ORIGINAL

E-00000C-11-0328
Investigation of Smart Meters.

0000135197

To: Arizona Corporation Commission
Docket Control Center
1200 West Washington Street
Phoenix, AZ 85007

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2012 MAR 15 PM 1 39

Arizona Corporation Commission
DOCKETED
MAR 15 2012
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From: Monnie Ramsell
50 Bronco Drive
Sedona, AZ 86336
Date: 3/14/12

Re: DOCKET NO. E-00000C-11-0328 (Smart Meter)

Here are my comments regarding smart meters. Health issues are my number one concerns, followed by privacy and security. Others issues are safety and accuracy issues. It seems that the Arizona Commission is only addressing the issue of privacy alone and is ignoring all other important known issues.

Smart meters are classified as Class 2 B Carcinogen by WHO in May 2011. Since there is no mentioning of any discussion regarding the issue of health in the upcoming workshop, we request that future studies be conducted before any mass roll out of the smart meters and smart grid. Also there should not be any mandatory installation until the issue of health risk caused by both RF and dirty electricity is resolved. No fee opt-out should be the standard or we will hold each member of the commission personally responsible for any damages known or unknown now and in the future if you fail to address this health issue to our satisfaction. There is no lack of report of people suffering from high blood pressure, ringing in the ears, seizures, bleeding nose, insomnia, irregular heart rate, intense headaches, nausea, etc. from these meters. The health risks associated with long term exposure is still unknown. If short term exposures are already so crippling, long term exposure could be more lethal than tobacco. Young girls are born with their lifetime supply of eggs in their ovaries. Those eggs are especially susceptible to mutations and DNA damage from EMF radiation, and the birth defects those eggs are permanent an irreversible for all subsequent generations. Details are presented in videos of Barrie Trower, Physicist and microwave weapons expert: *http://www.youtube.com/watch?v=9Ao4Z5-RYTQ&feature=player_embedded* . The producers and installers of these meters are subjected to lawsuit and class action suits. See link for more details.
https://sites.google.com/site/nocelltowerinourneighborhood/home/wireless-smart-meter-concerns/smart-meter-consumers-anger-grows-over-higher-utility-bills The fact that the Commission *may* instead of *will* develop an opt out proposal is simply not acceptable.

None of the smart meters are UL certified. There are known facts that they are unsafe. In Alabama in 2009, a Sensus engineering employee named Don Baker was fired for repeatedly alerting his management to the presence of a multitude of dangerous defects in the smart meter they were manufacturing (model iConA). He **reported serious flaws in design and functioning that could lead to electrical danger, overheating, and/or fire.** In fact, the failure rate of the meters was twenty times higher than it was supposed to be, and the engineer contends that at least two house fires were the result. In the complaint Baker relates in detail what makes the meters dangerous, and the allegations are damning—and alarming.
A few highlights:
[Meters] may fail dangerously when subjected to a sudden surge of electricity .... Meters found to contain 'flux' or loose solder residue .... Calibration equipment not properly designed .... Electric resistor component defective .... Internal temperatures up

Antonio Gill

From: Dina Galassini [dinarose@cox.net]
Sent: Thursday, March 08, 2012 12:44 PM
To: Newman-Web; Burns-Web; Pierce-Web; Stump-Web; Kennedy-Web
Subject: Re: Smart Meters and Workshop on March 23

Dear ACC Chairman and Commissioners,

I would like to address the Smart Meters and urge you to continue to allow all electric customers to opt out. I am unable to attend the March 23 meeting and I am writing you in lieu of.

I researched Smart Meters and aside from the huge health risks associated with them, I feel my right to privacy has been violated by APS, let alone the monitoring devices of the smart meter. When I opted out of the Smart Meter with APS, their employee Pam (ID Z09379) dug into my privacy. She made me make a statement as to why I wished to opt out. I said it's because I don't want the smart meter. She said they required a reason and asked if it was a privacy issue. I stated my fourth amendment rights provide for my privacy. She still wanted a reason, so I told her I just want the same meter I have now.

