt out" but it will cost them to do so. This entire program revolves around money, not around any safety. The Portland Press Herald reported that "if smart meters are banned and the [Maine] program is abandoned...CMP would lose its federal grant and be required to pay back \$22 million...and remove the more than 157,000 digital meters already installed. The cost would be borne by all customers" who did not request them in the first place.(13)

In a Letter to the Editor, an irate CMP customer wrote on August 15: "It comes as somewhat of a shock considering easements have not been passed down through deeds. Without warning, notice, or knowledge that soon we would be a buzzing, humming community of power stations, wires, eyesores, broken promises, diminished property values and broken lands, CMP marches in with smiles as it steals. We...suggest, CMP, you alter your title to Central Maine Cover-up. We think that the next time you barge into someone's community you have the common decency to inform the residents that you will soon be turning their backyards into industrial wastelands."(14)

Last February, Connecticut's Attorney George Jepson sent out a press release urging Connecticut Light and Power Company [CL&P] not "to replace existing electric meters with advanced technology [that] would be very expensive and would not save enough electricity for its 1.2 million customers to justify the expense. ...The pilot results showed no beneficial impact on total energy usage...and the savings that were seen in the pilot were limited to certain types of customers and would be far outweighed by the cost of installing new meters."(15) This press release was ignored.

However, increasingly, city councils and county supervisors are becoming more responsive to valid and serious consumer complaints to reduce constant exposure (24/7/365) to the invisible dangers of RF and EMF [electromagnetic frequency]. These can be documented as causing a variety of health problems for humans and all other animals (from our pets, to farm and wild animals). This constant pulsing of high frequencies, in addition to the RF function, is causing not only interference with other electric and electronic equipment in many homes with smart meters installed, but also is causing havoc with biological systems in its field exposure.”(16)

Health Problems and Damage Many experts are speaking out of the dangers of RF/EMF exposure. Medical journals and scientific reports show that there is DNA damage, cell mutation, degenerative diseases, and damage to vision and clear-thinking (short-term memory and speech are affected).(17)

The protective Blood Brain Barrier has been breached; and there are numerous studies that show that “exposure to low levels pulsed or continuous microwave radiation has been reported to affect neurotransmitter metabolism...” while other studies suggest that “RF radiation can alter the electrical activity of the brain” and changes cognitive function and behavior. Although there has been very little reported in mainstream media, there is extensive information available information on the Internet.

In a recent community TV program, Joshua Hart, Director of Stop Smart Meters! was interviewed on July 24 about the issues. He noted it is now a public health emergency since these were installed. He said: “There has been insufficient privacy protection...and violation of civil liberties. There is a clear expression of democratic opposition to this program”:
<http://communitytv.org/blog/kenknobler/vftv-7-24-11-pg-e-smart-meters>

Health problems, due to constant exposure of RF radiation, already reported include: migraines, nausea, vomiting, vision impairment, ringing in the ears (tinnitus), muscle spasms and nerve pain, heart palpitations, chest pain, and sleeplessness caused by intense bursts (pulsing) of radiofrequency radiation that has recently been classified as a “possible carcinogen” by the World Health Organization —in the same category as lead, engine exhaust, and DDT.

Other physical problems relate to people who have metal in their bodies: dental metals (such as silver-mercury amalgams or gold inlays); or wear metal jewelry or metal eyeglasses (the metal intensifies the RF). People with pacemakers, prosthetic devices, and wireless insulin pumps have had medical problems due to RF interference.

Most medical professionals and veterinarians have no training in RF/EMF health-related damage. So, often symptoms can be mis-diagnosed. Some people, such as those who have MCS [Multiple Chemical Sensitivity], are aware of these dangers. However, this is a massive experiment on all living beings without any informed consent. This is not “sensitivity” but a chronic and invisible poisoning to the entire population. Susan Brinchman says “there was no public warning of the health dangers with these new meters that have an unsafe technology. This exposes everyone all the time. There is no escape from electrosmog.”

Here are comments by some of the top authorities: Dr. Martin Blank, Associate Professor, Department of Physiology and Cellular Biophysics, Columbia University: “Cells in the body react to EMF’s as potentially harmful, just like any other environmental toxins, including heavy metals and toxic chemicals. The DNA in living cells recognizes electromagnetic fields at very low levels of exposure [not covered by current outdated laws]; and produces a biochemical stress response. The scientific evidence tells us that our safety standards are inadequate, and that we must protect ourselves from exposure to EMF due to power lines, cell phones and the like, or risk the known consequences. The science is very strong and we should sit up and pay attention.”

