

THE SMART METER REBELLION & WHAT EVERYONE SHOULD KNOW ABOUT THOSE NEW ENERGY EFFICIENT LIGHT BULBS

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<http://newswithviews.com/Peterson/rosalindA.htm>
<http://www.agriculturedefensecoalition.org/?q=pg-and-e-smart-meters>
<http://www.agriculturedefensecoalition.org/content/plumas-county-ca>

Across the United States a growing rebellion is starting to gain momentum as reports about SMART METERS have begun to find their way into local newspapers, radio, and television news. In California, as Pacific Gas & Electric Company (PG&E), began to roll-out their SMART Meter installation program, residents began to learn more about these meters, in many cases learning this lesson the hard way as their bills skyrocketed upward at alarming rates.

Health questions began to increase, not only about the meters themselves, but the cell towers needed for transmission of the SMART Meter signals, and the SMART Meter Relay Antennas that have begun to show up along rural roads in California. Many are asking their local, city, and state elected representatives to stop this process until all impacts can be evaluated. We know that these types of SMART Meter signals may disrupt pacemakers and other similar medical devices. And it should be clear that hospitals, which ask cell-phone users to turn off their cell phones when inside, should be protected from these types of signals.

The rebellion, here in California, started in Southern California where local residents began protests that have spread across California. This issue has spread throughout California and many other states are getting involved in this debate. The SMART Meter rebellion has been gaining momentum as the big push to put SMART meters on every home, business, school, apartment, and every place where electricity or natural gas is metered. (The change-out has also included the installation of natural gas SMART meters to replace the older existing meters.) It is a topic we all need to know more about as the installation of SMART meters sweeps across California and the United States.

PG&E in California has rolled out the program with \$Millions in television, radio, and print media advertising (being paid by ratepayers in California). Their goal is to SMART Meter the entire State of California without residents having the option to permanently "opt-out". This issue will be decided this September by the California Public Utilities Commission (CPUC). (In other states different options may be available for residents-for information on how to "opt-out" in California see [7] below or file a complaint with the California PUC [8].)

PG&E in California and Texas [16] have also been having problems with defective Smart Meters [14-15], overbilling problems, questions about privacy, and ease of hackers hacking into the system [17]. The list of Smart Meter problems keeps growing. In California, the latest revelation in the S.F. Chronicle on May 3, 2011, is that PG&E has installed some SMART Meters that overcharged customers when the SMART Meter interior temperature reached 100 degrees [18]. PG&E has agreed to remove these defective meters but will only rebate customers \$40.00+/- even though the meters may have overcharged each customer over time hundreds or thousands of dollars.

In addition, PG&E is being forced into an customer “opt-out” or “delay” position because people are refusing these meters. (The PG&E private contractor that installs Smart Meters in California, Wellington (1866) 671-1001 has been ignoring “opt-out” or “delay orders” from PG&E customers in Plumas County.)

The California Public Utility Commission will make a ruling for California residents in September 2011, on whether there will be an “opt-out” option for PG&E customers. The problem is that PG&E wants huge amounts of money paid to them for a possible “opt-out” option and also may elect to encumber our property in the event we want to sell, in order to collect additional money from ratepayers. California residents are not in favor of these “opt-out” options. Also it means that middle, low, and those on fixed incomes (like seniors), would not be able to afford to “opt-out” of the program.

What is an Analog Meter which most people in the U.S. have at this time? PG&E, on their website, made the following statement about analog meters: “...Gas and electric meters record the total amount of gas or electricity consumed, just as a car's odometer records mileage. Meters are highly accurate instruments. In fact, our accuracy record is measured and found to be correct more than 99 percent of the time...” [2]. With analog meters so accurate why should PG&E have to move to SMART meters?

What is a SMART Meter? PG&E, on their website describes Smart Meters and their operations: “...The SmartMeter™ system uses programmable solid-state meter technology that provides two-way communication between the meter at your home or business and the utility, using secure wireless network technology...” [2]. We question how “secure” this technology is at this time as hackers may be able to easily intercept these signals and charge their own utility bills to your account. And other problems may be generated, like human health problems, from using this type of wireless network technology.

PG&E also states on their website: “...The solid-state digital SmartMeter™ electric meter records hourly meter reads and periodically transmits the reads via a dedicated radio frequency (RF) network back to PG&E. Each SmartMeter™ electric meter is equipped with a network radio, which transmits meter data to an electric network access point (pictured below). The system uses RF mesh technology, which allows meters and other sensing devices to securely route data via nearby meters and relay devices, creating a “mesh” of network coverage. The system supports two-way communication between the meter and PG&E. SmartMeter™ electric meters can be upgraded remotely, providing the ability to implement future innovations easily and securely...” [2]. It will also enable PG&E to turn off your electricity at any time.