Taken from YouTube comments from this video: http://www.youtube.com/watch?v=8JNFr_j6kdI
Supreme Court declared that the writers of the U.S. Constitution conferred the right to be let alone — the most comprehensive of rights and the right most valued by civilized men. To protect that right, every unjustifiable intrusion by the government upon the privacy of the individual, whatever the means employed, must be deemed a violation of the Fourth Amendment.
Olmstead v. U.S., 277 U.S. 438, 478 (1928) (Brandeis,J., dissenting).

PLEASE WATCH THE VIDEO ON HEALTH ISSUES HERE (about half way down on the page):
http://www.bansmartmetersarizona.com/

www.stopsmartmeters.org **49 Calif. Local gov'ts NOW DEMAND HALT.**
But at the root of this international deployment are some very powerful corporations designing and supplying the diabolical devices and/or their components. One of the biggest firms pushing the wireless smart grid to utilities and governments around the world is Silver Spring Networks, based in the San Francisco Bay Area. **WHY STOP SMART METERS:** http://stopsmartmeters.org/why-stop-smart-meters/

'Smart' meters are new wireless utility meters being installed as part of the "smart" grid initiative, spearheaded by technology firms and backed by the Obama administration and the Department of Energy. Promises ranging from lower utility bills to enhanced renewable generation capacity have failed to materialize, with widespread reports of higher bills, privacy violations, fires and explosions, and commonly reported health impacts such as headaches, nausea, tinnitus, and heart problems associated with powerful wireless transmissions."

It's already been proven that global climate change is a HOAX, so why would anyone believe what the WHO has to say about Smart Meters?

Thank you for taking the above into account at your Workshop on March 23, 2012.

Dina Galassini
SRP Customer and APS Customer

1

Smart Meters: DUMB IDEA?

BY CINDY J. COLE

There is no question that advancements in technology have impacted almost everyone on the planet in one way or another. In the United States, our lives have changed dramatically over the last fifty years or so with the development of cordless phones, computers, the internet, microwave ovens, cell phones, and wireless networks. For many, these developments have made lives easier and allowed folks to keep in touch with family and friends around the world or even run a business from any location. However, many are also starting to ask whether all this progress comes with a steep, even lethal, price tag. The recent death of Apple mogul, Steven Jobs, has been related by some to continuous long-term exposure to high **Electro-Magnetic Fields**, a by-product of his life's work — he had a rare form of pancreatic cancer that only shows up in those who have undergone extensive imaging for another illness.

Often we know there are risks involved as we willingly incorporate technology into our lives. In some cases, we choose to accept the risks or try to find ways to mitigate them. In others, we deny the risks exist and just move on with our lives. But when do the risks begin to outweigh the benefits? At what point do we need to take a stand and say enough is enough? When do we begin to look at the good of the many and not just the few? Many people are drawing that line in the sand when it comes to the installation of smart meters.

Smart meter installation has begun across the country and in other parts of the world including Europe and Australia. Smart meters are an integral part of creating a worldwide "smart grid" for delivery of utility services. In the US, the federal government has provided over $4.5 billion for the development and implementation of smart grid technologies. Advocates of this extensive plan see it as an energy-saving way to control the flow of power nationwide. Opponents see it as expensive, invasive, unsafe, and unhealthy.

So, what is a smart meter? According to the **Arizona Public Service** (APS) website, a smart meter "is a meter that provides two-way communication of information on energy use between your home and APS. Smart meters can be read and programmed remotely without sending a service person to your home." Sounds simple, right? But what APS fails to mention is that smart meters transmit the information they collect via wireless signals — utilizing **Radio Frequencies** that produce EMFs. In addition, in order for smart meters to send their data back to APS, data hubs (equipment for collecting data from multiple meters and relaying it back) may need to be placed throughout neighborhoods adding to greater frequency emissions and EMFs.

Health Concerns

The safety of RF exposure is something that is hotly debated amongst scientists, wireless equipment manufacturers, and utility companies. The **World Health Organization** has yet to provide extensive research regarding EMFs, which the utility companies have used as a determination of its safety. An APS pro-smart meter brochure states: "The World Health Organization has concluded that no known adverse health effects can be attributed to low-level radio frequency." However, on the WHO website, the line following this statement is that "there are gaps in knowledge still needing to be filled before better health risk assessments can be made." And in May 2011, the **International Agency for Research on Cancer**, a WHO specialty agency, declared RFs to be a "possible human carcinogen."