Prof. Olle Johansson, Karolinska Institute, Stockholm, Sweden, and co-author of the Bioinitiative Report’s section on the Immune System: “Cancer may be the least important effect [of RF/EMF exposure]. Other effects may be much more important...for instance, the impact on the Immune System which is supposed to protect you against whatever bacteria, microbes, or molecules that enter your body; effects on fertility...effects on various mental functions; including short-term memory. You have concentration capacity decreases after microwave radiation.” See: www.youtube.com/watch?v=cczGVhd63pM

Dr. David Carpenter, Professor, Environmental Health Sciences, and Director, Institute for Health and the Environment, School of Public Health, University of Albany, State University of NY: “We need to educate decision-makers that ‘business as usual’ is unacceptable. The importance of this public health issue cannot be underestimated.” See: www.youtube.com/watch?v=n7L21XOC2wA

We are up against the collusion of corporations and governments. In new posting at SmartMetersDangers.org, So CA Edison is regarding the city of Irvine, CA, as a “living laboratory” for using unsuspecting citizens as experimental laboratory subjects. So CA Edison was awarded \$39,621,208 from the US DoE [Department of Energy]. The grant notes: “Thus, the project will literally provide a living laboratory for accurately assessing the interoperability of, and interaction between, all of these various Smart Grid technologies and systems working at the same time. The ISGD [Irvine Smart Grid Demonstration] will be deployed in the City of Irvine, and ideal demonstration site typical of most heavily populated areas of Southern California in climate, topography, environmental concerns and public[sic] policy issues.”(18)

What You Can Do

This is an unsafe technology, where we all are experimental lab subjects being used for dangerous levels of invisible but constant RF/EMF exposure. There is already an enormous public health threat to all of us. It is urgent for people to become informed. We must do this peacefully and COLLECTIVELY.

Here are things you can do:

1. Read up on RF/EMF exposure. Do your homework and become well-informed about these dangers. (See NOTES below.)

2. Write to the CPUC [California Public Utilities Commission]. A public meeting is planned for September 14 in San Francisco. Letters can be sent to: www.electrosmogprevention.org/joinus.html

3. Join together and have public meetings. Demand of public officials that analogue meters be restored at no charge to customers. Where “Smart” meters have not been installed, demand that analogue meters be kept at no charge to customers. In some states, customers are charged up to \$500 to opt-out; while other power companies are charging a monthly rate to keep analogue meters.

4. People should flood ALL public officials with letters, as this is another way of harming us; and it is a complete invasion of our privacy.

With our economy in chaos and funding of all social services slashed, there are several other news items of note:

1. Thousands of meter readers will be or are already out of work, with these “smart” meters installed. With jobs off-shored and millions of Americans out of work, where will these people find jobs?

2. On June 13, the US Department of Agriculture [USDA] announced that it had a goal of “investing \$250 million in smart grid equipment deployment in rural America over the next 12 months.” (Newsroom-magazine.com) Is this tax-payer money? Why are they investing in dangerous technology? Why is there no public discussion?

3. Sempra Energy just posted its second quarter profits. According to PRNewswire (on Aug. 9): “Sempra Energy’s earnings through the first six months of 2011 were \$769 million, compared with \$328 million in 2010.

4. For the “first six months of 2011, SDG&E (a subsidiary of Sempra Energy) earned \$160 million, up from \$158 million in the same period last year.”

There is a long history of deception in this country. Much of it involves our being uninformed experimental laboratory subjects for illegal testing of drugs and other products that have caused enormous harm to us. Remember the thalidomide scandal? Or, Toxic Shock Syndrome? Or the most recent one: the 2009 H1N1 Vaccines scam? None of the various “flu” vaccines were ever independently tested for safety. There were numerous reports that the H1N1 “flu” was geo-engineered. With Orwellian scare tactics, and no supporting evidence of any real “pandemic,” millions of doses were “forced” on hundreds of thousands of innocent people. Many children died. I know personally of the one-year-old grandson of a friend who was given an H1N1 vaccine and died two days later. There was no informed consent. No one was ever prosecuted.

Evidence piled up that the WHO pushed for a [false] “Level 6” Pandemic listing when there was no pandemic. What was at stake was billions of dollars for various drug companies to market a variety of unsafe and untested vaccines. Michel Chossudovsky reported on what happened

behind the scenes, “Manipulating Data to Justify a Worldwide Public Health Emergency”:
www.globalresearch.ca/index.php?context=va&aid=14901

The corporate bottom line is all about profits. The Precautionary Principle [“first do no harm”] and our well being and safety are not included in that. We are all expendable for the bottom line. How much longer do we want to keep silent for continuous harm, lies, and deceit?