This technology increases our RF exposure and may lead to increased health problems from this type of technology. Thus, residents of California and other states are asking for more studies and are using existing studies to obtain this type of information prior to installation of more Smart Meters in California.

The SAGE report, released on January 1, 2011, is now online and should be required reading with regard to this subject [4]. Human health issues are one of the main reasons that most people cite as a reason not to deploy these meters without more research.

PG&E also is promoting an Energy Partners Program. Their Energy Partners Program offers free services (allegedly billed to ratepayers), to help reduce energy usage. The PG&E Energy Partners Program offers qualified customers who own or rent a home free energy education and energy-efficient measures which may include: Refrigerator, water heater, other appliance replacement, door replacement and weather-stripping, attic insulation, and compact fluorescent lighting [5-6].

This Energy Partners program was rolled out in Plumas County, California in 2010-2011, with plans for future installations in California. There are several problems with this program:

- A. The replacement refrigerators are alleged to have all been made in Mexico, many had reported defects or failed to keep food at proper temperatures, they were all one size and one color fits all, and required the purchase of an expensive warranty. In addition, some of these refrigerators, and other appliances, may have built-in RF antennas which could increase human exposures in our homes.
- B. The PG&E Contract for these items, which residents were required to sign, was allegedly designed to protect PG&E and not the customer from defective refrigerators [6]. (Also it is a one-size and color fits all and may undermine local businesses who sell these appliances.)
- C. The energy efficient light bulbs installed by PG&E, without Proposition 65 hazard warnings, could turn any residence into a HAZMAT site if broken or when a fire occurs due to Mercury and/or Mercury vapor being released into the room. PG&E allegedly failed to notify residents of this HAZMAT problem or the fact that disposal of these bulbs required a HAZMAT site. PG&E did not allegedly did not provide their customers with U.S. or California EPA information regarding these types of energy efficient light bulbs and the hazards associated with their usage and disposal. And they allegedly did not inform customers that improper disposal could lead to fines being issued by the EPA or other government agencies.
- D. PG&E customers were not warned by PG&E that introducing a HAZMAT item (light bulbs), into their homes might mean that their home insurance policies may not cover the homeowner or renter in a broken bulb accident or fire involving these types of light bulbs.
- E. PG&E did not provide receptacles for HAZMAT waste disposal, for broken or burned out bulbs and tubes, in the areas near where these light bulbs were installed by PG&E, nor did they warn the local sheriff, hospitals, fire departments, or other emergency workers that they were installing these hazardous light bulbs in Plumas County, California.

It should be noted that the EPA has announced (December 2010), that older fluorescent light bulb ballasts may be leaking PCBs (or oils), in our schools, homes and businesses. The EPA in December 2010, issued new home, school and business clean-up rules for broken bulbs which contain mercury; some types also contain arsenic and lead. The range of light bulbs this covers include fluorescent light tubes and bulbs, high intensity discharge (HID), metal halide, sodium and neon bulbs, LEDs, CFLs, and other new types of energy efficient light bulbs. We are required to take them to a HAZMAT site for disposal [9-11].

Many counties and cities throughout California are banning Smart Meters and rethinking the use of light bulbs that have expensive HAZMAT requirements attached to them, not only in our homes, businesses, and schools but in the our waste stream as a whole. It is time to reconsider the use of incandescent light bulbs, until safer light bulbs are designed and tested, due to the environmental mercury, arsenic, and lead contamination problems. And it is also time to reconsider the use of SMART Meters when analog meters work just fine in California and other states. END

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- 1, For more information on these issues visit: <http://www.agriculturedefensecoalition.org/> or <http://www.agriculturedefensecoalition.org/?q=pg-and-e-smart-meters>
- 2, PG&E Analog Meter Information on Website May 1, 2011
<http://www.pge.com/myhome/customerservice/smartmeter/analogmeters/>
- 3, PG&E Smart Meter Information on Website May 1, 2011
<http://www.pge.com/myhome/customerservice/smartmeter/howitworks/>
- 4, The SAGE Report – Released January 1, 2011
http://sagereports.com/smart-meter-rf/docs/Smart-Meter_Report.B-Tables.pdf
- 5, PG&E Energy Partners Program Website Information May 1, 2011
<http://www.pge.com/myhome/myaccount/explanationofbill/billinserts/previous/2009/august.shtml>
- 6, PG&E Plumas County Documents, Contract, Photographs, regarding their Energy Partners Program will be found on this website:
<http://www.agriculturedefensecoalition.org/?q=content/plumas-county-ca>
- 7, In California PG&E is allowing temporary “opt-out” action that can be taken by California residents as reported by a San Francisco Chronicle newspaper article:

The California Public Utilities Commission won't vote on PG&E's "OPT-OUT" proposal until mid-September, at the earliest. Until then, customers who have not yet received a SmartMeter can call the company at **(877) 743-7378** and ask to "OPT-OUT" until this decision is made. If this number does not allow for the PG&E “OPT-OUT” option either write a letter to the address below or call PG&E Headquarters in San Francisco: **(415) 267-7070**

Pacific Gas & Electric Corporation – PG&E Corporate Headquarters, President Christopher P. Johns, Members of the PG&E Board of Directors, One Market, Spear Tower, Suite 2400, San Francisco, CA 94105-1126 or residents may call the following PG&E telephone numbers to “opt-out” until the September 2011, ruling by the PUC.

- 8, California residents may also write to the California Public Utilities Commission in regards to the “opt-out” PG&E plan [12], filing complaints or raising other issues about PG&E Energy Partners Program, hazardous light bulbs or to express their views on PG&E's SMART Meter Program. PG&E is a public utility company in California and the California PUC has oversight and other authority over PG&E. PUC Address:

**The California Public Utilities Commission, Consumer Affairs Branch
505 Van Ness Avenue, Room 2250, San Francisco, CA 94102**

- 9, CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY WARNING
ON LIGHT BULB HAZARDS: FLUORESCENT, CFLS & LEDS <http://www.calepa.ca.gov>

Mercury is a natural element that has many uses. However, mercury is a powerful neurotoxin and causes a variety of adverse health effects due to exposure. Those who are at most risk from mercury exposure are pregnant women and developing children. These types of light bulbs also contain arsenic, lead, and older ballasts release PCBs.

It is Illegal to Discard Fluorescent Light Tubes / Lamps in the Trash! “A fluorescent light tube in your dumpster is a violation of the hazardous waste laws. Violation of these laws can result in large fines and criminal prosecution. Fluorescent tubes contain mercury and become hazardous wastes when they no longer work. Mercury poses especially serious hazards to pregnant women and small children. Nonworking tubes must be recycled by an authorized recycling firm and cannot be discarded in the trash...”

http://www.dtsc.ca.gov/hazardouswaste/mercury/upload/hwmp_fs_fluorescent-tubes-trash.pdf
<http://www.calepa.ca.gov/pressroom/Releases/2006/PR7-020906.pdf>

- 10, Fluorescent tubes and bulbs and other mercury-containing lamps: These types “...Include Fluorescent light tubes and bulbs, high intensity discharge (HID), metal halide, sodium and neon bulbs. These lights contain mercury vapor that may be released to the environment when they are broken. Mercury is a toxic metal that can cause harm to people and animals including nerve damage and birth defects. If mercury is released into the

environment it can contaminate the air we breathe and enter streams, rivers and the ocean, where it can contaminate fish that people eat.

http://www.dtsc.ca.gov/HazardousWaste/UniversalWaste/Res_Fluorescent_Lamps.cfm

- 11, When a fluorescent light breaks please refer to the following guidelines found on this website which include but are not limited to the following:

http://www.dtsc.ca.gov/HazardousWaste/UniversalWaste/Fluorescent_Lights.cfm

Open all doors and windows to ventilate the area for at least 15 minutes. Turn off your AC/Fan/Heater so as not to circulate any mercury vapor. Young children and pregnant women should leave the area during cleanup. Wear appropriate personal protective equipment, such as a dust mask and gloves to keep bulb dust and glass from being inhaled or contacting your skin. Carefully remove the larger pieces and place them in a secure closed container. Next, begin collecting the smaller pieces and dust. It is recommended that you use two stiff pieces of paper such as index cards or one of the many commercial mercury spill kits available. Put all material into a sealed container. Pat the area with the sticky side of duct, packing or masking tape. Wipe the area with a damp cloth. Put all waste and materials used to clean up the bulb in a secure closed container and label it "Universal Waste - broken lamp". Take the container for recycling to the household hazardous waste facility (HHW) nearest you.

- 12, PG&E Press Release April 24, 2011 Regarding their Request to the PUC for an "opt-out" program in California:

http://www.pge.com/about/newsroom/newsreleases/20110324/pgampe_proposes_smartmeter_option.shtml

- 13, Another side of SMART METERS and how they work:

http://www.youtube.com/watch?v=FLcTaSG2-U&feature=player_embedded

November 1, 2010 In this invitational presentation to the San Francisco Tesla Society consulting engineer Rob States explains how PG&E's so-called 'smart' meters work and why they may endanger health and privacy.