Dr. David Carpenter, a Harvard-trained physician who was the head of the New York State Department of Public Health for 18 years says: "we have evidence ... that exposure to radio frequency radiation ... increases the risk of cancer, increases damage to the nervous system, causes electro-sensitivity, has adverse reproductive effects and a variety of other effects on different organ systems. There is no justification for the statement that smart meters have no adverse health effects." And just how much RF radiation is put out by smart meters is another point of contention.

APS and other utility companies that have begun implementing smart meters often claim that the RF emissions are no worse than what a person experiences with a cell phone held against the head. In some cases, this may be true but we always have the option of turning off our cell phone or using it with a wired headset that has been shown to reduce radiation exposure. Once a smart meter is installed on your home, there is no way to turn it off or move it. Some have equated this exposure to be more like living right next to a cell phone tower.

The RFs are measured from smart meters using a "time averaged" method. This approach looks at the RF emissions over 30-minute time spans. What independent research is showing, however, is that this method is serving to hide the extremely high spikes in RFs emitted when the meter pulses to communicate with the mesh network or send data. By averaging out the high spikes with the lower emissions during non-transmission times, the overall level of emissions appears lower. But the spikes car so high that they are off the scale of even most sophisticated measuring devices. the pulses tend to come in unpredictable erratic patterns.

Utility companies have tried to tell cons ers that their smart meters pulse infreque but this is also proving to be untrue. APS cla that their wireless meters send out signal no more than a few minutes in a 24-hour riod. However, independent researchers have measured functioning smart meters h found them to be pulsing at rates as high to 20 times per second. There is even rese that indicates that this pulsed form of RF ra tion is actually more dangerous to people t a constant stream, like that found with phones and Wi-Fi. This research was relate sickness amongst radar operators and was ducted in the 1930s.

If science and research isn't enough to pe the RF emissions from smart meters are dangerous, there are countless first-hand sto in complaints filed with utility commiss across the country, where otherwise hea people have suffered from the physical imp of radiation from smart meters. Many re these effects occurring within hours of sr meter installation. The health issues repo include headaches, nausea, heart problems somnia, ringing in the ears, stress, anxiety, irritability.

Another factor in the health concerns ra by smart meters is the creation of what has come known as "dirty electricity." This phen enon could explain why some people begi experience health symptoms even before t smart meter starts broadcasting. The smart ter can cause voltage shifts in the power going into your home which in turn cause frequency electricity to emit RFs through appliances and other electrical devices creates high-level EMFs in your home that cause the illnesses listed above. Again, thir hotly debated issue as there are some wh not believe this phenomenon even exists others who have reported the onset of he issues immediately following the installatic a smart meter.

Security Concerns

Health issues are not the only reason smart meters may not be such a smart i There are also extensive concerns about security of the meters and the wireless sys designed to carry usage data to the utility c panies. The very features the power compa say will allow them to deliver your electr more efficiently are what make the system tremely vulnerable to hackers creating a va of security concerns.

Microsoft itself, on a Windows help fo on their website, declares "there is no we guarantee complete security on a wireless work." And, unlike Wi-Fi and Bluetooth sec systems, in the protocol used for wireless tr mission in smart meters, called Zigbee, the cryption keys are transmitted as plain text. is equivalent to using the word "password secure a sophisticated computer network.

An article in the September/October issue of *Technology Review*, published by **Massacusetts Institute of Technology**, cluded several different methods by which security of a smart meter could be com mised. From tapping into a meter's mer chip using syringes to listening in on wir transmissions, the article demonstrated could be extreme risks to data security u the current generation of smart meters. once the smart grid system is in place, the from your meter could also be present in studies of additional meters in your neigh hood. The smart grid is designed so that me

share information from surrounding meters so that all data will eventually be transmitted to the collecting agency. If one meter fails to transmit, data is duplicated on other meters so it will not be lost.

At the personal level, concerns about what information is transmitted over the smart grid are high. If the security of the system is vulnerable, then any personal information that is a part of your utility account could be up for grabs. A hacker could also falsify data regarding your rates and usage — hopefully to your benefit. Not to mention being able to tell whether or not anyone is home based on the amount of electricity use the meter is reporting or the ability to disable a home security system.

