

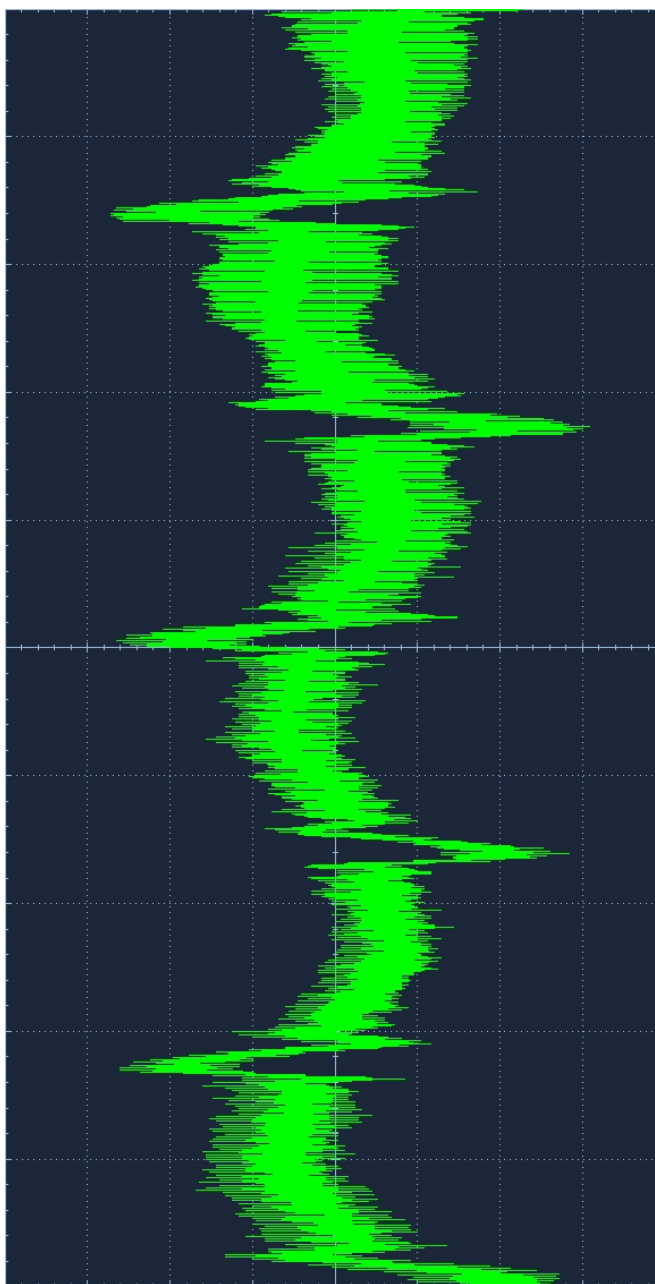
ET Docket No. 13-84 & ET Docket No. 03-137

Photograph 4



ET Docket No. 13-84 & ET Docket No. 03-137

Oscilloscope Waveform 1



ET Docket No. 13-84 & ET Docket No. 03-137

Photograph 5



ET Docket No. 13-84 & ET Docket No. 03-137

Diagnosis 1

ROBERT KAPLAN, MD, LLC

June 3, 2013

Southwest Gas
Tucson Electric Power
Tucson Water

RE: Steven Magee
3618 S. Desert Lantern Rd.
Tucson, AZ 85735

I have evaluated Mr. Steven and find that he exhibits signs and symptoms consistent with electromagnetic hypersensitivity. He has been advised to avoid exposure to automatic meter readers (AMRs)/Smart Meters.

Sincerely,



Robert D, Kaplan, MD

P.O. Box 28696 Scottsdale, AZ 85255 (480) 991-7478

ET Docket No. 13-84 & ET Docket No. 03-137

Diagnosis 2



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration
Center for Devices and Radiological Health
10903 New Hampshire Ave.
Document Mail Center – WO66 G609
Silver Spring, MD 20993-0002

SEP 14 2012

Mr. Steven Magee
3618 S. Dessert Lantern Road
Tucson, AZ 85735

Dear Mr. Magee:

Thank you for your letter to the Food and Drug Administration regarding your concerns about public exposures to electromagnetic fields and non-ionizing electromagnetic radiation (EMF). The information in the document you provided is consistent with people who describe themselves as electromagnetically hypersensitive (EHS).

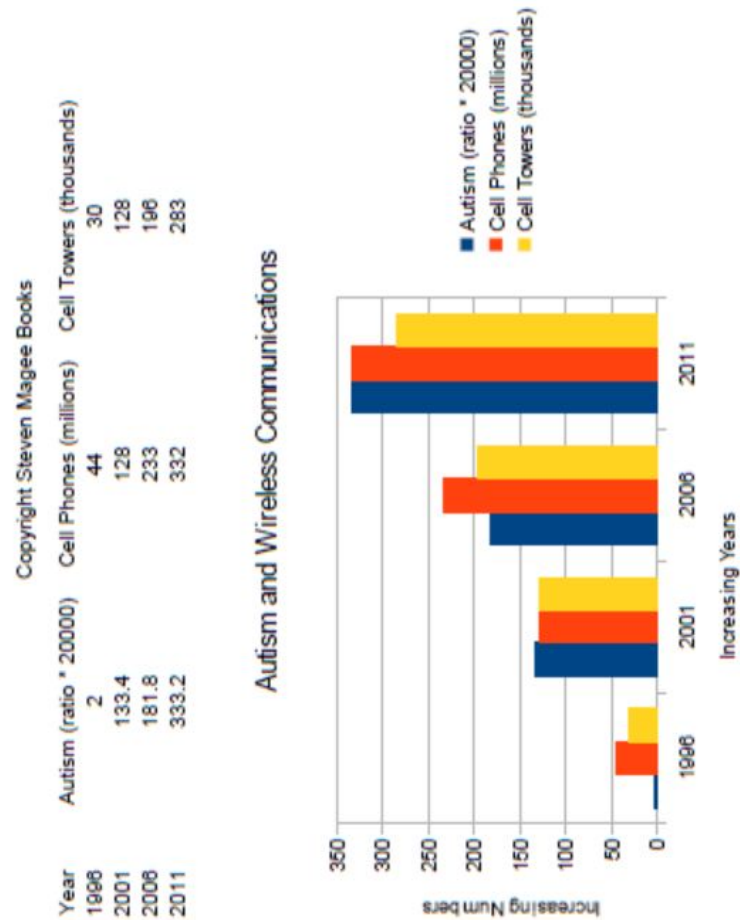
The World Health Organization (WHO) has published a fact sheet about EHS which is available at: <http://www.who.int/mediacentre/factsheets/fs296/en/index.html>. This fact sheet was produced as part of the WHO's International EMF project: <http://www.who.int/peh-emf/publications/en/>. Also, more information about EMF is available on FDA's cell phone and electromagnetic interference web pages: <http://www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "R. Doyle", is written over the typed name.

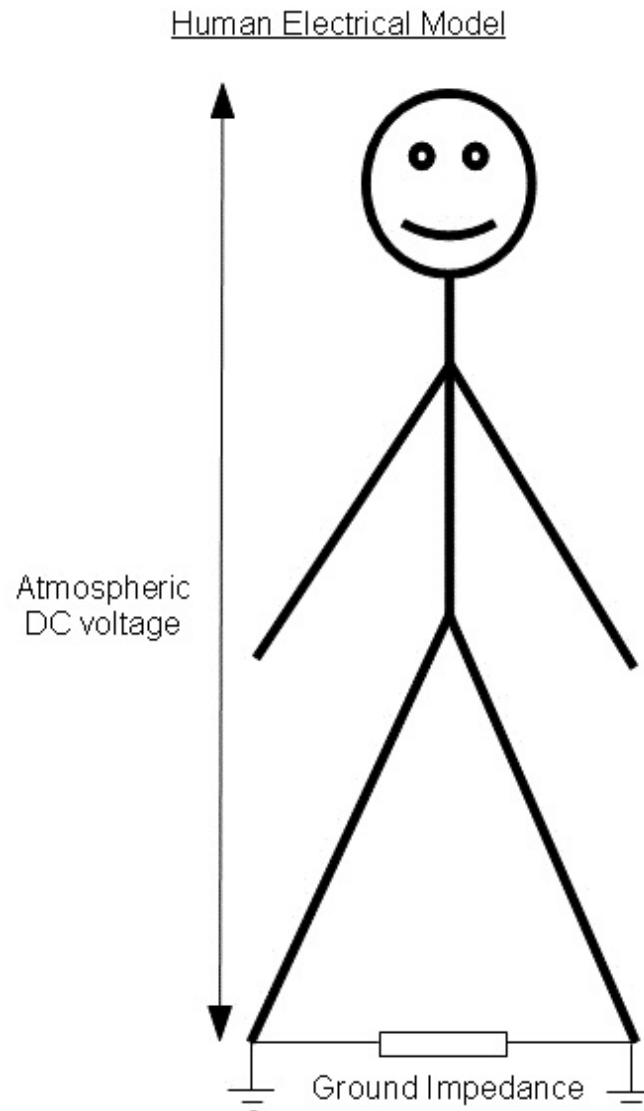
Robert J. Doyle, Chief
Electronic Products Branch
Division of Mammography Quality
and Radiation Programs
Office of Communication, Education,
and Radiation Programs
Center for Devices and
Radiological Health

ET Docket No. 13-84 & ET Docket No. 03-137

Graph 1

ET Docket No. 13-84 & ET Docket No. 03-137

Diagram 3



Radiation Sickness & ADA/FHA; Melissa Chalmers Comments, Sep. 3, 2013

September 3rd, 2013

Dear FCC,

I am writing in hopes that your agency will take the step to review the radiofrequency limits in the United States. I am a Canadian, however I must comment on this due to the importance of the topic and the impact it has had on me personally.

I was until last year a Captain on the A320 at an airline here in Canada. I became severely sensitive to all wireless after cell towers were placed behind my home in London, Ontario. I have since had to end my 22 year career because of this new sensitivity; unable to tolerate wireless devices on the aircraft, wi-fi in hotels, the terminal, etc.

Instead of traveling the world and enjoying the perks of working as a pilot, I am now doing advocacy every day until this stops. I am unable to find a home that remains untouched by this form of radiation, even after moving twice last year. Cell towers continue to keep being built across the Country, including my new neighbourhood and I have obligations of family that make it impossible for me to leave again. So now any health I have regained is again ruined by new exposures to RF. I was basically trapped in my home, and now that is not even ok anymore.

In my small area of around 3000 people I know personally of 25 or so that are now newly sick from two cell towers just installed a few months ago, and those are people that know to contact me. There are cancer clusters also around other cell towers in the area too.

This year so far 3 nurses from London, Ontario have contacted me who are now ill from the technology, one of whom has had to leave her job permanently. This is also happening quite often to teachers and students in schools now that they are all wi-fied.

I have great concerns about wi-fi on aircraft, and have witnessed flight attendants having symptoms as well from just having cell phones turned on inside the metal fuselage of the aircraft. I know that the engineers that are testing this equipment are only taking into account the radiation levels from the wi-fi only and are not even looking at the radiation emitted from the many devices brought on board the aircraft (as well as being reflected off the fuselage).

This problem is increasing rapidly and now would be an appropriate time to act on it.

Feel free to contact me anytime to discuss this in more detail. I would be more than happy to help in any way.

Thank you, Melissa Chalmers

Radiation Sickness & ADA/FHA; Garril Page Comments, Aug. 30, 2013

Comments on Reassessment of FCC RF Exposure Limits and Policies, ET Docket No. 13-84 and Proposed Changes in FCC Rules Regarding Human Exposure to RF Electromagnetic Fields, ET Docket no.03-137

August 28, 2013

All of my adult life I have been an active participant in public processes, attending meetings, speaking at events, commenting during periods of public participation.

I find it an embarrassment and a scandal that this United States of America, where we celebrate and fight for freedom and equal rights, uses ELF and RF 'guidelines' to disenfranchise citizens. FCC guidelines for RF/MW exposure based on thermal effects are inadequate, out-dated and wrongful. Using SAM and SAR to shield industry profits is an outrage. There can be no other reason for this agency to try to cling to standards which are not protective of public health and are especially harmful to sensitive populations.

You have received thousands of peer-reviewed reports and studies which provide you proof of damage from low-level exposure to non-thermal radiation sources and urge adoption of biologically-based exposure guidelines. The 2012 BioInitiative Report is incorporated by reference herein in its entirety(<http://www.bioinitiative.org>)

How is it that only the United States and Canada retain these high-level guidelines while the rest of the world listens and learns? The FCC's power density value should be lowered from $1,000\mu\text{W}/\text{cm}^2$ to $0.0003\mu\text{W}/\text{cm}^2$.

In my own experience, I find I am sickened to a point of being unable to attend meetings at the Board of Supervisors, the CPUC, local agencies, and other venues such as stores, markets, even outdoor celebrations, where Wifi and RF signals and transmissions are unrestricted. I first notice a sharp and blinding headache, my eyes feel pressure, then my skin reddens and begins to swell. Next comes nausea and finally, my heart rhythms are affected. I find being so limited in where I can go and in what I can participate very-unAmerican. Per No. 09-5761 Heartwood, Inc., et al. v. Agpaoa, et al. I challenge the current exposure guidelines because I have suffered an 'injury in fact' that is concrete and particularized; is actual or imminent; is traceable to wireless exposure; and it is likely that this injury will be redressed by

lower exposure guidelines.

What is the cost of this disenfranchisement and ill health? I suggest that public discontent is counterproductive and ought to be a matter worthy of FCC consideration. I suggest this be full, careful, and appropriate consideration.

The FCC may not be a health and safety agency, but if you solicit comment, you indicate an intention to read what is sent you. This is in the public interest. That you are able to acknowledge the error of the current guidelines also is a representation of the public interest. The FCC should advocate that Congress direct the EPA to establish biologically-based radiofrequency (RF) radiation safety limits and provide the budget and resources to carry out that task.

Further, this proceeding requires a NEPA assessment due to reports of injury traceable to radiofrequency (RF) exposure under existing guidelines, which establishing biologically-based RF safety limits would prevent.

Thank you.

Garril Page
70 Fawn Drive
San Anselmo CA 94960

Radiation Sickness & ADA/FHA; Laddie W. Lawings Comments, Sep. 5, 2013

SEP 05 2013

FCC Mail Room

FCC 13-39

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of	)	
	)	
Reassessment of Federal Communications	)	ET Docket No. 13-84
Commission Radiofrequency Exposure Limits and	)	
Policies	)	
	)	
Proposed Changes in the Commission's Rules	)	ET Docket No. 03-137
Regarding Human Exposure to Radiofrequency	)	
Electromagnetic Fields	)	
	)	

To: Office of the Secretary
Federal Communications Commission
Washington, DC 20554

Comment Filed by: Laddie W Lawings
403 E. Park Avenue
Port Angeles, WA 98362-6935
ThePoemRags@msn.com
360-452-8122

August 29, 2013

Received & Inspected

SEP 05 2013

FCC Mail Room

AFFIDAVIT OF Laddie W Lawings

State of Washington
Clallam County

I, Laddie W Lawings, attest that my statements are true to the best of my knowledge.

Comment round for FCC ET Docket No. 013-84 and ET Docket No. 03-137

1. My name is Laddie W Lawings. My address is 403 E. Park Avenue, Port Angeles, WA 98362-6935
2. I am retired from a Naval Nuclear Inspector / Auditor Training Leader career.
3. Smart Meters RF transmissions have been reported to interfere with RF emitters that control medical devices, such as pacemakers, apnea monitors, electrically powered wheelchairs, RF insulin pumps...etc.... This condition is called radiofrequency interference (RFI) and can have consequences that range from inconvenience to serious injuries and death. Living in Port Angeles, WA, please consider my following conditions:

I have an Implantable Defibrillator/Pacemaker (CD2231-40Q), which the University of Washington State Medical Heart Center had implanted in my chest due to a medical team's advisement of concerns that I may return to a heart fibrillation state upon my return to Port Angeles, WA. Although I have had two heart (a two by-pass and a one stint post-ops) conditions, I was determined to return to work at OMC. A few years later, I noticed changes in my heart rhythms shortly after the installation of the City Wide and Olympic Medical Center (OMC) Wide Wi-Fi Systems. These systems I believe caused and began the start of my heart rhythmic, respiratory, diabetic, and nervous tension symptoms. These symptoms continued to increase and became problematic that sent me to hospitals and medical clinics alike. A heart medical device to alert medical staff of my heart condition as I struggle to stay alive now monitors me.

I developed server sleep respiratory apnea for which I must now use an assisted respiratory medical device every night. This device assists my continuing breathing during sleep. This too had become problematic during the same time epoch, as did my heart fibrillation epochs.

During these heart and apnea problematic epochs, I had developed yet another problem, high blood glucose levels. The insulin pump (OmniPod – UST200) and in-office lab testing reflected two highly different variances, not even close. After my research on locations and level indications of the EMF/RF radiations by the use of EMF/RF meters, I was able to reduce some of my EMF/RF radiation exposures by using the methods used when I was a Nuclear Inspector; Time, Distance, and Shielding. However, there are now locations and levels of EMF/RF radiations, which the general population and myself are unable to use these methods to control our exposures. They are; City Wide Wi-Fi Systems, Smart Meters/Grids, and Cell Phone Grids. Hospital Wide Wi-Fi, Security, and Electrical Systems. And there are many businesses with the same type systems. Now the Smart System, adding to the problem that the average person cannot control their exposure to. Lets face it, we have now produced a New Dangerous Pollution that is killing us more than the Nuclear Waste and the Auto.

4. Health, environmental, privacy, and billing concerns have all been voiced over the installation of these smart meters. The City of Port Angeles says they are following the FCC guidelines. Anyone with at least some common sense should know that the FCC guidelines are "Out-Of-Date". The people living under and in this "New Dangerous Pollution" know what they are subject to; Sickness, Abusive Price Increases, Natural Life around them dying, and Invasion of Privacy by the Government and Thief alike.

5. The FCC guidelines are based on thermal effects to human tissue (heating). The thermal heating effect of radio frequency (RF) radiation on humans has been studied and is well understood. Non-thermal effects were not taken into consideration for the basis of these regulations. Scientific studies have shown that non-thermal effects due to cumulative or prolonged exposure to lower levels of RF emissions can cause adverse health effects. The Bio-Initiative Report provides a good summary on the studies of non-thermal adverse health effects detected.

6. The Federal Communications Commission (FCC) has failed to set safety standards that take into consideration safety for the disabled population and those with medical conditions adversely affected by non-ionizing radiation at far lower levels than that of the general population.

7. The Federal Communications Commission (FCC) has failed to take into consideration the increase amounts of EMF/RF devices being produced, installed, and used by business, governments, public works, and the like which the average person do not have control over to reduce their exposure to EMF/RF radiation; therefore, they are doom to adverse health affects, their lost personal privacies, and securities.

Respectfully,

Laddie W Lawings, MA/CNA
403 E. Park Avenue
Port Angeles, WA 98362-6935

Name:

(Print)

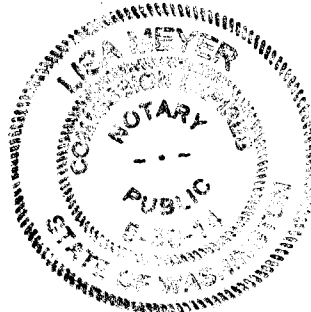
August 29, 2013

(Signature)

Sworn to before me,

This 29th day of August, 2013

Notary Public



Radiation Sickness & ADA/FHA; Fern Damour Comments, Sep. 4, 2018

I am very concerned about the presence of 5g in our community.

I have been personally affected by a 5g signal put in our home by our internet service provider ◆ Knology. After 6 months of being exposed to the signal, I developed heart palpitations and went to the emergency room thinking I was having a heart attack. I researched my condition and found an article that said these symptoms could be caused by 5G. I called Knology to ask them to turn off the signal. They instructed me on how to tap into my modem and turn it off for myself. So I did (keeping the 2.4G signal for wi-fi use). Over a period of months, my symptoms decreased in severity, duration and frequency.

However, we live in a duplex. When new neighbors moved in next door, Knology put a 5g signal on their modem. My symptoms returned. Thankfully, when I explained to the lovely couple next door what effects 5G has on me, they turned it off (keeping the 2.4G signal). There are other people in our area that are using the 5G signal that Knology automatically installs in each home. From the name on the signal, I cannot tell who they are. If I could, I would tell them my story and ask them to turn off the 5G signal. Thankfully they are far enough away that I am not experiencing symptoms daily.

Still, I am concerned that soon there will be no safe place for me. Adequate safety testing has either not been done, or has been suppressed or ignored in the rush to beat the rest of the world to 5G technology. We will lose a lot more if we expose our citizens to 5G without adequate safety protections than if we let someone else get to 5G first.

The wireless deployment must immediately halt and◆the EPA should systematically review the issue and develop proper safety standards.◆

Radiation Sickness & ADA/FHA; Rebecca Rundquist Comments, Aug. 28, 2013

FCC 13-39

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of	)	
	)	
Reassessment of Federal Communications	)	ET Docket No. 13-84
Commission Radiofrequency Exposure Limits and	)	
Policies	)	
	)	
Proposed Changes in the Commission's Rules	)	ET Docket No. 03-137
Regarding Human Exposure to Radiofrequency	)	
Electromagnetic Fields	)	
	)	

To: Office of the Secretary
Federal Communications Commission
Washington, DC 20554

Comment Filed by: Rebecca Rundquist
901 Newcombe St.
Lakewood, CO 80215
Mrknbcky@aol.com
303-278-8498

August 28, 2013

The proliferation of wireless technology has taken over the American landscape. It has revolutionized the manner in which we live. The government has been at the forefront of this technological push, and the public has accepted it without question. Unless they are like me, and have become sensitized by exposure to everyday frequencies.

With each new advancement the physical symptoms I experience become worse, and the world I once knew becomes more difficult to live in. I started to do research when my symptoms, which include dizziness, confusion, ear- ringing, pressure and pain, became noticeable. The wealth of information was overwhelming as I discovered the world of electrosensitivity and other harmful effects caused by various frequencies. What was troubling to me was the lack of verifiable research done in this country, and the dismissal of research results done around the world. What was more disconcerting was that the industry was governed by the FCC and FDA, not the EPA.

Radiating technology has become so pervasive and invasive that the lives of my family have been permanently altered. Our 29-year old daughter, who is more sensitive than I, has been unemployed for 3 years. As more antennae permeate the outdoors, and wireless technology permeated the indoors, she is more or less housebound. We have not watched TV since the enforced digital switchover; we cannot use our swamp cooler or fans during the summer; we use an outdated computer with dial-up service and "simple" cell phones only when necessary. If we are experiencing these difficulties with the current exposure limits, I fear an increase would be intolerable.

I propose a moratorium until proper research is conducted, preferably by the EPA who would not be influenced by the industry. This research must include biology-based studies of radiation exposure. The cost to my family has already been too high.

Respectfully submitted by
Rebecca L. Rundquist

Radiation Sickness & ADA/FHA; JoAnn Gladson Comments, Sep. 3, 2013

I am a commercial airline pilot that is ES (electrically sensitive). My symptoms have gotten progressively worse with the exponential proliferation of RF/EMF exposures in AIRPORTS, hotels, from BODY SCANNERS, and WiFi on-board Aircraft. I am concerned about the health effects of RF/EMF exposure! There is virtually no escaping it. My research on this subject matter this year has made me very aware and downright scared as to what my future holds. I have met with several other individuals, all with ES, even another female airline pilot! We are 5% of today's population and growing. I can't emphasize enough how our future is at stake! Please review the material submitted and form an INDEPENDENT panel, one that is non biased towards the telecommunications industry! Please feel free to contact me at 954-560-6312 for further discussion.

Radiation Sickness & ADA/FHA; Jonathan Mirin Comments, Jul. 13, 2016

Dear Commissioners,

This is my wife's story about becoming functionally impaired from RF exposure:

<http://mieuxprevenir.blogspot.ch/2014/03/switzerland-waves-make-me-ill-testimony.html>

We are trying to manage this situation as best we can but deployment of 5G would be a serious blow. Instead of being able to go into high RF environments once or twice a week and then spend some time recovering, she may not be able to go out at all. We know many others in the same situation. Small business owners, mothers, fathers, teens - people trying to survive in a world that has become saturated in microwave radiation - a world that is increasingly unlivable for them.

I understand there is plenty of industry funded research available to prove that my wife and millions of others around the globe (300,000+ people in Sweden alone are officially recognized as functionally impaired by their government) can not differentiate between a real and false RF signal. This would be comforting if it was an accurate measurement of electro-hypersensitivity. For more, please see:

<http://electromagnetichealth.org/electromagnetic-health-blog/electrohypersensitivity-ehs-is-it-real-does-it-exist/>

I also understand you have various dockets relating to sub-thermal exposure and safety that are pending. Given the extremely high stakes for our family and yours, please say no to 5G until these dockets have been processed and the results evaluated. Private sector innovation is a wonderful thing that should be encouraged but it is up to people like yourselves to insure that this innovation happens in a way that does not sacrifice an entire generation - which unfortunately is the historical precedent in America for many products (tobacco, DDT, lead, asbestos, etc.) that have had serious safety questions ignored in the relentless pursuit of a dollar - or trillions of dollars, as the case may be.

You may feel that if you were to stray from the "party line" on this issue, even a little bit, you would soon find yourself looking for a new job. If you are considering such a move, all I can say is that you might be surprised at how the disastrous things that seem to await you may not be as disastrous as you imagined.

It took me some months to accept non-ionizing microwave radiation could be affecting my family to such an extreme degree. If you would like to read about this process, please see my essay here: <http://www.spiritofchange.org/Summer-2015/All-I-Really-Need-to-Know-About-EMF-I-Learned-After-My-Wife-Got-Sick/>

I believe encouraging the private sector to innovate biologically compatible forms of wireless communication while building out our wired infrastructure is a strategy that history would look kindly upon.

Sincerely,
Jonathan Mirin, Massachusetts

Radiation Sickness & ADA/FHA; Mary Adkins Comments, Jul. 12, 2016

I'm writing to demand that our elected officials and those working on their behalf put a stop to Tom Wheeler's insane plan to roll out 5G across the country. Mr. Wheeler is apparently unaware (or unconcerned) that there are literally millions of people in this country whose health has already been devastated by wireless technology.

5G is a death sentence for the millions being crippled by wireless radiation. I should know, because my two children and I are among the casualties. We've been sickened by the already out-of-control wireless infrastructure, which continues to encroach upon every aspect of our lives. Wireless technology is already blocking our access to housing, jobs, education, medical care, public utilities, and even the ability to buy food. We cannot tolerate the wireless EMF emissions from cell phones, WiFi, cell towers, and utility "smart" meters already in place. Migraines, heart arrhythmia, respiratory problems, debilitating pain, dizziness, nausea, and other disabling symptoms will only increase with the release of 5G. How are we supposed to live? Work? Contribute to the community? People like us are dying because of this technology, and Mr. Wheeler wants more?

It is this unfettered release of wireless technology (which began in the mid-nineties) that has sickened our population, causing exponential increases in neurodegenerative diseases, cancer, autism, ADHD, brain tumors, and other illnesses that have been unequivocally linked to wireless radiation. It is Tom Wheeler and other telecom industry executives like him that created this wireless nightmare that has trainwrecked the lives of millions. Please listen to the "canaries in the coal mine" like myself before the rest of you end up on the same horrendous path we've traveled. PLEASE STOP 5G, and please have compassion for those of us already suffering and dying. Mr. Wheeler is saying 5G technology is "safe," and all the while people are dying from the wireless technology already in place--this is the ugly truth that no one wants to hear. World renowned scientists are unanimous that current guidelines ARE NOT PROTECTIVE OF HUMAN HEALTH. 5G needs to be stopped.

There is nowhere left to hide and barely anyplace left in this country where people like us can safely live. Introducing 5G into this already toxic microwave soup we call the US is the final nail in the coffin. By voting for 5G you are voting for government-sanctioned genocide because millions of people like us--who are already debilitated--simply cannot survive any additional exposures above and beyond what we are already enduring. Torture is too kind of a word for the struggle that is our daily lives.

Biological effects from radio frequency microwave radiation occur at levels tens of thousands of times below current federal safety guidelines. Because of this and on behalf of all who are suffering, please STOP the release of 5G. It is a death sentence for me and my children. If you've not heard of EMF sensitivity and the large numbers of people who are being sickened by this technology, then you have a responsibility to educate yourself and you certainly shouldn't be voting for or supporting this legislation. When a public good is used to terrorize, dominate and sicken people (as this technology is doing to a significant portion of the population), it is no longer a public good. It is something that must be stopped.

Sincerely,

Mary Adkins, M.Ed.
Rhode Island Regional Director
Citizens for Safe Technology
www.citizensforsafetechnology.org
Former Configuration Manager
Mark 48 Advanced Capability Torpedo Program
Naval Undersea Warfare Center, Newport, RI
78 White Falls Trail
Wakefield, RI 02879
(401) 284-4530

Sent from a safe, hardwired computer

Radiation Sickness & ADA/FHA; Ian Greenberg Comments, Sep. 3, 2013

I am a regular citizen like yourself, but I suffer from Electrical Hypersensitivity, which causes me to react with symptoms like chest pain, rapid heartbeat, dizziness, memory loss and headaches every time I am around electro-magnetic fields (EMF), particularly around wireless devices and wireless signals. I was living the American dream in my own home in Atlanta, GA. To minimize, the amount of RF radiation I was exposed to, I stopped using wireless devices like cordless phones and cell phones.

This was workable for me, but about a decade ago the cell towers started coming up like mushrooms all around me, then came the smart phones. Next was the Wimax, blanketing the whole city and then the neighbors adopted WiFi. My health started declining.

A few years ago the smartmeters arrived, first the electric, which I dealt with by not using the room that had the meter outside. Next came the gas smartmeters, which had to be read by a truck once a month, but were set to transmit every 15 seconds 24/7.

As the wireless infrastructure was growing exponentially, my health kept declining. I started lining my bedroom walls with RF blocking material, so I could sleep at night. I also stayed in the center of my house where the RF readings were the lowest. Every time I went outside, I would be bombarded by wireless signals and had to retreat back inside. Public places like libraries, coffee shops and supermarkets were now off limits for me and I had to get family members to shop and run errands for me.

At the end of 2012, I could not take it anymore and I literally slammed the front door and drove 2000 miles across the country to a small town in rural Arizona. I am not around wireless signals anymore and my health has improved dramatically.

OK, back to the business at hand. In 1996 you allowed industry to set RF radiation guidelines, this is like letting the fox guard the hen house. At that time there was almost no wireless infrastructure and no one could envision the exponential growth in wireless technologies or just how dense the electrosmog from all of these devices constantly radiating would be.

Our radiation exposure limits are among the highest in the world and other countries are much more concerned about the health risks of wireless radiation. More and more people worldwide are becoming electrically hypersensitive and this is going to be one of the biggest health challenges of the 21 century. The current exposure limits allow a 20-fold higher exposure to the head compared to the rest of the body and do not account for a child's greater vulnerability to this type of radiation.

In 2010, I published a website www.thenewtobacco.com, warning people about the health risks of wireless radiation and how to protect themselves. Your organization needs to set tougher limits on

RF exposures, you can't trust the wireless companies or the telecom industry to set appropriate limits, there is just too much money at stake.

