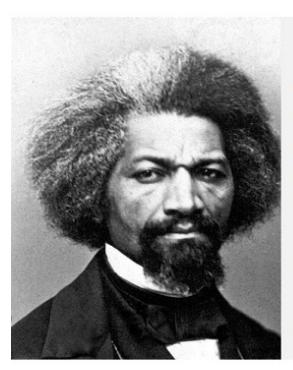
#### **TAKE BACK YOUR POWER**

#### http://www.takebackyourpower.net/

- action strategy guide <a href="http://www.takebackyourpower.net/solutions">http://www.takebackyourpower.net/solutions</a>
- 10 questions to ask your utility company -- <a href="http://www.takebackyourpower.net/take-action/10-questions-for-your-utility/">http://www.takebackyourpower.net/take-action/10-questions-for-your-utility/</a>
- http://www.takebackyourpower.net/research/film-references/



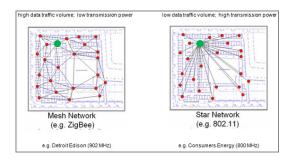
"Find out just what any people will quietly submit to and you have the exact measure of the injustice and wrong which will be imposed on them."

Frederick Douglass

[EXTRA] – Smart Meter issues (e.g. privacy, security, safety, environment, health, and cost) are grounded in the principle of CHOICE and CONSENT.

Most of the network-specific information below has been gathered for a **mesh network** (e.g. DTE), which has high transmission volume and low transmission power.

Note that some utility companies (e.g. Consumers Energy, Duke Energy, Texas New Mexico Power, and CPS Energy) are installing a **cellular point-to-point network (Pt2Pt)**, which has low transmission volume and high transmission power.



Smart Meter activities -- Radio Frequency Radiation and Dirty Electricity

- G2M smart grid (e.g. utility company) to smart meter
- M2G smart meter to smart grid (e.g. utility company)
- M2A smart meter to smart appliance
- A2M smart appliance to smart meter

Opt-Out Meter activities -- Radio Frequency Radiation and Dirty Electricity

- G2M smart grid (e.g. utility company) to smart meter
- M2G smart meter to smart grid (e.g. utility company) manual read by utility company
- M2A smart meter to smart appliance
- A2M smart appliance to smart meter

Privacy issues include the **granularity** of the data collected.

Privacy and Health issues include the **frequency** of transmissions for reporting the data collected.

RFR transmission sources within the home:

- M2G smart meter to smart grid (e.g. utility company)
- · transmissions typically not mentioned in utility company literature
  - M2A smart meter to smart appliance
  - o A2M smart appliance to smart meter
  - M2H2A smart meter (to Home Area Network) to smart appliance
  - o A2H2M smart appliance (to Home Area Network) to smart meter

Typical Frequency Ranges FCC OET Equip Authorization <a href="http://transition.fcc.gov/oet/ea/fccid/">http://transition.fcc.gov/oet/ea/fccid/</a> <ul> <li>Smart Meter mesh network</li> <li>Smart Meter point-to-point</li> <li>824.7 - 846.31 MHz</li> <li>Smart Appliance</li> <li>1851.25 - 1908.75 MHz</li> <li>2414.0 - 2462.0 MHz</li> </ul>
86400 sec / day an example" A 1% duty cycle (e.g. transmitting only 1% of the 86400 sec/day) equals 864 sec = 14.4 min/day. If 1 sec / transmission, then 864 transmissions / day = 1 transmission every 100 seconds. If 5 millisecond / transmission, then 17280 transmissions / day = 1 transmission every 5 seconds.
Be aware of cumulative effects of Radio Frequency Radiation (RFR):
<ul> <li>concurrent simultaneous transmissions from various sources (e.g. M2G, M2A, A2M)</li> <li>compounded a transmission bouncing off a reflective surface         <ul> <li>asphalt roads, concrete sidewalks, aluminum siding, stainless steel appliances (indoors), ceramics, plate glass windows, etc</li> </ul> </li> </ul>
<ul> <li>intensity 30-minute time-averaging allowance for the General Public for 900 MHz</li> <li>600 μW/cm² Maximum Personal Exposure (MPE) for 100% duty cycle</li> <li>60,000 μW/cm² Maximum Personal Exposure (MPE) for 1% duty cycle</li> </ul>
<ul> <li>intensity 30-minute time-averaging allowance for the General Public for 2.4 GHz</li> <li>1,000 μW/cm² Maximum Personal Exposure (MPE) for 100% duty cycle</li> <li>100,000 μW/cm² Maximum Personal Exposure (MPE) for 1% duty cycle</li> </ul>
$0.1~\mu W/cm^2$ BioInit 2007 recommended precautionary limit for cumulative outdoor RFR exposure $0.0003$ - $0.0006~\mu W/cm^2$ BioInit 2012 reasonable precautionary action level for chronic exposure to pulsed RFR
$\mu = micro$ $m = milli$ $mW = 10(dBm/10)$
1 W/m <sup>2</sup> = 1,000 mW/m <sup>2</sup> = 1,000,000 $\mu$ W/m <sup>2</sup> = 100 $\mu$ W/cm <sup>2</sup> Power Flux Density = (((V/m) <sup>2</sup> ) / 377) = (W/m <sup>2</sup> ) = 100 $\mu$ W/cm <sup>2</sup>
<ul> <li>UHF, SHF, EHF MICROWAVE 300 MHz - 300 GHz</li> <li>HF, VHF Radio Frequency 3 MHz - 300 MHz</li> <li>MF AM, CB, FM 300 kHz - 3 MHz</li> <li>VLF Very Low Frequency 3 kHz - 300 kHz</li> <li>ULF, ELF, VF Extremely Low Frequency 3 Hz - 3 kHz</li> </ul> Schumann Resonance frequency of the earth 7.83 Hz identical to Human Alpha-Wave in the brain <a href="http://en.wikipedia.org/wiki/Schumann resonances">http://en.wikipedia.org/wiki/Schumann resonances</a>