On a bigger scale, hackers could potentially break into the grid through any individual smart meter and gain control over the entire system. One of the perks of smart meters touted by companies like APS is that they will be able to shut off a consumer's electricity without having to make a site visit. So the system contains remote shut off mechanisms that could also be vulnerable to attack allowing a hacker to shut down the power grid any place a smart meter is present. If the utility companies have their way, smart meters will be everywhere – including hospitals, schools, and banks. Because of the mesh nature of the smart grid, it has also been shown a virus introduced into a single meter would spread like wildfire.

Safety Concerns

Another by-product of smart meter installation has been an increase in electrical fires in buildings that have them. In California, where Pacific Gas & Electric (PG&E) has installed more than 8 million smart meters, a fire in East Palo Alto involved 80 burning smart meters. In San Bruno, a fire caused by exploding smart meters killed 8 people and destroyed the homes in an entire neighborhood. Multiple reports of smart meters smoking, smoldering, burning, and exploding have been filed.

PG&E has, more often than not, blamed faulty wiring for these electrical fires. However, it may not be that simple. The problem may once again be related to the high RF spikes emitted by the smart meters. These spikes are not intended to travel down the electrical lines in a building connected to a smart meter. However, various factors can cause the high frequencies produced to do just that. Improper installation of the meters by inadequately trained technicians has been suggested. Arcing of power in the lines and shorts can also occur. **Cindy Sage**, of Sage Associates, an independent environmental consulting firm, stated in a July 2010 report that "wireless smart meters don't intentionally use the electrical system to send their RF signal back to the utility to report energy usage. But, when the wireless signal is produced in the meter ... it boomerangs around on all the conductive components and can be coupled onto the wiring, water and gas lines, etc. where it can be carried to other parts of the residence or building."

Current wiring standards are not sufficient to support the high frequency spikes that emit from smart meters. In addition, smart meters have not been tested and approved under federal **Occupational Safety and Health Administration** (OSHA) rules, nor are they certified by **Underwriters Laboratories**, the independent, non-profit product safety testing and certification organization that certifies most of the rest of the electrical equipment consumed in the US. This means that, in general, homeowners insurance will not pick up the tab for damages caused by a smart meter.

In addition to fires, there are also a plethora of reports from people whose home appliances have been damaged or destroyed following the installation of a smart meter. The electrical equipment we have in our homes is also incapable of handling the large RF spikes that may be delivered through the wiring by the smart meter.

The Final Blow

On top of all the health, security, and safety issues that have been raised, the final blow often comes along with the first bill the consumer receives after installation of a smart meter. In spite of promises that the new meters will save energy and money, most utility customers report an immediate increase in their monthly bill – sometimes more than two or three times the amount they were billed for under their analog meter. There are several reasons why this may occur, though companies like PG&E and APS have failed to offer their own justifications for this broken promise.

One explanation is that companies are varying rates more for peak and off-peak use of power. So, for consumers who are on a time-rated plan, the real-time monitoring capabilities of smart meters may mean they are paying more now for the fact that their refrigerator runs all day long. Another explanation speculated is that consumers are being charged for electricity delivered to the meter on the power company's side of the lines but not used yet on the homeowner's side — a way of charging for potential use rather than actual use.

Whatever explanation is applied, thousands of complaints have been filed with corporation commissions that govern utility companies in states where smart meters have been implemented. And consumers have filed lawsuits against PG&E in California and against public utilities in Maine and Texas. Will suits against APS be far behind?

Mandated, Really?

There is no federal mandate for the implementation of smart meters. In Arizona, there is also no official option to not have one. APS had initially told those who protested the installation of a smart meter on their property that they would be put on a "temporary" opt-out list and that further installations would be delayed until 2013. However, more recent contacts with the utility provider have been less gracious. One consumer received a letter from APS that stated: "Our Company is in the process of installing smart meters throughout the state and we expect to complete the project by the end of 2014. I regret to inform you that we do not offer the option of opting-out." In Maine, people had to fight for it but they were eventually given the option to refuse smart meters. Californians are still fighting for it. However, the alternative proposed by the utility companies is often an exorbitant fee for those who choose not to have a smart meter.