- 14, Reuters News May 2, 2011 PG&E California Replacing Broken Smart Meters that Overcharged Customers Thousands to be Replaced

<http://www.reuters.com/article/2011/05/02/idUS406816379420110502>

- 15, PG&E Acknowledges SmartMeter Problems by Michael Finney ABC7 New "On Your Side" Video:

April 26, 2010 - SACRAMENTO, CA (KGO) -- There is a startling admission from PG&E about the controversial SmartMeters. The utility has insisted its new meters are accurate, but on Monday they admitted to some problems at a state Senate committee hearing. PG&E confirmed on Monday that more than 43,000 of its SmartMeters have suffered from various problems. The utility remains insistent however that these problems have had little impact on customers' bills.

http://abclocal.go.com/kgo/story?section=news/7_on_your_side&id=7406652

- 16, http://abclocal.go.com/kgo/story?section=news/7_on_your_side&id=7386817

TEXAS Video - Texas Utilities Admit Billing Errors With Smart Meters - April 14, 2010

- 17, <http://abclocal.go.com/kgo/story?section=news/business&id=7353737> CALIFORNIA

Video - Are Smart Meters Easy Targets for Hackers? ABC7 "On Your Side" March 26, 2010

- 18, San Francisco Chronicle May 3, 2011 "PG&E finds some SmartMeters Erred when they got too Hot by Running too Fast-Overcharging Customers."

<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2011/05/02/BU8J1JATB0.DTL>

- 19, San Francisco Chronicle April 26, 2011 Where to Call in California to Opt-Out of PG&E SMART METER program in California Until September 2011 Article by Baker.

<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2011/04/25/MNG21J73UH.DTL>

"...SmartMeter opt-out - Under pressure from the California Public Utilities Commission, the company last month proposed an option for such customers. If the commission approves the plan, PG&E would still install SmartMeters at virtually every customer's home, but the homeowner could choose to have the meter's radio transmitter turned off. That choice would cost customers as much as \$20 per month, in addition to an up-front fee, because the company would need to send a meter reader to that particular house.

The utilities commission won't vote on PG&E's opt-out proposal until mid-September, at the earliest. Until then, customers who have not yet received a SmartMeter can call the company at (877) 743-7378 and ask to put off installation..."

- 20, PG&E may no longer accept calls Opt-Out at their telephone number allocated for this purpose - if PG&E refuses just call this PG&E number or write to:
Pacific Gas & Electric Corporation – PG&E Corporate Headquarters
President Christopher P. Johns & Members of the PG&E Board of Directors
One Market, Spear Tower, Suite 2400, San Francisco, CA 94105-1126
Telephone: (415) 267-7070
or California Residents may File a Complaint with the California Public Utilities Commission
- 21, “An Internet Address for Every Light Bulb” May 16, 2011 Finance Yahoo News
<http://finance.yahoo.com/news/An-Internet-Address-for-Every-iw-364712174.html?x=0&.v=1>
- “...Press Release Source: NXP Semiconductors On Monday May 16, 2011, 8:00 am EDT
EINDHOVEN, NETHERLANDS--(Marketwire - 05/16/11) - What if every light bulb had its own unique Internet IP address? The possibilities are endless: You could monitor, manage and control every light bulb from any Internet-enabled device -- turning lights on and off individually, dimming or creating scenes from your smartphone, tablet, PC or TV -- to save energy as well as electricity costs. Your "smart lighting" network could have dozens or even hundreds of appliances connected through a wireless network designed for maximum energy savings, communicating information about their environment, about power consumption levels, and alerting you to any problems. Today, NXP Semiconductors (NASDAQ:NXPI - News) is introducing its GreenChip™ smart lighting solution that makes the Internet-enabled, energy-efficient lighting network a reality -- not only for businesses, but also for consumers trying to make the most of energy savings in the home...”
- Note that home and health hazards are not included in this article.
- 22, “LED Bulbs Hit 100 Watts as Federal Ban Looms” Yahoo News May 16, 2011 APNews Technology
http://news.yahoo.com/s/ap/20110516/ap_on_hi_te/us_led_lighting;_ylt=AsE3Gkdtse.WMyLRBM_sWOCs0NUE;_ylu=X3oDMTNqNzVocWJIBGFzc2V0A2FwLzlwMTEwNTE2L3VzX2xIZF9saWdodGluZwRjY29kZQNtb3N0cG9wdWxhcqRjcG9zA2gEcG9zAzUEcHQDaG9tZV9jb2t1BHNIYwN5bl9oZWFKbGluZV9saXN0BHNS
- “...The new bulbs will also be expensive — about \$50 each — so the development may not prevent consumers from hoarding traditional bulbs... Creating good alternatives to the light bulb has been more difficult than expected, especially for the very bright 100-watt bulbs. **Part of the problem is that these new bulbs have to fit into lamps and ceiling fixtures designed for older technology.** Compact fluorescents are the most obvious replacement, but they have drawbacks. They contain a small amount of toxic mercury vapor, which is released if they break or are improperly thrown away. They last longer than traditional bulbs but not as long as LEDs. Brighter models are bulky and may not fit in existing fixtures. Another new lighting technology, organic light-emitting diodes, or OLEDs, has had problems reaching mass production. OLEDs are glowing sheets or tiles, rather than pinprick light sources, as LEDs are. They're used as vibrant color screens for smartphones, particularly from Samsung Electronics Co. But making OLEDs that are big, bright, cheap and long-lasting enough for use as light sources has proved difficult, in part because they use chemicals that are sensitive to oxygen and spoil unless sealed very carefully...”