NOTES:

1. “The Benefits[sic] of Smart Meters.” California Public Utilities Commission:
www.cpuc.ca.gov/energy/Demand+Response.htm
2. See: www.citizensforsafetechnology.org/smart-meters-and-grids-in-communities-governments,25,0
3. “Transmitting Smart Meters Pose a Serious Threat To Public Health”:
www.electricalpollution.com/smartmeters.html
4. “See Ref. 4 above.
5. Marti Oakley. “Smart Meters: No Federal Mandate.” Aug. 15, 2011:
<http://ppjg.wordpress.com/2011/08/15/smart-meters-no-federal-mandate/#more-17629>
6. See Ref. 5 above.
7. “Smart Meter Interference.” www.ve3ncq.ca/wordpress/?page_id=10
8. EMR Policy Institute: www.emrpolicy.org June 5, 2011 Report, p. 2.
9. See Ref. 8 above.
10. See: www.sammilham.com
11. Brainwave Chart: www.bevolution.dk/pdf/BrainwavemodelBevolutionGB.pdf
12. Marti Oakley...See Ref. 5 above. Dr. Arnold previously was V-P for Lucent Technologies Bell Laboratories.
13. Tux Turkel. “CMP: Smart meter bills come with huge costs.” April 5, 2011:
www.pressherald.com/news/cmp-smart-meter-bills-come-with-huge-costs_2011-04-05.html
14. Dara Leigh Roberts. Letters to the Editor: “CMP’s attitude disdainful about customer’s interests.” Portland Press Herald: Aug. 15, 2011.
15. www.ct.gov/lib/ag/press_releases/2011/020811clpmeters.pdf

16. “New Critical Problem with ‘Smart’ Meters: The Switching-Mode Power Supply (SMPS).” March 30, 2011: <http://eon3emfblog.net/?p=2180>

17. Important studies include: J. Phillips et al. “Electromagnetic fields and DNA damage. Pathophysiology (2009) Vol. 16, Issue 2: 79-88; M. Dämvik and O. Johansson. “Health Risk Assessment of Electromagnetic Fields: A Conflict between the Precautionary Principle and Environmental Medicine Methodology.” Reviews on Environmental Health (2010) Vol. 25, No. 4: 325-333; A. Frangopoulou et al. The Seletun Scientific Statement. “Scientific panel on electromagnetic field health risks: consensus points, recommendation, and rationales.” Rev Environ Health (Oct.-Dec. 2010) Vol 25, No. 4: 307-317; A. Kosowsky et al. “Effects of Cell Phone Radiofrequency Signal Exposure on Brain Glucose Metabolism.” JAMA. Aug. 1, 2011: <http://jama.ama-assn.org/content/305/8/808.abstract>; R. Baan et al. “Carcinogenicity of radiofrequency electromagnetic fields.” Lancet Oncology. (June 22, 2011) Vol. 12 Issue 7: 624-626; O. Johansson. “Electrohypersensitivity: state-of-the-art of a functional impairment.” Electromagn Biol Med. (2006) Vol. 25, No. 4: 245-258.

18. “Irvine, CA is Living Laboratory for Smart Grid”:
www.smartmeterdangers.org/index.php/smartmeter-facts/95-living-lab

Other Important Reports: 1. The Seletun Scientific Statement, Feb. 3, 2011: <http://vimeo.com/180188440> 2. The Bioinitiative Report: www.bioinitiative.org 3. “Health Impacts of Radio Frequency Exposure from Smart Meters.” Final report, April 2011. California Council on Science and Technology. ISBN-13: 978-1-930117-42-6 Also available online. One of the conclusions of this report is: “There is no evidence that additional standards are needed to protect the public from smart meters.” Despite its recent publication, this report is VERY outdated and did not use current research on the significant health dangers. 4. The 2003 EU-REFLEX four-year Study found that “after being exposed to electromagnetic fields, the cells showed significant increase in DNA damage which could not always be repaired by the cell...and damage was also seen in the next generation of cells.” See, “EU REFLEX Project Report”: <http://omegatwoday.net/stories/436261>

ORGANIZATIONS: 1. www.elecrosmogprevention.org 2. www.smartmeterdangers.org 3. www.emfsafetynetwork.org 4. American Coalition Against Smart Meters: www.causes.com/594297 5. In Canada: www.citizensforsafetechnology.org/smart-meters-and-grids-in-communities-governments,25,0

Educator and environmental writer Dr. Ilya Sandra Perlingieri is the author of the highly acclaimed book, “The Uterine Crisis.” London’s “The Ecologist” calls this book “an inspiration.”

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