Research has shown there are other, safer technologies that can be implemented to make our power delivery systems more efficient. In fact, there is significant evidence that wireless technologies place an even greater strain on the environment than wired ones. And what about all the people whose job it is to go out and read your meter? Is this really the time to be forcing people out of jobs so we can rush into an expensive technology that may have a great deal of risk involved in its implementation?

Maybe these so-called "smart" meters are really a dumb idea after all.

| Cindy J. Cole is a writer and photographer who makes her home Sedona. cindycole@live.com

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to 200° Fahrenheit .... Hot socket alarm .... Drastic overheating to the point of catastrophic failure, melting, and burning....

The sort of defects and failures enumerated in this suit might well have been caught with an independent safety-certification process such as Underwriters' Laboratories (UL). But these Sensus iConA smart meters, and every other type of smart meter, have never been subjected to such testing.
More details about this can be found in this link
http://stopsmartmeters.org/wp- content/uploads/2012/01/Alabama-Baker-Sensus-Complaint.pdf
and there is a link to see the full complaint filed.
http://stopsmartmeters.org/2012/01/20/meters-that-endanger-shocking-details-from-a-whistleblower/

There are also issues like remote shut off. Even if the utility companies guarantee that there would be no chance of human error, there is still the possibility of hacker taking advantage of this feature. Just the idea that your power can be remotely shut off will pose a stress on people whose lives depend on life-saving devices like home dialysis machine and other medical devices. This feature needs to be disabled.

Please see my further comments on the issues raised by the draft proposed meter guidelines. Anything that is wireless can never be 100% secured. This is a well-known fact even stated clearly on the front page of Microsoft website. Norton's antivirus source code got hacked only recently. It Norton and our military system got hacked, just imagine how easy it is to hack the mesh grid and meters.

Smart meters are also harmful to the environment killing honey bees and vegetations. APS knew about it and they knew that the bees would disappear where smart meters were installed. If the commission is really serious about green technology, stay away from RF smart meters. Again, more studies are needed to ensure these meters are not harming our trees besides harming ourselves and other living creatures on the planet. We should be allowed to keep our analog meters until all these issues are adequately researched and studied. It would be much more expensive to fix the problems later when more data becomes available showing the lack of safety of these meters.

We have commented on this docket before numerous times, this is the first time we are required to send in 14 hard copies to Staff so that they will prepare a summary of comments for discussion at the Workshop. This is a total waste of paper and energy if 14 copies are printed out just to turn into a summary. Electronic copies are way more efficient for preparing a summary with copy and paste. It may be a slightly less unreasonable request if each commissioners and staff will have a copy of the comment instead of just the summary. For this reason, I will also send my comments electronically to make sure each commissioner has the opportunity to read my full comment.

I want you immediately to pass an ordinance prohibiting the installation of wireless Smart Meters by utility companies and their agents until such time as the people of this community are persuaded that Smart Meters are safe, do not represent a threat to our privacy, do not decrease our property values, will not result in the micro-management of how we live our lives, and will not result in higher energy costs during a period of economic danger and distress. I consider such an ordinance to be urgent civic business, and a matter of great public concern. Please understand that any failure to act swiftly to pass such an ordinance will produce a profound voter backlash.

Comments on Draft Proposed Meter Guidelines

Following is a list of proposed guidelines for the use of all meters by electric utilities and for any data obtained from their use.

1. Measurement will not be specific to any particular appliance or electrical device, unless approved by the Commission for a specific tariff.

The way this reads is that the Commission will approve a specific tariff to measure specific usage of particular appliance or device. Any measurement CAPABLE of being specific to any particular appliance or electrical device is a breach of privacy regardless of whether such measurement is taken or not. This is especially problematic when the rate-payers do not consent to such invasion of privacy. Other examples of data collected that will infringe on our privacy are as follows even without specific measurement to particular devices. http://stopsmartmeters.org/wp-content/uploads/2012/02/Private-Memiors-of-Smart-Meter.pdf Table 1. Private questions and answers that fine-grained power consumption data reveals.