Time stamp	TOPIC – TRUST and VERIFY
4:00	[mesh network] Hydro meter the smart meter of a Canadian utility company
5:20	SMART PROPERTY RIGHTS
6:30	[purported] Benefits
6:45	Fires
	[mesh network] Aug , 2012 Fire Concerns Lead PECO (Pennsylvania) To Halt Smart Meter Installations <a href="http://www.myfoxphilly.com/story/19289039/peco-halts-smart-meter-installation-program">http://www.myfoxphilly.com/story/19289039/peco-halts-smart-meter-installation-program</a>
9:00	Government incentives 2009 US bailout stimulus package
	Time magazine  • Link on TBYP web site <a href="http://business.time.com/2012/07/26/obamas-smart-electrical-grid-plan/">http://business.time.com/2012/07/26/obamas-smart-electrical-grid-plan/</a> • EXTRA Time web site - Search - additional articles  • <a href="http://science.time.com/2013/03/26/smart-power-why-more-bytes-will-mean-fewer-and-cleaner-electrons/">http://science.time.com/2013/03/26/smart-power-why-more-bytes-will-mean-fewer-and-cleaner-electrons/</a> • <a href="http://business.time.com/2013/03/28/smart-power/">http://business.time.com/2013/03/28/smart-power/</a>
	[EXTRA] Wikipedia Energy Policy Obama Administration Reduce electricity by 4% by 2030 <a href="http://en.wikipedia.org/wiki/Energy">http://en.wikipedia.org/wiki/Energy</a> policy of the Obama administration  Personal Comment reduce the supply of plants powered by coal or gas while increase the demand of electrical recharging of electric vehicles.

10:45	SMART BILLING
	Toronto Sun - Sept 18, 2010 Dalton McGuinty's shocking admission  Premier Dalton McGuinty, having launched Ontario on a billion-dollar smart meter experiment, now admits the electricity pricing scheme that's supposed to make it all work, isn't.
	http://www.torontosun.com/comment/editorial/2010/09/17/15392101.html
	BBC News - May, 2013 - Smart Meters: a waste of money <a href="http://www.bbc.com/news/uk-politics-22528144">http://www.bbc.com/news/uk-politics-22528144</a>
11:20	[mesh network] 3 min video – Apr, 2010 - ABC - Channel 7 Michael Finney PG&E acknowledges SmartMeter problems – inaccuracy <a href="http://abclocal.go.com/kgo/story?id=7406652">http://abclocal.go.com/kgo/story?id=7406652</a> 3 min video – Mar, 2014 - ABC - Channel 7 Michael Finney – San Mateo woman fights utility bill after home destroyed by fire <a href="http://abclocal.go.com/kgo/story?section=news/7">http://abclocal.go.com/kgo/story?section=news/7</a> on your side&id=9467149
11:15	[mesh network] 2010 - California - ABC channel 7 Stanford University students utility billing mixed up wirelessly with their neighbors 4 min video - <a href="http://abclocal.go.com/kgo/story?section=news/7">http://abclocal.go.com/kgo/story?section=news/7</a> on your side&id=7424533  \$200 - \$300 product <a href="http://www.theenergydetective.com/compare">http://www.theenergydetective.com/compare</a> 10 min video TED 5000 <a href="http://www.youtube.com/watch?v=RfjVN_Z4JK4">http://www.youtube.com/watch?v=RfjVN_Z4JK4</a>
12:20	CMP facing audit over smart meters as electricity bills go up <a href="http://freepressonline.com/main.asp?SectionID=52&amp;SubSectionID=78&amp;ArticleID=26558">http://freepressonline.com/main.asp?SectionID=52&amp;SubSectionID=78&amp;ArticleID=26558</a>
12:30	[EXTRA] Time-of-Use example  • 7 pm - 7 am Summer - off-peak Winter - off-peak  • 7 am - 11 am Summer - mid-peak Winter - on-peak  • 11 am - 5 pm Summer - on-peak Winter - mid-peak  • 5 pm 7 pm Summer - mid-peak Winter - on-peak

13:50	SMART VULNERABILITY
	David Chalk cyber-hacking expert <a href="http://www.businesswire.com/news/home/20120412005992/en/Hacking-Expert-David-Chalk-Joins-Urgent-Call">http://www.businesswire.com/news/home/20120412005992/en/Hacking-Expert-David-Chalk-Joins-Urgent-Call</a>
15:10	GAO – CyberSecurity challenges in securing the modernizing electricity grid – Feb, 2012 <a href="http://www.gao.gov/products/GAO-12-507T">http://www.gao.gov/products/GAO-12-507T</a>
	[TBYP 2013 DVD <b>]</b> Campbell – <b>Bilderberg</b> trip not conflict of interest <a href="http://www.cbc.ca/news/canada/british-columbia/campbell-s-bilderberg-trip-no-conflict-official-1.913720">http://www.cbc.ca/news/canada/british-columbia/campbell-s-bilderberg-trip-no-conflict-official-1.913720</a>
15:50	Campbell – Clean Energy Act is an assault on democracy <a href="http://www.avtimes.net/opinion/editorial/clean-energy-act-is-an-assault-on-democracy-1.201286">http://www.avtimes.net/opinion/editorial/clean-energy-act-is-an-assault-on-democracy-1.201286</a>
17:10	The Providence Hydro horror stories show smart meters just aren't that smart Apr 2012 <a href="http://margotbworldnews.com/News/Apr/Apr1/horror.html">http://margotbworldnews.com/News/Apr/Apr1/horror.html</a>
	[TBYP 2013 DVD] This is a tax!!! Too bad!
18:20	SMART CORPORATOCRACY
	Dept of ENERGY – Smart Grid Communications Requirements Report 2010
	overview http://energy.gov/gc/downloads/communications-requirements-smart-grid-technologies
	Detailed report <a href="http://energy.gov/sites/prod/files/gcprod/documents/Smart Grid Communications Requirements Report 10-05-2010.pdf">http://energy.gov/sites/prod/files/gcprod/documents/Smart Grid Communications Requirements Report 10-05-2010.pdf</a>
	Page 23 One of the most common steps taken by utilities toward creating a smarter power grid has been the increasing implementation of demand response (DR). Demand response is the reduction of the consumption of electric energy by customers in response to an increase in the price of electricity or heavy burdens on the system. Demand response can significantly reduce peak loads.77
	Page 24 Retail demand response can take various forms. With direct load control (DLC), customers agree to have their consumption of electricity automatically curtailed at times of peak load, via the powering down of appliances.81 A more advanced version of DR is automated DR, which allows on-premises equipment to respond to dynamic conditions on the grid, shifting load consumption in near-real-time. The DR device can be an energy management system or a smart appliance, the latter referred to as "prices to devices" because it sends pricing information directly to the appliance, which responds accordingly without an explicit control command.