We need to learn a lesson from the tobacco industry, whose executives lied under oath to protect their profits. So do the right thing, use the precautionary principle, pay attention to the studies that have NOT been conducted by industry and set more restrictive RF radiation limits.

In a country founded on individual freedom, what about freedom of choice not to be blasted by high levels of wireless radiation? I am thankful everyday that I am not around wireless radiation anymore and that my body has a chance to heal, but others may not have the strength, ability or resources to flee like I did.

Thank you for listening!

Radiation Sickness & ADA/FHA; Helen Sears Comments, Sep. 3, 2013

PERSONAL EXPERIENCE AND COMMENTS ON EMF PRESENT LIMITS:

1. Port Angeles, WA installed one of the nation's first citywide wi-fi systems. When half of it was turned on, I couldn't get to sleep until 4:30 a.m., then slept until a little after 7 a.m. That was it. A day later, the rest of it was activated, and that night I got no sleep at all. In addition, I was constantly dizzy, light-headed, and couldn't keep a focused thought in my head. It was terrifying.

How did I know when the system was activated? My husband was on the Citizens Utility Advisory Committee and was present at all the meetings when the time was agreed upon. How did I know I had a problem with wi-fi? Several months beforehand, we got a router and plugged it in next to a desk in our bedroom, which was big enough it also contained the study. From that time, I couldn't get to sleep. As an experiment, we simply unplugged the router at bedtime, and the sleep problem disappeared.

We had just paid off our house the month before and planned to live in Port Angeles the rest of our lives. However, my reaction was so severe my husband rented me a motel room outside the wi-fi range until I could fly down to our daughter's in SoCal while he located a room outside Port Angeles that we could rent where I could stay until we could sell our wonderful house and move.

2. We were allowed to move into our new cottage in Mendocino, CA the night before close of escrow, but I felt dizzy, unable to concentrate, and couldn't sleep that night at all. The next morning, I found a "smart" meter on the outside of the garage, even though we'd been told "smart" meters had been banned in Mendocino. We found out the supervisors had approved them, in spite of local dissent. Fortunately, there was an opt-out available, so we paid \$75 for ourselves and our neighbors (only one close neighbor), to remove the meters, and continue to pay \$10/month for us and \$10/month for our neighbors to keep this uninvited and debilitating technology away. (Our neighbors reported having strange headaches and sleep disturbances, though their symptoms were not as severe as mine.)
3. My system is now much more sensitive to EMR of all kinds than it was in the beginning. As a result, I can pick up dirty electricity from sources that never bothered me before. Because I was still having symptoms, my husband located an EMF consultant on-line, and we rented 3 kinds of meters for two weeks so we could make a thorough measuring throughout the house. One meter measured radiation (Gauss), one EMR of all kinds, and one the amount of electricity picked up on an individual's skin. It turned out I pick up much

more electricity than my husband, which may account for my sensitivity, or it could be a result of all I've been exposed to. However, with the help of the meters, we have located problem areas in the house and have turned off several circuits, and are going to get a couple areas rewired with metal-clad wiring so the house is EMR safe.

4. A doctor I went to in Port Angeles reported dozens of his patients complained about sleep problems after the wi-fi system was turned on, but they had no way to track it, for the local newspaper refused to carry any articles about the wi-fi mesh system the city was installing. And then the City Council approved the installation of "smart" meters; however, a citizens' group formed and has managed to stall any further installation, for many people are deeply concerned about the health effects they and their children and neighbors are experiencing with a double dose of EMR from both the wi-fi and "smart" meters.
5. Three months after my last exposure of strong and constant EMR, I'm still recovering. I'm requiring 9-10 hours sleep, and my memory is still a bit slow, though much better than it was, and improving daily. But my system is still sensitized, and my hunch is it will be for some time. I can feel strong EMR sources when moving into them, and can also sense when being in an EMR-free zone.
6. In doing research on EMR, including wi-fi, "smart" meters, and cell phones and cell phone towers and antennas, I have read over and over again how research is now proving the all too real and verified health hazards with exposure to what the body was never designed to handle. Just recently the UK delayed the installation of any "smart" meters in their soil so the health hazards can be studied. France has outlawed use of cell phone by children in elementary school. Toronto was going to install a citywide wi-fi system, but the health department stepped in and stopped them because of health concerns. I can personally witness that there are dire consequences connected to these technologies, and though I am part of only 3-8% of the total population with severe symptoms, I have no doubt others are affected without knowing it, especially children. And the WHO has recently declared EMR to be a possible carcinogen.
7. IN CONCLUSION, I URGENTLY SUGGEST YOU REVISIT THE PRESENT LIMITS OF EMRs AND JUMP FEET-FIRST INTO ALL THE RESEARCH DONE SO FAR, AND BECOME THE COUNTRY'S TOP ADVOCATES OF THE FOLLOWING:
 - A. Stop any further installation of city-wide wi-fi systems.
 - B. Stop any further installation of "smart" meters, which do NOT save energy, consumer money (bills, instead, go up), or help with any energy conservation.
 - C. Ban cell phone use in children. (Finger texting fine, but nothing

involving the phone being held against the head.

- D. Promote truly clean energy (solar, wind, wave, algae) for the needs of the future, so new ways to have power and communication can happen without endangering our precious resources or the health of our citizens. And find ways to protect sensitive people now, while new technologies are being discovered. All this will involve plenty of new jobs and pay decent profits to corporations willing to put people's well-being first.

If you will be brave enough to do all that's in your power to protect and nurture, you will not only be promoting one of the more important transitions to the future, but you will be saving the country catastrophic amounts of money, should the full health consequences of mesh EMR go ahead unstopped.

Thank you.

Helen Sears

Recommended Resources:

PUBLIC HEALTH SOS: The Shadow Side of the Wireless Revolution by Camilla Rees and Magda Havas, Wide Angle Health, LLC 2009. (Professor Magda Havas is a pioneer researcher of EMR at Trent University, Canada.)

HEALTH HAZARDS OF ELECTROMAGNETIC RADIATION, 2nd Edition, by Bruce Fife, N.D., Piccadilly Books, Ltd., Copyright 2009, 1998.

Radiation Sickness & ADA/FHA; Janet Johnson Comments, Mar. 4, 2013

Testimony on effects of EMF's

To Whom It May Concern,

I am a person disabled for 20 years by intolerance for chemicals and electromagnetic fields (EMFs). Both chemicals and EMFs were causing impairment to my intellectual functioning. I had become so impaired that I was unable to follow and participate in normal conversation, or remember 3 simple numbers long enough to add them (for example, $15 + 8 + 10$).

In my mouth I had a mix of mercury, 5 steel posts and two gold crowns. I have recently learned that mixed metals in the mouth can cause a battery effect which results in mercury mobilizing into the bloodstream. I also lived in a house with high magnetic fields (12 milligauss) which I believe may have made the situation worse and also caused the lead poisoning in me and my daughter, since the source of high EMF's was coming from stray electricity in the water pipes.

My memory, my mental clarity, and my tolerance for EMFs improved steadily as I chelated mercury out of my body. However I remain sensitive to EMFs. Being within a few feet of a WiFi emitter still causes neurological loss of functioning within minutes. Being at an increased distance of even 30 feet, results in a delay of this reaction to a day or two. I am able to tolerate exposures at work for a few hours because I can come home to my house which has no recordable EMFs (on my meter) and recuperate.

I have had to relocate 4 times because of these neurological problems. I am in a safe place now. Forcing me to have a smart meter would be devastating.

I am not a scientist, but I know I am a person who does not do well with EMF exposure. Where is the research? For the health of our society we need to answer such questions as:

1. Does exposure to EMFs cause increased release of mercury amalgam in some people? Especially those with mixed metals in the mouth? (I saw one study that supported this.)
2. Why is it that some people with mixed metals in their mouth can "hear the radio" in their teeth?
3. Does mercury in the brain act like an antenna?

Sadly, people like me are unable to represent themselves. I am only able to use a computer for a few precious moments at a time. There has been very little representation from anyone other than those who are making financial profits from EMFs.

Radiation Sickness & ADA/FHA; Mr. and Mrs. Gammone Comments, Aug. 20, 2013

Comments on Notice of Inquiry, ET Docket 13-84

STOP THE HEALTH HAZARD NOW !!!!

It started for my husband and me in June of 2012. We started to hear a very high pitched tone one day, which we never heard before. It was on and off for a while until it stayed on permanently, day and night, 24/7. We assumed that there was a problem in our home and had an electrician check our wiring, which is fine. Then we went on to call Central Hudson, our electric company, then all the other companies that have wires/cables hooked up to our home. Nothing was wrong with our connections and wiring, but that high pitched tone was still there.

It is ruining our lives! We can echo many of the complaints of all the other people responding to this inquiry. We do not have a "Smart Meter" attached to our home yet, but we know of some that are in our vicinity. We also noticed all the extra, heavy duty wiring and equipment that was installed on the power poles by the local Cable/Internet Provider OptimumTV/Cablevision in conjunction with the local electric provider Central Hudson to install the "Rural Broadband" (high speed internet service for every person in this country). That was the onset of us hearing the strange tone in our home. It is a 2 tone signal, high pitched which varies throughout the day and night and it has a low,roaring undertone, like an engine idling in the distance and it is constant. It can not be blocked with earplugs or headphones. It penetrates everything, including our bodies.

Our symptoms to this frequency are as follows; can not go into deep sleep, constantly awaking every other hour, sleep deprived and drowsy during the day, depressed, angry, loss of concentration,loss of memory,constant headaches, nerve pains, nausea, anxiety and general feeling of being unwell.

In the beginning we could find places that were not affected yet and we would feel better quickly, but we think the more wiring went up the worse it got. We can hear this tone/frequency everywhere now. In the stores, at the park, alongside the roads and the worst place is our home. We live in a rural, quiet town and the sound of this frequency penetrates the night hours especially.

It may very well be a combination of different sources, Broadband over Powerlines, Smart Meters, WiFi and Cell Towers.

We also had technical problems with our appliances. When Broadband Wiring got installed,we had several small power outages and surges.because Broadband runs on electrical power with battery backup. We lost 2 television sets due to the disturbances and one computer. Our automatic garage door won't open anymore, unless you get out of your car and stand right in front of the door. That coincided with the installation of a signal repeater/wifi box right across from our house. We talked with the manufacturer of the garage door and were told that if new batteries in the remotes won't remedy

the problem, that Radio Frequency Interference would be the cause of the door not opening. We called OptimumTV/Cablevision to report and remedy the problem, but they told us that the wifi box will not be moved and that they are operating their frequencies for Broadband at the guidelines of the FCC.

This frequency can also be heard during a power outage or by shutting of the main electrical panel in the house. We heard the frequency still running during a power outage related to "Hurricane Sandy". We know that Broadband has battery backup and the Cell Tower has generator backup.

This is an invasion of our privacy, our lives and our health. There is no remedy for any of the problems mentioned above. The public has no recourse. We were never informed of the side effects of any of these installations and have nobody to turn to for help. We have contacted the NYPUC, the FCC, the Governor of New York, the New York State Broadband Office and our Town Supervisor as well as all the companies that have wiring attached to our home. All the parties we contacted either ignored our plea for help or denied that there is a problem. We were laughed at and looked at as if we had lost our minds ,when everybody involved knows very well that there is a major problem with the newly installed technology. It is a crime!

This is a major health threat to the public and needs to be stopped as soon as possible. Take notice FCC and investigate the complaints of all the people that took the time to express their concerns!

Radiation Sickness - Disability; Shelley Masters Comments, Sep. 10, 2013

Received & Inspected

SEP 10 2013

FCC Mail Room
FCC 13-39

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)

Reassessment of Federal Communications)
Commission Radiofrequency Exposure Limits and)
Policies)

ET Docket No. 13-84

Proposed Changes in the Commission's Rules)
Regarding Human Exposure to Radiofrequency)
Electromagnetic Fields)

ET Docket No. 03-137

To: Office of the Secretary
Federal Communications Commission
Washington, DC 20554

Comment Filed by:

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September 3, 2013

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AFFIDAVIT OF – SHELLEY MASTERS

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SEP 10 2013

FCC Mail Room

State of CALIFORNIA

SONOMA County]

I, SHELLEY MASTERS, attest that my statements are true to the best of my knowledge.

Comment round for FCC ET Docket No. 013-84 and ET Docket No. 03-137

1. My name is SHELLEY MASTERS. My address is 336 BANCHERO STREET,
SONOMA, CA 95476

2. I am a professional artist of 35 years. I am a painting contractor and I paint murals and interior art work for private residences and commercial spaces. I have painted in over 1000 upscale homes in the San Francisco Bay Area. I am also an art teacher and I had an art school from 1996 to 2001 in San Francisco.

3. I support change in the FCC RF safety guidelines. The indiscriminant use of artificial pulsed microwave radiation is not compatible with biological life.

4. Attached is my experience of being harmed by the indiscriminant use of this wireless artificial pulsed radiation.

Respectfully submitted by:

Shelley Masters

336 Banchero Street

Sonoma, CA 95476

September 3, 2013

SHELLEY MASTERS
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Received & Inspected

SEP 10 2013

FCC Mail Room

During the last two weeks of December 2010, one third of my hair fell out. It came out in handfuls. I went to a dermatologist and she did a biopsy and said that all of my hair was in "resting phase". Hair has three phases - growing, resting and falling out. She asked me if I had been in an accident or suffered some unusual stress. I hadn't. She said my hair showed that my body had experienced a big stressful event, like having a baby, or a car accident. I didn't know of any event. The body goes into shut down mode when this happens and it uses its energy for functions other than producing hair.

The next few months I felt fatigued. The fatigue was with me all the time. It was hard to do my work, my profession, which requires physical labor. I was exhausted all the time. I could fall asleep anywhere and any time. It was as if I never got any sleep. I would wake up exhausted. I could fall asleep anywhere, anytime. I was barely functional and went to several doctors.

I also felt depressed, but it was a strange kind of depression. I felt like something was pressing on my chest. I felt like my heart was broken. I felt this all the time, morning, noon and night. I felt this when I would wake up in the middle of the night. I had nothing to be depressed about. I live in a great city. I have a nice house. I have a good profession where I do art for interior designers and architects. I love my life. I've never experienced this feeling, ever.

I noticed one day that the two sides of my face looked different. My left side looked horrible. My eyelid was drooping and there was a sty growing on my lower eyelid. My cheek looked inverted. Also, I had a patch of skin on the left side of the back of my head that itched horribly. Everything was on the left side. My dermatologist couldn't figure out why it was raised and pink on one side only. It was from the top of my head to the bottom of my neck. There was also a place on the round of my left shoulder that itched the same way. Nothing would satisfy the itch. It burned, too. My doctor prescribed several ointments and shampoos. None of them worked.

I would wake up with my heart beating wildly. There was no dream, there was no outside disturbance. I could actually see it beating inside my chest. It would happen several times a week. It always happened between 3AM and 3:30 AM. I remember often when I would wake up with a start, out of a deep sleep, that my cell phone, that I had on the night stand to use as an alarm, would be chirping.

I was having trouble thinking. I couldn't concentrate. It was very strange, I couldn't do things in sequence, I couldn't process my thoughts. I felt mesmerized when working at

home. My spelling was fine, my math was fine, and my recall of people's names and numbers were fine.

I took an online class on EBay three times, because I couldn't get the sequence in which to do the steps. I remember one time trying to write out a bid for a job and it took me four hours to figure it out. It was so simple and normally a bid like this would take a half hour, not a whole day. I couldn't process my thoughts right. I thought I was going crazy. My work suffered. One day it took the whole day to just decide on a simple font for a document.

In my art profession I work at home half the time and on site the other half. Many times I remember sitting on the couch in the middle of the day and just disappearing. I would just go out, I would just go blank and ten minutes later I would think... what just happened?

I remember that taking showers always made me feel better, my skin felt like it was sunburnt, when I hadn't exposed myself to the sun. There were days I took four showers. Also, I would feel better at night. I felt much more energy after dark or after 7 pm. Early, early mornings were fine, too. The worst time was from around noon to 7PM. I started shopping at night. After about a year I was unable to leave my house during the day. I had an irrational fear. It didn't make any sense.

I couldn't concentrate and I couldn't think. I couldn't exercise because I was so exhausted. My doctor said I had an undiagnosed inflammatory condition. I was on an anti-inflammatory diet and on medication that helped the condition, but no one knew what was wrong. I did an intake with a psychiatrist for the depression and he said I was mentally fine, but he would give me medication for the depression. The medication did nothing. I took it for six months.

The itching had become so bad that no matter how much I scratched I couldn't stop the itching. I have a friend who is a surgical nurse for a local hospital. I told her of how the itching specifically felt – like steel wool drenched in acid stuffed under my skin. No amount of hot, or cold compresses, no topical or oral medicine, or scratching stopped the itching. She said it sounded just like the description of her patient's itchiness when they were on chemotherapy. At the time I had no understanding of her comment about the symptoms of chemotherapy radiation.

In March of 2012 I started to get nosebleeds at night and I was waking up almost every morning with my heart racing. I was a mess. I couldn't think, I couldn't concentrate, I was depressed, I was fatigued, I had gained lots of weight and I couldn't exercise. I couldn't do my profession.

When I tried to go for a walk in my neighborhood, I felt like I would collapse. I had also developed incontinence and I had to go to the bathroom every 45 minutes. My doctor said that incontinence was part of the mysterious inflammatory condition. He did a blood work up on me and everything was in an acceptable range. Nothing looked unusual.

One night I woke up with my heart racing and once again another bloody nose. I had never ever had a bloody nose in my life. I started to cry. I wanted to die. I knew I wasn't depressed. But I knew something was terribly wrong.

How I found out it was the Smart meter: I turned on the radio one night after waking up with my heart racing around 3 AM and I caught the last few minutes of a talk show on Smart meters. The person calling into the show listed the health effects of Smart meters.

Even after a year and a half of this experience of symptoms, I remember thinking to myself at the time, about the person on the radio - "What a dummy! Smart meters don't put off enough power to harm you. It's not even as much as a 60 watt light bulb or a cell phone call." I had embraced the new technology. I didn't even remember when mine was installed. I didn't care. This new technology was about energy consumption and I felt it was a great idea to know what you were consuming.

She listed the symptoms and I had all of the symptoms of "microwave sickness" or "microwave illness". I hadn't put them together as one thing. I didn't know that the depression was related to the nosebleeds or the pressure on my heart had something to do with the lack of concentration.

I certainly didn't expect an environmental exposure. I was surprised to find out that microwave illness is well documented. These were my symptoms:

- Hair loss
- Heart palpitations
- Insomnia
- Pressure on the heart
- Depression for no reason
- Itchy and burning skin
- Inability to concentrate
- Anxiety
- Chronic fatigue
- Thought processing difficulties
- Nose bleeds
- Ringing in the ears - constant

The gas Smart meter was about 6-7 feet from my headboard of my bed, on the outside. On the other side of the meter there was a mature, 25 year old Rhododendron. It was all brown except the top leaves. I had had two nursery people over to help me save it. We couldn't figure out what it was that was turning the leaves brown. There were no insects; there was no mold or mites. I looked at the plant again and noticed that there was a very exact line that went straight across, the brown leaves below, the bright dark green leaves above. The plant also had been affected by the radiation from the Smart meter. It has also recovered since the removal of the meter.

I called PG&E and had the meter removed. They came 10 days later. I am being charged \$75.00 for the removal and \$10.00 a month for not having the meter. I slept in my bathroom on the floor away from the meter and over at a friends house whose neighborhood didn't have them yet during those 10 days.

I slept through the night with no heart racing or bloody noses. The itchy burning area on the left side of my head and my shoulder had faced the Smart meter in my sleeping position in my bed. I sleep on my stomach with my face to the right. The area that had a rash, and that horribly itched was on only on the left side of the back of my head; the side that faced the Smart meter – the side that was exposed 8 hours a night. I had a Smart meter on both sides of my house, one for gas and one for electricity.

Sleeping away from the Smart meter my symptoms almost immediately disappeared. I felt more energy and my head cleared.

I called PG&E to find out when the meter was installed. It was installed December 2010 just before Christmas. This was at the same time that I lost a third of my hair and the beginning of all of my symptoms that lasted for a year and a half.

This pulsed microwave communication is dangerous and I believe that the utility company has heard hundreds of stories, many like mine. The person who removed the meter said that my experience, though extreme, was typical of the complaints. She also stated that PG&E had weekly meetings where they reported the experiences of the people who were having the meters removed.

This experience has cost a minimum of \$7500. in doctor bills. I was unable to work and this cost me a year and a half of wages, approximately \$75,000. I had just moved to Sonoma and I was unable to market and establish myself in the community and have had to live on my retirement savings to cover this \$75,000. I now have developed sensitivity to many RF fields. My new sensitization makes it impossible for me to be around the DECT portable phones and most WiFi radiation. I can also feel fluorescent lights and I have an allergy to what I know to be dirty electricity. I have had much of my electrical wiring in my home insulated.

I have purchased meters and had a professional electrical engineer mitigate the fields in my home that are affecting me the most. A body voltage meter was used to identify what I was sensitive to and it has made a remarkable difference shielding some of the walls and insulating some of the wiring. I have turned off most of my circuits and only turn on the ones I need to use when I need to use them. This has cost me over \$5000. to mitigate.

I have permanent tinnitus. It is a high-pitched ringing that is 24/7. I have improved, but I still have an inflammatory condition. I am in the process of finding another place to live where there is no smart meter grid and reduced cell tower and Wifi coverage. When I am in places with lots of Wifi, or in a home with a DECT phone I have heart palpitations and my skin starts to burn and I have difficulty concentrating and finding my words.

I am also worried about possible brain damage from sleeping next to the Smart meter for 8 hours a day for a year and a half. It is my understanding that tumors take many, many years to develop. The studies of radiation victims in Japan show that damage from exposure to radiation takes time to show up and is different for different individuals. There is no way to find out how this will affect me in the future.

And, because of my newly developed sensitivity I will now have to move from my home to a place where I am not in the Smart meter grid, perhaps out of state, leaving all of my friends and business contacts. I may never be able to work again at my profession.

What is this worth? Millions!

How can I put a number to the cost of developing a tumor, or developing early Alzheimer's disease due to this encounter with the Smart meter technology and the additional exposure to other artificial radiation regulated by the FCC? \$100,000. per year in a nursing home? For 10 to 20 years? It's incalculable.

You have a duty to protect the public from this artificial radiation. This is not about restricting industry unfairly. Everyone is affected. Everyone is in harm's way. This must be scientifically studied with NON industry tests.

Sully Noster
September 3, 2013
Sonoma, CA.
95476

Radiation Sickness - Disability; Tara Schell &
Kathleen Bowman Comments, Sep. 12, 2016

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Brief Comment

Our health is not negotiable! We are holding everyone personally liable and accountable that does not vote against or speak up against these radiation deployments! The wireless deployment must immediately halt and the EPA should systematically review the issue and develop proper safety standards. Just Say "NO!" to the 5G Big Brother Spectrum, Global Wifi, and the Not So Smart Murder Meters and any other program that releases more toxic microwave radiation on its people and illegally surveys or collects data. There has been no NEPA review of the environmental and human health impacts of moving forward with 5G. The FCC has put the cart before the horse in promulgating rules for 5G without first studying the safety of 5G for humans and the environment. There is consensus within the scientific community that the existing FCC limits for wireless radiation do not protect the population from biological effects (www.EMFscientist.org) Wireless has destroyed my life! Over the years as more and more wireless and EMFs have been added to our society, I developed severe sensitivities to it. At first I couldn't be near people's cell phones, then the cell towers made me ill and weak, then they put a "Not So Smart Murder Meter" on my house in 2008 and I had no idea what a Smart Meter even was let alone that they changed the meter on my home. It took us months to figure out (after I went away on a trip and all my symptoms from the Smart Meter stopped), that it was the meter. It almost killed me. It stopped my heart every night and paralyzed half my body, it constantly caused my heart to act up each day either by tightening, jerking, rapidly and irregularly beating, I had continuous bleeding every day, it gave me severe vertigo, neurological damage, tremoring, severe brain fog, severe pain in my lymph nodes and extremely painful electrical shocks in my body, paralyzed my joints and limbs for weeks or months at a time, it caused nerve damage and numbing, circulation problems, severe insomnia, messed with my sugar levels, shut down my kidneys, caused a Diabetes type 3 (which I only get when I'm around EMFs), hormone imbalance, severe cramps in my uterus, caused all the systems in my body to go completely haywire, caused a form of artificially forced depression, and so much more. Eventually I found out they switched the meter on my house to a "Not So Smart Murder Meter" and I had it removed but the damage was already severe and the sensitivities did not go away or decrease. I slept in the middle of my living room floor for the rest of the years in that house cause I was so ill and sensitive from EMFs. Only 100% abstinence can keep the symptoms from appearing or getting worse. This is impossible to do in today's society since EMFs and environmental pollutants are everywhere. Not So Smart Murder Meters also have an extremely high risk and record of catching on fire and illegally track and collect data inside one's personal dwelling. Citizens were never informed nor asked to opt in to this toxic program. After wireless destroyed my health, I then became severely sensitive to all forms of EMFs (RF (wireless), magnetic/electric fields, and dirty electricity). So now I'm sensitive to all electric including appliances, wires and plugs, EMFs from a motor or vehicle and more. I can't handle any chemicals, molds, toxins, gasses, or smoke even in small quantities. I can no longer drive or I can pass out or end up in a coma, it shuts down my kidneys, shoots my sugar levels in extreme differences in a short period of time, and gives me brain fog so badly that I lose all cognitive function and develop both Parkinson's and Alzheimer symptoms from neurological damage. Even being a passenger in a car can cause this from a short ride. I can no longer work, go to church, get around, shop for groceries, or be around people with cell phones, electronics, or chemicals. I can't travel or be in a city/town without side effects and permanent damage to my health and I can't use hospitals or medical offices. Millions of people in America are

completely disabled and homeless from wireless. Studies show that at least 50% of the population will be hypersensitive to EMFs by 2017 due to the rapid increase in numbers and these figures were not calculated with the addition of Global Wifi, 5G, or any other radiation being released which uses even more power. There are so many people sick from wireless that doctors are changing their practices over to just focusing on radiation sickness. I personally know a long list of people severely suffering from this. I can't be near a single cell phone without severe instant pain and in a short time can completely shut down my body or stop my heart. Global Wifi was beamed down over my house this past Winter and it killed my dog and almost killed me. I was knocked out instantly as if someone shot me with a strong radiation gun. I didn't know it was Global Wifi at the time because I never heard of it. I thought maybe someone put up a new tower or wireless device in the area so I called all the utility companies and told them I could feel wireless really strong and it was killing me and asked if anything new was put up. Everyone said no. Then one day it just lifted and I knew it wasn't something new in the area. Then I found out from others that Global Wifi was being experimented on us in this area. I was unable to function and barely get up from January to June from the radiation poison they placed on me. Other neighbors got extremely ill too who can not feel wireless as I can actually feel it. One guy ended up in the hospital from it and is still there. He has weak kidneys and a heart condition and the Global Wifi experiment shut him down completely. There were complaints from other neighbors as well of brain fog, dementia, and lack of cognitive function during that time. The answer is not in treating symptoms with drugs, gadgets or devices. The answer is to remove the toxic source and replace it with safer technologies! (Watch this video to see how EMFs affect the body on the cellular/biological level; The Truth About Thermal Effects & the Good & Bad of Microwave Radiation on the Cellular/Biological level and How it Affects EHS/MCS, Cancer, Autism, and more https://www.youtube.com/watch?v=_Up8bqiJN2k The amount of radiation they beamed down was extremely strong. It was severely tormenting. I lost weight, lost all cognitive function, had strong suicidal/depression frequencies placed on me, and my cells and mitochondria were completely wiped out and I had severe abnormal chronic fatigue. I was not even able to lift my arms or get up the majority of the day. I was severely weak and just lay there crying. This is not only inhumane and cruel but it is illegal and unconstitutional to torment, experiment, or place these toxins on our bodies. We will be holding anyone accountable and liable for this that does not vote against it and does not take serious measures to protect us! This is a declaration of war and an invisible holocaust being placed on its citizens. Wireless is a neurotoxin, genotoxin, and a carcinogen. 5 G spectrum is just as dangerous, if not more, than Global Wifi and both will reach everyone everywhere with no way to opt out. Also, chipping everyone and everything (as Mr. Wheeler stated in his speech) is illegal tracking and surveillance and proves that this is a Big Brother Agenda that he and other Narcistic leaders are trying to put forth. Other countries are removing wireless because so many people are becoming disabled from it. America is the only country that keeps promoting dangerous technologies on its people as experimental rats! As Mr. Wheeler himself showed that he is not a medical doctor and does not care about safe radiation levels, you need to listen to the evidence from the medical doctors and scientists that are not "bought out" or threatened by the cellular industry or government. The cumulative effects of all these EMFs are not being calculated and the "thermal imaging" safety standards were not created for medical or biological effects on mankind or the environment but were created for "technical standards" only as the scientists themselves stated. Thousands of studies show that the current standards are billions and billions of times higher than what is biologically/medically safe and the government is trying to raise these standards billions of times higher than the deadly doses already existing. Many children are severely tormented by wireless and EMFs. They can't even have the slightest exposure without a complete meltdown. This is abuse! Wireless can not be controlled. It reaches across everyone's properties and boundaries which is encroachment and is illegal. Stop increasing frequencies and radiation levels. Narcistic leaders will never be satisfied and will continually ask for more. Someone needs to get this under control before it is too late. There will be no safe place for anyone to reside or live away from this radiation poison and torment. Land lines are the safest and most secure services we have so far. Either hardwire everything with proper filtering/shielding and cancelling of EMFs or come up with safer technologies. For an alternative energy that is good for the environment and can

run motors and devices without electricity to reduce the amounts of EMFs we are using see the "Air Compression with the Trompe System" links below. In the meantime, back off our bodies, families, properties, and children and give us safe zones to live in. Zone yourselves in and kill yourselves off if that is what you want to do. I don't agree with it but keep it off of us! Wireless microwave pulsed radiation is the number one killer of bees and pollinators and a famine will develop from this. It also kills crops and animals along with humans. Wireless also increases mold and biotoxins (including Lyme disease) over 600 times in your body and environment and is also creating a mold epidemic. Weakening and disabling America is not progress! It is criminal! Sincerely, Concerned Citizen Who Is Fully Disabled from EMF Damage and Seriously Fed Up with our Corrupt Government and Lack of Compassion and Concern, Tara Schell Virginia, USA 540-474-3146

Radiation Sickness - Disability; Patricia Burke Comments, Feb. 5, 2013

Request for Biologically Based Health Standards for RF
Statement from Patricia Burke

In 2005, while living in Massachusetts, I moved to an apartment within walking distance of the yoga studio I had directed for almost a decade. Within weeks, I experienced declining health, including headaches, fatigue, poor sleep, poor digestion, tension, and extensive menstrual bleeding. The apartment was on the 3rd floor of a home 2 doors down from a church housing a cellphone antenna.

In 2008, in deteriorating health, I moved to California in hopes that the warmer climate would help me to heal. By the spring of 2010, I was turning off the power in part of my rental home. Eventually, I was camping in the yard because I was receiving electric shocks out of thin air during the night.

In 2010, I returned to MA to be near family, preparing to die.

I continue to tread water in terms of survival, and every day is a challenge.

Since 2008, I have moved 14 times due to radiation-related illness, at considerable expense and financial loss. I am unable to live in reasonably-priced apartment buildings or in thickly settled areas due to the presence of Wi-Fi, cellphone users, cordless phones, and electronic devices which exacerbate my deteriorating condition.