Question	Pattern	Granularity
Were you home during your sick leave?	Yes: Power activities during the day No: Low power usage during the day	Hour/Minute
Did you get a good night's sleep?	Yes: No power events overnight for at least 6 hours No: Random power events overnight	Hour/Minute
Did you watch the game last night?	Yes: Appliance activity matching TV program No: No power event in accordance with game showtime	Minute/Second
Did you leave late for work?	Yes: Last power event time later than Google maps estimated travel time No: Last power event time leaves enough time for commute	Minute
Did you leave your child home alone?	Yes: Single person activity pattern No: Simultaneous power events in distinct areas of the house	Minute/Second
Do you eat hot or cold breakfast?	Hot: Burst of power events in the morning (microwave/coffee machine/toaster) Cold: No power event matching hot breakfast appliances	Second

Without having to measure specific appliance, a relative low power consumption and variation will signify no one in the house.

2. The utility will not share energy usage data except with its authorized agent. Individual or aggregate usage data will never be sold.

What kind of data will be shared? Name, address, bank account info, payment history, social security number or Tax ID, account password, etc. Will those be shared because it didn't specified cannot be shared. If usage data never be sold, can it be shared instead of sold. Who can be authorized? Law enforcement agencies, IRS, investors, employees, outside agencies? Are these people equipped to handle data security?

3. All information transmitted between meters and the utility must be encrypted and password protected using US government approved and recommended standards.

What exactly is US government approved and recommended standards? Presently even our government can't even protect its own military server from being hacked. The so called government standard **Federal Information Processing Standards Publications** http://www.itl.nist.gov/fipspubs/fip112.htm was dated May 30, 1985. If we relied on something so ancient in this information age, that would be a farcical joke. Experts have warned that the security of the smart grid is easily hackable and even our government experts have suggested the present standard of protection is far from adequate. The other big problem is WIRELESS transmission. Presently, there is no 100% proof that wireless transmission is secured. The only fool proof transmission need to be wired. So having encrypted and password protection will not address the wireless vulnerability at all.

4. Data from each meter. must use specific unique identifiers associated with the customer's meter number and service address to ensure that each customer is billed only for his / her own usage.

Unless such data is stored and transmitted individually and separately by wired transmission, there is not assurance that such data is not corrupted or compromised if the data are stored and transmitted over the mesh network. Again no Wireless transmission is safe. Even Microsoft acknowledged it.

5. The utility will not control or shut off individual appliances without customer consent based on an approved ACC tariff.

The utility should NEVER control or shut off individual appliances, period. Any remote feature that will interfere with any individual appliances is not acceptable.

6. The utility may shut off electric service per ACC rules. The utility will abide by current regulations with respect to shut-off of service and curtailment in power emergencies.

All shut off should not be done remotely or without consent or advance notification to paying customers. Remote shut off can endanger life of customers with serious health situation on life-support medical devices including at home dialysis machine, oxygen support breathing assistance, etc.

7. The utility will limit the length of data transmission over a 24 hour period, (utility input will help define the appropriate length of time in seconds or minutes per time period).

The length of data transmission over a 24 hour period is not the only issue. It is also the frequency or transmission and as well as any transmission of pinging of meters within the mesh network. The more information transmitted the higher the RF. With PG&E, these data are available to the California Public Utility Commission dated Nov. 1, 2011 http://imgs.sfgate.com/g/acrobat/2011/11/03/RFDataOpt-outalternatives_11-1-11%203pm.pdf We need to ask for the same data for Arizona. Lists of question to ask are:

Question 1:

What is an average duration (in seconds) that a residential smart meter transmits in a 24 hour period?

Question 1.a.:

How is this average computed or measured?

Question 2:

How many times in total (average and maximum) is a smart meter scheduled to transmit during a 24-hour period?

Question 2.a.:

How many of those times (average and maximum) are to transmit electric usage information?

Question 2.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.

Question 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.?

Question 4:

Typically, how much of the communication between the customer's meter and the utility is unscheduled vs. scheduled?

Question 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.

Question 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)?

Question 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?

Question 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.

Question 9:

Is there RF emission when the meter is not transmitting? If yes, what is the amount of RF emission?

Question 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?

Question 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?