19:10	lan R. Crane Geopolitical Researcher <a href="http://www.ianrcrane.com/">http://www.ianrcrane.com/</a>
19:55	Congressional Research Service 48 pages – Privacy and Cybersecurity https://www.fas.org/sgp/crs/misc/R42338.pdf  • Page 2 - If smart meter data and transmissions fall outside of the protection of the Fourth Amendment, they may still be protected from unauthorized disclosure or access under the Stored Communications Act (SCA), the Computer Fraud and Abuse Act (CFAA), and the Electronic Communications Privacy Act (ECPA). These statutes, however, would appear to permit law enforcement to access smart meter data for investigative purposes under procedures provided in the SCA, ECPA, and the Foreign Intelligence Surveillance Act (FISA), subject to certain conditions. Additionally, an electric utility's privacy and security practices with regard to consumer data may be subject to Section 5 of the Federal Trade Commission Act (FTC Act). The Federal Trade Commission (FTC) has recently focused its consumer protection enforcement on entities that violate their privacy policies or fail to protect data from unauthorized access. This authority could apply to electric utilities in possession of smart meter data, provided that the FTC has statutory jurisdiction over them. General federal privacy safeguards provided under the Federal Privacy Act of 1974 (FPA) protect smart meter data maintained by federal agencies, including data held by federally owned electric utilities.  • Page 4 – Overview Smart meter technology is a key component of the Advanced Metering Infrastructure (AMI)1 that will help the smart grid2 link the "two-way flow of electricity with the two-way flow of information."3 Privacy and security concerns surrounding smart meter technology arise from the meters' essential functions, which include (1) recording near-real time data on consumer electricity usage; (2) transmitting this data to the smart grid using a variety of communications technologies;4 and (3) receiving communications from the smart grid, such as real-time energy prices or remote commands that can alter a consumer's electricity usage to fac

#### 20:30 California Utility selling data to third parties --TBYP -- 4) Is it true that my energy use information will be sold to third-party vendors in order to market products or track my activities in some way? Answer: Yes. The California Public Utilities Commission has stated on the record that they look forward to the business opportunities that will come from selling our personal energy use data. Sept 2010 -- http://www.emeter.com/smart-grid-watch/2010/california-moves-toprotect-consumer-energy-data-privacy/ http://www.leginfo.ca.gov/pub/09-10/bill/sen/sb 1451-1500/sb 1476 cfa 20100628 112805 asm comm.html [EXTRA] --Senate Bill (SB) 1476 (Chapter 497, Statutes of 2010) http://www.leginfo.ca.gov/pub/09-10/bill/sen/sb 1451-1500/sb 1476 bill 20100929 chaptered.html. CPUC - July 27, 2011 -- http://www.sqiclearinghouse.org/cybersecurity?q=node/4533&lb=1 --This document provides attachments of the decision of CPUC that adopts rules to protect the privacy and security of customer data generated by Smart Meters concerning the usage of electricity that are deployed by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E). The rules adopted implement the protections ordered by Senate Bill (SB) 1476 (Chapter 497, Statutes of 2010). TBYP provided – July 31, 2011 -- http://smartenergyportal.net/article/california-commissionadopts-rules-protect-privacy-and-security-customer-electricity-usage-d CDT - Center for Democracy and Technology -- Aug 16, 2011 -- https://cdt.org/insight/ca-pucsmart-grid-privacy-and-security-rules/ -- This decision adopts rules to protect the privacy and security of customer data generated by Smart Meters concerning the usage of electricity that are deployed by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E). The rules adopted implement the protections ordered by Senate Bill (SB) 1476 (Chapter 497, Statutes of 2010). The adopted rules are also consistent with other sections of the Public Utilities Code and past Commission privacy policies. Attachment D, Rules Regarding Privacy and Security Protections for Energy Usage Data, lists the adopted privacy and security rules. CPUC - Dec 2011 Smart Grid report -- http://www.cpuc.ca.gov/NR/rdonlyres/3B475B48-58CF-4541-9ACE-

2EEA7B374336/0/SmartGridAnnualReporttotheGovernorandtheLegislature.pdf

Need to clarify what is explicitly/implicitly meant by the term "Pursuant".