I have an Ivy League education but I am unable to work.

As a professionally trained yoga practitioner, it is obvious to me that humans possess different resiliencies and sensitivities. In that same way that some dogs can detect an incoming thunderstorm, some humans possess a heightened awareness of the EMF spectrum because they register the frequencies on a physical level. To continue to deny that some individuals are being adversely affected to RF, and to expose them to unhealthy frequencies, against their wishes and without accommodation, is a form of genocide.

Radiation Sickness - Disability; Deirdre Mazzetto Comments, Aug. 19, 2013

Comments on Notice of Inquiry, ET Docket No. 13-84

First I would like to tell you my story: I am a Registered Nurse who moved to Reno in early July. On July 25th, a NV Energy technician arrived at my house to install a smart meter and gas module. I had not received any phone calls, phone messages, or detailed information in the mail from NV Energy about the smart meters or information regarding any potential health risks associated with installation of these devices.

As a side note, in the medical field we are required by law to obtain an informed consent whenever we perform a surgery or treatment that carries a known or potential risk for the patient. If we do not, we may be considered professionally negligent and prosecuted as such. I am having a hard time understanding why the same rules and regulations do not apply when a device that has the potential to harm myself and my family is installed on my home.

Since I was unaware of any potential health risks associated with this device, and grossly underinformed by NV Energy, I said “yes” to the installation. I have not had one night of fitful sleep since that day, and neither has my 23-month-old daughter. I am plagued by headaches bilaterally in my temple areas during the day and at night. The headaches at night seem to be associated with a pressure against my eardrums and head. Along with the pressure are distinct ringing tones or tinnitus. Some tones are higher pitched, and there are several different layers within the high-pitched tones. At times, I also hear a low humming sound that oscillates. It is virtually impossible to sleep with the noises, pressure, and headaches. I have never had these symptoms before the installation of the smart meters, and when I am in nature where there are no homes or buildings nearby, the symptoms are alleviated within hours. I have determined that I am now “electromagnetically hypersensitive”, and that the installation of the smart meters coincides with the start of my hypersensitivity. Because of the sleeplessness, I have become moody, depressed, and unable to concentrate or focus well during the day.

In addition, my 23-month-old daughter tosses and turns all night. She is unable to get the proper rest and deep sleep her developing body needs. Unfortunately, she is unable to verbalize yet whether she has any other symptoms, such as headaches or tinnitus. But I am able to determine that she is not getting adequate rest due to an unusual grogginess and fatigue during the day that she did not have before. From the data I have seen, children are more sensitive to radio frequencies and other frequencies of the electromagnetic spectrum. What is this doing to my child and to other people's children when, as an adult, I have symptoms after only days of exposure??

Is the Public Utilities Commission unaware of the hundreds of studies and growing body of evidence to support that radio frequency radiation produced by these devices has the potential to harm humans? Many physicians, scientists, and biologists are increasingly stating that smart meters, the smart grid, and wireless communications

technology are a serious health concern. Not only is a growing portion of the population experiencing acute electro hypersensitivity symptoms, there are thousands of independent peer-reviewed studies showing significant long-term effects including cell damage, DNA chain breaks, immune and neurological system impairment, and damage to the blood brain barrier. Is this not a serious enough call to action for the Public Utilities Commission, part of whose job description is to protect the public?

I am afraid that the one study NV Energy provided me with to prove to me that these devices are "safe" is not adequate evidence. It pales in comparison to the mountain of evidence that I have already seen showing these devices can and do cause harm and there is reason to be weary of them.

Because of all of this, for the health of myself and my family, I demand the smart meter be removed from my premises and a NON RF EMITTING device, such as an analog meter, be installed as a replacement. I will not allow a Centron C1SR replacement that also emits RF radiation to be placed on my home. To do so would be ridiculous, as the RF emissions are why I want the smart meter removed in the first place.

As a citizen of this country, and a medical professional who cares about the health of the public, I also demand a moratorium on smart meters and a much more in depth and scientific look into the ramifications of these devices.

THANK YOU FOR YOUR TIME

Radiation Sickness - Disability; Jim and Jana May Comments, Mar. 5, 2013

To whom it concerns;

The wireless emissions limits are currently too high. For me and my wife, a Sprint cell tower was erected about 1000 feet from our home a number of years ago. During the two years before we could move, my wife became very sick and I became sensitive to wireless transmissions of any kind. My wife got headaches, blood pressure increase, dizziness and tiredness. I got headaches.

After we sold our home and escaped, we moved into a lovely home with a view. After a couple of healthy years, a cell tower was erected about a mile from us with no other home barriers because we are on a hill. My wife's symptoms started again, and when the wireless smartmeters were added to our neighborhood, we both became very sick and are getting sicker. By this I mean that our sleep is disturbed and the quality of sleep has deteriorated significantly and we are suffering from chronic sleep deprivation and all the things my wife had previously experienced. We also have major headaches and depression and just don't feel good. And unfortunately there is no way to hide because smartmeters and cell towers are everywhere. I would have a major lawsuit going except for the ruling by FCC that you cannot sue for medical reasons based on wireless transmissions. Seems like the FCC is in the pockets of the large wireless companies and doesn't give a damn about people's health. All one has to do is look at the internet to see that Europe recognizes the dangers. I am appalled at this country and its lack of health concern. We obviously need to reduce wireless emissions.

The FCC really needs to consider what wireless is doing to people, especially children, who are being radiated by all the new "toys" with wireless. Cell towers by neighborhoods and schools is a crime against society. FCC needs to protect the public and lower wireless emissions before the next generation is ruined by the ravages of cancer from wireless not to mention sleep deprivation and lesser symptoms. FCC is killing my wife and I.

Jim May

Radiation Sickness - Disability; Lisa M. Stakes Comments, Jun. 10, 2013

To whom it may concern,

I am writing in regards to the harmful affects that I endure due to wireless technology.

I don't think that it is understood what a nightmare this is for some people including myself. When I'm near a wireless router for WiFi I have numerous symptoms including headache, stabbing pains in my head, heart palpitations, nausea, tightness in my chest, the shakes, and dizziness. These symptoms get more severe the longer I am around it. It is debilitating. I have the same symptoms when I'm near a cell tower, as well as high tension wires.

This makes it almost impossible for me to find a job, due to WiFi being in most places. In fact, I had to quit a job last year when WiFi was put into the shop I was working at. It makes it almost impossible to find a rental. I can not rent in an apartment building or a duplex. I can only live in a house that is sufficient distance from other dwellings due to the WiFi signal coming from almost every home. I work on a computer by hard-wiring it to my internet connection. Then I have to take into consideration the placement of cell towers and high tension power lines. This is truly a nightmare for me.

This is an increasing problem for individuals that are sensitive, I have extreme stress wondering where to work and live as new cell towers are going up every day. Please, something has to be done about the levels of radiation coming from these devices. I understand the FCC is in charge of regulation. I am willing to partake in any study to help bring this forward. I have not been able to find any help, such as a doctor to help me with this situation.

I realize that not everyone feels the radiation coming from these devices, but there are plenty of facts/studies done to prove that they are harmful to human biology whether or not they are felt by the individual.

Please do what you can to make this world a safe and pleasant place for everyone to live.

Thank you,
Lisa M. Stakes

Radiation Sickness - Disability; Veronica Zrnchik Comments, Sep. 3, 2013

Today I went to take my son to his gymnastics class. I suffered for one hour there underneath the florescent lights with all the other parents on thier phones and ipads. After being overexposed to the smart meter radiofrequency radiation in my home, I developed a severe reaction to all forms of RF. Driving to the gym for my son, I pass several towers and there is one right by the gym. I suffer by florescent lights. By the time I left the gym, my mouth and skin were burning, I had the taste of metal in my mouth. My eyes were burning and had pain deep in the eye. My head was throbbing and I was nauseous. I couldn't talk with the other moms because of the sensitivity to the phones that they carry. I sat alone, sick, and praying that someone somewhere would stop all the radiofrequency radiation so that perhaps I might have my life back. Maybe I could do more with my son--get to know the other moms, take my kids to more places. I am the mother of three boys and I am very limited in what I can do with them now. We used to do all kinds of things, but now that I encounter RF everywhere we go, I have had to stop taking them places. We are all suffering in one way or another. My physical symptoms have become so severe that I don't know how to deal with them most days. My sons are being cheated out of a life too. All this so the telecom industry and the utility industry can make billions of dollars. Where is the fairness??? Where are the laws that are supposed to protect us???? How will I survive this and have any kind of a life???? Who will even look at this very real problem with no bias??? Will the telecom industry continue to minimize this issue, deny that it exists and make all of us who suffer from this out to be mental cases??? I am sane now as I was sane 6 months ago as I have always been sane. Five months ago I developed this sensitivity and it has destroyed my life. I am only 50 and I wonder what I have to look forward to. I have difficulty taking my kids to things that they love to do. I sleep in a faraday cage and often go there for relief during the day. My sons suffer from headaches and feeling of unwellness. Who, if not you, who will set the standards to ensure that everyone is protected??/ Can you live with knowing that you are sentencing people like me to a living hell if you don't limit the cell towers, smart meters and public wifi that is out there. You control the fate of many people who are counting on you for protection. Please don't let this suffering continue. Please recognize this very debilitating and real issue. Please don't let my life end in this manner. I have so much yet to do, experience, and enjoy. You will be effectively ending my life if you don't lower, limit and restrict the proliferation of radiofrequency radiation. For all who suffer, please do the right thing. Please look at the unbiased research. Please look to the unbiased doctors, please review the mounting levels of research information that shows that this is dangerous and that people need to be protected from it. Even those who don't experience noticeable physical symptoms are being affected. Some of us are experiencing debilitating physical symptoms. Please do the job you are supposed to be doing and protect the population from this. Do not protect the profits of the industry over the health of the people. May you please do the right thing

Radiation Sickness - Disability; J.A. Wood Comments, Sep. 12, 2013

DEADLINE FOR SUBMITTAL:
SEP 11/04/2020 Page 215 of 494

USCA Case #20-1025 Document #1869762

PLEASE FILE ON REERO

(YOUR WEBSITE DID NOT ACCEPT MY COMMENTS.)

J.A. Wood

PO BOX 213

Green Bank WV 24944

To: FCC
445 12th St SW
Washington, Dc 20559

Received & Inspected

SEP 12 2013

FCC Mail Room

Re: FCC is reconsidering its radiation exposure limits

"Comments on Notice of Inquiry, ET Docket No. 13-84"

I was a healthy, licensed architect working in Honolulu, Hawaii when I became severely ill from wireless radiation poisoning and nearly died. I went from 117 pounds to 77 pounds in a couple of months in 1996. Cell phone use and cell phone towers proliferated commercially at this time. I was forced to leave my job as Chief Architect for Student Housing Projects at the University of Hawaii and travel to the US Mainland for medical treatment. Eventually I became so sensitized to microwave radiation from cell phone towers and affected electrical fields on wiring (that is overloaded and used for internet carriers etc.) that I had to seek refuge in a quiet zone in West Virginia. (There are no cell phone towers here due to the Radio Astronomy Observatory. However there are some problems here as well on the electrical and telephone lines; there is stray ground current, overloaded lines, poor or inadequate neutrals etc in much of the country, including here. Nevertheless when I came to this area and lived on a farm in a hollow without electricity or cell phone reception I began to gain weight and physically improve. I was 82 pounds when I first came to the quiet zone in 2011 and am now 130 pounds.)

By 2010 I had already been forced to move several times due to higher and higher levels of wireless radiation proliferating in each of the areas I lived in. Since 1996 I had worked very hard to improve my health at great cost and sacrifice. By 2009 I had recovered a portion of my health and weighed 120 pounds, but in 2010 I again became very ill after being exposed to RF radiation in a house in NY, and lost 50 pounds for the third time since 1996. I had seizures when exposed to wireless smart meters and high cell phone usage areas and would have to lie in my car all day for hours in an area that had little or no cell phone reception near the Long Island sound. When I finally heard about the cell phone free area in West Virginia I was driven here by my son within 48 hours. My family was certain I was dying and very distressed. I could not live with them due to blanketed wifi in their city; I tried but lasted only three days; they did not want to see me die alone but I had to sleep in my car all winter in 5 to 10 degree weather even though I was paying \$800 a month for a room in NY state. I could not stay in the room due to the wireless radiation in the house. I experienced heightened and debilitating symptoms that continued until I moved to West Virginia. I became so sensitized to electricity that I had to build a tiny, moveable cabin without electricity, running water or plumbing. I am an American citizen, born and raised here and a professional architect but I now am living as a refugee in my own land due to the current and ever growing levels of wireless radiation. I also write books and was unable to work on a computer for seven years. I am now able to work on a hard-wired computer in areas where there is no wireless, without getting ill. When I am sick, it is difficult, if not impossible to go to most medical offices because there is wireless radiation in the clinics and hospitals. I feel I do not have basic human rights even to medical care. Many stores, public facilities and buildings now have wireless. It is difficult for me to shop for food, go to the library or file my taxes without getting exposed to wireless radiation and becoming ill, just trying to do the simplest of tasks.

JA 09492

If smart meters used fiber optics instead of wireless signaling, if phone lines were hard wired and not subjected to what is termed "dirty electricity," if chord less phones in homes were not used and instead land lines with long telephone chords were used, and if computers were hard-wired instead of wireless-based I could lead an almost normal life: I could use the public libraries, go on the internet on hard wired computers, shop in grocery stores without getting violently ill and contribute much to the society at large. I was not born an invalid. I love to work and have many talents; I enjoy being of service to others. It was not my dream to live in a 7 foot by 12 foot cabin without electricity or plumbing or water but it is something I have had to adapt to due to the wireless, smart grid, the wireless smart meters, the overloaded electrical and telephone lines and the proliferation of cell phones and towers, wireless toys and gadgets adinfintum. I love technology and progress but do not think it should be recklessly advanced at the expense of people's health. America is supposed to be a democracy but for me personally, with a condition like mine, it is a technological dictatorship. I not only do not have the right to be well; I do not, apparently, have the right, according to the act of 1996, even to mention health with regards to cell phone towers. When I first became ill I didn't even know what a cell phone tower was, but over the years I have come to study the many technical and scientific reports on both sides of the issue. Scientific studies by the cell phone industry run the risk of extreme bias due to monetary interests. Studies done by independent scientists with no particular agenda are often silenced or purposely discredited. The cell phone and wireless industry could develop safer technologies and still make billions of dollars providing an alternative to the mass proliferation of wireless systems. I obviously have nothing against industry making money providing technical services to the public; but I am sick; my life has been robbed from me; I know countless others such as myself; professionals with much to contribute that now are forced to sleep in cars in forests or move from place to place in an attempt to get away from heavily wireless areas that have a debilitating effect on them. This is a growing problem in a growing population. If we are to believe the conservative estimates (that only 3% of the world population is currently suffering with identifiable symptoms of non-ionizing radiation poisoning, in a world of about 7 billion people) that is still at least 250 million people worldwide, and a sign of what's to come for the greater populace as RF levels increase. This 250 million estimate does not include all the people that have gotten cancer, leukemia, brain tumors, autistic disorders and many other EMF/RF related conditions well documented by scientists, researchers, doctors, and even the World Health Organization nor does it include animals, nor cows on dairy farms that have been severely affected by high voltage wires and wireless radiation.

In summary, I, like many others have been injured by RF radiation that complies with current exposure limits. I have been repeatedly driven out of my city, my home, my work place and my community. When I am in a car accident I cannot go to the hospital due to wireless radiation; I cannot shop in most stores or go into many public buildings. In short I have no right to enjoy a healthy life; I am forced to live in isolation, wondering what kind of downturn my health might take when the next wireless invention and subsequent exposure comes to my area. I think I can say with confidence that living under this reckless technological dictatorship, in my condition, is in some ways worse than living under Stalin. At least most of Stalin's victims had their health up until their moment of execution or enforced exile. I have been forced into a physically tortuous exile in the name of unregulated, scarcely measured wireless proliferation, video games, frivolous apps, the pursuit of wireless gadgets, surveillance and spying, smart chips, smart meters and an endless array of gadgets to be used by a world population of guinea pigs. Do the countless scientific studies that have been done mean nothing to the FCC? I implore you to consider my case. I am not the only person suffering from RF radiation. This could become a nightmare for the FCC in the years ahead. Thank you for reading this, and I hope, taking preventative action in the future.

--J.A.Wood

Radiation Sickness - Disability; Sherry Lamb Comments, Jul. 13, 2016

My name is Sherry Lamb and my life has been forever changed for the worse by wireless devices. It started when a smart meter was placed on my home. I began to experience symptoms of dizziness, vertigo, anxiety, heart palpitations, shortness of breath, and being sensitive to every electrical device in my home. I was diagnosed by a medical Doctor as having Electrical hypersensitivity. My life has been destroyed. I become extremely ill around cell phones, wireless in grocery stores and restaurants. I am unable to visit family and friends, and am a prisoner in my own home. I can only spend minimal time on a wired computer and cannot listen to the radio, watch tv, etc. If you continue on with rolling out 5G, there will not only be a lot of other people becoming sick, but the people who already suffer from 4G and other wireless technologies, will become even sicker, and will probably die an early death. There are too many studies and research now that prove that wireless should have never been rolled out. These frequencies are not safe. Here are some research studies, to name just a few of the many available, that prove how dangerous they are: 1. <http://wifiinschools.org.uk/30.html> 2. <http://www.bioinitiative.org/rf-color-charts/> 3. <http://www.safeinschool.org/2011/01/international-warnings-on-wi-fi.html> 4. <http://biorxiv.org/content/early/2016/05/26/055699> 5. <http://www.news.com.au/technology/brain-surgeon-dr-charlie-teo-warns-against-mobiles-home-appliances/story-e6frfro0-1225791947213> 6. <http://safetechforschoolsmaryland.blogspot.com/2016/02/teacher-unions-and-parent-teacher.html> 7. <http://www.powerwatch.org.uk/science/studies.asp>. If you do not listen to science and reason, nor care about the health of the citizens of the United States, then you will be held accountable and liable for your actions.

Radiation Sickness - Disability; April Rundquist Comments, Aug. 28, 2013

FCC 13-39

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of	)	
	)	
Reassessment of Federal Communications	)	ET Docket No. 13-84
Commission Radiofrequency Exposure Limits and	)	
Policies	)	
	)	
Proposed Changes in the Commission's Rules	)	ET Docket No. 03-137
Regarding Human Exposure to Radiofrequency	)	
Electromagnetic Fields	)	
	)	

To: Office of the Secretary
Federal Communications Commission
Washington, DC 20554

Comment Filed by: April Rundquist
901 Newcombe St.
Lakewood, CO 80215
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303-278-8498

August 28, 2013

I started noticing certain electrical things when I was twelve, small annoyances like my LED alarm clock interrupting my sleep if I kept it on my headboard even with the light covered up. In 2007, Jefferson County Public Library got RFID and, to my horror and complete surprise, it was so disorienting and painful in there after the installation that I haven't been back since. In 2009 during the T.V. switchover to digital we got a converter box and I couldn't stand it at all; it was just torture the whole time it was plugged in. We haven't watched broadcast television since. When we got a new microwave the same thing happened - terrible sensations in my head and garbled thinking just with it plugged in, not even while it was running. There wasn't anywhere in the house I could go that I couldn't feel either of these devices somewhat. When my CD player broke, the new ones made me physically weak in seconds and MP3 players were even worse, most of those giving me head pain besides.

I had never even heard of electrohypersensitivity at this time. I had no idea what was going on with me with this. One of the big arguments against ES is people think you're afraid of new technology. How can you be afraid of a problem you don't even know exists?

That changed in October of 2010, when a strong electromagnetic frequency engulfed the entire area where we live for three weeks. It made me feel like my brain was being tied in knots. I couldn't think straight. I was having serious difficulty eating and sleeping and breathing. After one week my mom shipped me off to Alpine, TX to stay with relatives in the hopes that I could escape whatever was going on. We couldn't get anybody to help us - not the police, not the TV investigators, not even our local branch of the FCC (they came out weeks later when it had dropped back into the legal range.) The meter my mom had purchased was giving readings of 8 all over town when the legal ambient limit is 3! Alpine was no escape; the Border Patrol towers made sleeping even harder but at least I could nominally function while awake. I was in pain though, so bad my eyes were watering constantly. After three weeks this electromagnetic radiation just stopped as mysteriously and suddenly as it started. But it left both me and my mom permanently sensitized, me much worse than her.

Between this and increasing sensitivity to chemicals I have been unemployed for about three years now. There is literally nowhere I can work; the new energy-efficient lighting just finished off anything that was left (including the buses I would need for transportation); I get so weak so *fast* around those things and at close range they really hurt my head and make me tired. My time in the outside world is extremely limited now; I can only be in most stores for about ten minutes and the effect appears to be cumulative over the period of a day or two.

Wireless radiation has been the hardest to mitigate. There are so many places I can't go anymore. I get brain fog, confusion and physical weakness around it, it feels awful. Big cities are out. So is almost any kind of travel. All my appliances and gadgets are old. We still have AOL dialup internet because all the other options are literally too hot to handle. The last time we had to update just the dialup service our internet was so painful for me that I couldn't stand to be in the house when it was logged on for *five months*. My mom had to handle my email for that amount of time. We can't do it again. It's real slow but it's better than the alternative.

I have become a nomad in my own house, living where it's least painful this month (it keeps changing) and sleeping wherever I can get some rest, usually on the floor somewhere. I haven't slept in my own bed in years. It's gotten harder to find good spots within the last year. I've tried all the shielding products and stuff and none of it works for me. I don't even want to imagine this getting worse but it will if RF policy stays the way it is or gets any more lenient.

I could go on for days but you get the idea. I don't want to be a financial sponge on anyone. I just want to have a productive, meaningful life. And I can't do that now. As of this writing I am waiting for my first disability appeal.

I do not recall it being legal in this country to sell electronics that have not been fully tested for safety but this is precisely what is happening in our wireless industry currently. The American public is not a test subject, and if we are we should be compensated.

I understand that the studies concerning RF and living organisms - especially humans - have had very conflicting results so far and are therefore inconclusive. However, this does not imply safety, merely that we don't fully understand the mechanism of RF on a biological level yet. More thorough and unbiased study is obviously necessary. The EPA was studying the effects of non-ionizing radiation back in the 1980s. It would make sense to have them continue their work so we can hopefully come to a definitive conclusion about this issue rather than batting it around for another few decades while goodness-knows-what is happening to us and our world. While they are working on this, it would be prudent to place a moratorium on further 'Smart Meter' installations, cellular tower and antenna erections, etc., until we know for certain.

Respectfully submitted by

April A. Rundquist

Radiation Sickness - Disability; Charlene Bontrager Comments, Jul. 21, 2016

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Brief Comment

I am a normal, healthy adult female over 50 who has become EMF sensitive since 2010, and it has changed my life. I would have cared little about FCC decisions prior to 2010, Symptoms of headache, heart palpitations, memory loss, sleep disturbance, and the literal hearing of frequency emissions has left me feeling hopeless, helpless, and out of control. What is to be done for the electrically sensitive? I have done everything in my power to protect myself, lifestyle and environmentally. So the FCC, the citizen watchdog, will roll out the carpet for 5G technology without undertaking major studies that ensure our health and wellbeing are not being compromised by it? FCC, respectfully, give this job to the EPA if you will not do right by us--and definitely do not go ahead with 5G. It is not COOL to be FLAGRANTLY INSENSITIVE.

Radiation Sickness - Disability; Michelle Miller Comments, Jun. 19, 2013

This letter has been hard thought for me. There are so many matters I wish to bring to your attention, that where to start is an issue. Let me begin by introducing myself. My name is Michelle Miller, a 37 year old female living in Northeast Ohio. Until recently I have lived an active very happy life. I love hobbies like karate, running, working out, laughing, jokes, and spending quality time with my family and friends. For over 18 years I have worked with great people in local Government and truly love what I do for a living. The rest of this letter I will explain how and why my whole world has been thrown upside down.

Less than a year ago I got my first 4 G "smart phone". I was so excited. I had the whole world at a touch of a button. I never went anywhere without it. We were inseparable. I would probably go to work without my pants before I did without my phone. I noticed that if I used it for awhile, my hand would tingle and go numb. I just thought it was maybe the way I held the device... I changed hand positions....but all had the same outcome....numb tingling hands. Sometimes while talking on it I would even get a sharp stabbing pain like a brain cramp in my skull. I kept my phone in the bedroom and suddenly I had trouble sleeping. When I would finally fall asleep from total exhaustion I had terrible dreams. I also started suffering from anxiety attacks. I would feel as though my heart was beating and thumping out of my chest and my lungs failed to gain to air. My life was beyond happy... a matter of fact the happiest I have ever been. So why the anxiety?

"To keep the body in good health is a duty... otherwise we shall not be able to keep our mind strong and clear." ~ Buddha

I tried to move on with my life, though I started to struggle as I found myself exhausted, depressed for no reason, anxiety constantly haunting me, and a mind that never shut down. I was in my thirties and for the first time was showing signs of ADHD. Single tasks became difficult because my mind failed to stay idle long enough for me to complete or comprehend before it was off in another direction. Things took longer and I was making mistakes that I never had before. I was forgetting so many things and I was known for having a memory of an elephant, now it was more like a pea. Running and working out was now just too hard. I was too exhausted. I overall just had an overwhelming feeling of being "unwell". And my worse loss...I lost my ability to love life and LAUGH. It took all I had to just survive and fake a smile.

"A wise man should consider that health is the greatest of human blessings, and learn how by his own thought to derive benefit from his illnesses." ~ Hippocrates

A mutual friend of my fiancé mentioned he had been doing research on RF exposure. After a little research of my own, I removed my wireless WIFI router (hard wired my computer to the internet), removed cordless phones, and barely use my cell phone and kept it out of my bedroom at night. Unfortunately, I have no power to control the unconstitutional radiation that is spewing out from the smart meter on our water & gas meters! At this point, I am going to be honest.... I was still very skeptical. My fiancé also suffers from crippling headaches after being struck in the head by over 200,000 volts of static electricity years back. I figured it would be a double bonus if it helped him too. It was as though lightening struck me as the realization hit me with such force. I was sleeping at night, my mind and memory seemed much better, and the anxiety, heart arrhythmias, and depression were finally lifting. Though at work I did feel a little less improved due to the WIFI and RF exposure, but overall was feeling better. At least I was sleeping at night, and my body and mind felt "relaxed" when I was at home which seemed to assist my body with dealing with the exposure at work. And the double bonus, my fiancé was finally getting some relief from his headaches.

"None are more hopelessly enslaved than those who falsely believe they are free." ~ Johann Wolfgang von Goethe

Then my world crashed. I came into work one day and my head started to split. The pain radiated down into my jaw, across my face and into my ears with unexplained dizzy spells. I could feel my heart was beating all over the place. I could not even concentrate. Co-workers began to notice that something was defiantly wrong with me. My headache would become so severe I would become light sensitive and my eyes blood shot. The job I loved so much became my private hell. Something in this place was killing me. I would notice that when I would get home my symptoms would improve. What had changed here? Thinking it was maybe allergies (though I have never suffered from allergies) from the AC ducts I made an appointment for a complete physical with my doctor the following week. The pain grew more severe with passing days and I became very aware it was not displaying symptoms of allergies. Why would I feel so much better when I left this place? I noticed that certain parts of the building would affect me so badly I had to avoid them because I would become so dizzy and the pain would stab my head like a sharp knife. I started to ask questions. I asked my Department Director and she asked our Maintenance Supervisor, neither of which knew what had changed. After

asking our Tech Department, I was told that our Cell Tower (that is literally almost connected to our building) had been upgraded (they increased the number of frequencies). My pain correlated almost **exactly** when work had finished on our tower. The parts of the building I was forced to avoid were the parts CLOSEST to the tower.

"It is horrifying that we have to fight our own government to save the environment." ~ Ansel Adams

I am an educated, level headed human being. I more aware of my body than any other doctor or scientist can tell me otherwise. I do not need years of schooling or some degree to tell me that something is wrong. I will not have a bias study funded by 'Big Telecom' try to brain wash me to believe that RF exposure does not cause health issues. I am walking living proof that it CAN AND DOES. These health issues did not manifest for no reason. They have turned my life into a **living hell**. The fact that even after the many studies, experts, and scientists have thrown warning flags should be ENOUGH to recognize the **danger of this issue**.

"Our lives begin to end the day we become silent about things that matter". ~ **Dr. Martin Luther King Jr.**

What is so bothersome is that there are hundreds of credible unbiased scientific studies indicating all kinds of health issues from Electromagnetic exposure. Leaking of cells, ADHD, thyroid and gland issues (resulting in our current obesity epidemic), early dementia, infertility, cancer, auto-immune deficiencies, sleep disturbances, memory loss, heart arrhythmias, hearing and eye issues to just name a **few**. If you want to add a few secondary health issues from the obesity, you can add high blood pressure, diabetes, increased rate of heart attack and stroke. I am appalled that somehow because some bias studies have found RF/EMF exposure not "unsafe" somehow cancels out the many studies that have found the hazards. That is like someone on death row apologizing for murder and because of the apology it cancels out the crime. That is backwards logic.

"Those who have the privilege to know, have the duty to act." ~ **Albert Einstein**

I am a proud American, and I believe in our Government. But for the first time I am actually ashamed of our great nation. We have allowed self centered narcissistic money grubbing greedy people to ruin the life of others. It is all about the money, who cares about the true price to the ignorant masses, right? The Telecommunication Industry keeps making "blood" money hand over fist while taking away others right to live a HEALTHY life. Yes, changes and provisions may increase cost to the Telecommunications Industry, but look at the price ALL of us are paying...with our lives (though most are unaware of the source of their problems...as of yet!). Not to mention the cost to the budget for health problems that are being caused by RF exposure (i.e. autism, obesity, anxiety disorders, adult and child ADHD...etc).

"Never doubt that a small group of thoughtful, committed citizens can change the world; indeed, it's the only thing that ever has." ~ Margaret Mead

I am aware there is a person on this Docket that is a harassing bully and attempts to discredit other posts from Doctors, Scientists, Professors and Experts in this field that have posted on this Docket. Harassing and belittling people and trying to discredit their level of expertise or worse belittling others who have posted their health problems from RF Exposure. It is nauseating how the table is trying to be flipped, flopped and turned to hide the truth that after many years of silence has began to speak. Truth wins, it always does.

"The truth is incontrovertible. Malice may attack it, ignorance may deride it, but in the end, there it is." ~ Winston Churchill

People have suffered in silence and ignorance too long. To say that only a "few" have effects from RF exposure is fictitious. Many if not ALL suffer everyday but have no idea what is the true root of their health issues....because of the BELIEF that our GOVERNMENT would not permit utilization of something that was not proven to be **100% safe**.