- 23, **State of Maine PUC Adopts Consumer SMART Meter Opt-Out Plan May 18, 2011**
Portland Maine Press Herald News – “...HALLOWELL — Central Maine Power Co. customers who don't want wireless smart meters installed at their homes and businesses will have options, following a landmark decision at the Maine Public Utilities Commission. People can opt out of the program by keeping their existing, analog meters, or having a modified smart meter installed with its wireless transmitter turned off, the PUC decided. Customers also have the option of moving a wireless smart meter to another location on their property... The choices approved in Maine come with costs, however, that must be paid by the customers who want to opt out. Choosing a digital smart meter with the wireless transmitter turned off will carry an initial charge of \$20, plus a monthly charge of \$10.50. Keeping an existing mechanical meter will cost \$40 upfront, plus \$12 a month. The cost of relocating an existing meter is highly variable, but typically expensive. Low-income residents can qualify for a subsidy that could pay up to half the opt-out cost. The costs are likely to be adjusted over time, depending on how many customers ultimately want something other than a standard smart meter. An estimated 7,000 people – just over 1 percent of all customers – so far have asked not to have the new meters installed at their homes and businesses. CMP will continue to honor these requests until a formal opt-out process is put in place...”
<http://www.pressherald.com/news/PUC-approves-smart-meter-opt-out-options.html>
- 24, **California Department of Toxic Substances Website – Hazmat & Contaminant Information**
Restrictions on the use of Certain Hazardous Substances in General Purpose Lights
http://www.dtsc.ca.gov/RoHS_Lighting.cfm
- 25, **Visit the California EPA Website for more information on Halogen Light Bulb and other Light Bulb Hazards:** <http://www.calepa.ca.gov/> (Use the Search Engine – Great Website)
- 26, **Mercury Report August 2002, CA Department of Toxic Substances – Includes Light Bulbs**
<http://www.dtsc.ca.gov/loader.cfm?url=/commonsspot/security/getfile.cfm&pageid=13123>
- 27, **The Wall Street Journal JANUARY 19, 2011. The New Light Bulbs Lose a Little Shine**
Compact Fluorescent Lamps Burn Out Faster Than Expected, Limiting Energy Savings in California's Efficiency Program.
<http://online.wsj.com/article/SB10001424052748704259704576033890595565026.html>
- 28, **Experts say cellphones are possibly carcinogenic - By MARIA CHENG, AP Medical Writer May 31, 2011**
Also could mean that Smart Meters are also carcinogenic. “...A respected international panel of experts says cellphones are possible cancer-causing agents, putting them in the same category as the pesticide DDT, gasoline engine exhaust...”
<http://www.sfgate.com/cgi-bin/article.cgi?f=/n/a/2011/05/31/international/i091115D93.DTL>
- 29, **PG&E: “Take this SmartMeter, or else.” San Francisco Chronicle June 15, 2011**
http://www.sfgate.com/cgi-bin/blogs/energy/detail?entry_id=90992&tsp=1&plckItemsPerPage=10&plckSort=TimeStampDescending&plckFindCommentKey=CommentKey:a0aae3af-c0cc-4a38-a742-a30bb2358ab4
- 30) **The San Francisco Chronicle “SmartMeter Foes Call Study on Cell Phones Vindication” June 2, 2011**
<http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2011/06/02/BUT31JO9MN.DTL>