21:50	SMART SPY STATE
	The Guardian / The Observer July 1, 2012 Energy smart meters are a threat to privacy <a href="http://www.theguardian.com/environment/2012/jul/01/household-energy-trackers-threat-privacy">http://www.theguardian.com/environment/2012/jul/01/household-energy-trackers-threat-privacy</a>
	[TBYP 2013 DVD] The Age ITPRO - Sept 23, 2012 smart meter data shared far & wide <a href="http://www.theage.com.au/it-pro/government-it/smart-meter-data-shared-far-and-wide-20120925-26dvp.html">http://www.theage.com.au/it-pro/government-it/smart-meter-data-shared-far-and-wide-20120925-26dvp.html</a>
	[TBYP 2013 DVD] San Francisco Chronicle - June, 2013 - Is your smart meter spying on you? http://blog.sfgate.com/energy/2013/06/20/is-your-smart-meter-spying-on-you/
22:10	CIA Chief Spy through your dish washer <a href="http://www.huffingtonpost.com/2012/03/15/cia-chief-smart-homes-spying-n-1349810.html">http://www.huffingtonpost.com/2012/03/15/cia-chief-smart-homes-spying-n-1349810.html</a>
	http://www.wired.com/dangerroom/2012/03/petraeus-tv-remote/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+wired%2Findex+%28Wired%3A+Index+3+%28Top+Stories+2%29%29
	[EXTRA] New York Times For Google, a Toehold Into Goods for a Home <a href="http://www.nytimes.com/2014/01/14/technology/google-to-buy-nest-labs-for-3-2-billion.html?hpw&amp;rref=business&amp;r=1">http://www.nytimes.com/2014/01/14/technology/google-to-buy-nest-labs-for-3-2-billion.html?hpw&amp;rref=business&amp;r=1</a>
	[TBYP 2013 DVD <b>]</b> Business Insider - June 13, 2013 there's a new bill to keep your TV (or XBOX) from spying on you <a href="http://www.businessinsider.com/bill-to-keep-tv-and-xbox-from-spying-2013-6">http://www.businessinsider.com/bill-to-keep-tv-and-xbox-from-spying-2013-6</a>
23:00	CISPA - Cyber Intelligence Sharing and Protection Act <a href="https://intelligence.house.gov/bill/cyber-intelligence-sharing-and-protection-act-2013">https://intelligence.house.gov/bill/cyber-intelligence-sharing-and-protection-act-2013</a>
23:45	CNET – US Give Big, Secret Push to Internet Surveillance <a href="http://www.cnet.com/news/u-s-gives-big-secret-push-to-internet-surveillance/">http://www.cnet.com/news/u-s-gives-big-secret-push-to-internet-surveillance/</a>
24:45	NSA Data Center Bluffdale, UT <a href="http://nsa.gov1.info/utah-data-center/">http://nsa.gov1.info/utah-data-center/</a>
26:10	"until the technology gets better"

	1
27:00	Jerry Day <a href="http://www.freedomtaker.com/">http://www.freedomtaker.com/</a>
28:30	Cashless currency based on carbon credits
30:00	Scarcity and Control
	Time-Of-Use Pricing (TOU) and Demand Response (DR)
29:15	Federation of American Scientists 5000+ alternative energy inventions <a href="https://www.fas.org/">https://www.fas.org/</a>
30:00	Title 35.U.S.C. 181 Patents Secrecy of certain inventions and withholding a patent. refer to Appendix L <a href="http://www.gpo.gov/fdsys/granule/USCODE-2011-title35/USCODE-2011-title35-partII-chap17-sec181/content-detail.html">http://www.gpo.gov/fdsys/granule/USCODE-2011-title35/USCODE-2011-title35-partII-chap17-sec181/content-detail.html</a>
	[EXTRA] PROPONENT SmartGridNews <a href="http://www.smartgridnews.com/">http://www.smartgridnews.com/</a> <a href="http://www.smartgridnews.com/artman/publish/Technologies Metering/Latest-smart-meter-pushback-Laws-to-prevent-meters-from-stealing-secrets-6405.html">http://www.smartgridnews.com/artman/publish/Technologies Metering/Latest-smart-meter-pushback-Laws-to-prevent-meters-from-stealing-secrets-6405.html</a>
32:30	Radio Frequency Radiation (RFR)
33:30	Paraphrase "it's not a smart meter. It's a radio-frequency meter."
35:15	May 2011 Radio Frequency Radiation (RFR) – WHO / IARC class II b cancer causing carcinogenic <a href="http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208">http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208</a> E.pdf
35:40	David O. Carpenter contributor to BioInitiative Report 2012
	2 min video http://www.youtube.com/watch?v=OfTi1J24AMo
	http://marylandsmartmeterawareness.org/general-info/dr-david-carpenters-letter-to-bge/
35:50	CNW - TELBEC - Sept 24, 2012 - Health experts from 20 countries caution about smart meter risks http://www.newswire.ca/en/story/1041159/health-experts-from-20-countries-caution-about-smart-meter-risks