"When you know a thing, to hold that you know it, and when you do not know a thing, to allow that you do not know it - this is knowledge." ~ Confucius

Many have no knowledge of the signing of The Telecommunications Act of 1996 which prohibits the removal of a cell tower due to human health hazard, or (WHO) 2011 classified radio frequency electromagnetic fields as a possible human carcinogen (**Class 2b carcinogen**) in May 2011. A few years earlier they classified extremely low frequency electromagnetic fields as a **Class 2b carcinogen** based on childhood leukemia studies with elevated exposure to residential magnetic fields. The “elevated” exposure in this case was at 3 to 4 mG. The international guideline for low frequency magnetic fields allows 24-hour exposure to 1000 mG! Or even that the BioInitiative 2012 Report that was prepared by 29 authors from ten countries, ten holding medical degrees (MDs), 21 PhDs, and three MsC, MA or MPHs. Among the authors are three former presidents of the Bioelectromagnetics Society, and five full members of BEMS. One distinguished author is the Chair of the Russian National Committee on Non-Ionizing Radiation. Another is a Senior Advisor to the European Environmental Agency. Full titles and affiliations of authors are in Section 25 – List of Participants. The 2012 version of the BioInitiative Report reviews thousands of such documents (over 1500 page report) indicating DNA damage, altered calcium flux, increased permeability of the blood-brain barrier and host of physiological changes that include decrease in antioxidants, decrease in hormones and neurotransmitters, effects on sperm, etc.

Our scientific power has outrun our spiritual power. We have guided missiles and misguided men.

~ **Martin Luther King, Jr.**

As old glory hangs tattered and blood stained from our ancestors before us, I beg this great nation to take care of what matters. ALL AMERICANS, it is our constitutional birth given right. We ALL deserve to live happy and healthy lives. Because of those who have ignorance regarding this matter should not give the Government a free pass allowing all of society to be radiated and their quality of life taken away.

“For in reason, all government without the consent of the governed is the very definition of slavery.”

~ **Jonathan Swift**

Every day is a struggle me. Some days more than others. The job I love so much has become a private hell for me. I shroud myself in very costly (at my own expense) protective shielding clothing for whatever little relief it offers me while I work. My once flawless skin on my face is now flawed by a burning rash that appears every day when I report to work. The headaches and jaw pain are now a chronic issue any time I am exposed to RF, and now I have a screeching in my ears when around the cell tower at work. I am sadly aware that the job I love so much is taking so very much away from me now. All because of a tower that spews its carcinogenic waves on unsuspecting victims. And the FCC has made it very difficult for the local government to protect its’ people. It is TIME... time for change before it is too late!

“It was once said that the moral test of government is how that government treats those who are in the dawn of life, the children; those who are in the twilight of life, the elderly; and those who are in the shadows of life, the sick, the needy and the handicapped.” ~ **Hubert H. Humphrey**

Radiation Sickness - Disability; James C. Barton Comments, Sep. 3, 2013

Comments on Notice of Inquiry, ET Docket No. 13-84

My daughter is sensitive to electromagnetic radiation (EMR) and suffers intolerable symptoms when exposed to EMR. Her life is being destroyed. Because of all the time it takes to help her find a place where she can exist, my retirement is being destroyed. Because of her need to move to a place where she can exist, our family closeness has been destroyed. In order to get away from the many sources of EMR in the city, she moved to an old farm house in the country. Then a cell phone tower a mile and a half away was activated, and that house was no longer habitable. Then she moved to another state where she thought she had found a habitable home.

Shortly after moving there, she was hit by the objectionable and intolerable noise and symptoms which seem to be associated with broadband on telephone lines (DSL) in rural areas. The August 20, 2013, comments by Mr. and Mrs. Gammone describe exactly what my daughter and some of her neighbors are experiencing. The only difference is the state and the names of the telephone and power companies. The noise the Gammones described, the physical symptoms, the problems and failures of electric appliances, the refusal of the telephone company, the power company, and government at all levels to do anything are all the same as what my daughter has experienced, but in another state. My daughter could have written the comments by Mr. and Mrs. Gammone. By way of this paragraph, I make their comments part of my comments.

My daughter and I spent thousands of dollars (now into the tens of thousands) on electricians, on moving costs, and incurred more thousands of dollars in real estate sales commission costs. And now we are on the search again. Her life is still difficult and limited.

Her home was an eight minute walk from my home. We often walked together for exercise after work. She liked to cook. Our families had Thanksgiving and Christmas dinners and some birthday celebrations at her home. Now she is hundreds of miles away at a place where we thought the EMR would be minimal, and we are on the search again because of the telephone DSL problem.

In December 2010 she began hearing disturbing noise at night and could not sleep. She also began having severe headaches, dizziness, confusion, fatigue, and sensations of burning in her legs. She cannot travel any farther than she can drive and return home in the same day, because she cannot risk having to spend a night in a hotel or motel that has WiFi in the rooms, and/or is in an area with cell phone towers. She cannot go to most public places because so many have either or both WiFi and cell phone tower emissions. Offices have WiFi and/or wireless computer networks.

At first, my daughter thought the symptoms might be from her house wiring. Her electrician had heard of such things. We spent \$8,000 redoing most of the house wiring and paying electrical consultants to find the problem. The electric utility installed a new transformer, but had no knowledge to add. None of this made any difference. The symptoms continued. From an electrical engineering consultant, we learned that some of the symptoms could be associated with wiring errors that result in EMR which could be measured with a gauss meter, but if wiring was done in strict accordance with the National Electrical Code, that would not be a problem. Her house was ok in that respect, but it was our first knowledge that EMR could be a significant health problem. We had spent \$8,000 unnecessarily, because no one seems to be informed about the hazards of FCC approved EMR.

Then she got a call from her doctor's office. They understood that people were experiencing such symptoms after smart meters were installed. The water company and the gas/electric company had installed smart meters in her basement without telling her what they were and without asking her permission to install EMR producing devices inside her house. At her request, the water company moved their meter to an underground vault at the curb. The gas/electric company, at the insistence of the Illinois Commerce Commission, removed their smart meters and installed manually read meters that do not broadcast. But that left the neighbors' smart meters broadcasting at her house.

During all of this, a near neighbor noted the many times the electrician's truck and numerous gas/electricity company trucks were at my daughter's house, and asked my daughter about it. My daughter told her the symptoms, and that they were trying to find the cause. The neighbor said they were having similar symptoms, and their young son had begun to have trouble doing his schoolwork. The neighbor's doctor had ordered an MRI for her, thinking she might have MS, but the results showed nothing. They tried what my daughter had been doing: sleep in the car in the countryside away from much of the EMR. They spent the summer sleeping in a tent in the yard of her parents' house in the country. When winter approached, they came back, spent a night in their house, and said "never again." They rented a basement in the country to spend the winter, sold their house, and then found a rental house in the country with minimal EMR. They were fine, and their son's schoolwork improved.

We called the Mayor and the City Manager. They said they are not allowed to even think about EMR: that the FCC regulates it. The City Inspections office knew nothing about it. The city/county Health Dept knew nothing about it and sent me to the State EPA. They knew nothing about it and sent me to the State Dept of Public Health.

A toxicologist in the Illinois Dept of Public Health: Division of Environmental Health told me that EMR was ruled out as a health problem years ago, and he sent me two old reports to document it. The reports were dated 1992 and 2002 from the National Institute of Environmental Health Sciences (NIEHS). They were about 60 Hz power line EMR and had nothing to do with the radio and microwave frequencies we are now being blasted with. They were mostly about cancer and leukemia. The reports pretty much concluded that because the evidence that power line EMR causes cancer or leukemia was weak, that EMR was not a health hazard. I think that such a conclusion is ridiculous at best, and better described as irresponsible or criminally negligent. If we use the NIEHS reasoning, carbon monoxide is not a health hazard because carbon monoxide does not cause cancer or leukemia. However, the NIEHS also concluded that "inexpensive and safe reductions in exposure should be encouraged." Instead, we have had an explosion of exposure to Electromagnetic Radiation (EMR), with the support and encouragement of the federal government, and often at taxpayers' expense.

A sharp rise in dementia and other neurological deaths.

My daughter's symptoms are neurological. Others who are sickened by EMR have similar neurological symptoms. A *Science Daily* article of May 10, 2013, titled "Brain Diseases Affecting More People and Starting Earlier Than Ever Before," calls our attention to a report published in the journal *Public Health*. The *Science Daily* article summarized the report as follows.

“Professor Colin Pritchard’s latest research published in journal *Public Health* has found that the **sharp rise in dementia and other neurological deaths** in people under 74 cannot be put down to the fact that we are living longer. The rise is because a higher proportion of old people are being affected by such conditions – and what is really alarming, **it is starting earlier and affecting people under 55 years**. Of the 10 biggest Western countries the USA had the worst increase in all neurological deaths, **men up 66% and women 92% between 1979–2010.**”

The article quoted Professor Pritchard, “These rises in neurological deaths, with the earlier onset of the dementias, are devastating for families and pose a considerable public health problem. It is NOT that we have more old people, but rather more older people have more brain disease than ever before, including Alzheimer’s. For example there are two new British charities, The Young Parkinson’s Society and Young Dementia UK, which are a grass-roots response to these rises. The need for such charities would have been inconceivable a little more than 30 years ago.”

The article quoted Professor Pritchard on the cause of the increase of neurological deaths, “It cannot be genetic because the period is too short.” The facts “indicate multiple environmental factors . . . the **explosion in electronic devices, rises in background non-ionising radiation – PC’s, micro waves, TV’s, mobile phones**, road and air transport up four-fold increasing background petro-chemical pollution; chemical additives to food etc.” I think the EPA can tell us the USA has not had a huge increase in air pollution, and the FDA might be able to tell us that the USA has not had a huge increase in chemical additives to food. That leaves only the huge increase in EMR as the environmental factor associated with the increase of neurological deaths.

The Science Daily article is free on the Internet. The journal report is available at a charge on the Internet. [http://www.publichealthjrnl.com/article/S0033-3506\(12\)00467-2/abstract](http://www.publichealthjrnl.com/article/S0033-3506(12)00467-2/abstract)

Instrument to measure the intensity of microwave frequency EMR

I am an engineer by education (Bachelor and Master of Science degrees in engineering) and by occupation (four decades doing and managing technical research). The source of my daughter’s symptoms must be quantifiable. Because of the total lack of know how or assistance from government at all levels, I bought a microwave frequency meter that measures the power density (microwatts per square meter) of electromagnetic radiation in the frequency range of 800 MegaHertz to 2.5 GigaHertz which is the frequency range of so much of the objectionable radiation. The meter’s antenna is directional; therefore one can use it as a pointer to the source.

The microwave meter readings showed that the gas and electric meters were each emitting an electromagnetic pulse every five minutes 24/7. That amounts to over 8,600 electromagnetic pulses a month from each. One of each is used for gas and electricity bills. The water meter was emitting an electromagnetic pulse every 14 seconds 24/7. That’s over 185,600 EM pulses a month. Only one is used for our water bill. Obviously no thought had been given to the effect on the captive customers. They are monopolies. They have no competition. The FCC gives them a blank check to pollute the environment at their pleasure. The gas and electric meters broadcast the impulses to a collector atop a neighborhood power company pole. Each night after midnight, the collector broadcasts all the day’s data to a cell phone tower about a mile away, again needlessly polluting the atmosphere with microwave radiation.

We counted seven cell phone towers, some with more than one tier of antennas, within about one mile of my daughter's home, one not much more than half that distance, all in a residential part of the city.

The microwave meter pointed us to EMR being emitted from the neighboring houses on both sides of my daughter's home. The houses had aluminum siding which blocks microwaves, and the microwave meter pointed us to the windows of the rooms which had their wireless routers or wireless modems. What right had they to emit EMR which pollutes my daughter's home? The FCC doesn't care. It's all about multi-million dollar salaries for CEO's of telecom and wireless companies. I see advertising for wireless boosters (\$100) that will beam your wireless router to a receiver more than a mile away. Just what you need to attack the home and family of a neighbor you don't like. Approved by the FCC. In most cases the victims will not know what is making them so sick. Even if the victims know what is causing their symptoms, there is nothing the victims can do about it. Imagine calling the police to complain and the Mayor's and City Manager's offices say they are not allowed to even think about it? The FCC regulates it they say.

You use the internet to guess what FCC office to call. You get an answering machine. You leave a message and a day or two later you get a call back. They don't know who at the FCC deals with such things, and they guess at another FCC office that might know. You repeat the routine with that FCC office, and another, and another. If you are persistent, in a few weeks you get to the office of someone who tells you that the FCC does not respond to calls to actually regulate electromagnetic radiation in residential neighborhoods.

SBM-2008 Guidelines for EMR in sleeping areas

When I bought the microwave frequency meter mentioned above, I was made aware of the building biology evaluation guidelines for sleeping areas published by the German Institute of Building Biology + Ecology. The guidelines are SBM-2008. Whereas the FCC limits were based on mice and rats in the laboratory, and cells in a test tube or petri dish, the SBM-2008 guidelines were based on people and real life.

http://www.baubiologie.de/downloads/english/standard_questions_%202008.pdf

SBM-2008 states that the natural background radio frequency radiation is less than 0.000001 microWatt per square meter.

Their recommendations for sleeping areas are as follows:

Less than 0.1 microWatt per square meter – No concern

0.1 to 10 microWatts per square meter – Slight concern – As a precaution and especially with regard to sensitive and ill people, remediation should be carried out whenever it is possible.

10 to 1000 microWatts per square meter – Severe concern – Values in this category are not acceptable from a building biology point of view, they call for action. Remediation should be carried out soon. In addition to numerous case histories, scientific studies indicate biological effects and health problems within this reference range.

Above 1000 microWatts per square meter – Extreme concern – These values call for immediate and rigorous action. In this category international guidelines and recommendations for public and occupational exposures may be reached or even exceeded.

The above matched my findings. My daughter and her neighbor who was severely affected by EMR were comfortable with microwave meter readings at or near 0.1 microWatts per square meter. They expressed discomfort with readings near or above 1 or 2 microWatts per square meter. Above a reading of 7 or 8, the environment was not tolerable.

Water meter – At a ten foot distance, the EMR intensity was 100 to 200 microWatts per square meter. Intolerable.

Gas and electric meters – At a 20 foot distance, the EMR intensity was 30 to 90 microWatts per square meter. Intolerable.

Wireless modems and routers – The DSL technician installed a DSL modem about three feet from where my head would be when I used my computer. The EMR intensity was off the top of the meter, i.e., over 2000 microWatts per square meter. Because it was wired, we turned off the wireless capability, and the EMR intensity fell to essentially zero. A different DSL provider technician installed a DSL modem at the side of the head of the bed in my other daughter's house, because that was near where the telephone line entered the house. When told of the problem, she had it moved to the basement under a part of the first floor where people would not spend much time. Then she changed to a wired modem with the wireless capability turned off.

Cell phone towers – I took measurements of cell phone tower emissions at distances of 500 to 700 feet or more, and at a distance I would guess to be about a half mile. The intensity depends on the time of day and the day of the week. Typical readings at the shorter distances were 1500 to 2000 microWatts per square meter peak, and approximately half that rms. They could be higher, but the meter cannot read the emissions over 2000 microWatts per square meter. At the longer distance, the meter readings were 350 to 440 microWatts per square meter peak.

These measured cell phone tower emissions were a billion times the natural background EMR, and more than ten thousand times the SBM 2008 habitability limit for sleeping areas for sensitive people.

The FCC limit for continuous exposure of the general public is so high that it would take more than a thousand cell phone towers within a 500 or 600 foot radius to exceed the FCC limit. That would explain why the FCC refuses to respond to complaints of excessive EMR. The FCC limit is so lenient that it is impossible to exceed it in a residential area.

The FCC limits for the general public, continuous exposure

The FCC limits are published in NCRP Report No. 86 Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields, pages 279 through 283. It is available on the Internet – at a charge.

At a frequency of 800 MegaHertz, typical of much of the objectionable EMR, the FCC limit is 5,330,000 microWatts per square meter. That is five million, three hundred and thirty thousand microWatts per square meter.

It is 5.3 trillion times the natural background level of EMR. Yes, that's trillion, not million or billion.

It is 53 million times the SBM 2008 recommendation for sleeping areas

Is it any wonder that people, especially children, have severe neurological symptoms? Perhaps resulting in dementias even for people who don't first have the early neurological symptoms?

The FCC limits are based on the theory that if the EMR is not proven to cause cancer, then it is safe. There is a difference between "safe" and living normally which the FCC and its "scientists" do not understand.

Mice and rats and cells in petri dishes and test tubes do not tell you they have severe headaches, feel dizzy, confused, fatigued, and have burning sensations in their legs. People do.

Immediate steps necessary to reduce the problem

Simply lowering the limits will not even begin to solve the problem. It is necessary to reduce the amount of EMR being thrown into our environment. Thousands of people are known to be suffering from the symptoms of EMR sickness. Some search for a place to avoid it. Others live on pain pills, sleeping pills, etc. Certainly there are far more than that suffering from the symptoms, spending money on doctors, tests, and prescriptions, and do not know the cause.

1. Smart Meters. They should be limited to one or two transmissions a month, not the unnecessary thousands of electromagnetic pulses that attack our bodies daily. Gas and water meters can live with one per month for billing purposes. Time-of-day billing for electricity can be accomplished easily by a simple chip that sorts use by incrementing two or three registers, each register representing the different time of day rates, and reporting the register readings once a month. Anyone who cannot figure that out should not be in the business. For readings when people move, only a few people are needed to take manual readings. These changes are a very small price to pay for reversing the onslaught of toxic radiation into everyone's home.

2.1. WiFi and wireless in homes. Cities should be empowered to make rules to deal with cases where home use of WiFi or any form of wireless in a home affects a neighboring home. The wireless provider should be required to provide information to the customer as to the possible hazards of wireless, information as to the advantages of wired installations, and how to disable the wireless feature of modems, routers, and computers (which may be continuously broadcasting in search of a signal).

2.2. WiFi and wireless in small offices and small businesses. The wireless provider should be required to provide information to the office or business as to the possible hazards of wireless, information as to the advantages of wired installations, and how to disable the wireless feature of modems, routers, and computers.

2.3. WiFi and wireless in schools. Should be banned until we have a better understanding of how this is affecting children, both in the short term and throughout their life. We cannot be planting the seeds of neurological problems in our children only to find out too late what we have done to them.

3. 1. Cell phone towers. Downloading movies or streaming movies or the Internet by way of cell phone towers should be banned. There are other ways of doing that by way of wires and/or fiber, i.e., either cable or telephone lines. Movies and the internet are mostly entertainment. Broadband is mostly entertainment. Entertainment should not be allowed to destroy the health and lives of people who don't even use it.

3. 2. Cell phones. All cell phones should be required to have easy and simple means, clearly labeled, to shut off transmissions, and simple instructions as to how to use it. On some cell phones, this is called "flight mode." Too many people think that turning a cell phone off stops the transmissions. It doesn't, the cell phone continues to communicate with the nearest tower. With a "flight mode" type of switch, when one enters an area, for example a doctor's office or waiting room, the sign to turn off cell phones would be meaningful.

4. 1. Overall. The habitability approach of SBM 2008 should become the criteria for residential areas.

4.2. Overall. The government must require the providers of wireless products to inform their customers of the hazards of their products. The food we buy at the grocery store has a detailed label with the contents and their nutritional values. Our prescriptions include a sheet of the side effects and warnings. Tobacco products have warning labels. It is past time for the wireless industry to do likewise.

Summary

The government is providing money to people who bought homes they could not afford, to keep them in their homes. At the same time, the government approves EMR and finances broadband that drive people out of homes they have paid for. This is insane. It is a violation of human rights. It is a government financed and government approved invasion of our homes. It is criminal. It must stop.

James C Barton
417 W Lawndale Ave.
Peoria, IL 61604-1529

Radiation Sickness - Disability; Diane Schou Comments, Sep. 3, 2013

FCC Comments on Notification of Inquiry,

ET Docket No. 13-84, Reassessment of Federal Communications
Commission Radiofrequency Exposure Limits and Policies

ET Docket No. 03-137, FCC Proposes Changes in the
Commission's Rules and Procedures Regarding Human Exposure
to RadioFrequency Electromagnetic Energy.

Submitted by Diane Schou, P.O. Box 99, Green Bank, West Virginia 24944
**Electromagnetic radiation added to our environment can trigger people to
unintentionally error, possibly causing accidents.**

and

Diane Schou is harmed by exposure to electromagnetic radiation. (page 2)

and

**Medical care / testing is NOT accessible to people harmed or disabled by
electromagnetic radiation.** (page 5)

**Electromagnetic radiationⁱ added to our environment can trigger people to
unintentionally error, possibly causing accidents.**

What levels of electromagnetic radiation were present when:

- A) Airport control tower operators fell asleep?ⁱⁱ
- B) Pilots forgot to land at the Minneapolis Airport?ⁱⁱⁱ
- C) Vehicle accidents in buses, trucks, cars, trains, boats, and aircraft
occurred?^{iv}
- D) Control tower errors were made when planes were too close to each
other?^v
- E) Three healthy marathon^{vi} runners died; two of them at the EXACT
LOCATION and two of them died within one minute.
- F) Suicides by military personnel who were not deployed have increased
substantially.^{vii}
- G) Serious surgical errors increased at a hospital?^{viii}

Were electromagnetic radiation emissions a possible or likely factor? Harm can
be direct, indirect, or both.

Can any exposure effect their responses? The value of avoiding harm
should be more important than technology. *"People who are chronically exposed
to low-level, wireless antenna emissions report symptoms such as problems in
sleeping (insomnia), as well as other symptoms that include fatigue, headache,
dizziness, grogginess, lack of concentration, memory problems, ringing in the
ears (tinnitus), problems with balance and orientation, and difficulty in
multitasking . . . Cognitive impairment, loss of mental concentration, distraction,
speeded mental function, but lowered accuracy, impaired judgment, delayed
reaction time, spatial disorientation, dizziness, fatigue, headache, slower motor
skills and reduced learning ability . . . have all been reported"* ^{ix}

From personal experiences and observations exposures to very small levels of some electromagnetic radiation can cause injury. Many of us question incidences where peoples' behavior could have been triggered by electromagnetic radiation (as noted earlier – see A through G events listed above).

Symptoms provoked by electromagnetic radiation may seriously affect airport control operators, pilots, vehicle drivers, military personnel, medical responders, and many others. **The environmental emissions may be influencing them to unintentionally make mistakes, therefore indirectly harming others.**

Diane Schou is harmed by exposure to electromagnetic radiation.

I became a victim from exposure. For me, electromagnetic radiation^x triggered and still triggers headaches^{xi}, fatigue, a decreased ability to think clearly; writing or speaking words or numbers may be wrong; sometimes it hurts to think; and my vision changes. I became gluten intolerant, experienced chest pains, and began having elevated blood sugar levels^{xii}. When I am not exposed, the pain and symptoms lessen or disappear, I can think clearly, blood sugar^{xiii} levels drop to normal. If I can have time to recover (i.e. 3 months), some electromagnetic radiation in an environment can be tolerated for a short time (a few minutes, i.e. to quickly go into a store and hopefully make a purchase before accosted by electromagnetic radiation) – or a few days (to attend my father's funeral with my mother). Continued exposure produces more and more symptoms which seem to get worse with each exposure.^{xiv}

To be without pain and to be able to think, I live with little to no exposure. I live away from crowds (especially people carrying or using electronic devices), and especially cities. Do all cities except (except Green Bank, WV) have cell towers (base stations), wireless emissions and contaminated electricity? I avoid traffic with electronic and wireless devices, and roads near overhead power lines.

My life has become severely isolated and includes avoiding exposure from wireless devices. I am physically harmed if I go into environments with electromagnetic radiation.

Recently, I received a notice for jury duty. I am capable; only if accommodations at the courthouse could be made. *I wish to serve, but I have a special need or consideration and shall require the following accommodation or auxiliary aid:* “No exposure to electromagnetic radiations. (cell towers within 10 miles, power lines, vacuum cleaners, motors, wireless communication devices, cell phones, wi-fi, fluorescent lights, CFL lights, etc.)” Even if all of these accommodations were made, there is a strong chance that I would still be exposed to emissions coming from outside.

I appreciate that the court excused me, not forcing me to be there. But it is discouraging that electromagnetic radiation in the environment excludes me. I have the right to participate in a jury of my peers contained in the 6th Amendment of the U.S. Constitution. I am being denied my right to participate fully in a democratic society.

I am physically harmed if I go into grocery stores, community centers, or universities (where I would like to work, attend a conference, or obtain professional training for a service needed in my community). I am unable to go into many churches and there are places that do not, cannot or will not make accommodations, and therefore access is denied. I have lost many freedoms guaranteed by the U.S. Constitution.

People injured by electromagnetic radiation often forego technology and live in primitive conditions. Escaping electromagnetic radiation means relinquishing comforts most Americans have taken for standard: hot water, warmth, access to food, running water, a shelter, a home, a bed, a toilet, friends, family, occupation or career, a telephone^{xv}, our dreams, and a future.

Survival is the primary concern. Initially, I tried to put up with the severe headache and other symptoms. Could the emissions from the cell tower be turned off? If it was causing harm to a human being? I doubted it. And, the FCC was not amenable even to measuring the emission levels. My second solution was to escape, leave home and live in remote areas in my vehicle. It was challenging to be without water, without my husband, not knowing where to go or where we would sleep (I tried to tell my husband where I was so he could join me. Or he took the time to look for a safe place to be with me for the day. We relied on payphones for contact (many pay phones no longer work)..

Our third solution was to live in a Faraday cage, a shielded box, something like a dog cage. The end walls, ceiling and floor are Reflectix (bubble wrap with foil on each side). The sides are covered with a metal insect screen. The Reflectix and metal insect screen serve to block frequencies from wireless communication, provided there are no leaks.



Does a prison cell have better accommodations? Due to my own experience, and my observation of others, it is my opinion that people injured by electromagnetic radiation are forced to live in conditions that are close to being inhuman. Worse yet, deterioration of health from un-natural, invisible, far-reaching, permeating electromagnetic radiation is torture.

The solution, to date, has been to live in the radio quiet zone in West Virginia. It feels good to have a home base again, but there is a void when my husband is not here. We have a business that could not be moved here. The house we bought was unfinished (wall studs). Most walls are now in, floors are in, trim is not finished. Kitchen cabinets have not been selected. I am using a cooler with ice for refrigeration (need a refrigerator with *low* electromagnetic radiation emissions), a sink is sitting on cinderblocks, many kitchen food preparation items

are in boxes (my husband packed, so I don't know which one), so I am still in camping mode.

Costs for my family and me are enormous. They include not being able to work, not being able to help in our business, not being able to go home, and costs for consequences if I did. Sadly, we sold a large portion of our income-producing farm so I could have a safer place to live. There are costs for my husband to commute 2000 miles round trip to be with me. There have been costs for constructing adaptations to a living structure: putting electrical wires in conduits, burying the distribution cable, putting electrical appliances at the end of the house and farthest distance away from the living space, a switch to turn off refrigerator (when I want to access it). Fluorescent lights were removed from the basement because the electromagnetic radiation permeates the ceiling (through the floor of the room above) and injures me.

The costs continue: costs for being in pain and disabled because of exposure, costs for loss of health, increase in medical bills, costs for being unable to do things and costs for stress and efforts to keep alive. The costs for stress not knowing where to sleep without harm, costs for loss of liberty, and costs for loss of dreams and future. There were also costs for my son. Knowing his mother was homeless during the early period of my injury caused him tremendous stress (and the people he was around).

There are costs for not being able to communicate with spouse daily especially during meals and times not working, for not being able to oversee their safety late at night, for not being able to run errands, for not being able to maintain and improve things, for not giving input for which is the better selection (from my knowledge, therefore my education and experience are not utilized), for not being able to volunteer and be a social support, and for not being able to coordinate needs. There are costs for loss of support for self and to spouse (i.e. concern for safety of each other, the stress and concern for safety when husband spends many hours farming and doing research – the plants do not wait and the weather has an unpredictable window. There are costs for preparing separate meals; the cost of stress, for example, of hearing about a closed secret meeting about cell towers. When I heard (an untrue) rumor of possible cell towers coming here, I felt stressed, distressed, and felt a loss of hope for a future. There are costs for being prohibited from doing things because of ridicule, harassment^{xvi}, bullying, threats, exclusion, and physical harm, stress when I and visitors (refugees) got sick from electromagnetic radiation intermittently emitted by my neighbors.

There is the cost of using much time doing what I am doing now – fighting for survival and for a safer environment (I had never taken part in protests, I never questioned our government, its decisions were right, I trusted American citizens lives were valued. It is becoming increasingly aware that everyone can be affected). What I am doing is foreign. There are the costs of obtaining research papers verifying effects from electromagnetic radiation emissions; costs and stress in educating contractors, costs in not having a home completed and jobs not done. The costs of feeding refugees visiting. The costs for not being able to be with and help family and friends. The costs and stress of no place to turn to for support.

If the assaulting emissions from the cell tower had been turned off, lessened, or aimed in another direction, I would have likely been living at home with my husband and following our dreams. Instead, I was harmed, became disabled and sought safety, as a refugee. It is possible this could happen to anyone as these triggers are real and statistically validated for one's specific exposure frequency.^{xvii}

A need for NO EXPOSURE is what people harmed by electromagnetic have in common. Victims of electromagnetic radiation urgently need designated wireless-free, White Zones. (To date, I am unaware of any support or protection from the FCC with the help of EPA and our government.)

Please, ban, turn off or lower electromagnetic radiation emissions. Please, ban or put a moratorium on new frequencies, new emissions, and new antennas. Protected zones from current technology are urgently needed. Newer technologies will create desperate situations for the sensitive and will likely affect the health of everyone.

Medical care / testing is NOT accessible to people harmed or disabled by electromagnetic radiation

When there becomes a need to go to a clinic or hospital (when myself or someone else is injured or very ill), which is the *least harmful*?^{xviii}

- A) no exposure, hence no medical care for the emergency health issue?
- B) medical attention and the likelihood of being injured from electromagnetic radiation exposure? (Many doctors have noted heart problems, abnormal EKG, elevated blood sugar, seizures when patients are exposed to wireless and electromagnetic radiation in their clinics and hospitals.)

I contacted 14 hospitals to inquire about access for persons with EHS and not one expressed any ability to accommodate that population. This response from the facilities director at a major university hospital in Michigan was typical:

"Reading the documentation that was sent makes it clear that anyone with a sensitivity to high frequency electromagnetic radiation should stay far away from the [name of medical institution] because we emit a lot of it between the various electronic systems that are in use."

University of Iowa Hospital and Clinic *"Absolutely no way will we be able to accommodate EMS people"*

While these statements acknowledge the condition, it makes it impossible to enter the hospital for treatment.

An accident occurred. A relative was cut badly, likely needing stitches. Who to drive to the hospital? Me. The Michigan hospital said to stay far away.

Already suffering from exposure, I did not take the injured person to emergency, and the relative did not get emergency care.

When another accident occurred, I was taken to emergency to the very hospital that told me to stay far away. In the X-ray room, I experienced acute pain identical to my symptoms from electromagnetic radiation exposure and said so. The medical staff told me *the X-ray room was the safest place in the hospital*. The medical staff behaved as if they did not believe me. I stated again, something in the room was wrong! I was having a painful headache likely from something in the room. I asked to reduce delays and to get me out quickly. A hospital person entered the room, heard me and remembered that a week earlier Nextel had installed an antenna for wireless communication in the X-ray room. Here was an unplanned double-blind study. It took days to recover from this exposure.



Another time, when I became ill; I had a sore throat and the neck below my jaw was painful to touch. By arrangement to accommodate my electromagnetic radiation sensitivity to fluorescent lights (for that appointment), I waited outdoors which became over one-half hour in 14 degree cold.