There is a technical paper published by Peter H. Sierck in December 2011 to clarify RF radiation emissions and measurement methodologies on Smart meter. You can read it at this link. http://hbelc.org/pdf/Resources/SmartMeter_Sierck.pdf

8. Individual usage data gathered will be available only to the customer, the utility, and its duly authorized agent. Such data may be used only to help the customer make choices that will help keep electric bills to a minimum.

There are cheaper and more private alternatives for customer to obtain such data without a smart meter. Choices only come with information. Unless the customer is educated of choices of alternative energy consumption or consumption pattern or methods of mitigation, shutting down air-conditioner or refrigerator on triple digit days is just not viable or is it humane. Painting the house and pavement a lighter shade will help reflect the heat and makes the house cooler. However there are currently city codes that won't allow any lighter color due to reflection. In fact, these codes encourage homeowners to paint their house a darker shade. Painting the house or pavement a light shade can cool it by 5 degree, more effective than turning down our A/C. According to the Phoenix Magazine, "*Dressing roofs and pavements in light colors might not titillate Phoenix's bolder gentry, but it can reduce surface temperatures up to 100 degrees and decrease a city's UHI by 5 degrees. That's according to the LBNL, which found that if Phoenix whitewashed its roofs alone, we could save a net $37 million every year in cooling costs." "Less energy also means fewer greenhouse gases. Two years ago, U.S. Energy Secretary Steven Chu, citing LBNL research, announced that if the world's 100 largest cities lightened all their roofs and pavements, it would offset 44 billion tons of carbon dioxide emissions. That's the equivalent of taking every car in the world off the road for 18 years, the LBNL's Art Rosenfeld later told the Wall Street Journal.*" http://www.phoenixmag.com/lifestyle/valley-news/201105/phoenix-s-urban-heat-island/2/.

The analog meter does not require electricity to run but the smart meter does. Collecting, tracking, analyzing, and safekeeping all the data from the smart meter further require more energy. There are already studies coming out showing that smart meter is not really saving any energy or money. "*Last year, consultancy firm the Brattle Group estimated that the European Union would spend 51 billion euros ($65.65 billion) on smart meters by 2020 with savings of between 26 billion and 41 billion euros.*" http://af.reuters.com/article/energyOilNews/idAFLDE6860P520100908?pageNumber=2&virtualBrandChannel=0

APS's target is to install 1,100,000 smart meters and SRP's target is 980,000. The power output of 2.08 million meters each putting out 1/4 watt of RF would be 520,000 watts. A standard broadcast commercial radio station puts out 50,000 watts of power, and requires 75,000 watts of electrical power to achieve this. Using that formula, it would require 780,000 watts of electrical power to power the 2.08 million smart meters in APS and SRP territory alone, and all of that power is paid for by the customers who have the new meters in place. The new meters might be fairly accurate, but they do use energy and the customers have to pay for that energy. That is the reason for higher monthly bills. And that is just to power the meters which are part of a mesh network repeating the data through other meters until the transfer the data at a hub end repeater and transmit all that data on higher powered carriers to the central computers. All of that infrastructure has been paid by the ratepayers. The federal stimulus tax dollars, the corporation or their shareholders do not pay for any part of the new systems installed. A standard power plant puts out 1 million watts, so with the addition of 2.08 million new meters and related infrastructure, we will probably have to build another power plant just to power the meter project.

This is what Connecticut Attorney General had said "*The pilot results showed no beneficial impact on total energy usage," Jepsen said. "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 the new meter systems," he said. Also, the existing meters, installed between 1994 and 2005, have a useful life of 20 years and replacing them early would incur additional costs for customers, Jepsen said.*
http://www.ct.gov/ag/lib/ag/press_releases/2011/020811clpmeters.pdf

9. The utility will use only aggregate, anonymous data for system planning purposes.

Data needs to be defined. We only agree that our monthly usage be collected and definitely not usage by hours or minutes. We also only agree that our usage be collected by the utility company and not any other parties. We don't have any contractual agreement with any third parties at this point. Just to be fair, we should also get a breakdown of exactly how much energy the smart meter and smart grid are using separately. If ratepayer is paying for it, ratepayer should have a right to know how much of their energy use is just to power the smart meter and smart grid and all its infrastructure.