	[mesh network] PG&E 14000 pulses / day Other smart meters 190000 pulses / day http://www.bcuc.com/Documents/Proceedings/2012/DOC 32544 C6-4 JF-Submission-Kelowna.pdf
36:40	[EXTRA] A pulse duration [purportedly] is 4.5 milliseconds.
38:40	aggregate meter [appears to be similar to a collector meter within a mesh network]
38:15	<ul> <li>[EXTRA] GigaHertz Solutions high frequency</li> <li>HF 32D 800 MHz-2.7 GHz \$250 - 1 μW/m² - 1999 μW/m²</li> <li>HF 35C 800 MHz-2.7 GHz \$400 - 1 μW/m² - 1999 μW/m² shown in this DVD</li> <li>HFE 35C 27 MHz-2.5 GHz \$870 - 1 μW/m² - 1999 μW/m²</li> <li>http://www.gigahertz-solutions.com/en/Home.html</li> </ul>
	[NOTE All information above is to be used to increase one's <b>personal awareness</b> and an aid to further investigation, but is <u>not to be considered an endorsement</u> for any product or for any personal action.]
39:00	Dancing Aphids reacting to airport radar 14 miles away.
	http://www.youtube.com/watch?v=018C2oG2Rcs
	"Exploring the Spectrum" Dr. John Nash Ott
	Chart microwave power density: health effects vs safety standard
	7.93 μW/cm² one foot from single smart meter Electric Power Institute - Dec 2010
	19.8 μW/cm² 2-4 feet from bank of 12 smart meters Healthy Homes Consulting Inc Nov 2011
	600 - 1000 μW/cm² Safety Limit for US and Canada based on 1960's review of thermo effect
	Also refer to Daniel Hirsch <a href="http://www.committeetobridgethegap.org/pdf/110212">http://www.committeetobridgethegap.org/pdf/110212</a> RFrad comments.pdf

FCC – Aug 1997 84 pages - Compliance FCC Guidelines Biological Effects RF EMF
http://transition.fcc.gov/Bureaus/Engineering Technology/Documents/bulletins/oet65/oet65.pdf
Limit to General Public Power Density (mW/cm²) for F-range of 300-1500 MHz = F / 1500 For example 900 MHz 900/1500 = 0.6 mW/cm² = $600 \mu$ W/cm²
Limit to General Public Power Density (mW/cm²) for F-range of 1500-100,000 MHz = 1.0 For example 2.4 GHz 1.0 mW/cm² = $\frac{1000}{\mu}$ mW/cm²
[EXTRA] Current Guidelines, including 600 microWatts / square centimeter, are NOT acceptable; Guidelines should be significantly lower 3000 times lower 0.2 microWatts / square centimeter.
600 - 1000 μW/cm² 30min-TimeAvg Safety Limit for US & Canada 1960's review of thermo effect
0.1 μW/cm <sup>2</sup> BioInit 2007 recommended precautionary limit for cumulative outdoor RFR exposure
$0.0003$ - $0.0006~\mu W/cm^2$ BioInit 2012 reasonable precautionary action level for chronic exposure to pulsed RFR
Slide footnote sighted http://www.powerwatch.org.uk/science/intguidance.asp
The main international guidance comes from the International Commission on Non-Ionizing Radiation Protection (ICNIRP). These levels apply in most of Europe.
SMART HEALTH DAMAGE
Naval Medical Research Institute MF12.524.015-0004B, Report No. 2, revised. 106 pp Zorach R. Glaser – 1971 report and 1972 report <a href="https://openlibrary.org/works/OL10949003W/Bibliography_of_reported_biological_phenomena_(effects_) and clinical_manifestations_attributed_to&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;8 min video Smart meter effecting heart pacemaker&lt;br&gt;http://www.youtube.com/watch?v=BRDhogkdxW4&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;[TBYP 2013 DVD&lt;b&gt;]&lt;/b&gt; Dirty Electricity Eric Windheim GS meter 4 min video - &lt;a href=" http:="" watch?v='LotupK7IQBs"' www.youtube.com="">http://www.youtube.com/watch?v=LotupK7IQBs</a>

46:50	Switch mode power supply (SMPS)
49:30	BC Hydro – Salt Spring Island – installation of a "regular digital meter"  Oct, 2012 - <a href="http://saltspringexchange.com/2012/10/21/are-smart-meters-coming-to-salt-spring/">http://saltspringexchange.com/2012/10/21/are-smart-meters-coming-to-salt-spring/</a> Aug, 2013 <a href="http://www.osoyoostimes.com/saltspring-island-woman-launches-class-action-lawsuit-over-smart-meters/">http://www.osoyoostimes.com/saltspring-island-woman-launches-class-action-lawsuit-over-smart-meters/</a> Comment from an Opponent of smart meter deployment – In this example, the meter is purported to <a href="not be a smart meter at this time">not be a smart meter at this time</a> . While this statement may be accurate, this statement is misleading. At the time the smart meter deployment is complete and meter is fully functional, then the advanced metering infrastructure (AMI) meter will be a smart meter with 2 transmit sources: M2G smart meter to smart grid (e.g. utility company) and M2A - smart meter to smart appliance.
51:30	As you watch the DVD, count how often the monitoring meter makes an audible sound.
	[EXTRA] Do the Math GigaHertz Solutions meter was audibly pinging every 5 .5 seconds  99.9% inactive = 0.1% active  0.1% duty cycle  0.1% of 86400 sec / day = 86.4 sec / day  1.44 min / day
	(1 pulse / 5 mSec) * (1000 mSec / sec) * (86.4 sec / day) 17,280 pulses / day  (17,280 pulses / day) / (86400 sec / day) 1 pulse every 5 seconds
53:15	Bees - Colony Collapse Disorder -or- Smart Meter
	[TBYP 2013 DVD] Dutch court overturns cell permit on concerns for bees Nov, 2012 http://www.telecompaper.com/news/dutch-court-overturns-cell-permit-on-concern-for-bees906102
53:40	Book "Bees, Birds and Mankind - Destroying Nature by 'Electrosmog'" Ulrich Warnke