Eventually

someone came outside and led me into a treatment room where there was warmth and I turned the room fluorescent lights off. After a period of time, the doctor came into the unlit room and switched on the lights. I pointed to the incandescent lamp in the corner, and asked for that to be used. The doctor refused. The doctor told me the fluorescents lights had to be on for an examination. So much for a prior arrangement. I again said that fluorescent lights gave me a severe headache, dizziness, and a new symptom: chest pain. I asked her to please hurry. The doctor then stated that the clinic could not accommodate me, and I should go elsewhere. In this remote area, there was nowhere else. Does this violate the Hippocratic oath? The incandescent lamp was used after grumbling by the doctor and I felt unwelcome due to the unwillingness to deal with me. It was as if the doctor had been prepped with a negative attitude prior to my arrival; I felt this because her uncooperative demeanor was so immediate.

When my husband had a triple by-pass surgery, I was unable to go and be there with him as the electromagnetic radiation exposure in the hospital setting would have injured me. I felt some of the staff ignored my disability and insisted for me to be there; I could not.

Where there is electromagnetic radiation, people who are harmed try to avoid exposure. When I suspected I had a broken toe, I did not go to emergency. The cell towers, cell phones, fluorescent lights, computers, and wireless communication would have likely caused greater damage. I did not obtain medical care when I had a red, itchy eye (a person with conjunctivitis had visited three days earlier). I did not obtain medical care when I had a fever, a cough and a sore throat (I suspect it was something many people including the mayor had and the university sports teams did not come nor travel away)

I did obtain medical care when I discovered a lump in my breast. Consequences of hospital experience were: mammography showed no cancer, but I had three days with diarrhea, five days with tender breasts, and seven days with a very bad headache.

When exposed, a new symptom is chest pain. A local doctor referred me to a heart center for tests. Prior to going, I alerted the heart center that electromagnetic radiation harmed me. I asked if the procedure would harm me. They responded they had no incandescent lights and I would have to bring my own. My husband went with me. In the waiting room, they refused to turn off the fluorescent lights, even though my husband and I were the only patients there. I went outdoors and waited in the car. When they came with an injection, I again asked how people harmed by electromagnetic radiation reacted; did people's body reject the radiation that will be going into the blood? They did not know. I asked what were the typical side effects? They did not know about side effects and they said they could not get this information. I did not risk the procedure.

Please establish a medical code to recognize health conditions (i.e. pain, injury, harm, disability, health effects) from electromagnetic radiation exposure and from the second-hand effects (others effected, therefore affecting others).

Searching for medical care in West Virginia, the West Virginia Institute of Occupational Medicine responded: *"I am not able to locate any medical facilities that meet your needs. I am sorry and hope that you have recovered from your cut."*

Solution: For those disabled by electromagnetic radiation, home visits or turning off fluorescent lights and wireless devices in clinics and hospitals would help.

In conclusion

Because *very small* exposure to some electromagnetic radiation injure *me*, I am alerted to many issues, and I question many incidences where peoples' behavior could have been triggered by electromagnetic radiation (as stated in cases A through G listed above). Medical care / testing is not accessible to people harmed or disabled by electromagnetic radiation. The solution is to have home visits or to turn off harmful electromagnetic radiation. The present standards are not conducive to human health. They did not protect me, they do not protect people directly, they do not protect people indirectly.

Diane Schou, Ph.D. PO Box 99 Green Bank, WV 24944

ⁱ Electrical fields, magnetic fields, ground currents, non-ionizing radiation frequencies. One device likely does not emit all frequencies. People may react to some frequencies, some fields, and not to other frequencies. A need for NO exposure is what we have in common. I am aware of some devices to measure emissions (an electrical meter, a gauss meter, and a spectrum analyzer), but there is still a void (electromagnetic radiation people feel but the utility companies or telephone companies cannot or will not identify). Many meters are not sensitive enough. Some people injured by electromagnetic radiation can feel emissions (meters cannot or before meters do detect such as when an aircraft is approaching or reacting to emissions from a cell tower before we round the curve and it becomes visible). Thermal standards do not measure electromagnetic radiation emissions in the environment. Please measure electrical fields, contaminated electrical fields, magnetic fields, ground currents, stray voltage, non-ionizing radiation, and more.

Fiber optic systems are faster, more reliable, less expensive (than copper), keep data for further distances, have more bands, are safer, and more secure. Remove sources of contamination: wireless communication, broadband over power or telephone lines, copper lines. Copper lines are susceptible to interference, are slower, less secure, cost more, have a shorter life span, loose power with distance, emit line noise or pulsing, and are susceptible to moisture. **Promote, install and use fiber optics.**

ⁱⁱ Lucas, S. (Writer). (2011). Asleep in the tower, *NBC Nightly News April 16, 2011*. NBC.

ⁱⁱⁱ Lowy, J., Freed, J., Karnowski, S., Forliti, A., & Koenig, D. (2009, October 23). Pilots missed Twin Cities by 150 miles—but how? Washington: The Associated Press.

^{iv} Perhaps due to slow reacting, less able to multitask, vision change or faulty judgment of altitude or speed. Perhaps from equipment installed, equipment carried on, the area traveled through or the truck, bus, train, aircraft, car, or boat drivers accumulation of exposure?

^v Halsey, A. (Writer). (2011). Plane carrying Michelle Obama aborts landing because of controller error: The Washington Post.

^{vi} Autopsies expected after 3 die during Detroit race (2009). Associated Press Mon Oct 19, 2009 5:54 AM EDT.

^{vii} CNN News Update (11-17-2009) 4 PM EST

^{viii} R.I. Hospital fined for wrong-side surgery. (2009), *CBS News, November 2, 2009*. Providence, R.I.: The Associated Press.

^{ix} Sage, C., & Carpenter, D. O. (2009). Public health implications of wireless technologies.

^x Emissions from a new cell tower gave me headaches when I was home but not when I was away. I contacted both the FCC and the cell tower company, about reacting to the emissions from a cell tower 1/3 mile away. I expected protection and the problem (health effects correlated to the tower's emission) resolved, my complaint was dismissed, and I was told they (the emitting cell-

tower antenna emission company) had never heard of health effects and (from the FCC) health effects were not possible. They repeated this statement when other calls were made.

The exposure continued, I became more ill, more injured, and disabled. When I was away, I became better; when home, symptoms reappeared; when away, symptoms lessened or disappeared; simply driving by the tower near my home, symptoms reappeared. The injury morphed to include emissions from other cell towers (when driving, in other locations, and when an antenna in a shopping mall was inappropriate) and cell phones (when people used them), then electrical appliances (vacuum cleaners, refrigerators, coffee makers), inverters, converters, fluorescent lights, notebook computers, and overhead power lines. Later, symptoms occurred after being near wireless microphones, cordless telephones, cellphones (even in pockets not being used), cellphones inside parked vehicles not being used, wi-fi, compact fluorescent lights, contaminated electricity, generators, and motors. There could be errors in the order of occurrence. The most recent: has been symptoms from desktop computers and electronic books. There may be more, but I hope not.

I listed the items that provoke radiation sickness symptoms for me while others may become ill from them too – harming them and/or possibly triggering them to make unintentional mistakes.

^{xi} I am not prone to headaches and headaches were and still are rare, unless wounded by electromagnetic radiation. Sometimes the injury may not be felt instantly. It could be compared to sun exposure, where one becomes sunburned and feels it later. When severely sunburned, a little bit of sun, or hot water or heat from an appliance is too much. An amazingly very small amount of electromagnetic radiation (too little for many meters to measure) can injure.

One night, I had a throbbing headache. A spectrum analyzer screen displayed pulsing frequency spikes. I could turn the scientific instrument off, but the pounding headache did not go away.

^{xii} From my observation, others are affected too. For a good resource focused on the medical field see Bevington, M. (2010). *Electromagnetic - Sensitivity and Electromagnetic - Hypersensitivity (also known as Asthenic Syndrome, EMF Intolerance Syndrome, Idiopathic Environmental Intolerance - EMF, Microwave Syndrome, Radio Wave Sickness) - A Summary*. MK18 5EH UK: Capability Books.

Although our symptoms differ, what afflicted persons have in common is that some symptoms lessen with NO exposure.

^{xiii} Havas, M. (2008). Dirty electricity elevates blood sugar among electrically sensitive diabetics and may explain brittle diabetes. *Electromagn Biol Med*, 27(2), 135-146. doi: [10.1080/15368370802072075](https://doi.org/10.1080/15368370802072075)

^{xiv} When pain became almost unbearable (it hurt so much, I cried) from coffee makers, power lines, to aircraft flying overhead, my husband sent me to Scandinavia. Electricity is different, with 50 Hertz (Hz) in Europe (60 Hz in the U.S.A.). I met many people living in isolated areas, living under

conditions they unwillingly (and I needed to) adapted to. A book Granlund-Lind, R., & Lind, J. (2005). *Black on White: Voices and Witnesses about Electrohypersensitivity. The Swedish experience* (J. Ganellen, Trans.). Sala, Sweden: Mimers Brunn Kunskapsförlaget PDF on-line: www.feb.se/feb/blackonwhite-complete-book.pdf or www.wavr.org/blackonwhite.pdf. is a summary of first hand testimonies from people harmed by electromagnetic radiation.

- ^{xv} Standing to talk at an outdoor payphone (a common resource): Exposed to inclement weather such as in down-pouring rain is logically wet and chilling but note taking on soaked paper (or exposing legal documents needed at the phone for reference) adds another challenge



The photo showing access problems, a pay phone in the snow, was taken at Easter time in 2007. Communication with family via telephone during this special day has to be important. When the pay phone works, it is used often, even in bad weather. Access to telephone communication is a problem for electromagnetic radiation sensitive persons. Using telephones are painful and injure; it seems it would be obvious that **communication via telephones by electromagnetic radiation injured people are not simple nor friendly social calls.**

- ^{xvi} I telephoned the community senior center; spoke to the county director about a problem of harassment (from one of their board members, by one of their cooks, and no response from the director himself) I hoped there was a misunderstanding to people harmed by electromagnetic radiation. I am not the only person encountering a negative reaction. The director told me the senior center won't do anything; electromagnetic radiation harm is not a disability recognized by West Virginia ADA. I asked for a written statement on this segregation. His response was he didn't have time to discuss this, [click].

- ^{xvii} Rea, W. J., Pan, Y., Yenyves, E. J., Sujisawa, I., Samadi, N., & Ross, G. H. (1991). Electromagnetic field sensitivity. *J Bioelectr*, 10, 241-256.

- ^{xviii} Doctors and emergency responders need to be trained to diagnose electromagnetic radiation injury and precautions for people injured by it. We are all being exposed to electromagnetic radiation and we are getting incrementally weakened from electromagnetic radiation whether we know it or not. A side note, the functioning of medical personnel may be impaired by

their exposure; they need to take precautions for themselves so they don't indirectly make errors.

The functioning of medical personnel may be impaired by their exposure. An unexpected observation/experience led to my awareness of how staff could be unwittingly affected by electromagnetic radiation.

A dentist and the assistant both commented how relaxed each felt doing the dental work (a tooth had broken and needed repair). They noted this comfortable/relaxed feeling was unusual. What was different? They made accommodations for me. They had turned off all the compact fluorescent lights, keeping on only the incandescent operation light and the dentist's LED head gear, to accommodate my electromagnetic radiation disability in this minor emergency. These two professionals were unaware they may be electromagnetic radiation sensitive, yet each noticed their health was better without CFL lights. A second visit about a year later, evoked the same response.

A new dental office opened in town. I tried it. Accommodations to my sensitivities were made and fluorescent lights were turned off. Lighting was from a large window, the dentists' headgear, and the operation light. Cleaning up after the work in my mouth, they both discussed how good they felt. These were volunteered comments and not something asked by me.

Radiation Sickness - Disability; Alison Price Comments, Jun. 24, 2013

I started to have a severe reaction to microwave radiation right before “9-11” (’01). Or perhaps it started 4 yrs earlier when I first reacted severely and horribly to a large, brand new microwave oven at a friend’s place, unknowingly as I was in the bathroom. Worst thing- bar nothing, that I’ve ever been thru (for next 2 hrs) in my 65 yrs of life.

Then as towers came in to my small city, my neck (glands and lymph nodes) would immediately swell as I sat at red lights- next to one tower in particular -and also my armpit lymph nodes. Felt like my neck instantaneously grew 2 inches wider in width. Heavy pressure in my chest at same time, sometimes with nausea accompanying..

Shortly later, while I was living in HUD housing due to other health problems, I could no longer sleep there at night due to the level of burning in my head and upper spine I would get thru much of the night-always starting around 9 PM or before 10 ...preventing sleep... and I began to sleep in my car so that I could drive to places I could find where the burning stopped- perhaps low cell signal areas.. I have been doing this now for almost 12 yrs- sleeping in my vehicle –having to change locations multiple times between when I “turn in” and arise. It’s a nightmare beyond your fathoming and the level of pain I endure is pure torture in a very literal sense.

Shortly after I became aware of having this reaction to cell phone tower waves, I read an article wherein the top microwave expert at the Walter Reed Institute in Maryland was asked to evaluate a proposed microwave-like stun gun for crowd control by police...as to it’s safety before they marketed it. He said that: “once burning has occurred, tissue damage has already taken place”.

I never have forgotten that during all these years that the left back part of my skull behind my left ear has burned intensely almost daily during early AM rush hr traffic as I still try to sleep in the

mornings and am awakened by the pain of. I feel sure that tissue damage has been done in my head over the 1000 x's I've burned there and other places in my body (such as one lymph node under armpit). My memory became much worse within a short period of time after this burning in my head on daily basis began..

Very soon I will move to the mountains where they do not get a cell signal in the area and the population is low- in hopes that I will find "survival" more manageable up there and can get the level of rest my body needs EVERY night. From there, maybe I can begin to build up- if life offers me any grace-after so many lost years.

I have over 6 yrs of college, am bright and talented in many areas, but due to this, it's all going to waste and I cannot contribute much to society often due to feeling so unwell.

I cannot be within 20 ft of a cell phone in **use** after passing by one- if stationary, cannot be near any wireless devices -such as laptops all around me, due to all the immediate painful reactions which then usually last for hrs after the exposure (swollen lymph nodes, extremely intense burning in my head, etc). These other things now ALL bother me with extreme symptoms that are immediate:

- *public fire alarms

- *radio-wave theft bars at entrances to stores (heart feels like it's been shot and then remains just barely functioning for up to 2 days...in feeling, weakness to the max in chest and down arms, almost blacking out at times in next hrs after the exposure.)

- *GPS in other people's cars

- *Strong magnetic fields...such as having my head sandwiched at libraries between 2 desktop computers at head level on the desk, unavoidably

- *MRI's...cannot get thru them-so extremely painful

- *Satelite dishes..closely

The CB radios that police, firemen, theatre and event people wear on their belts-I cannot be in close proximity to either.
Basicly- anything that employs microwaves or radiowaves and emits them.

I cannot work unless entirely isolated and alone ...because I cannot be near cell phones, laptops, mw ovens, etc and when sleeping in car, (not by choice, but with no other options out there-even if I were to win the lottery- as long as I'm in a city as I now remain being for a little longer,...one is not often rested enough to be working independently or **at all**. I'd like to be working all day, every day and that opportunity is taken away from me by outside sources and decisions I have no power over...making me not accountable for my own level of health anymore.
I live a clean life otherwise: no drinking, smoking, drug-taking, and I eat healthy foods, etc.

It's entirely taken my whole life from me. No social life, no home, no work, no love partner, no nightlife due to having to retire so early
...even though I've had many offers of places to stay-they don't work! The intense reactions and pain prevent sleep.
And more than anything, no **hope is** left for surviving very much longer...unless I can find a way to reverse this reaction to mw radiation...which I read now affects 9%, world -wide.

You are TORTURING all of us who react thusly and more people are developing this reaction to it all the time, including young vital people in their 20's-(mostly , I believe, from overuse of their phones and laptops, day in and day out).

But it is not just those of us who react now whom it hurts. It is harming **everyone's** health greatly, whether it's shown up yet as having done so or not.

Do you pay attention to the percentage levels cancer- and particularly brain cancer- have exponentially jumped to within short periods over the last decade?

This is just blatant irresponsibility towards our US population of good citizens to do this to us in the name of greed and without knowledge of what you're doing.

The levels of radiation bombarding us are, I read, WAY, WAY past the safe limits for our collective health.

I know of several who have died due to their cell phone tower wave reactions...so very, very sad and unnecessary!

You would not believe what many of us are going thru. I have something like 26 different systems: nausea, can't get air, burning throughout body...only at night and during morning rush hr, fast heart beat, low energy...as if affects my heart, tremendous gas build-up inside and pressure within-feeling like a blown up balloon and so much more.

My friends paid \$6000 to send me to a clinic in Dallas which tests for this (called 'electromagnetic sensitivity') and chemical poisoning and who also test for many other levels of various bodily functions and levels thru hair, blood, hormones, saliva, etc,- 9 yrs ago.

My neurological test results (when exposed to the mw frequency with electrodes placed all over my body in a blind test) were written up and stated by the 2 doctors attending as : "abnormal nervous system response."

I was twitching all over the place, swelling, and in pain.

I do not have access to my test results right now to include them herein as they are deep in storage-where most all my belongings

have had to stay since sleeping in the car began quite a few yrs ago now.

I hope you will begin to see the fire you are playing with here in these unsafe levels of mw radiation thru towers that are currently being allowed to bombard our bodies 24-7 and consider what it will do to you and yours also.

Is becoming excessively wealthy for you and yours worth it if you die decades early and kill off many you know and love due to lack of ethics, education and the sincere interest to **truly** know what it's doing to all of us?

I hope you consider this above, and come up with new SAFE levels and limitations for the frequency output levels for our communities so that our society of people can live safe, healthy lives-if they so choose. Then we all can have the possibility for "thriving" as a collective economy in our country-.with the level of health in much higher percentages to enable that..

Sincerely,
Alison Price

Radiation Sickness - Disability; Shari Anker Comments, Sep. 10, 2013

Shari R. Anker, M.S.W.
2402 SE Burton Street
Port St. Lucie, FL 34952
772-335-3484

Received & Inspected

SEP 10 2013

FCC Mail Room

Re: Comments on Notice of Inquiry, ET Docket No. 13-84

September 3, 2013

Office of the Secretary
Federal Communications Commission
445 12th St., SW
Washington, DC 20554

Dear Secretary:

This letter is to put in the record that I have been and currently am being injured from the pulsed radio frequency (rf) radiation devices known as "smart" electric meters (installed by Florida Power & Light) as well as from as the City of Port St. Lucie's new radio read water meters.

I have several medical conditions that have been made significantly worse by the 24/7 radiation emissions from these devices: myalgic encephalomyelitis/chronic fatigue syndrome, inflammatory polyarthropy, multiple chemical sensitivity, and electromagnetic sensitivity. I was deemed disabled by MCS beginning in 1998. I have a substantially impaired immune system, an activated autoimmune response which causes serious systemic inflammation, and poor antiviral defense. My doctor, Nancy Klimas, M.D., a nationally known immunologist, has documented my medical history, with lab work and clinical observation for over 22 years. Lab tests also reveal that I have the gene HLAB27 which heightens the overactive inflammatory autoimmune response to the point that I have required hospitalization, been bed bound or on crutches for weeks and months at a time after exposures to a toxic environmental agent like pesticides, even at low levels. More recent lab work from Dr. Klimas, as well as my medical history with my rheumatologist, John Hour, M.D., document similar effects from the exposure to a new environmental agent: rf radiation. The year 2011, before the deployment of smart meters, was my best year since the early 1990s, but beginning in 2012 when FPL installed the smart electric meters my health plummeted. Then, in 2013 the City of Port St. Lucie installed their radio read meters. If necessary, I would be happy to supply letters from my doctors and lab results to supply evidence of a cause and effect response to the rf radiation.

Here are the symptoms I experience from exposure to the rf radiation emissions from smart meters: nausea, severe fatigue, headaches, severe short-term memory loss, slurring of speech, severe insomnia, acute inflammation requiring several visits

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to my rheumatologist, low-grade chronic fever, tachycardia and arrhythmia. Some of the neurological conditions such as nausea and headache, slurring of speech, memory loss and heart irregularities were new symptoms not associated with my previous diagnoses. The heart irregularities began within one week after the City's installation of the new radio read water meters. I went to a walk-in clinic where the doctor observed tremors and performed an EKG.

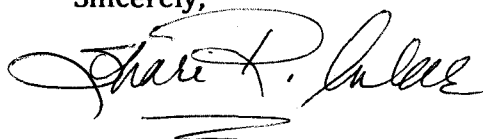
This new technology has delivered a devastating blow to my health and my long-term prospects. I had been hoping to commence an at-home work project to bring in much needed income after so many years of ill health. I was already substantially limited as to where I can go – as I can not be exposed to chemicals like pesticides or VOCs from new carpets or paint, etc, and now, I can not visit friends' homes who have smart meters on their homes. I experience immediate brain difficulties and inability to sleep, and this lasts for days even if my exposure was limited to an hour or two. Quite simply, my life is ruined without protective measures taken by you and other regulatory agencies.

Another absolutely critical aspect to consider is that for my health to recover I need a **"zone of safety"** around my home, free from the radiation transmissions from "smart" meters at a minimum, but also from a variety of wireless devices and cell towers. Anything that presents an involuntary 24/7 exposure is dangerous to me, causing injury. I have requested ADA accommodation to that effect from both Florida Power & Light and the City of Port St. Lucie. I will take legal action if I am not accommodated. My very life and health and ability to live safely in my own home requires it.

I urge the FCC to courageously rise up and walk away from the influence of the telecommunications industry for the good of our public health. I beg you not to take the same route taken when DDT, lead, tobacco, asbestos, etc. industries were given free reign and immunity from the harm they caused. History will judge you harshly if you allow people like me to be injured, who already know why they are being injured and are appealing to you for protection, as well as for those citizens in the vast majority, who have no idea that biological effects from exposures are creating an array of health complications as well as triggering cancer. Please listen to your consciences: do you wish to be burdened with the knowledge that you have caused the injury and even premature deaths of many people? Please make impartial inquiries into the large and growing body of independent scientific research documenting that harm.

I thank you for taking the time to read and consider my letter.

Sincerely,

A handwritten signature in black ink, appearing to read "Sharon P. Palmer". The signature is fluid and cursive, with a horizontal line drawn underneath the name.

Radiation Sickness - Disability; Paul Vonharnish Comments, Aug. 30, 2013

To Whom It May Concern:

I have not been well for many years, and have attempted to inform friends, relatives, medical personnel, and even total strangers on the internet regarding my physical demise. Suffice it to say, no one believes me, as I'm not sitting in a wheel chair, yet.

It would appear I have been highly sensitive to electromagnetic radiation my entire life, thus spent the majority of my years in school experiencing severe and debilitating headaches, extreme fatigue, stomach disorders, and chronic depression. The flickering and hum of fluorescent lighting used to drive me crazy, and I hated attending school as a result. I usually felt better during the summer, and headaches and muscle weakness would subside within a few weeks of summer vacation.

As I was electromagnetically sensitive, I had never felt "normal" or physically well. I had no idea that my condition was a result of these exposures. Ironically, I spent many years in the electronics business, and it would seem that quite allot of neurological damage was compounded by repeated EM exposures in sound control rooms and recording studios. Migraine headaches were a normal way of life during those years, and I'd typically go through about 100 aspirin a month.

The most significant damage to my neurological system occurred as a result of exposures whilst living directly under a radio and television tower complex in Shoreview Minnesota, from 1990 thru 1997. I had a friend at the time that was an FCC licensed individual in the electronics repair business. In the course of a conversation regarding the constant ringing in my ears, he stated that such high-powered antenna complexes required a 2-mile setback from residential areas in the (now former) Soviet Union. Yet in the United States, we build high density housing right across the street from such a facility. The FCC was obviously negligent in this regard.

I moved away from Shoreview Minnesota in 1997, specifically to get away from these radio and television emissions, as I had gradually become aware that these towers were seriously affecting my health. The health of neighbors also declined, and many were being diagnosed with high blood pressure, heart attacks, unexplained neurological disorders, and several cases of terminal cancer.

These last years since 1998 have been a constant onslaught of excruciating physical pain, intellectual torture, and economic collapse. I cannot work any longer, as I am now totally disabled and cannot work in any normal fashion. This includes not being able to walk around in the rural town I now live in. I am no longer able to visit friends or family, due to their addiction to cell phones, wireless devices, and portable phones. I am no longer able to go to restaurants, bars, grocery stores, public libraries, or even to hospital, without sever and painful seizure activity. This is not a life. It is slow death in a foil-lined apartment, which has become my Guantanamo.

The Federal Communications Commission has been totally negligent and unresponsive to the many letters and affidavits submitted by the medical community. The FCC has also failed to address in any coherent way, the millions of people around the world who have complained of electromagnetic sensitivity and it's destruction of their functional lives.

The Telecommunications Act of 1996 should be repealed immediately. The legal right of citizens to prohibit installation of "smart meters", cellular antenna systems, and wi-fi mesh networks must become the law. The health and environmental consequences of pulsed digital systems is no mystery in nearly every country in Europe. Safe zones, such as those in France and the Netherlands, should become available to those in the United States, who are electromagnetically sensitive.

In conclusion: The FCC has been in direct collusion with various interests related to the cellular phone and communications interests for many years, and this practice must end NOW.

Paul Vonharnish - American citizen

Radiation Sickness - Disability; Heidi F. Lumpkin, Comments, Aug. 24, 2013

FCC 12-152

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of	)	
	)	
Notice of Proposed Rulemaking	)	
18 FCC Rcd 13187, 13188 ¶ 1 (2003)	)	ET Docket No. 03-137
	)	
And	)	
	)	
Reassessment of Federal Communications	)	ET Docket No. 13-84
Commission Radiofrequency Exposure Limits	)	
and Policies	)	
	)	
And	)	
	)	
Service Rules for the Advanced Wireless Services	)	WT Docket No. 12-357
H Block---Implementing Section 6401 of the	)	
Middle Class Tax Relief and Job Creation Act of	)	
2012 Related to the 1915-1920 MHz and	)	
1995-2000 MHz Bands ¶53 footnote 95	)	

To: Office of the Secretary
Federal Communications Commission
Washington, D.C. 20554

Comment Filed by: Heidi M. Lumpkin
384 Tamarack Lane
Sagle, Idaho 83860
unisoils@yahoo.com
208-263-1080

August 24, 2013

AFFIDAVIT OF Heidi M. Lumpkin

I, Heidi M. Lumpkin, attest that my statements are true to the best of my knowledge.

Comment round for ET Docket No. 03-137, ET Docket No. 03-84, and WT Docket NO. 12-357.

1. My name is Heidi M. Lumpkin.

2. My mailing address is 384 Tamarack Lane, Sagle, ID 83860.

3. I am an International Regulatory Compliance Specialist and Clinical Study Coordinator. I have a Bachelor of Science degree.

4. Comment on FR page 33660, column 1, II. Notice of Inquiry, paragraph 47: The Federal Communication Commission's general regulations and policies limiting human exposure to radiofrequency (RF) radiation are completely inappropriate as to be ineffective and irrelevant. I adamantly and urgently request that the FCC adopt **more restrictive limits** to the amount of RF exposure allowed due to the extremely harmful biological effects induced by these frequencies.

Until realistic safe limits are established, I request that the FCC impose a moratorium on the installation and operation of all wireless RF communication systems associated with cellular telephone fixed antenna arrays, utility meters operating using wireless radiofrequency antennas, wireless local area networks deployed in public schools, Power Line Communication systems and associated equipment. I am basing my request on personal experience as well as published peer-reviewed scientific studies indicating wireless RF radiation is biologically active and is harmful to biological life.

5. Personal Experience: In November of 2007 I purchased my first home in Sagle, ID. It is located in a rural setting on 5 acres, approximately 8 miles from town. I chose this location because it was peaceful, there was an abundance of wildlife and resident and migratory birds, and it provided a safe place for my son to live during childhood, a period of life when humans are particularly vulnerable to exposures of environmental toxins. It was important to me to live in an area where the environment (air and water) was relatively free of harmful contaminants so as to be able to provide my son (7 years old at the time) and myself (age 50) with a lifestyle that promoted good health. For the first 2 ½ years my son and I very much enjoyed living in our home. Our health was very good. We spent much time outdoors in our community as well as throughout Bonner County where we are able to ski, kayak, hike, and fish. This all changed 3 years ago in late 2009, early 2010. Since the installation of a digital RF emitting electric meter on my home (without my knowledge or consent) and the Power Line Communication system that it communicates with, I have experienced the following health problems – constant low frequency humming and vibration inside my home as well as outside attributable to acoustic shock, anxiety and feelings of mild panic, sleep deprivation, heart arrhythmias and sudden heart racing, debilitating fatigue, short term memory deficits, concentration difficulties, rapid mood swings, severe abdominal pain lasting 6

hours and more. My son has also experienced unexplained headaches and alarming neurological paresthesia unilaterally and bilaterally as well as severe abdominal pain without any evidence of viral or bacterial infection. Our adverse symptom onset coincided with the rollout of the Smart Grid in Idaho and the proliferation of the wireless RF infrastructure that supports it, the initiation of Broadband over Power Line wireless internet services, and the proliferation of WiFi. My son and I have both undergone full health evaluations. I had a wellness checkup and full cardiac evaluation and no underlying disease was found that could account for my symptoms. My son underwent a full pediatric neurological evaluation with a CAT scan ordered by our local hospital and an MRI ordered by a pediatric neurologist in Spokane, WA. No sign of underlying disease was found that could account for his symptoms. The adverse health events continue, 3 years later. I now have full blown electromagnetic hypersensitivity (EHS). I cannot live comfortably in my home any longer. I have not had an uninterrupted night of sleep for 3 years and most nights I cannot sleep at all. I cannot be out in the local environment for very long due to the emissions of RF radiation coming from the unshielded power lines and from the multitude of antenna arrays in my town. I cannot attend Sunday mass at St. Joseph Catholic church due to the RF antennas next door that now also permeate the chapel causing nausea and mental distress. My quality of life has plummeted and I am desperate to find some relief and yet there is no place one can go to remove themselves from these wireless radiofrequencies. I experience nausea, anxiety, irritability, and severe fatigue when I am in close proximity to wireless transmitters. I cannot sit comfortably in any business that has WiFi, including my place of work. Even businesses that do not have this service are affected by the public and private owners of WiFi routers in their proximity as the WiFi signals transmit through walls and trees and seem to now be ubiquitous in the environment. I have no wireless technology in my home, no cordless phone and a hard wired internet connection and yet I am tormented by the same symptoms that I experience while in town where the density of wireless devices and fixed antennas is much greater. I attribute this to the Power Line Communications system that is utilizing the existing power line electricity infrastructure for distributing RF data signals. The electric power line cable is not designed to carry a RF microwave signal and as such it "leaks" out of the cables and into the environment. This is occurring over 1,000s of miles of electric power lines, it is not localized. In fact, due to the distances between homes in rural areas like my county, these data signals need to be injected into the power lines at very high intensities in order to travel the many miles to the homes connected in the grid. Every obstacle along the power line acts as an impedance and the signal needs to be collected and concentrated and re-injected into the power line at greater intensities. At every junction and turn in the line, the signals break out. You can hear it and you can feel it as you travel along the power lines.

I have visibly aged beyond my years and consider myself in very poor health now. All of this has occurred in the absence of any kind of public disclosure or discussion with respect to wireless RF transmissions that the FCC is sanctioning. I have had to find information on my own to explain the source of my adverse health symptoms. This has been extremely difficult and time-consuming. Countless support groups have been initiated across the U.S. and abroad to help people understand this technology and the adverse health effects it causes. One such group led me to a man named Victor Nixon. He was a decorated British Special Air Services soldier, a mechanical engineer and a

computer systems analyst. He had emigrated to the U.S. and was a resident of Pittsburgh, PA. In 2009, he had began suffering the same debilitating health effects after the rollout of the Smart Grid in his community – severe abdominal pain, insomnia, low and high frequency sounds around the clock, mood swings, sciatic pain, vision disturbances, loss of appetite, muscle atrophy, etc. Due to his training and expertise he was able to identify the sources of his “noises” as emanating from the power lines which were emitting, not electric fields, but RF/Microwave emissions, and from the digital RF meter installed at the apartment complex where he lived. He documented his findings, and filed complaints with the PA Public Utility Commission. His complaints were dismissed, in his estimation improperly (see attachment of Correspondence from Victor Nixon to Pa Public Utility Commission Secretary Rosemary Chiavetta as evidence of filing). Victor was also working to assist anyone in the U.S. and abroad that was having similar experiences (see Comments filed by Bonnie Mensch, Sandra Chianfoni, John Weigel, Dimitris Panagopoulos, Olle Johansson, Marina Sauco-Helfst). I and others in the U.S. and elsewhere, have been assisted by him with understanding this very complicated technology and with filing complaints with our respective Public Utility Commissions and other international health agencies.

In 2012, after receiving no redress with the PaPUC, Victor Nixon filed a complaint with the U.S. Department of Justice alleging that his, and all American's, civil rights were being violated by the unregulated deployment of RF communication systems. The Department of Justice Correspondence Unit, Civil Rights Division, responded to his initial letter asking for additional information so as to be able to determine whether a violation of a federal civil rights statute is involved (see letter from Dept. of Justice as evidence of correspondence). Victor Nixon complied and sent additional data to the Department of Justice in August of 2012. By this time his health was severely deteriorated; in fact, he knew he was dying. He moved to Sagle, Idaho two days after he mailed his Certified Letter to the Department of Justice in order to be with me and my son in an environment that he hoped would allow him to recover his health. He and I had become engaged in May 2012 and were to be married in October 2012. After he arrived in Idaho he started experiencing the same heart arrhythmias that I had been experiencing but for him they were more acute. On September 17, 2013 Victor Nixon died of sudden cardiac arrest at my mother's cabin in Sandpoint, ID – 24 days after he arrived. I found him after I came home from work that evening. The police were called and asked what I thought had caused his death. I explained his troubles with RF radiation. The county coroner ruled his death under investigation as a result. An autopsy was performed and cause of death listed as myocardial infarction – (proving exposure to RF radiation and attributing adverse health effects and death to this exposure is not something that our current medical community is trained to investigate). His complaint to the Department of Justice, mailed in August 2012, has not been acted upon. Any correspondence that was sent to Victor's former address in Pittsburgh has been lost. It would be my hope however that the FCC initiate a conversation with the Department of Justice Civil Rights Division regarding Victor Nixon's complaint as this might be used as a basis to initiate an investigation into the legality of subjecting residents of the United States to involuntary exposure to RF radiation.

6. Selection of Scientific studies, letters, and reports that support the supposition that RF radiation is a severe human health hazard and, as such, calls for a severe restriction in allowable RF radiation limits if not full product recall of wireless communications systems. (All supporting evidence is submitted in full-text as attachments to this Comment).

A. Letter to the Los Angeles Unified School District from Dr. Martha Herbert, Pediatric Neurologist and Neuroscientist on the staff at Harvard Medical School and at Massachusetts General Hospital describing the adverse health and neurological impacts of EMF/RF and the particular sensitivities of children. “EMF/RF from wifi and cell towers can exert a disorganizing effect on the ability to learn and remember, and can also be destabilizing to immune and metabolic function. This will make it harder for some children to learn, particularly those who are already having problems in the first place. “Dr. Herbert advises the LAUSD to not use wifi in their public schools and instead opt for wired technologies. I concur with this opinion.

B. Hillman et al. 2013 “Relationship of electric power quality to milk production of dairy herds – Field study with literature review”. *Science of the Total Environment* 447:500-514.

C. Letter from the Irish Doctors Environmental Association to school principals advising them of their concerns regarding wifi and harm to children’s health and advocating wired technologies.

I concur with their suggestions and request that the FCC require all public schools to switch to cabled, hard-wired local area networks in their classrooms and also remove any cell phone towers erected on school grounds and within close proximity to schools.

D. Capone et al. “Extremely low frequency magnetic fields (ELF-MF) produce functional changes in human brain”. Poster submission P22.5. *Neuroplasticity*. Indicating pulsed-mode magnetic fields such as those used in Power Line Communications produce an increase in excitatory neurotransmission, which may produce functional changes in the human brain.

E. Girgert et al. 2005 “Induction of tamoxifen resistance in breast cancer cells by ELF electromagnetic fields”. *Biochemical and Biophysical Research Communication* 336:1144-1149. This study describes the possible increase in the incidence of breast cancer as a result of exposure to low frequency electromagnetic fields through a radiation-mediated anti-melatonin pathway. It also discusses concern that EM fields interfere with the activity of tamoxifen and may account for the tamoxifen resistance observed in breast cancer patients after long-term treatment.

F. Stratton et al. 2013 “Pulsed extremely low-frequency magnetic fields stimulate microvesicle release from human monocytic leukaemia cells”. *Biochemical and Biophysical Research Communications* 430:470-475. This study demonstrated that an alternating current, pulsed, extremely low-frequency electromagnetic field induced transient plasma membrane damage that allowed calcium influx.

G. Cururachi et al. 2013 “A review of the ecological effects of radiofrequency electromagnetic fields (RF-EMF)” *Environment International* 51:116-140. Systematic review of published scientific studies on the potential ecological effects of RF-EMF in the range of 10 MHz to 3.6 GHz (from amplitude modulation, AM, to lower band microwave, MW, EMF). The authors concluded that two thirds of the studies reviewed found ecological effects of RF-EMF at high as well as low dosages; very low dosages being compatible with real field conditions, as found under environmental conditions. Effects were found in birds (breeding density, reproduction or species concentration), insects (honey bees: acute decrease of breeding performance and in some instances collapse of entire colonies; fruit flies: significant depression of growth and reproduction as a response to exposure at both 900 and 1800 MHz; ants (*Myrmica sabuleti*): exposure to a GSM generated signal associated with a loss in the acquired association between food and a visual cue, a decreased retention of acquired knowledge, and a total loss of visual memory; vertebrates (frogs; significant effect of exposure on the growth and mortality rates of tadpoles of frogs under field conditions; bats: RF-EMF reduced the foraging activity), other organisms (*E. coli* bacterium, *C. elegans* nematode, and land snail – all cases reported a significant effect on behavior and growth of target subjects); plants (growth inhibition). (see Comment by Steven Magee)

H. Donald I. McRee (1974) “Biological Effects of Microwave Radiation” *J Air Pollution Control Association*, 24(2):122-127. Discusses reports of behavioral and neurological effects in humans after exposure to microwave radiation at very low power levels in the USSR, which has set safe exposure limits 1000 times lower than in the U.S. Dr. McRee, at the National Institute of Environmental Health Sciences, back in 1974 concluded that safety studies needed to be initiated to determine whether exposures to continuous, modulated, and pulsed fields were safe. To date, these fields are unregulated.

I. Hinrikus et al. 2009 “Effect of modulated at different low frequencies microwave radiation on human EEG” *Environmentalist* 29:215-219. The authors concluded that telecommunication devices with complex spectrum of modulation frequencies like mobile phones can affect all human EEG frequency bands.

J. Mousavy et al. 2009 “Effects of mobile phone radiofrequency on the structure and function of normal human hemoglobin” *International Journal of Biological Macromolecules* 44:278-285. The authors investigated the effects of mobile phone RF on the structure and function of hemoglobin (HbA). In addition to carrying nearly all the oxygen required by cells from the lungs to the tissues, hemoglobin carries two end products of cellular respiration (H⁺ and CO₂) from the tissues to the lungs and the kidneys, where they are excreted. Results indicated that mobile phone EMFs altered oxygen affinity and tertiary structure of HbA. The decrease of oxygen affinity of HbA corresponded to the EMFs intensity and time of exposure.

K. Kesari and Kumar. 2012 “Pathophysiology of Microwave Radiation: Effect on Rat Brain” *Appl Biochem Biotechnol* 166:379-388. This study investigated the effect of 2.45 GHz microwave radiation on rats. The study concluded that a reduction in melatonin or an increase in caspase-3, creatine kinase, and calcium ion may cause

significant damage in brain due to chronic exposure of these radiations. These biomarkers clearly indicated possible health implications of such exposures. The FCC, through the appropriate health agencies should initiate immediate clinical studies investigating whether people exposed to MW RF are experiencing the same changes in these biomarkers.

L. Calvente et al. 2010 “Exposure to electromagnetic fields (non-ionizing radiation) and its relationship to childhood leukemia: A systematic review. *Science of the Total Environment* 408:3062-3069. The primary objective of this review was to analyze the current state of knowledge on the association between environmental exposure to non-ionizing radiation and the risk of childhood leukemia.

M. Letter from the American Academy of Environmental Medicine to the California Public Utilities Commission requesting an immediate moratorium on “smart meter” installation due to serious public health concerns.

N. Stephen J. Genuis 2008 “Fielding a current idea: exploring the public health impact of electromagnetic radiation” *Public Health* 122:113-124. Despite the many challenges in establishing irrefutable scientific proof of harm and the various gaps in elucidating the precise mechanisms of harm, epidemiological analyses continue to suggest considerable potential for injury and affliction as a result of a-NIR exposure. As environmental health has not been emphasized in medical education, some clinicians are not fully aware of possible EMF-related health problems and, as a result, manifestations of a-NIR may remain misdiagnosed and ineffectually managed. It is important for physicians and public health officials to be aware of the fundamental science and clinical implications of EMF exposure. A review of the scientific literature relating to the link between electromagnetic radiation and human health, several public health recommendations, and four case histories are presented for consideration.

O. Burda et al. 2009 “Extremely low-frequency electromagnetic fields disrupt magnetic alignment of ruminants” *PNAS* 106(14):5708-5713. The findings provided evidence for magnetic sensation in large mammals as well as evidence of an overt behavioral reaction to weak ELFMEFs in vertebrates. The demonstrated reaction to weak ELFMEFs implies effects at the cellular and molecular levels.

P. Ulrich Warnke 2007 “Bees, Birds and Mankind: Destroying nature by “electrosmog”. Effects of Mobile Radio and Wireless Communication. Brochure 1 *Competence Initiative for the Protection of Mankind, Environment, and Democracy.*

Q. Levis et al. 2011 “Mobile phones and head tumours. The discrepancies in cause-effect relationships in the epidemiological studies – how do they arise?” *Environmental Health* 10:59. The analysis of the literature studies and of the results from meta-analyses of the significant data alone shows an almost doubling of the risk of head tumours induced by long-term mobile phone use or latency. (see Comment posted by Alan Marks)

R. Laurence et al. 2000 “Biological Effects of Electromagnetic Fields –Mechanisms for the Effects of Pulsed Microwave Radiation on Protein Conformation” *J. Theor Biol* 206:291-298.

V. Soderqvist et al. 2011 “Childhood brain tumour risk and its association with wireless phones: a commentary” *Environmental Health* 10:106. Case-control studies on adults point to an increased risk of brain tumours (glioma and acoustic neuroma) associated with the long-term use of mobile phones. Recently, the first study on mobile phone use and the risk of brain tumours in children and adolescents, CEFALO, was published. It has been claimed that this relatively small study yielded reassuring results of no increased risk. We do not agree. We consider that the data contain several indications of increased risk, despite low exposure, short latency period, and limitations in the study design, analyses and interpretation. The information certainly cannot be used as reassuring evidence against an association, for reasons that we discuss in this commentary.

S. Abdel-Rassoul et al. 2007 “Neurobehavioral effects among inhabitants around mobile phone base stations” *NeuroToxicology* 28:434-440. Conclusions and recommendations: Inhabitants living nearby mobile phone base stations are at risk for developing neuropsychiatric problems and some changes in the performance of neurobehavioral functions either by facilitation or inhibition. So, revision of standard guidelines for public exposure to RER from mobile phone base station antennas and using of NBTB for regular assessment and early detection of biological effects among inhabitants around the stations are recommended.

T. A.K. Dhama 2012 “Study of electromagnetic radiation pollution in an Indian city” *Environ Monit Assess* 184:6507-6512. Measurements of EMR were conducted at 62 locations near schools and hospitals in Chandigarh City, India. The measured power densities and estimated SAR values were compared with the international recommendations by ICNIRP for safety. Results indicated that exposure levels in the city were below ICNIRP limits, but much above the biological limit at which systems of humans and animals start getting affected.

7. Comment on what additional information the Commission should develop relating to exposures from common fixed sources. (FR page 33662, Column 3, paragraph 62). I request that the commission act on the multitude of complaints that are arising from the installation of RF utility meters and the RF communications grid that connects them. The Commission should allow for people to opt-out of participation in the smart grid in light of physical and mental health effects associated with these devices and wireless RF communications systems. In addition, I request that the Commission investigate the growing number of health complaints associated with Power Line Communications and the disturbances this system creates in the environment – it is unregulated, uncontrollable, and dangerous. I request that the Commission require these systems be deactivated until proven safe. I note in the following reference (<http://en.kioskea.net/contents/126-introduction-to-power-line-communications-plc>) a description of Power Line Communications – PLC transmits data via the electrical supply network by superimposing a high frequency signal at low energy levels over the 50 Hz electrical signal. The data signal is transmitted via the power infrastructure and is

received and decoded remotely by any PLC receiver located on the same electrical network. According to this information which was current as of July 2013, PLC networks are at the same time both electrical supply networks and telecommunications networks, with the result that the authorities have difficulties defining legal framework.

No precise regulation exists for PLC equipment and networks. The installation of PLC networks is unregulated and is therefore subject to the condition that they do not cause negative side-effects, in which case the equipment must be removed. Many consumers are experiencing negative side effects from digital radiofrequency meters installed without consent on their residences. These meters operate, at least in the state of Idaho, using Power Line Communications networks. Therefore, without regulation, anyone experiencing negative effects from this PLC network is able to have the equipment removed. I request that the digital meter servicing my home be removed and replaced with an analog meter and that the PLC system that communicated with the meter also be removed as the negative health effects I and my family are experiencing cannot be remediated with the removal of the electric meter alone but can only be remediated by de-energizing the system that operates these meters.

I work in the health care industry and part of my responsibility is to work with private institutions and universities in assisting them with filing Investigational New Drug applications for conducting clinical studies. I support the Principal Investigators in providing documentation that they require when seeking permission to conduct their studies with the FDA and their Institutional Review Boards. A large part of the process is spent making sure that study subjects are not exposed to harmful practices or substances and those subjects are participating in the clinical study with full informed consent.

As a Clinical Study Coordinator by profession, I am astounded that there is no informed consent when it comes to wireless RF devices and transmitters, there is no disclosure of possible adverse effects, there is no recording and tracking of adverse events associated with exposure, there is no pilot study limiting the number of people exposed so as to be able to limit the extent of any discovered health risks. This is unconscionable if not outright illegal and requires immediate assessment by all federal health agencies.

Respectfully submitted by,

Heidi M. Lumpkin
384 Tamarack Lane
Sagle, ID 83860
August 24, 2013

Radiation Sickness - Disability; Kaitlin Losansky Comments, Sep.1, 2013

September 1, 2013

Office of the Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Kaitlin Losansky
P.O. Box 1461
Snoqualmie, WA 98065

Dear Federal Communications Commission,

I am writing to ask you more restrictive standards for RFR exposure. There is something seriously lacking in the current standards, if my mom can be so negatively affected by cell phones, Wi-Fi, cordless phones and cell towers, etc.

I have witnessed my mom suffer in pain from Wi-Fi, cordless phones and other wireless devices as we try to sit in a restaurant, go to a hospital, try to shop, or try to visit our friends. I have seen her rebound from a general loss of strength, energy and vitality during RFR exposures to content and enthusiastic after time away from such exposures.

I have lost my home, my neighborhood, my community, and many fun activities we were involved in because we had to move away from smart meters and other people's wireless habits. My mom is a different person when she is not being poisoned by wireless radiation.

I don't understand why the FCC didn't require testing of these products before they went to market.

I don't understand why the FCC has taken steps to reclassify the pinna, or outer ear, as an extremity, which creates less strict exposure standards and less protection of public health.

I am just one of the people who will be supporting your generation in your elderly years – I would think you'd want me and my age group to be healthy and capable of leading the next generation. You are missing the big picture, by only thinking of how this will affect us now, when you should also think of how this will affect us later. Have you heard of the Iroquois Confederacy? They are one of the oldest democratic organizations in the world. Every time they made a decision, they kept in mind how it would affect the seventh generation, two to three hundred years down the road. Entertaining the interests of industry instead of protecting public health is not working for the future, just profiting in the present.

Please decrease maximum permissible exposure limits and take the advice of the 29 international experts who authored the 2012 BioInitiative Report and concluded "that exposure to EMF and radiofrequency radiation (RFR) produces biological effects and adverse health effects at levels significantly below existing public exposure standards..."

Sincerely,

Kaitlin Losansky

Radiation Sickness - Disability; Monise Sheehan Testimonial, Nov. 12, 2012

Declaration of Monise Sheehan

I, Monise E. Sheehan, have personal knowledge of all facts set forth in this declaration and am competent to testify thereto if called upon to testify in a court of law. I hereby declare:

1. My name is Monise Sheehan, and I reside at 33 Bayview Rd, Castroville, CA 95012
2. I am a utility customer of Pacific Gas & Electric.

I am a staff research associate with UC Davis and, didn't have an opinion "one way or the other" about smart meters when one was installed on my home in Aptos CA July of 2011.

My attitude changed, however, **over the following weeks as I began experiencing new and unwelcome sensations:**

Tingling in my arms and legs

Higher than usual body temperature

Later on—a ringing in my ears when I was in certain rooms

Trips to the doctor turned up nothing. It wasn't until I googled my symptoms that I learned that others were having similar experiences and suspected smart meters to be the cause. I visited an ear, nose and throat specialist about the ringing to "make sure, there was no anomaly inside my ears making this happen," but everything checked out fine.

All I knew was that my special little world—my calm, safe home, where the only thing you would hear is a leaf falling, was now ringing so loud that I could not sleep in my own bedroom anymore. I want to mention that my house was a geodesic dome.

In my first call to PG&E, in early September of 2011, I was told that I was to be placed on an "emergency 48 hour call list" for people with health complaints. I wasn't contacted within 48 hours promised, and so began a lengthy back-and-forth with the corporation. After seeing a video from the **Sept. 22 CPUC meeting in which President Michael Peevey authorized the removal of a Smart Meter on the home of Chandu Vyas**, a man who spoke during the public comment period, I called PG&E one last time to request that mine also be removed because it was hurting me. I was denied.

I follow the rules of society and am a law-abiding citizen. It was a very scary thing for me to go against PG&E. **I was afraid and filled with fear**, but I had to take care of my own health. Frustrated at the company's refusal and desperate to feel better I decided to act. I purchased an analog meter and, on Sept. 24 2011, enlisted the help of a technician to swap the two out.

I photographed both the smart meter and the analog meters before and after installation in order to document their power usage.

I then called PG&E to tell them what I had done. I told them so they could come get their meter and calibrate my meter and get a reading.

I was not trying to steal electricity. This development embroiled me in another round of conversations with PG&E, in which the company told me that I had committed a federal offense, broken a state law, might be fined, may have my service discontinued, and should expect a visit from an investigator some time that day. They also told me one of their technicians would be out to reinstall a Smart Meter. In fear I waited up all night for the truck(s) and some federal agent to come pounding on my door. Also more than likely I would have my power turned off

They never came.

According to local attorney Dana Scruggs, a customer who violates this rule would not be breaking the law. "The clause ... does not indicate they 'broke' any laws, nor are they subject to any other civil or criminal liability," he says. I also ran this by another attorney and it was confirmed that I had broken no law. PG&E's words to me were pure intimidation.

This is the United States of America and I live in a democracy. I can tell you that it did not feel like it. This is a corporation intimidating citizens. This is not supposed to happen here but yet it was.

None of the threats I reported receiving from PG&E became reality except for the power shut off just before Christmas. Instead, after stonewalling the company's many attempts to reach me, PG&E offered—and I accepted—to have my store-bought analog replaced with one of their **"digital non-Smart Meters."** I was assured over and over again that the digital meter was just like an analog but it had a digital readout. They lied.

The problem with these **"Digital Meters"** is that although the radio transmission has been disabled, the meter is still sending and receiving RF signals. I had a professional come out and take readings for me and yes indeed the thing was still running. As a matter of fact even if you turn off all of your power via the main switch, the meter still runs. It still sends out signals and still keeps using electricity wattage that, you, the consumer is paying for.

I did not bother to call PG&E this time and once again with the help of a licensed electrician exchanged the digital meter for another analog meter. I also locked it up so they the utility company could not come and replace it when I was not at home. This was and apparently still is a normal practice for them. Please note that all of the "PG&E employees who were used during our rollout were not, let me repeat not, licensed electricians but people from the hiring hall who were given a short training on how to remove and replace a meter. So when the power company says things like you must have and experienced utility employee do this work it is yet another lie.

Digital meters work with an "on-off switching mode function" This is proving to be even more detrimental to the body than radio waves. The electricity is sent out in erratic pulses. Digital means signals sent in pulses rather than waves. There is no set rhythm, so our brains and bodies cannot process this information correctly. Our bodies are constantly being stressed. Electrical current powers our whole body including our brains. When you add these other irregular and erratic pulses of 10,000- 192000 a day to those that the brain produces for normal functioning, many things can become affected and bad things can start happening to us. Simple brain functions get compromised. **These pulses can break DNA bonds within the cell. This alone is scary. This is what we call cancer.**

It is said that there is a percentage of people I included in that group, who will **feel the effects immediately**. Others may not see symptoms for months. Many will not realize that part of what is going on with their health is RF related.

Some people seem to have a make up that shields them from their brain functions being compromised. There are fewer and fewer of those people as the onslaught continues.

In my case these pulses were affecting me so much that my body was not able to feed the mitochondria within my cells. **I was essentially dying at an accelerated speed.**

1. **Sleep** was affected. The body repairs itself when we are in sleep mode.
2. My **cognitive thinking** was compromised.
3. My **memory** has been affected.
4. My **ears** are ringing most of the time.
5. If I am near RF/EMFs, my **heart** will beat erratically
6. My **eyes** water and are puffy for hours after exposure
7. My **voice** gets very scratchy. I know instantly when I am near a power source.
8. The texture of my **skin** has changed.
9. Trying to just feel "ok" eludes me most of the time.

Yes, I am affected by this stuff. Cell towers, cell phones, wireless routers, laptops, and smart meters/digital meters. It is all the same stuff.

The one thing that **I can say with certainty** is that **before smart meters/digital meters**, I was able use a cell phone without trouble. I had a wireless router. I liked all that cool new technology too. After this massive multimillion rollout out around the country, all of that has changed.

Europe has been using this technology for over ten years in some places and **they now see what has happened to the people who have been exposed**. They are rolling back and moving to hardwiring these meters. No more wi fi in classrooms either. Much research and studies have been done. They have been done in Europe. In this day and age why anyone would try to say that those studies were not valid because the U.S did not do the studies are not very intelligent. The United States does not hold the corner market on research anymore.

Studies in Sweden have showed huge clusters of brain tumors on people who have been using a cell phone for an extended time.

The power companies hit one utility after another using the exact same sales pitch. Making the same false claims. They read the script they are given. They have been successful with some and unsuccessful with others. All of the claims about the customer saving money are absolutely false. The only ones that stand to profit are the power companies themselves and the makers of these meters. Most, if not all of the components for these smart/digital meters are made in China and then assembled in Mexico. Did you know that?

Our own **Leon Panetta** has said publicly that **smart meters/digital meters pose a huge threat to our national security**. The potential for malware to be imbedded without any one knowing is credible. The fact that the whole system works by way of a grid of at least 5000 units that can be disabled by the click of a scripted keystroke should be enough for you to reject this.

You at SMUD have the power to act without having to wait for the CPUC to give their blessing or in our case PG&E, to finally to give in and **let us have our analogs back.**

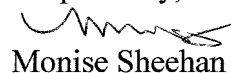
When the president of PG&E goes on television and publicly admits that they have lost their way, you need to pay attention, Please!

SMUD you are a public utility, the peoples' utility.

Palo Alto is also a public utility and they told the power company thanks but no thanks. They did not have to look very far to find all of the evidence they needed to make that informed decision.

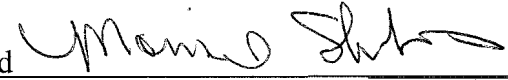
Please do your due diligence here. Taking the power company's word for it is naïve and very irresponsible on your part.

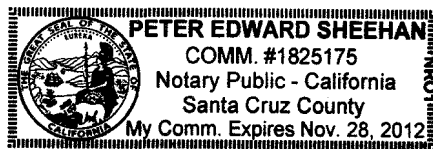
Respectfully,


Monise Sheehan

I declare under penalty of perjury under the laws of the State of California facts set forth above are true and correct to the best of my knowledge.

This declaration was executed this 11th of November 2012 at Castroville, California

signed  Date 11/12/2012



Radiation Sickness - Disability; Ruthie Glavinich Comments, Mar. 1, 2013

I live with ElectroHypersensitivitySyndrome (EHS) thanks to overexposure to a cell tower located extremely close to our family owned business which I reported in 2009 to the FCC and you did not listen. The comment I received from the FCC, "have you been to a doctor?" Thanks for your sympathy and duping our family. I have a son with Autistic-Like Behaviors that has social and learning disabilities in school. At the time of our exposure and to this date, my husband and I experience symptoms such as: Extreme pressure in the head, headaches, migraines, mood swings, anger, dizziness, pain behind the eye sockets, tinnitus, nausea, neck and back pain, joint pains, rapid heart beat, insomnia and fatigue when exposed to radio frequency radiation emitted by wireless technology such as: cell towers, SmartMeters, WI-FI and surveillance cameras. It is the FCC's duty to protect our children and people, NOT the corporate wireless telecommunications industry or utility companies! Your guidelines need to be re-evaluated for today's technology, we have come a long way from dinosaur analog technology since the enactment of the 1996 Telecommunication Act. Your research should be conducted by independent science groups, not science funded by the telecommunications industry! SAR based on a mannequin is not science. Stop protecting them or there will become an epidemic of a completely ill society unable to function. Our bodies were not created for this kind of RF/Microwave exposure!

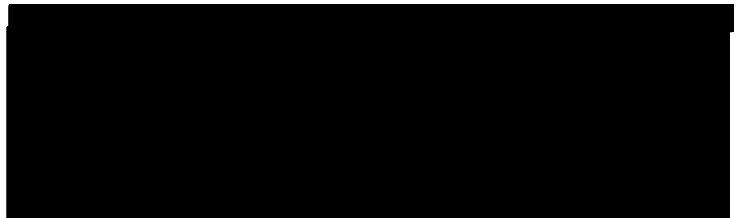
Radiation Sickness; Testimonials of Nine People; Jan., 28, 2013

Q. Do you wish to add anything here not included in your statement in Exhibit A?

A.

Q. Do you want to submit the statements in Exhibit A to the Maine Public Utility Commission for consideration in its pending proceeding to investigate the safety of smart meters?

A. Yes. I submit the attached sworn testimony in support of complainants Ed Friedman, et al in their case before the Maine PUC as evidence that smart meters are not safe.



STATE OF MICHIGAN
WASHTENAW, ss

January 28, 2013

Personally appeared the above-named [REDACTED] and stated under oath that the foregoing Affidavit made by her is true and based upon her own personal knowledge, information or belief, and so far as upon information and belief, she believes the information to be true. Before me,

Kathleen A Mulligan
Notary Public

Kathleen A Mulligan
Name Typed or Printed

My Commission Expires: 11/28/14



KATHLEEN A. MULLIGAN
Notary Public, Washtenaw County, Michigan
Acting in Washtenaw County, Michigan
My Commission Expires September 21, 2014
Lay Witness Testimony
Redacted 83 of 293

EXHIBIT A

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application and request)
of the DETROIT EDISON COMPANY seeking)
approval and authority to implement its) Case No U-17053
proposed Advanced Metering Infrastructure)
opt out program.)

QUALIFICATIONS AND DIRECT TESTIMONY OF

[REDACTED]

QUALIFICATIONS OF [REDACTED]

1 Q. Do you swear that the testimony you are about to give is the truth, the whole truth,
2 and nothing but the truth?

3 A. I do.

4 Q. Please state your name, address and contact information.

5 A. My name is [REDACTED]
6 [REDACTED]

7 Q. On whose behalf are you testifying?

8 A. That of Intervenors Linda Kurtz and Cynthia Edwards.

9 Q. What are your qualifications to testify?

10 A. I take my electric service from Detroit Edison. I have been affected by the smart meter
11 installation both in terms of my health and in terms of earning an income.

DIRECT TESTIMONY OF [REDACTED]

1 Q. What is the purpose of your testimony?

2 A. To provide information that establishes that there is a need for a no-fee opt-out and the
3 need for an analog meter option. To provide information that may help the Commission in
4 determining whether smart and digital meters create certain kinds of economic, medical,
5 social, or other harm or hardship, as outlined in Intervenor Linda Kurtz's Petition for
6 Intervention, to some or all persons such that Detroit Edison and the Commission must not
7 require those who are or who are likely to be so harmed to have a smart or digital meter
8 placed on their home or place of business or to be otherwise deprived of rights and liberties,
9 as outlined in Intervenor Kurtz's Petition for Intervention, by the deployment of the
10 advanced metering infrastructure, smart meters, or digital meters, and, in the alternative,
11 that such persons must be able to avoid such harm to their person and property without
12 being charged a fee.

13 Q. How long have you lived at your current residence?

14 A. I have lived in my home since 1981, for 31 years. I own my home.

15 Q. What do you do for a living?

16 A. I worked as a [REDACTED] for 18 years. For the past 13 years I have worked as a [REDACTED]

17 Q. When was a smart meter installed on your home?

18 A. July 18, 2012.

19 Q. Did you know it had been installed on your home?

20 A. No, I didn't. Later, when I couldn't sleep, I called DTE, and they told me the date it had been
21 installed.

22 Q. Something led you to call DTE. What was that?

23 A. Never in my life have I had a problem sleeping. "When my head hits the pillow," as the
24 saying goes, "I'm out like a light." But now I was lying awake for hours without falling
25 asleep, night after night. 12 am, 2 am, 4 am, I'm still awake! I wondered, "What's going on?"

26 I talked to a friend, telling him my dilemma, and he told me that the smart meters could
27 alter your sleep. "What are smart meters?" I asked. I had never heard of them.

28 Q. So prior to your conversation with your friend, you knew nothing about smart
29 meters?

30 A. No.

31 q. So you weren't anxious about smart meters and thus experiencing insomnia?

1 A. No. Like I said, I had never heard of them before. Like I said, my entire life, I have slept like a
2 rock—that is until a smart meters was installed on my home.

3 **Q. Prior to talking to your friend, did you know that a smart meter had been installed**
4 **on your home?**

5 A. No. I was never contacted or asked if this meter could go on my home. After I talked to my
6 friend, I went to look to see if a smart meter had been installed on my home. It had been. I
7 contacted DTE immediately, this was some time in August, asking them to take this meter
8 off my house. They said I was the first person to call and complain about the smart meter
9 causing any problems. The representative said she was sure I must have had problems
10 sleeping before.