	[EXTRA] http://www.bioinitiative.org/ In 2007, the BioInitiative Working Group reviewed 30 years of scientific studies documenting bioeffects and adverse health effects from these electromagnetic field (EMF) exposures. It concluded that "the existing public safety limits are inadequate." The newly published 2012 Bioinitiative report written by 29 independent scientists from around the world says the situation is much worse than thought in 2007.  600 - 1000 μW/cm² 30min-TimeAvg Safety Limit for US & Canada 1960's review of thermo effect 0.1 μW/cm² BioInit 2007 recommended precautionary limit for cumulative outdoor RFR exposure 0.0003 - 0.0006 μW/cm² BioInit 2012 reasonable precautionary action level for chronic exposure to pulsed RFR
55:30	Blood tests inflammatory markers:  TGF-beta 1 increase http://en.wikipedia.org/wiki/TGF_beta_1  MMP-9 increase http://en.wikipedia.org/wiki/MMP9  Copper increase http://lpi.oregonstate.edu/fw08/copper.html  HSP heat stress/shock proteins http://apps.fcc.gov/ecfs/document/view?id=7520940054
56:50	Dark field microscopy 2 min video <a href="http://www.youtube.com/watch?v=Mg21897IW">http://www.youtube.com/watch?v=Mg21897IW</a> 4

59:40	Dider Bellens doesn't like Wi-Fi waves
	http://stopsmartmeters.org.uk/belgacom-chief-does-not-like-the-wi-fi-and-says-mobile-phone-signals-are-dangerous/
	http://www.robindestoits.org/SCOOP-Didier-Bellens-le-patron-de-Belgacom-operateur-Belge-n-aime-pas-les-ondes-Wi-Fi-et-affirme-que-le-GSM-est_a1853.html  BING translation - The patron of Belgacom is not a junkie of the Wi - Fi mode in the high tower of the telecom operator. The 27th floor, intended for the direction, runs therefore this technology that allows access to wireless Internet and broadband. The decision surprised only halfway, when knows that Didier Bellens, also encouraged its interlocutors to call it on its fixed line and not its GSM  See also: VIDEO: "mobile phone: towards a European directive against waves?" + the boss of Belgacom (Belgium) cut Wi - fi on its floor and limited its use of the mobile phone! -BFM - TV - 05/12/2012 (with mention of the journalist on the disconnection of the Wi - fi by Didier Bellens).
	http://www.robindestoits.org/Didier-Bellens-le-boss-de-Belgacom-operateur-Belgeexplique-que-le-GSM-c-est-dangereux-Sudpresse-25-11-2011 a1852.html  BING translation - The generally, a boss criticizes never the product it sells. Even more when it is regularly targeted by studies on its possible harmfulness.  But this basic rule of commerce, Didier Bellens has visibly what to do! The man who is the head of Belgacom and therefore of Proximus, initiated Tuesday of schoolchildren about the dangers of the Internet, in the charming company of Justine Henin. An initiative established with the Child Focus and Microsoft partnership.
	And when a child asks him about the dangers of cell phone, the boss of the first operator of GSM in the country do not go by four paths: he explains to the children of the school's Center of Woluwe-Saint-Pierre GSM, it is wrong and dangerous for health  "" During the day, it is best to use a headset, as GSM, ça chauffe ", he first explained." Waves
	are dangerous. At night, it is better to cut it. If you use your phone as an alarm clock, you must also turn it off."
1:00:00	NOIDA to relocate 300 mobile towers – June 2013 <a href="http://www.dailypioneer.com/city/noida-to-relocate-300-mobile-towers.html">http://www.dailypioneer.com/city/noida-to-relocate-300-mobile-towers.html</a>
1:00:30	Cactus Cellular tower in Arizona – Aug 2012 <a href="http://twistedsifter.com/2012/08/examples-of-cell-phone-tower-disguises/">http://twistedsifter.com/2012/08/examples-of-cell-phone-tower-disguises/</a>

	[TBYP 2013 DVD] Andrew Goldworthy  Electromagnetic Fields and Health <a href="http://www.hese-project.org/hese-uk/en/papers/emf">http://www.hese-project.org/hese-uk/en/papers/emf</a> health summary0109.pdf  The Dangers of Electromagnetic Smog <a href="http://www.hese-project.org/hese-uk/en/papers/electrosmog_dangers.pdf">http://www.hese-project.org/hese-uk/en/papers/electrosmog_dangers.pdf</a>
	The Biological Effects of Weak Electromagnetic Fields <a href="http://www.hese-project.org/hese-uk/en/papers/goldsworthy-bio-weak-em-07.pdf">http://www.hese-project.org/hese-uk/en/papers/goldsworthy-bio-weak-em-07.pdf</a> PROPOSED SOLUTIONS
	<ul> <li>Page 21 "However, we can make this radiation much less biologically active. There are at least two ways to do this. The first was devised, tested, and patented by Theodore Litovitz working at the Catholic University of America in the 1990s. All you have to do is to add low frequency electromagnetic [random] noise to the signal."</li> <li>Page 22 "While Litovitz's method might protect the user from the radiation, because magnetic fields dissipate rapidly as you move away from the source, they may not protect other people nearby, who are out of range of the protective random field."</li> <li>Page 22 "[Andrew Goldworthy's] Balanced Signal Technology involves transmitting two complementary mirror image signals on different carrier frequencies; i.e. when one has a pulse, the other has a gap."</li> </ul>
1:01:00	Jerry L Phillips (courtesy Public Exposure) <a href="http://www.researchgate.net/profile/Jerry">http://www.researchgate.net/profile/Jerry</a> Phillips/
1:01:30	Henry Lai – contributor to BioInitiative Report 2012  RF research: Does funding matter  Non-Industry studies – harmful - 70% n=96 no effect 30% n=41  Industry Studies harmful - 32% n=27 no effect 68% n=57