11 **Q. What did DTE tell you they would do?**

12 A. They said they could not take the meter off my house and at this time there was no opt-out
13 program but they were working on it.

14 **Q. What did you do next?**

15 A. I continued to call and call and call them and said, "Please take this meter off my house. I
16 can't sleep, I can't work." I called at 3 a.m. one night when I couldn't sleep. Like the first
17 representative, this representative said he'd never heard of such a problem. I finally set up
18 a tent in my backyard, after weeks of not sleeping. I slept really well, not quite as well as
19 when I was sleeping in my own bed in my own home before I had a smart meter, but no one
20 sleeps quite as well in a tent as in their own bed. It has been very stormy and windy this
21 last month, and about three weeks ago the tent blew over on me at about 3 a.m. It covered
22 me so thoroughly, and was so heavy, I thought I was going to suffocate!

23 **Q. Did you continue to sleep in the tent?**

24 A. I moved back into my house because every time I set the tent up, it blew back down the
25 winds were so high. My nights are now sleepless.

26 **Q. Do you experience any other health problems or symptoms from the smart meter?**

27 A. At night, I lie there feeling a vibration going through all of my body and my ears ring loudly.
28 [REDACTED] is really hard work, and I wonder some days how I am going to make it. The
29 sleep deprivation makes me extremely fatigued and worn out. Day after day after day of
30 exhaustion has made me feel suicidal at times. I just don't know how I can keep going on! I
31 have felt such a fatigue and depression. This is totally affecting my personality and thus my
32 friendships and other relationships. This is affecting my productivity at work – I am so
33 tired! My memory has been affected – I will be talking to a person and totally go blank and
34 can't finish my sentence. I have pain in my body I haven't had before—I feel an achiness
35 around my joints. This has been progressive. In the last two days, I have begun feeling an
36 achiness around the vertebrae in my back.

1 I feel a physical agitation in my body. I work outside all day. I come home, and within a
2 couple hours, I feel so agitated in my body. When I was able to sleep in my tent, I would look
3 so forward to going outside. People would say, "[REDACTED] you can't sleep out there, it's so cold."
4 And I would be so happy because I didn't feel that agitation outside and I could sleep.

5 I experience ringing in my ears whenever I am in any building with a smart meter. At one
6 client's house, the ringing in my ears was so loud I couldn't believe it. Buildings with
7 fluorescent lights are particularly bad.

8 **Q. How do you know it is smart meters that are affecting your health?**

9 A. I know because I never had a problem before smart meters.

10 **Q. Did you have any health problems prior to the installation of smart meters? If so,**
11 **what were they and when did they begin?**

12 A. Hypothyroidism. This was diagnosed about twelve years ago.

13 **Q. Does this cause fatigue?**

14 A. No, because I take medication for it.

15 **Q. So could this be what is causing you to have trouble sleeping at night?**

16 A. No, because I never have had trouble sleeping, that is, not until the smart meters were
17 installed. The fatigue was caused by the hypothyroidism, not by lack of sleep.

18 **Q. Any other health conditions?**

19 A. I feel like some asthma, though it's never been diagnosed.

20 **Q. Have you had sensitivity to any other electrical or wireless devices other than smart**
21 **meters?**

22 A. Yes. I am extremely affected by my cell phone. I feel agitated when I am using it, and I have
23 ever since I got it five years ago. I have started to use the speaker phone rather than hold
24 the phone against my ear. That helps slightly.

25 **Q. You said you have contemplated suicide after experiencing day after day of unending**
26 **fatigue since smart meter installation. Have you every contemplated suicide prior to**
27 **this?**

28 A. Never. Definitely never. But after I was so exhausted after not sleeping for days, I was
29 going to work one day, completely exhausted. I thought, "How can anyone go on day after
30 day like this without sleeping?" I thought, "Now I know why people think about suicide.
31 People that don't sleep, how do they keep on going?"

32 **Q. Have the health effects you experience as a result of smart meters affected your**
33 **ability to work and earn a living? If the answer is yes, describe how.**

1 A. I have been late for work because I have needed to try to rest—I guess I can't really call it
2 sleep anymore. I've never actually missed work, but I have been late for work. My
3 productivity is less. I've never been late for work in the past.

4 **Q. Have the health effects you experience as a result of smart meters affected your**
5 **ability to interact socially with others? If the answer is yes, describe how.**

6 A. Yes. When you are so tired, you don't even want to socialize with anyone. I feel angry, so
7 fatigued. All I think about is sleeping.

8 It's negatively affected my most intimate relationship in the last few months. It's had a huge
9 impact. The lack of sleep has made me so fatigued and angry, and it's hard to love someone
10 when you feel that way.

11 **Q. Have the health effects you experience as a result of smart meters affected your**
12 **ability to access public services, such as the public library, government offices? If the**
13 **answer is yes, describe how.**

14 A. Yes, because going into any building with a smart meter, I feel agitated.

15 **Q. Have the health effects you experience as a result of smart meters affected your**
16 **ability to freely assemble outside? If the answer is yes, describe how.**

17 A. No.

18 **Q. Have the health effects you experience as a result of smart meters affected your**
19 **ability to access religious or spiritual services? If the answer is yes, describe how.**

20 A. My spiritual life is outside, so no, it hasn't.

21 **Q. Have the health effects you experience as a result of smart meters affected your**
22 **ability to freely access health services? If the answer is yes, describe how.**

23 A. No, but I haven't been to any health-care facility since smart meters were installed, except
24 for the UM, where they don't have smart meters. Given how I react in buildings with smart
25 meters, I expect that it will affect me once I do need to see a health-care professional who is
26 in a building with smart meters.

27 **Q. Have the health effects you experience as a result of smart meters affected your**
28 **ability to perform one or more major life activities not already mentioned? If the**
29 **answer is yes, describe what activities and how the effects have affected your**
30 **performance of these activities.**

31 A. Interacting with others. Reading, because I get so agitated in my body and I can't
32 concentrated. I used to love to read, and I kept wondering, "Why can't I read now." Inability
33 to think, concentrate, comprehend. Sleeping, obviously. Performing manual tasks because
34 being in the house is so hard—how can I clean my house, wash my dishes, etc when I just
35 need to get out of my house.

1 As far as physical labor goes, I am more tired, it's harder to be productive.

2 Breathing—it has been harder for me to breathe in the house. I have asthma.

3 My memory is a lot worse. I have to write everything down now. My son keeps telling me,
4 “Mom, I told you that yesterday.”

5 **Q. Has your ability to live in your home been affected by the installation of smart**
6 **meters?**

7 **A.** Totally. I think that has been covered.

8 **Q. Is there anything else you wish to say about how smart meters have affected your**
9 **health and/or your life?**

10 **A.** Yes. My sixteen-year-old son, [REDACTED] sleeps a couple feet away from the meter. He has
11 juvenile diabetes. We just went to see his endocrinologist, Dr. [REDACTED] at the University of
12 Michigan Medical Center's Hospital on November 1. He's been going there for 2 years, since
13 his diagnosis when he was 14. There is this number called A1c. There's this blood test they
14 give the kids called A1C. It's a blood test that shows what his blood sugars combined were
15 for the last three months. His numbers were always below 7. His last appointment, they
16 were 6.8. [Exhibit 1.] The doctors have always been so happy because they want these
17 numbers to always be below 7.

18 I have [REDACTED] on a very clean, organic diet and he exercises playing hockey and lacrosse, all of
19 which help keep his blood sugars at a good level. On November 1, his A1c was taken, and the
20 level had shot up to 9.5. [Exhibit 1.] The doctor if anything had changed as far as his diet
21 and exercise. Nothing had. It's very clear that his blood sugar levels have shot up because of
22 the smart meters. Nothing else in his life has changed, and the levels have been consistent
23 for two years. There's no other explanation. When levels are above 7, it wreaks havoc on the
24 body. Many things can happen to the body, to his limbs, to his organ.

25 Dr. [REDACTED] has sent a letter to DTE describing her findings and stating that the smart meter
26 needs to be taken off the home.

27 From a *Prevention Magazine* article that I read, I have learned that the EMFs emitted by
28 smart meters can elevate blood sugar levels. They discussed work by Dr. Magda Havas of
29 Trent University, whose research has shown that voltage transients can elevate blood sugar
30 levels of diabetics. [Attached as Exhibit 2. Pertinent area is on page 6 of Exhibit 2,
31 highlighted in yellow.]

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application and request)

of the DETROIT EDISON COMPANY seeking)

approval and authority to implement its)

Case No U-17053

proposed Advanced Metering Infrastructure)

opt out program.)

EXHIBITS OF



EXHIBIT 1

001/006

Printed 11/8/12 4:03 PM

11/1/2012 8:00 AM Office Visit
MRN: 040245480

Description: 16 year old male
Provider: [REDACTED]
Department: Mh Ped Endocrinology

Diagnoses	Reason for Visit
Diabetes mellitus - Primary 250.00 Long-term insulin use V58.67	Diabetes Mellitus

Vitals - Last Recorded

BP	Pulse	Temp(Src)	Ht	Wt	BMI
114/61	58	97.7 °F (36.5 °C) (Oral)	1.816 m (5' 11.5")	68.8 kg (151 lb 10.8 oz)	20.86 kg/m2

Progress Notes

MD 11/5/2012 8:38 AM Signed

[REDACTED] is a 16 year 10 month old boy who is seen in Pediatric Diabetes Clinic for follow-up of Type I diabetes. He was diagnosed with Type I diabetes in May 2010. He is accompanied by his mother.

MEDICATIONS:

Lantus 22 units at bedtime
Novolog: Insulin/Carb ratio 1:13 for breakfast, lunch, and dinner
correction 1:100>150 at breakfast and lunch

Other relevant medications: None

INTERVAL HISTORY: No interim illness. Over the summer they attended an intro to pump class. He said he was interested in the pump but never completed the workbook. They did not bring blood sugar log to review. He reports checking 3-4 times/day. He states that he has low BG in the 70's after hockey practice in the afternoon. He treats these with power bars, and we discussed the need for him to have a fast acting sugar with him. He will not have any periods where he is not in a sport from this point. He has is not driving often. Mother is very concerned that a smart meter placed on their home by the utility company over the summer has caused a worsening of his BS.

History of severe hypoglycemia: No.

History of significant # of (non-severe) hypoglycemic episodes: non-reported 2-3 per week.

Occasional 50-60 after hockey practice. He feels shaky and has a granola bar.

History of DKA: None since diagnosis

History of DM related hospital admission: None since diagnosis

REVIEW OF SYSTEMS:

10 systems reviewed: Yes reviewed 10/14 see pediatric diabetes outpatient note imaged document.

SOCIAL HISTORY: Parents are divorced. Both brothers are away at college. He is in 11th grade. Active in hockey and LaCrosse.

PHYSICAL EXAMINATION:

BP 114/61 Pulse 58 Temp(Src) 97.7 °F (36.5 °C) (Oral) Ht 181.6 m (82%) Wt 68.8 kg (64%)
BMI 20.86 kg/m2 (44%)

In no acute distress.

External ears and canals are normal.

Nasopharynx is patent.

Printed 11/8/2012 4:08:51 PM

Page 1 of 6

002/008

Printed 11/8/12 4:03 PM

Oropharynx has moist mucous membranes and no lesions.
Neck is supple; no lymphadenopathy or masses. Mildly enlarged thyroid with normal texture.
Heart has a regular rate and rhythm, without significant murmur.
Lungs are clear to auscultation; no wheezes or rhonchi.
Abdomen has positive bowel sounds. It is soft and nontender, without organomegaly or masses.
Extremities are warm and dry, without abnormalities.
Normal tone, bulk, and strength.
Acanthosis nigricans : No
Lipodystrophy at injection sites : Yes, left abdomen
Feet Examination - examined : no

A1c: Previous 6.8% Today 9.6%

ASSESSMENT AND PLAN:

Diagnosis - Type 1 diabetes mellitus - worsening control.

1. Insulin Dose Adjustments: Since his A1c has worsened and he reports normal BS, we will increase his lantus dose to 24 units. We discussed with him the importance of diligent diabetes care and his A1c goal. Mother was concerned that the worsening was due to the smart meter. We also discussed that he may be finishing his honeymoon period. We instructed them to fax in BS in 2 weeks so that further dose adjustments can be made. He had annual labs drawn today.

Lantus 24 units at bedtime
Novolog: Insulin/Carb ratio 1:13 for breakfast, lunch, and dinner
correction 1:100>150 at breakfast and lunch

2. Follow-up in 3 months.

Blood Sugar Monitoring Goals
At least 4-6 times daily, including before hockey

HbA1C Goal
<7.5%

Nutritional Goals
Well-balanced, healthy meals

Behavioral / Educational Goals
Record glucose on logs once weekly

Counseled parents/patient on:
Importance of controlling BG
ADA goal of A1c<7.5%
Risks of NOT monitoring BG
Importance of recording/reviewing BG
Sx, tx, prevention and risk of hyperglycemia
Sx, tx, prevention and risk of hypoglycemia
Carb Counting
Site rotation
Parents involvement in diabetes care

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Page 2 of 6

EXHIBIT 2

Prevention Magazine Article

<http://www.prevention.com/health/healthy-living/electromagnetic-fields-and-your-health>

Is Dirty Electricity Making You Sick?**Why Are Electromagnetic Fields Dangerous?**

Several developments have highlighted the growing hazards of EMF pollution—and the crucial need to address them.

A report that cited more than 2,000 studies found that chronic exposure to even low-level radiation (like that from cell phones) can cause a variety of cancers, impair immunity, and contribute to Alzheimer's disease and dementia, heart disease, and many other ailments. One likely way: EMFs open the blood-brain barrier, causing blood vessels to leak fluid into the brain and damage neurons.

What's more, a less-well known kind of EMF, known as "dirty" or transient electricity, may play an even more damaging role. Transients are largely by-products of modern energy-efficient electronics and appliances—from computers, refrigerators, and plasma TVs to compact fluorescent lightbulbs and dimmer switches—which tamp down the electricity they use. This manipulation of current creates a wildly fluctuating and potentially dangerous electromagnetic field that essentially charges up the electrons in every cell of your body. Some research suggests that by overlapping the body's signaling mechanisms, transients may interfere with the secretion of insulin, drown out the call and response of the immune system, and cause other physical havoc.

For more information on the dangers of electromagnetic fields, [read our full investigative report here](#). (below)

Is Dirty Electricity Making You Sick?

Too many electromagnetic fields surrounding us—from cell phones, wifi, and commonplace modern technology—may be seriously harming our health. Here's how to minimize your exposure.

Read more: <http://www.prevention.com/health/healthy-living/electromagnetic-fields-and-your-health#ixzz22iCT1oED>

The California Cluster

IN 1990, the city of La Quinta, CA, proudly opened the doors of its sparkling new middle school. Gayle Cohen, then a sixth-grade teacher, recalls the sense of excitement everyone felt: "We had been

in temporary facilities for 2 years, and the change was exhilarating." But the glow soon dimmed. One teacher developed vague symptoms-- weakness, dizziness--and didn't return after the Christmas break. A couple of years later, another developed cancer and died; the teacher who took over his classroom was later diagnosed with throat cancer. More instructors continued to fall ill, and then, in 2003, on her 50th birthday, Cohen received her own bad news: breast cancer. "That's when I sat down with another teacher, and we remarked on all the cancers we'd seen," she says. "We immediately thought of a dozen colleagues who had either gotten sick or passed away." By 2005, 16 staffers among the 137 who'd worked at the new school had been diagnosed with 18 cancers, a ratio nearly 3 times the expected number. Nor were the children spared: About a dozen cancers have been detected so far among former students. A couple of them have died.

Prior to undergoing her first chemotherapy treatment, Cohen approached the school principal, who eventually went to district officials for an investigation. A local newspaper article about the possible disease cluster caught the attention of Sam Milham, MD, a widely traveled epidemiologist who has investigated hundreds of environmental and occupational illnesses and published dozens of peer-reviewed papers on his findings. For the past 30 years, he has trained much of his focus on the potential hazards of electromagnetic fields (EMFs)--the radiation that surrounds all electrical appliances and devices, power lines, and home wiring and is emitted by communications devices, including cell phones and radio, TV, and WiFi transmitters. His work has led him, along with an increasingly alarmed army of international scientists, to a controversial conclusion: The "electrosmog" that first began developing with the rollout of the electrical grid a century ago and now envelops every inhabitant of Earth is responsible for many of the diseases that impair--or kill--us.

Milham was especially interested in measuring the ambient levels of a particular kind of EMF, a relatively new suspected carcinogen known as high-frequency voltage transients, or "dirty electricity." Transients are largely by-products of modern energy-efficient electronics and appliances--from computers, refrigerators, and plasma TVs to compact fluorescent lightbulbs and dimmer switches--which tamp down the electricity they use. This manipulation of current creates a wildly fluctuating and potentially dangerous electromagnetic field that not only radiates into the immediate environment but also can back up along home or office wiring all the way to the utility, infecting every energy customer in between. With Cohen's help, Milham entered the school after hours one day to take readings. Astonishingly, in some classrooms he found the surges of transient pollution exceeded his meter's ability to gauge them. His preliminary findings prompted the teachers to file a complaint with the Occupational Safety and Health Administration, which in turn ordered a full investigation by the California Department of Health Care Services.

The final analysis, reported by Milham and his colleague, L. Lloyd Morgan, in 2008 in the *American Journal of Industrial Medicine*: Cumulative exposure to transients in the school increased the likelihood a teacher would develop cancer by 64%. A single year of working in the building raised risk by 21%. The teachers' chances of developing melanoma, thyroid cancer, and uterine cancer

were particularly high, as great as 13 times the average. Although not included in the tabulations, the risks for young students were probably even greater.

"In the decades-long debate about whether EMFs are harmful," says Milham, "it looks like transients could be the smoking gun."

The Case against EMFs

Cancer and Electricity--could a disease whose cause has long eluded scientists be linked to perhaps the greatest practical discovery of the modern era? For 50 years, researchers who have tried to tie one to the other have been routinely dismissed by a variety of skeptics, from congressional investigators to powerful interest groups--most prominently electric utilities, cell phone manufacturers, and WiFi providers, which have repeatedly cited their own data showing the linkage to be "weak and inconsistent." Recently, however, in addition to the stunning new investigations into dirty electricity (which we'll return to), several developments have highlighted the growing hazards of EMF pollution--and the crucial need to address them.

The Evidence showing harm is overwhelming.

In 2007, the Bioinitiative Working Group, an international collaboration of prestigious scientists and public health policy experts from the United States, Sweden, Denmark, Austria, and China, released a 650-page report citing more than 2,000 studies (many very recent) that detail the toxic effects of EMFs from all sources. Chronic exposure to even low-level radiation (like that from cell phones), the scientists concluded, can cause a variety of cancers, impair immunity, and contribute to Alzheimer's disease and dementia, heart disease, and many other ailments. "We now have a critical mass of evidence, and it gets stronger every day," says David Carpenter, MD, director of the Institute for Health and the Environment at the University at Albany and coauthor of the public-health chapters of the Bioinitiative report.

Fears about the hazards of cell phones seem justified.

"Every single study of brain tumors that looks at 10 or more years of use shows an increased risk of brain cancer," says Cindy Sage, MA, coeditor of the report. A recent study from Sweden is particularly frightening, suggesting that if you started using a cell phone as a teen, you have a 5 times greater risk of brain cancer than those who started as an adult. The risk rises even more for people who use the phone on only one side of the head. While defenders of cell phone safety claim no scientist can explain why EMFs may be harmful in humans, **a body of reliable and consistent animal research shows that electromagnetic fields, equal to those generated by mobile phones, open the blood-brain barrier, causing blood vessels to leak fluid into the brain and damage neurons.** Ironically, that research (by renowned Swedish neuro-oncologist Leif G. Salford, MD, PhD) began with the goal of finding a way to deliver chemotherapy to brain tumors.

Other countries are revising exposure standards.

Members of the European Union, which has led the way on EMF investigations, are moving quickly to protect their citizens, particularly children and pregnant women. In the past 2 years alone, France, Germany, and England have dismantled wireless networks in schools and public libraries, and other countries are pressing to follow suit. Israel has banned the placement of cellular antennae on residences, and Russian officials have advised against cell phone use for children under 18.

Electrical hypersensitivity (EHS) is becoming more widespread.

Symptoms of EHS, a recently identified condition, include fatigue, facial irritation (resembling rosacea), tinnitus, dizziness, and digestive disturbances, which occur after exposure to visual display units, mobile phones, WiFi equipment, and commonplace appliances. Experts say up to 3% of all people are clinically hypersensitive, as many as one-third of us to a lesser degree.

Electrical pollution is increasing dramatically.

"For the first time in our evolutionary history, we have generated an entire secondary, virtual, densely complex environment--an electromagnetic soup--that essentially overlaps the human nervous system," says Michael Persinger, PhD, a neuroscientist at Laurentian University who has studied the effects of EMFs on cancer cells. And it appears that, more than a century after Thomas Edison switched on his first lightbulb, the health consequences of that continual overlap are just now beginning to be documented.

A History of Harmful Effects

Until Edison's harnessing of electricity, humans' only sources of EMF exposure were the earth's static magnetic field (which causes a compass needle to point north) and cosmic rays from the sun and outer space; over our long evolution, we've adapted to solar EMFs by developing protective pigment. "But we have no protection against other EMF frequencies," says Andrew Marino, PhD, JD, a pioneer in bioelectromagnetics who has done extensive EMF research and a professor in the department of orthopedic surgery at the Louisiana State Health Sciences Center. "How quickly can we adapt our biology to these new exposures? It's the most important environmental health question--and problem--of the 21st century."

Research into the hazards of EMFs has been extensive, controversial--and, at least at the outset, animated by political intrigue. A sampling:

- The Russians first noticed during World War II that radar operators (radar operates using radio frequency waves) often came down with symptoms we now attribute to electrical hypersensitivity syndrome. In the 1960s, during the height of the Cold War, they secretly bombarded the US embassy in Moscow with microwave radiation (a higher-frequency RF used to transmit wireless signals), sickening American employees. Radio wave sickness--also called microwave sickness-- is now a commonly accepted diagnosis.

- When television (also radio wave) was introduced in Australia in 1956, researchers there documented a rapid increase in cancers among people who lived near transmission towers.
- In the 1970s, Nancy Wertheimer, PhD, a Denver epidemiologist (since deceased), detected a spike in childhood leukemia (a rare disease) among kids who lived near electric power lines, prompting a rash of studies that arrived at similar conclusions.
- In the 1980s, investigators concluded that office workers with high exposure to EMFs from electronics had higher incidences of melanoma--a disease most often associated with sun exposure-- than outdoor workers.
- In 1998, researchers with the National Cancer Institute reported that childhood leukemia risks were "significantly elevated" in children whose mothers used electric blankets during pregnancy and in children who used hair dryers, video machines in arcades, and video games connected to TVs.
- Over the past few years, investigators have examined cancer clusters on Cape Cod, which has a huge US Air Force radar array called PAVE PAWS, and Nantucket, home to a powerful Loran- Cantenna. Counties in both areas have the highest incidences of all cancers in the entire state of Massachusetts.
- More recently, the new findings on transients--particularly those crawling along utility wiring--are causing some scientists to rethink that part of the EMF debate pertaining to the hazards of power lines. Could they have been focusing on the wrong part of the EMF spectrum?

Transients: The Post- Modern Carcinogen

Some earlier, notable--albeit aborted--research suggests this may be the case. In 1988, Hydro-Quebec, a Canadian electric utility, contracted researchers from McGill University to study the health effects of power line EMFs on its employees. Gilles Theriault, MD, DrPH, who led the research and was chair of the department of occupational health at the university, decided to expand his focus to include high-frequency transients and found, even after controlling for smoking, that workers exposed to them had up to a 15-fold risk of developing lung cancer. After the results were published in the *American Journal of Epidemiology*, the utility decided to put an end to the study.

That research commenced at a time when energy-efficient devices--the major generators of transients--were beginning to saturate North American homes and clutter up power lines. [Smart meters generate transients 24/7 because the 240-volt current from the power line must be stepped down to a fluctuating (pulsing) 3-10 volt current to run the meter.] A telltale sign of an energy-efficient device is the ballast, or transformer, that you see near the end of a power cord on a laptop computer, printer, or cell phone charger (although not all devices have them). When plugged in, it's warm to the touch, an indication that it's tamping down current and throwing off transient pollution. Two of the worst creators of transient radiation: light dimmer switches and

compact fluorescent lightbulbs (CFLs). Transients are created when current is repeatedly interrupted. A CFL, for instance, saves energy by turning itself on and off repeatedly, as many as 100,000 times per second.

So how does the human body respond to this pulsing radiation? "Think of a magnet," explains Dave Stetzer, an electrical engineer and power supply expert in Blair, WI. "Opposite charges attract, and like charges repel. When a transient is going positive, the negatively charged electrons in your body move toward that positive charge. When the transient flips to negative, the body's electrons are pushed back. Remember, these positive-negative shifts are occurring many thousands of times per second, so the electrons in your body are oscillating to that tune. Your body becomes charged up because you're basically coupled to the transient's electric field."

Keep in mind that all the cells in your body, whether islets in the pancreas awaiting a signal to manufacture insulin or white blood cells speeding to the site of an injury, use electricity--or "electron change"--to communicate with each other. By overlapping the body's signaling mechanisms, could transients interfere with the secretion of insulin, drown out the call-and-response of the immune system, and cause other physical havoc?

Some preliminary research implies the answer is yes. Over the past 3 years, Magda Havas, PhD, a researcher in the department of environmental and resource studies at Trent University in Ontario, has published several studies that suggest exposure to transients may elevate blood sugar levels among people with diabetes and prediabetes and that people with multiple sclerosis improve their balance and have fewer tremors after just a few days in a transient-free environment. Her work also shows that after schools installed filters to clean up transients, two-thirds of teachers reported improvement in symptoms that had been plaguing them, including headache, dry eye, facial flushing, asthma, skin irritation, and depression.

Transients are particularly insidious because they accumulate and strengthen, their frequency reaching into the dangerous RF range. Because they travel along home and utility wiring, your neighbor's energy choices will affect the electrical pollution in your house. In other words, a CFL illuminating a porch down the block can send nasty transients into your bedroom.

Something else is sending transients into your home: the earth. From your high school science texts, you know that electricity must travel along a complete circuit, always returning to its source (the utility) along a neutral wire. In the early 1990s, says Stetzer, as transients began overloading utility wiring, public service commissions in many states told utilities to drive neutral rods into the ground on every existing pole and every new one they erected. "Today, more than 70% of all current going out on the wires returns to substations via the earth," says Stetzer--encountering along the way all sorts of subterranean conductors, such as water, sewer, and natural-gas pipes, that ferry even more electrical pollution into your home.

A Pragmatic Proposal

Of course, these small studies--from Milham, Hydro-Quebec, and Havas-- hardly constitute a blanket indictment of transients. "We're still early in this part of the EMF story," says Carpenter. Does that mean as evidence of their harm accumulates, officials will raise a red flag? Not likely, if past EMF debates are any indication. Power companies have successfully beaten back attempts to modify exposure standards, and **the cell phone industry, which has funded at least 87% of the research on the subject**, has effectively resisted regulation. One good reason has had to do with latency--how long it takes to develop a particular cancer, often 25 years or more. Cell phones have been around only about that long.

But does that mean we avoid any discussion of their *possible* dangers? Again, if the past is a guide, the answer appears to be "probably." American scientists worried about the hazards of smoking, the DES (diethylstilbestrol) pill (given to pregnant women, it caused birth defects), asbestos, PCBs (polychlorinated biphenyls)--the list is lengthy--but officially warned about exposure only after they could say with absolute certainty that these things were harmful. As for protecting ourselves from toxic radiation, we have a lax--and laughable--history. In the 1920s, just a few years after medical imaging devices were invented, physicians were known to entertain their guests by x-raying them at garden parties. In the 1930s, scientists often kept radium in open trays on their desks. Shoe stores used x-ray machines in the 1940s to properly fit children's feet, and radioactive wristwatches with glowing hour hands were popular in the 1950s.

All of which means that, absent prudent safety standards from both public officials and manufacturers (adding a protective filter would add 5 cents to the cost of making a CFL and \$5 to the cost of a laptop), you'll have to protect yourself from EMFs. Here's a reasonable proposition: Practice what is known in Europe as the precautionary principle, which is pretty much what it sounds like. Don't expose yourself unnecessarily to EMF hazards. Don't buy a home next to a WiFi tower. Get a corded telephone instead of a cordless one. Don't let your teenager sleep with a cell phone under her pillow. Don't use your laptop computer in your lap. Treat your EMF-emitting devices with the same cautious respect you do other invaluable modern devices, like your car, which is also dangerous--and can kill. You don't drive in an unnecessarily risky fashion--at high speed or while talking on a cell phone (right?).

The sad truth is that until we have more epidemiologic evidence--whether from disease clusters like the ones at La Quinta and on Cape Cod or from long-term analyses of the health of the world's 4-billion-and-growing cell phone users--we won't know definitively whether electrical pollution is harming us. And even then, we are unlikely to know why or how. "In this country, our research dollars are spent on finding ways to treat disease, not on what causes it--which is to say, how we can prevent it," says Marino. "And that's a tragedy."

But that's also another story.

The Opposing View: "No need for regulation"

In 1993, the National Institutes of health and Department of Energy began an extensive review of all studies on the possible health effects of electromagnetic fields. six years later they completed

their project, called the Electric and Magnetic Fields research and public Information Dissemination (EMF RAPID) program, and reported their findings to Congress: scientific evidence of human health risk from EMF exposure is "weak," they concluded.

While acknowledging a link between both childhood and adult leukemias and EMFs, the researchers' laboratory studies with cells and animals failed to identify a mechanism-- that is, how EMFs might cause cancer. (read the EMF RAPID report at prevention.com/links)

To longtime EMF investigators such as David Carpenter, MD, the NIH dismissal of EMF hazards was patently absurd then and even more so now, given the spate of new findings. "We don't know the mechanism for most carcinogens," he says. "There's this idea that anything that causes cancer must directly damage DNA, which is nonsense because most carcinogens don't directly damage DNA, and physicists are adamant that the energy in everyday EMF exposure is so low, it couldn't possibly do anything to biological systems. It's like saying the Earth is flat because you can't see over the edge."

In fact, biological impacts of EMFs--therapeutic ones--are well known. Low-level frequencies are commonly used to promote healing of wounds and bone fractures, and experimental studies show positive effects of pulsed EMFs in treating pain and depression. Recently, Michael Persinger, PhD, a cognitive neuroscientist at Laurentian University, found that pulsed magnetic fields also halted the growth of melanoma cells in mice.

In a neat twist of logic, many scientists believe that the more we document beneficial effects of EMFs, the better we'll understand their hazards. "If EMF at low intensities can heal," says environmental consultant Cindy sage, "then when we are constantly and randomly exposed to it from multiple sources, it may also be harmful, like any medicine used indiscriminately."

What was wrong with the La Quinta School?

According to epidemiologist Sam Milham, MD, the middle school was rife with the usual suspects-- fluorescent lighting, electronic devices--whose toxic effects were exacerbated by an electrical supply overloaded with high-voltage transients.

Substandard wiring in the new school also undoubtedly played a role; officials have since added protective shielding to the electrical room. Milham also measured transient pollution along the transmission lines that fed power to the school. "I found it all the way from the substation to the school--more than a mile," Milham says. "There are three other buildings along the route that also serve children. I've reported it to the FCC and the utility, but they ignore the problem."