1:02:50	Exponent Inc. – represented tobacco industry <a href="http://en.wikipedia.org/wiki/Exponent">http://en.wikipedia.org/wiki/Exponent</a> (consulting firm) <a href="http://articles.latimes.com/2010/feb/18/business/la-fi-toyota-exponent18-2010feb18">http://articles.latimes.com/2010/feb/18/business/la-fi-toyota-exponent18-2010feb18</a>
1:03:15	"Doubt is our product, since it is the best means of competing with the body of fact that exists in the mind of the general public" – Brown & Williamson Tobacco Corp – 1969
1:03:30	Telecommunication Act 1996 – Sec 704 <a href="http://www.mttlr.org/volthree/mclaren">http://www.mttlr.org/volthree/mclaren</a> art.html
1:04:20	STOP – Smart Grid Advancement Act 2013 – HR 2685  Smart Grid Advancement Act 2013 – HR 2685 <a href="https://www.govtrack.us/congress/bills/113/hr2685/text">https://www.govtrack.us/congress/bills/113/hr2685/text</a> Note RED highlight added for emphasis  2. Definition section  (6) Peak demand reduction  (A) diminishing the end-use requirements for electricity  3. Assessment of Smart Grid cost effectiveness in products  (B) The products were utilized in an electricity utility service area which had Smart Grid capability and ordered customers rate or program incentives to use the products.  5. Smart Grid peak demand reduction goals  (b) Baselines  (3) The Secretary, in consultation with the Commission, the Administrator, and the North American Electric Reliability Corporation, shall develop a system and rules for measurement and verification of demand reductions.  Also refer to HR 2208 – 2011

1:05:20	Cancer clusters Google – cancer clusters http://clusteralliance.org/clusters/
	[EXTRA] http://www.antennasearch.com/default.asp a map and list of towers and antennas within a 4 mile radius of a street address
	[EXTRA] http://www.cellreception.com/towers/ a map and list of cell towers
	[EXTRA] http://www.magdahavas.com/ Magda Havas Awareness Smart Meters; emphasizing EMF and EHS Co-author of the book <b>Public Health SOS</b>
	[EXTRA] http://www.sammilham.com/ Samuel Milham Author - Dirty Electricity - 2 <sup>nd</sup> edition Papers on correlation between diseases and electrification
1:09:30	Naperville, IL – 20111117 - <a href="http://chicago.cbslocal.com/tag/kim-bendis/">http://chicago.cbslocal.com/tag/kim-bendis/</a> <ul> <li>20130123 Kim Bendis and Jennifer Stahl, stay-at-home moms arrested</li> <li>20130205 Jerry Schilling speaks before the City Council</li> <li>20140218 charges of "attempted eavesdropping" are dropped</li> </ul>

1:14:30	SMART EXTORTION
1:15:30	Cautions about IMPLIED CONSENT
	[EXTRA] <b>Implied Consent.</b> That manifested by signs, actions, or facts, or by inaction or silence, which raise a presumption or inference that the consent has been give. An inference arising from a course of conduct or relationship between the parties, in which there is mutual acquiescence or a lack of objection under circumstances signifying assent Black's Law Dictionary - Sixth edition
	[EXTRA] Freedom of Information Act. The Freedom of Information Act (5 U.S.C.A. 552) provides for making information held by Federal agencies available to the public unless it comes within one of the specific categories of matters exempt from public disclosure. Virtually all agencies of the executive branch of the Federal Government have issued regulations to implement the Freedom of Information Act. These regulations inform the public where certain types of information may be readily obtained, how other information may be obtained on request, and what internal agency appeals are available if a member of the public is refused requested information. This Act is designed to prevent abuse of discretionary power of federal agencies by requiring then to make public certain information about their workings and work product Black's Law Dictionary - Sixth edition
	[EXTRA] <b>Bait and switch.</b> A deceptive sales practice. Such tactic usually involves advertising a low-priced product to lure customers to a store, then inducing them to buy higher-priced models by failing to stock sufficient quantities of the lower-priced item to satisfy demand, or by disparaging the less-expensive product. Such practices are prohibited by statute in most states. See Model Penal Code 224.7(5). Tashof v T. T. C., 437 F.2d 707, 709 Black's Law Dictionary - Sixth edition
	[EXTRA] <b>Deceptive advertising.</b> False and misleading advertising. Advertisement which contains any assertion, representation or statement of fact which is untrue or misleading.  Where the public are not cautious or watchful in their buying habits and are likely to be misled, the legislature may require not only the absence of active deception in advertising, but also affirmative measures to prevent misunderstanding. Com. v. Ferris, 305 Mass. 233, 23 N.E.2d 378. <i>See, e.g.</i> Mass.G.L. c. 266, 91; 15 U.S.C.A. 52 et seq Black's Law Dictionary - Sixth edition
1:16:30	"You're in a contract with the utility company. As soon as they change the terms of the contract, they have to get consent."  "You have to agree to the terms or the contract is void."
1:19:20	Renton reporter.com - Feb 27, 2013 Where have all the birds gone? Sound Publishing inc <a href="http://www.rentonreporter.com/news/192319761.html">http://www.rentonreporter.com/news/192319761.html</a>
1:19:40	Greenwashing – [the cloaking an agenda with terms such as going-green and sustainability; similar to whitewashing; similar to an illusionist's (or pickpocket's) use of a misdirect.]

1:21:00	Jack Moore - Naperville, IL
1:23:00	I will not have one of these [smart meter or Opt-out meter] devices on my home!
1:24:30	The End

#### **EXTRA**

- Atlas Struggled -- If you get a chance read the book or view the movies.
- A State could meet the electrical demand reduction by having employers and employees move to another State.
- Perhaps one should inflate their short term (e.g.1, 2, or 3 years) demand so as to easily meet the pending reduction requirement and still meet one's existing needs.

# (1) Resonance - Beings of Frequency (89 minutes) <a href="http://vimeo.com/groups/document/videos/54189727">http://vimeo.com/groups/document/videos/54189727</a>

- Produced by James Russell of the U.K.
  - Focuses on cell towers and cell phones. [caveat -- a mention of evolution throughout]
- -- at 6 min -- Schumann Resonance -- frequency of the earth -- 7.83 Hz identical to Human Alpha-Wave in the brain
- -- at 8 min -- Rick Wever "Electromagnetic fields of extremely low frequency have been shown at a high statistical level to influence human circadian rhythms."
- -- at 14 min -- Magnetic Fields
- -- at 15 min -- magnetic fields effecting bees
- -- at 19 min -- DECT phone, "miniature version of a mobile phone mast", effect on bees
- -- at 21 min -- Chryptochromes -- effects circadian rhythms and also bird navigation
- -- at 26 min -- some stats on decline bird and bee populations
- -- at 30 min -- electro-sensitivity
- -- at 35 min -- Elaine Fox Sussex experiment RFR 10 min on & 10 min off
- -- at 46 min -- grid built without testing; Gigahertz meter loud continuous sound; small village 70% effected
- -- at 51 min -- comments regarding ICNIRP
- -- at 54 min -- Nora Volkow -- glucose consumption within the brain activated by mobile phone
- -- at 58 min -- Specific Absorption Rate (SAR) -- EU limit 2W/kg; USA limit = 1.6 W/kg -- SAM head phantom "study of men and women of various ethnic origins, aged over 20 years, randomly selected among US Army personnel."
- -- at 1:02 -- WHO -- carcinogenic Group 2B -- Lennart Hardell research -- "[greater than or equal to] 10-years latency period seems to be a reasonable minimum period to indicate long-term carcinogenic risks"
- -- 1:07 -- the right question -- "How does a mobile phone prevent the human body from curing cancer?" -- answer
- Melatonin, which is "a natural antioxidant, a natural anti-cancer agent ... controls the sleep/wake cycle"
- -- 1:15 -- the brain interprets radio waves as light waves "The results of the present investigation show that low-frequency magnetic fields are able to reduce melatonin production in isolated hamster pineal glands"
- -- 1:20 -- cautionary notes

#### http://eon3emfblog.net /?p=3687

Amy C. Yip-Kikugawa -- Administrative Law Judge

"IT IS RULED that by November 1, 2011, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, and Southern California Gas Company shall file a response to the [11] questions concerning radio frequency emissions listed in this Ruling. Dated October 18, 2011, at San Francisco, California."

The 11 questions are listed below.

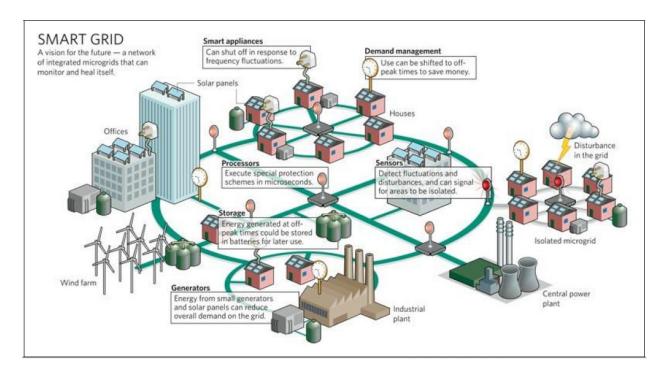
Amy C. Yip-Kikugawa
-- Administrative Law
Judge

IT IS RULED that by November 1, 2011, Pacific Gas and Electric Company, San Diego Gas & Electric Company, Southern California Edison Company, and Southern California Gas Company shall file a response to the [11] questions concerning radio frequency emissions listed in this Ruling. Dated October 18, 2011, at San Francisco, California.

- 1. What is an average duration (in seconds) that a residential smart meter transmits in a 24 hour period?
- a. How is this average computed or measured?
- 2. How many times in total (average and maximum) is a smart meter scheduled to transmit during a 24-hour period?
- a. How many of those times (average and maximum) are to transmit electric usage information?
- b. How many of those times (average and maximum) are for other purposes? What are those other purposes?

Please specify number of times (average and maximum) by type/category of transmission.

- 3. Under what scenarios does a meter transmit outside of the daily schedule, i.e., unscheduled transmission such as on-demand read, tamper/theft alert, last gasp, firmware upgrade etc.?
- 4. Typically, how much of the communication between the customer's meter and the utility is unscheduled vs. scheduled?
- 5. Are there any other factors that go into determining duration and/or frequency of meter transmissions (e.g., if a meter can't access the network when it's trying to send data, type of a meter etc.)? If yes, please identify these factors.
- 6. What is the amount of RF emission at the source when a meter is transmitting data (instantaneous maximum peak level, averaged over 30 minutes)?
- 7. Does the amount of RF emission vary depending on duration of transmission/volume of data being sent? For example, are RF emissions higher when there is a larger volume of data to be transmitted?
- 8. Are there any other factors that impact the amount of RF emissions? If so, please identify the factor(s) and its impact on RF emissions.
- 9. Is there RF emission when the meter is not transmitting? If yes, what is the amount of RF emission?
- 10. Is there a difference in the amount of RF emissions for a wireless smart meter with the radio off and a smart meter with the radio out? If yes, what is that difference and how is it calculated?
- 11. Is there a difference in the amount of RF emissions for a wireless smart meter with the radio off and an analog meter? If yes, what is that difference and how is it calculated?



CRS Report R41886, *The Smart Grid and Cybersecurity—Regulatory Policy and Issues*, by Richard J. Campbell - page 7 of 25 <a href="https://www.fas.org/sqp/crs/misc/R41886.pdf">https://www.fas.org/sqp/crs/misc/R41886.pdf</a>

• Congressional Research Services -- http://www.loc.gov/crsinfo/

http://www.takebackyourpower.net/wp-content/uploads/2014/01/NYTimes-smart-home-google-spying-cartoon.png