How electrical pollution harms

Here, a partial spectrum of the electromagnetic fields that surround us, from strong (waves of extremely high frequency and short length) to weak (waves of extremely low frequency and long length). In each category, you'll find sources that generate the EMF, and associated health risks from overexposure.

X-Ray [medical imaging devices] Used to diagnose illness	RISK Damages tissue and organs by breaking bonds
VISIBLE LIGHT [SUN] The only visible EMF	RISK Ultraviolet light can burn skin and cause cancer
MICROWAVE (a higher frequency RF) [CELL AND CORDLESS PHONES AND TOWERS] Can heat tissues and penetrate blood-brain barrier	RISK Increased risk of brain cancer, dementia, and heart disease
RADIO(RF) [RADIO AND TELEVISION SIGNALS] Can disrupt body's cellular interactions	RISK "Radio sickness" and electrical hypersensitivity syndrome
EXTREMELY LOW FREQUENCY (ELF) [POWER LINES] Can cause weak electric currents to flow through the body	RISK Exposure is associated with childhood leukemia

Read more: <http://www.prevention.com/health/healthy-living/electromagnetic-fields-and-your-health#ixzz22iUSKV5z>

**PRE-FILED DIRECT TESTIMONY
OF [REDACTED]
MPUC Docket No. 2011-00262**

1 **Q. Please state your name, address and contact information.**

2 A. [REDACTED]

3

4 **Q. Was a smart meter installed at your residence?**

5 A. Yes.

6 **Q. Did you offer to provide testimony in another proceeding about your**
7 **experience with smart meters?**

8 A. Yes. I have had serious health problems related to smart meters and I offered
9 testimony in a Michigan Public Service Commission hearing (Case No U-17053)
10 reviewing a proposed opt-out program for Detroit Edison Company's Advanced
11 Metering Infrastructure. Unfortunately, the Commission would not accept any
12 testimony about health and safety issues.

13 **Q. Is the attached document marked as Exhibit A a true and accurate copy of**
14 **the testimony that you offered to provide to the Michigan Public Service**
15 **Commission?**

16 A. Yes it is.

17 **Q. Are the statements that you made in the attached Exhibit A still true and**
18 **accurate?**

19 A. Yes.

1 Q. Do you wish to add anything here not included in your statement in Exhibit

2 A?

3 A. I had my home tested for EMF levels with a TriField meter, model 100XE. (I
4 don't remember the exact date).

5 My home tested high EMF in many locations. Therefore, I hired an
6 electrician who is knowledgeable about RF and EMF to make some changes in my
7 electrical wiring in order to, hopefully, lessen the EMF levels.

8 Of course, I don't know what the EMF levels were prior to the meter
9 change, but I had never experienced symptoms before, so something major
10 changed when the meter was installed.

11 My home was built in 1962. I had my home inspected before purchasing it
12 in 1987, and I have always hired reputable people for repairs or additions. It is a
13 nice home, but it was not built with modern technology in mind. If the electrician
14 found instances where EMF levels were raised in my home, I suspect there are
15 many other homes where dirty electricity from these meters has elevated EMF
16 levels.

17 The electrician spent a little over 2 days upgrading the wiring in my home.
18 He said that more can be done, if needed: there are additional interventions that he
19 could do which would involve working with a plumber. He suggested starting
20 with the wiring. So, on Dec. 21-23, he made changes in the electrical wiring in my
21 home.

22 I was away from my home immediately following the work by the
23 electrician. I left for a trip on Dec. 23, 2012 and I just returned on Jan. 4, 2013.

1 ALL of my symptoms completely went away on my trip, in fact, within the first
2 week of my trip.

3 On January 14, 2013, he did additional testing. Some of the high EMF
4 readings had gone down. There are still some areas that test high, however.

5 It is still too soon to know how much, if at all, the recent changes in wiring
6 have helped in alleviating my symptoms. What I noticed immediately upon
7 returning home after being gone for three weeks, was that the ringing in my ears,
8 though still an issue, was not as constant. So far, this intervention, like all the
9 others, has helped at least to some degree. As I said, it is still too soon to know.

10 It remains to be seen if my symptoms resurface after I have been home for a
11 longer period of time.

12 I am planning to follow through with additional interventions to, hopefully,
13 bring my home back to the level of comfort that I enjoyed prior to the meter
14 installations.

15 I am grateful that I have had the resources to be able to spend a great deal
16 of time away from my home since the meters were installed; and the resources to
17 remediate at least some of the adverse effects of the smart meter installations. I'm
18 sure there are others who are not as fortunate, who are forced to just live with the
19 problem.

20 **Q. Do you want to submit the statements in Exhibit A to the Maine Public Utility**
21 **Commission for consideration in its pending proceeding to investigate the**
22 **safety of smart meters?**

1 A. Yes. I submit the attached testimony in support of complainants Ed Friedman, et

2 al in their case before the Maine PUC as evidence that smart meters are not safe.



STATE OF MICHIGAN
WASHTENAW, ss

January 22, 2013

Personally appeared the above-named [REDACTED] and stated under oath that the foregoing Affidavit made by her is true and based upon her own personal knowledge, information or belief, and so far as upon information and belief, she believes the information to be true. Before me,

Andrea Taddie
Notary Public

Andrea Taddie
Name Typed or Printed

My Commission Expires:
ANDREA TADDIE
Notary Public, Washtenaw County, MI
My Commission Expires Dec. 9, 2018

3
4

EXHIBIT A

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application and request)
of the DETROIT EDISON COMPANY seeking)
approval and authority to implement its)
proposed Advanced Metering Infrastructure)
opt out program.)

Case No U-17053

QUALIFICATIONS AND DIRECT TESTIMONY OF

QUALIFICATIONS OF [REDACTED]

1
2 **Q. Do you swear that the testimony you are about to give is the truth, the whole truth, and**
3 **nothing but the truth?**

4 A. I do.

5
6 **Q. Please state your name, address and contact information.**

7 [REDACTED]
8 [REDACTED]

9 **Q. On whose behalf are you testifying?**

10 A. That of Intervenors Linda Kurtz and Cynthia Edwards.

11 **Q. What are your qualifications to testify?**

12 A. I take my electric service from Detroit Edison. My health has been extremely affected by the
13 smart meter that was first on my home and the nontransmitting Itron digital meter that is now on
14 my home.
15

DIRECT TESTIMONY OF [REDACTED]

Q. What is the purpose of your testimony?

A. To provide information that establishes that there is a need for a no-fee opt-out and the need for an analog meter option. To provide information that may help the Commission in determining that smart and digital meters create certain kinds of economic, medical, social, or other harm or hardship, as outlined in Intervenor Linda Kurtz's Petition for Intervention, to some or all persons such that Detroit Edison and the Commission must not require those who are or who are likely to be so harmed to have a smart or digital meter placed on their home or place of business or to be otherwise deprived of rights and liberties, as outlined in Intervenor Kurtz's Petition for Intervention, by the deployment of the advanced metering infrastructure, smart meters, or digital meters, and, in the alternative, that such persons must be able to avoid such harm to their person and property without being charged a fee.

Q. How long have you lived at your current residence, and do you rent or own?

A. 25 years

Are you retired?

A. I am a retired.

Q. Before a smart meter was installed on your home, did you have problems with wireless technology?

A. No. Prior to the installation of my smart meter, I did not have any problems with wireless technology. I did not experience symptoms when using a cell phone; I did not experience symptoms when I used wireless internet or when I entered a facility that offered wireless internet; and I did not experience symptoms from the wireless technology that was already in my home, which, at the time of the smart meter installation, included a wireless water meter, and a cordless phone.

Q. Prior to the installation of a smart meter on your home, were you affected by other electrical devices?

A. No, not that I was aware of.

Q. When was a smart meter installed on your home?

A. A wireless smart meter was installed on my home on the morning of Saturday, March 10, 2012, while I was not home.

Q. Did you know the meter was going to be installed?

A. Yes. A few weeks before the installation, I had received a notice from DTE that a new, upgraded, wireless meter would be installed on my home. When I got the notice, I called DTE indicating that I would rather not have the wireless meter. I was told that I had no choice. Although I would have preferred not to get it, I was not anticipating a problem with it either. It was a "preference" not to have it, as opposed to an aversion.

Q. You say you preferred not to get one, then tell us why you didn't want it.

1 A. As I said, it was just a preference. When I got my first cell phone, I read the manual, and it
2 indicated that, for safety reasons, I should hold the cell phone about an inch from my head when
3 using it. I believed the manufacturer's warnings which indicated there may be risks involved with
4 this technology. I have used, and still use, lots of wireless devices. It's not that I worry about their
5 effects and avoid them; it is more that I weigh the benefits, and I purchase the ones which I see as
6 highly beneficial, I choose not to use the ones that are not. The meter did not fall into the "highly
7 beneficial" category. I am concerned about the environment and I am already conscientious
8 regarding my energy usage at home. I keep my thermostat lower and wear warm clothing in the
9 winter, I turn down my heat at night and when I am gone, I don't often use air conditioning during
10 the summer, I have replaced older appliances for newer, more efficient ones, My TV is very small
11 and I rarely watch it, I turn off the lights I don't need. In weighing the proposed benefits a smart
12 meter, it didn't seem like something I needed. However, when I called DTE, I was told I didn't have a
13 choice. I didn't get upset or argue. I just accepted it. Had I had any idea what an impact it would
14 have on my life, though, I would have protested immediately
15

16 **Q. What happened when you returned home after the meter had been installed?**

17 A. I returned home a little after 1 p.m.. There was a note on my door indicating the new meter
18 had been installed. I didn't think much about it. Shortly after arriving at home, I went into my
19 kitchen to prepare lunch. There are no words that can adequately describe what happened next.
20 Here's my best effort:

21 As I stood at my kitchen sink (a stainless steel sink, opposite my refrigerator), I felt a very
22 uncomfortable vibration, like a low-level electric current, going through my body; there was a
23 buzzing sound in my head; and I experienced a jittery feeling in my body.
24

25 When I stepped away from the sink, the feeling lessened considerably, but was still noticeable,
26 especially whenever I was in close proximity to the back wall of my home.

27 My first thought was, "That must be the new meter. This will take some getting used to." At that
28 point, I wasn't upset and I didn't panic. I honestly thought that my body would just need some time
29 to adjust to it, and then everything would be okay.
30

31 Later, a friend who is a physics professor explained that my extreme reaction may have been
32 because radio waves were bouncing off the metal surfaces of the sink and/or the refrigerator. I
33 don't know what caused it; I just know it was weird and extremely uncomfortable.
34

35 **Q. So you weren't worried about the new meter?**

36 A. No. not yet. I wasn't worried prior to the installation, and when I first had the reaction, I
37 just thought it was something my body would adjust to. Looking back, of course, I think "How could
38 I have been so stupid? Why didn't I leave my house immediately?" At the time, though, as strong as
39 my initial reaction was, it didn't occur to me that exposure to a meter could cause problems, or
40 have prolonged consequences. I assumed I'd get used to it and the weird feeling and buzzing in my

1 head would go away. It was seeing my blood pressure suddenly shoot up, that suggested to me that
2 the meter was causing more than a "weird feeling." That's what triggered my concern.
3

4 **Q. Had you heard of smart meters prior to having one installed on your home?**

5 A. Yes and no. I was not aware of any controversy. I had seen an article that said energy
6 companies were installing new meters; that in some locations, people were being forced to accept
7 the meters whether they wanted them or not; and that it wasn't right. I tend to be more accepting
8 of things, and because I considered the views of this person to be a little extreme, I hadn't taken the
9 article seriously. I hadn't given it much thought, that is, until my personal experience with smart
10 meters.

11 **Q. What happened next, the day the meter was installed?**

12 A. As the day progressed, I developed a dull headache and I had a hard time focusing and
13 concentrating. I also became hoarse. At first, I didn't make a connection between these symptoms
14 and the meter. I did later, though, when these symptoms persisted, and when they developed at
15 home, but went away after being away from home for awhile.
16

17 That first day, in addition to the headache and lack of focus, by early evening, my blood pressure
18 had gone up significantly. High blood pressure had not been an issue for me. I had had a blood
19 pressure monitor, and for several years I had checked it occasionally. There had never been cause
20 for concern.

21 **Q. Why had you made the decision several years ago to check your blood pressure from time
22 to time?**

23 A. I care about my health. Checking it occasionally was a precautionary measure.
24

25 **Why are you so sure that the smart meter influenced your blood pressure readings?**

26 A. Quite by coincidence, I had taken lots of readings right before smart meter installation. I do
27 Bikram Yoga almost every day. It is a 90 minute, rigorous series of 26 postures, that is done in a
28 room that is 105 degrees. It is a good workout. A fellow classmate had mentioned health benefits
29 she attributed to her yoga practice, lower blood pressure being one of them. As I said, I didn't have
30 blood pressure issues, but I wondered what effect, if any, my yoga practice had on mine. I decided
31 to do an experiment: My plan was to take my blood pressure three times a day: before class, after
32 class, and a reading later in the day. It was because of this experiment that I noticed the immediate
33 spike in my blood pressure.

34 **Q. What were your blood pressure readings prior to the smart meter installation?**

35 A. Exhibit A is my record of blood pressure readings from March 1 through March 12. Prior to
36 March 10 (installation day), the range in readings was 108/61 to 133/75. The average reading was
37 119/64.

38 **Q: What were your readings the day of the installation?**

39 A. Before yoga, my blood pressure was 118/72. After yoga, it was 125/72.

1 By 5:00 p.m. it was 150/90. Later, it was 157/86. I remember that right before going to bed that
2 night it was 165/90, but I did not record that reading.

3
4 It was the rise in my blood pressure that triggered my concern. It made me aware that my body was
5 being affected on more levels than I had realized. and that the weird feeling I was experiencing was
6 not something to take lightly

7
8 **Q. What did you do then?**

9 A. That night, rather than sleep in my own bed, I slept in the upstairs bedroom furthest away
10 from my smart meter. The next day, Sunday, March 11, I called a friend and I arranged to stay at
11 her house. I slept at her house from Sunday until I left for a three-week trip to Brazil on March 18.

12
13 **Q. The second night, you slept at a friend's house. Did you notice a difference when you**
14 **slept at your friend's house?**

15 A. I didn't experience the buzzing sound in my head at her house, and the next morning my
16 blood pressure was down again. I slept better than I had at my own house, and I didn't wake up
17 with a headache. The weird, jittery feeling I had when at home lessened, but was still noticeable.

18 **Q. Did you return to your home?**

19
20 A. Yes. I could not totally avoid being in my own home that week because, in addition to
21 packing for my trip, I had many things I had to take care of before leaving. However, I stayed away
22 from home as much as I could.

23
24 **What happened when you were in your own home that week?**

25 The weird, jittery feeling and difficulty focusing persisted; I had headaches. Also, my eyes hurt, I
26 became hoarse, and I developed a dry cough. For the first time in my life, I started on blood
27 pressure medicine.

28
29 **Q. Did you call DTE?**

30 A. Yes. Monday, March 12, the first business day after my meter was installed, I called DTE
31 from home. I was told there was no way to opt out of a smart meter. I explained that the meter was
32 making me sick and that I couldn't stay in my house. I said I wanted to be transferred to someone
33 who could help me. The person I talked to said she could not transfer me to a supervisor, but that
34 she would arrange for someone to call me back. I indicated again that it was very uncomfortable for
35 me to be in my house, but that I would wait there for the call. I said it was an emergency, and that I
36 needed to talk to someone as soon as possible. No one called back. I called again that day or the
37 next, and got no response.

38
39 How were you feeling inside your home waiting for the call? The jittery feeling, the difficulty
40 concentrating, and the buzzing in my head were worse. I was also upset that I was getting such a

1 run-around from DTE. I knew I was leaving the country in a few days. I had hoped that I'd be able
2 to come back to a home with a normal, comfortable environment.

3
4 **Q. Did DTE get back to you?**

5 A. Not right away. When I had not heard back by Wednesday, March 14, two days after being
6 told someone would call me back, I sent an email to DTE via their online complaint site.
7 I was eventually told I was being referred to Elaine Curtis. I talked to Elaine on Friday, March 16.

8
9 **Q. What did she tell you?**

10 She said DTE would remove my meter if I could provide a letter from my doctor indicating my
11 smart meter was making me ill.

12
13 **Q. Had you seen a doctor?**

14 A. Yes. I had seen my doctor earlier in the week, on Wednesday, March 14. At that time, of
15 course, I had not yet talked with Elaine Curtis, so I did not know I would need a letter. Since it was
16 Friday by the time learned about the need for a doctor's letter; and I was scheduled to leave for
17 Brazil early on Sunday, I was unable to talk to her before I left. I called her office on Friday
18 afternoon, and when I didn't reach her, I left a message.

19
20 I had contacted my doctor immediately; I had been concerned about all of my symptoms, but
21 especially the high blood pressure readings. I wanted to get in to see someone before leaving on my
22 trip. My appointment was on Wednesday, March 14. Following the appointment, I started taking a
23 beta blocker. She said it should lower my blood pressure without making it go too low when I was
24 away from smart meters. She was right, it did. It also helped relieve the persistent jittery feeling I
25 was having. I continued to sleep at my friend's and spend as little time at home as I could.

26
27 **You were gone for three weeks. How did you feel in Brazil?**

28 A. I was fine in Brazil. I felt great and I slept very well. The headaches, the buzzing in my head,
29 and the weird jittery feeling all went away and did not come back until I returned home.

30
31 **Did your doctor write the letter?**

32 A. Yes. In spite of the fact that communicating from Brazil proved to be a challenge because
33 phone lines and access to email were not always available or consistently working, my doctor did
34 send the letter to DTE. Six days prior to my returning home, I received an email from Elaine Curtis
35 indicating that she had received the letter from my doctor, and that the meter would be removed.
36 Dr. Kyle Morgan faxed her letter directly to DTE; DTE has the letter. I do not have a copy.

37
38
39 **Q. Did DTE follow your doctor's instructions?**

1 Not exactly. In addition to indicating the meter was making me ill, Dr. Morgan had specified an
2 analog meter. DTE replaced my smart meter with a different digital meter, not an analog meter.

3
4 Elaine Curtis said that DTE no longer had a distributor for analog meters. From Brazil, I sent an
5 email to DTE via the DTE complaint link.

6
7 The many typographical errors exist because, after losing power in the middle of writing my letter
8 several times (and therefore, losing what I had written), I finally sent this one, errors and all.

9
10 DTE ignored both my request for an analog meter and my doctor's letter specifying the need for an
11 analog meter. If DTE had wanted to install an analog meter, it would have been very easy to do so.
12 Hundreds, even thousands of used analog meters, in good working condition, were available.

13
14 **Q. Was the smart meter removed?**

15 A. Yes, but it took awhile. Since I had received the email from Elaine Curtis on April 4th
16 indicating that my meter would be replaced, and since I wasn't coming home until April 10th, I had
17 hoped that my smart meter would be gone when I got home. As soon as I arrived home, I walked to
18 the back of my house and checked. It hadn't been changed. I went back to stay at my friend's house,
19 and I called Elaine Curtis immediately. I don't remember if I actually talked to her that day, or if I
20 left a message and she called me back. When we talked, she thought that my smart meter had
21 already been removed. She said she would check into it and get back to me. She did. When she
22 called me back, she assured me it would be removed within a few days. It was. I don't remember
23 what day it actually came off.

24
25 **Q. Why did you request an analog meter?**

26 A. I had not had any problems with the old analog meters; and, although I didn't understand
27 the concept, I had heard the term "dirty electricity" associated with digital technology. At that
28 point, I wanted my old, familiar, healthful home back.

29
30 **Q. Did replacing the smart meter with a digital meter solve the health problems caused by
31 the smart meter?**

32 A. No. Although there was an improvement, the new digital meter did not solve the problem.
33 My symptoms were not as severe as they had been with the smart meter, but the weird jittery
34 feeling, the headaches, the buzzing sound in my head, the cough, memory problems, and the
35 difficulty focusing—all came back, just to a lesser degree.

36
37 **Q. What did you do?**

38 A. I contacted Elaine Curtis again. She said she didn't think the new meter could cause
39 problems, but that she would look into it. When she got back to me, she said that the new digital
40 could not be the problem because it did not send a signal.

1
2 In the meantime, I had talked to my friend who teaches physics. She said that because radio
3 frequencies travel long distances, my current problems might be caused by the RF from my
4 neighbors' meters. She recommended putting up heavy duty tinfoil, shiny side toward the meters,
5 where I suspected the RF might be entering my home. The tin foil would help shield my home,
6 since radio waves are reflected by metal and shiny surfaces. She also explained that there are
7 materials which diffuse radio frequencies.

8
9 Someone else said that the problem could be that the new digital meter was dumping dirty
10 electricity into my home, and that could be causing the problem.

11
12 **Q.What did you do then?**

13 A. I did what I could to solve the problem:

14 My first intervention was to line my garage and cover an outside wall with heavy duty tin foil to
15 shield my house from my neighbor's smart meter that was closest to my house, and where I felt it
16 the most. That helped....a little. The buzzing in my head was definitely still there, but not quite as
17 intense. The other symptoms remained.

18
19 Next, I lined the inside wall with tin foil that shares the wall with my meter, On top of that, I put 3
20 layers of absorbing material. After this intervention (and every other intervention), I waited awhile
21 to see what, if any, effect it had on how I felt or on my symptoms.

22
23 **Q.Did it help?**

24 A. Yes. Although better, it was still difficult to be in my home.

25 Now that I was spending more time at home, other symptoms surfaced. I wasn't sleeping through
26 the night: I'd wake up after three, four or five hours and not be able to go back to sleep. I'd feel
27 tense, jittery. I became hoarse, and I developed a cough. After being home for about three weeks, I
28 began to notice breathing problems: I would get out of breath just by going upstairs, and I had
29 difficulty breathing in my Bikram Yoga Class when doing postures that I had done with ease prior to
30 the smart meter installations. Also because of my yoga practice, I noticed a slight weakness on my
31 left side, that had not been there earlier. I was not able to do some of the strength building postures
32 I had done earlier.

33
34 The buzzing sound in my head would seem louder late at night and early in the morning, and I
35 would always wake up with a headache and a buzzing sound in my head.

36
37
38 **Q. Have the interventions you've done helped?**

39 A. There is no question that each intervention has helped. The problem is that my home has
40 never gone back to being what it was before: I still can't tolerate being in my home for more than a

1 week or two without experiencing very worrisome symptoms. At this point, I still have concerns
2 regarding smart meter effects on my blood pressure; and I have even bigger concerns about my
3 breathing and my lungs. If I am home for more than a week, I get out of breath when I go up stairs,
4 or when it is humid outside, and in I am no longer able to do some of the Bikram Yoga breathing
5 exercises and postures that I formerly did with ease. So far, all of these symptoms improve or go
6 away entirely when I leave my home for an extended period of time. I can't keep searching for
7 people and places to visit, and as more smart meters are installed, there will be fewer places I can
8 go for relief.

9
10 **Q.What else have you done to your home?**

11
12 A. Since my first attempt at using tin foil as a shield had helped . . . a little. . . I put up more.
13 I put tin foil on some inside walls. I also put tin foil in my bathroom, and on the back wall of the
14 bedroom that shares a wall with the meter.

15
16 I ordered material which is designed to absorb radio frequencies from lessemf.com/. I put three
17 layers of that material over the tin foil lining the back wall of the bedroom closest to my digital
18 meter. I also lined one of the walls in my bedroom with this material.
19 The RF absorbing material is black; not exactly my color I'd choose for my bedrooms.

20
21 Because I was still experiencing symptoms, a few months ago I ordered a Graham - Stetzer meter
22 and filters. I had read that the EMF levels can be measured and reduced by adding the filters.
23 Again, I did notice a difference with the filters in place, but not enough of a difference to keep me
24 symptom free.

25
26 Last month, I covered the back wall of my home with tin foil. It looks awful, but it made a
27 difference. Again, it helped, but it has not totally taken care of the problem. With each intervention,
28 I have felt a little calmer and the symptoms seem a little less intense, but none of the interventions
29 has totally solved my problems. As I mentioned, I am especially concerned about the breathing
30 difficulties I experience after being in my home for awhile. My blood pressure remains a concern as
31 well, although I have been getting normal readings without medication since my last intervention of
32 putting tin foil on the entire back side of my home.

33
34 I tried to spend as much time out of my home as possible. I left whenever I could. I went on trips
35 for one to three weeks. Some were planned; others were trips I took just to get away from my
36 house. Some symptoms, such as coughing, would go away as soon as I left my home. Others would
37 go away after being out of my home for a period of time. The amount of time required for it to go
38 away, depended on the symptom.

1 q. **How long can you stay in your house before noticing symptoms?**

2 A. The length of time before I experience symptoms depends on the symptom: If I return
3 home after being away for a week, I feel jittery and get a buzzing sound in my head immediately
4 upon entering my home. Within a few hours of being home, my eyes may hurt and become dry,
5 and I will become hoarse and develop a cough. Things like breathing problems and weakness on
6 my left side surface after being home for a week or more.

7
8 **Q. How are things now?**

9
10 A. I'm still spending as much time as possible away from home. From March 10, 2012, when
11 smart meters were installed in my neighborhood, to the present, the longest stretch of time I will
12 have been at home at one time is 30 days. Usually I am home only a few weeks before leaving
13 again. When I leave, I try to be away for one to three weeks.

14
15 So far, when I have spent time away from my home, my symptoms have all lessened or completely
16 gone away. When I return, they return.

17 Although being in my home is more tolerable than it was, even with all that I had done, my health
18 while in my home is still not back to what it had been prior to the smart meter installations

19
20 **Q. Did these interventions help? Is the digital meter no longer a problem?**

21 A. The interventions have helped, but all the problems remain. Whenever I return home, I
22 immediately experience a buzzing sound in my head, I become hoarse, and I get a dry cough. My
23 reactions are systemic: If I am at home for an extended period of time (a few weeks), additional
24 symptoms surface:

- 25 • weakness on my left side,
- 26 • joint pain,
- 27 • chest pain,
- 28 • difficulty focusing,
- 29 • hot flashes,
- 30 • breathing problems,
- 31 • shortness of breath,
- 32 • skin things (a rash above my right eye; rough hardened skin on my knuckles)
- 33 my eyes hurt and become dry,
- 34 all my teeth on my upper left jaw ache.

35
36 **Q. Did you make any more attempts at mitigation?**

37 A. I had not shielded the back of my house, both because I didn't think I could get tinfoil to
38 stay up, and because I knew it would look terrible. Finally, though, in October, out of desperation to
39 make my home more livable, I lined the entire back of my house with tinfoil. It looks awful. Again,
40 it has not totally taken care of the problem and it is only a temporary measure, but it helped. I still

haven't spent more than a few weeks in my home since this latest addition of tinfoil, but so far my sleep is more normal, the jittery feeling is not as intense, I don't feel as spacey. I am still getting hoarse, but less often, and my eyes hurt less. The weird, unsettled sensation in my body and the uncomfortable buzzing sound in my head persist.

With each intervention I have seen an improvement in my symptoms, but my house is in no way back to what it was before smart meters were installed in my neighborhood or the digital meter was installed on my home.. In addition, the tinfoil, besides being ugly, is a temporary solution that won't hold up over time.

Q. How do you know that it is the digital meter that is causing these health effects?

Although I know it seems unbelievable that a meter could trigger all these health effects, the meter was the only thing that has changed in my home environment. Furthermore, at least so far, all these problems go away when I leave my home: some go away immediately upon leaving; others go away in time. The symptoms return when I return.

Q. So when you go to someone else's house that has a smart meter, do you have problems?

A. Yes, to varying degrees. I always experience the buzzing sound and a jittery feeling. I may or may not experience other symptoms.

Q. When you go into public buildings that have smart meters, do you have problems?

A. Fortunately, most of the places I frequent do not have smart meters yet, so I can't answer this adequately. However, the spiritual center I attend has a smart meter and it is very uncomfortable to go there, so I have not been going.

Q. Have you been in any home besides your own that has a digital meter?

A. Yes. I have a friend who lives on Lake Tahoe. She remodeled her home several years ago, and has a digital meter. It is not a smart meter. I really don't know if it is the same as my meter. Her home is very deep, and the meter is way at the back. I couldn't sleep when I stayed in a back bedroom. I was able to sleep when I slept on her sofa, in the front of the house. The weather was great when I was there, and we spent most of our time outside hiking or by the water. I didn't have as much trouble there as I do at my own home. Her meter is older; I don't know if it is like mine.

Q. In your experience, will the nontransmitting digital meter (the kind now on your home and the kind DTE is proposing as the alternative to the smart meter) solve the health problems you experience with smart meters?

A. No.

Are the nontransmitting digital meters an acceptable alternative to the smart meter?

A. No

Please list all the health effects you experience from smart and nontransmitting digital meters, whether on your own home or elsewhere.

1 buzzing in my head
2 Elevated blood pressure
3 Muscle weakness, especially on my left side
4 headaches
5 cramps in legs and feet, extremely cold feet
6 eyes hurt, blurry vision
7 breathing problems, shortness of breath
8 joint pain, arthritis like symptoms
9 chest pain
10 concentration and memory problems
11 All of my teeth on one side aching
12

13 **Q. How do you know that it was the smart meter that first caused these health effects and not**
14 **something else?**

15 A. The symptoms surface when I spend time at home. They go away when I leave. They
16 surface when I am home again. I don't know if the symptoms are caused by my digital meter or my
17 neighbors' smart meters, but the installation of smart meters in my neighborhood is the only thing
18 that has changed in my environment.
19

20 **Q. Please list all the health effects you currently experience from the digital meter on your**
21 **home.**

22 A. Without the remediation or if I am around other people's smart meters, I sometimes
23 experience all of them, especially buzzing in my head.
24 With the mitigation, I still experience buzzing in my ears and a I am not as calm, I'm more agitated.
25 To date, I haven't stayed at home long enough to know if the other symptoms will surface again.
26

27 **Q. Please list all the health effects you in the past experienced from the digital meter on**
28 **your home but do not currently experience.**

29 A. Since putting tin foil on the back of my home, my blood pressure has been normal without
30 medication as long as I avoid smart meters.

31 **Q. Has anything else changed that would account for the subsiding of these effects?**

32 A. No
33

34 **Q. Did you experience any of the health problems you have enumerated prior to the**
35 **installation of smart meters?**

36 A. In 2007 I became ill after being exposed to a very toxic paint. The symptoms I did not
37 experience were the buzzing in my head and the elevated blood pressure. I did experience the other
38 symptoms. I recovered from that injury, and, until the smart meter was installed, I had not had
39 experienced any of these symptoms since my recovery in 2008.
40

A.

Q. Did you have health problems prior to the installation of smart meters? If so, what were they and when did they begin?

A. Prior to the installation of my smart meter, I was healthy, I exercised regularly, I ate a good diet, and I was on no medication..

Q. Did you do anything else to deal with this problem?

A. Like I said, I put up shielding materials and I started spending as much time as possible away from home. I took several trips. Although some had been planned, I have taken others for the sole purpose of getting away from my house. From March 10, 2012, when my smart meter was installed, to present, the longest stretch of time I will have been home at one stretch is 30 days. When I have spent time away from home, I have generally left for one to three weeks at a time. Each time I left, my symptoms went away within a day or two of being out of my house. I am still spending as much time away from my house as possible.

At this point, I have spent about \$2000 in materials and devices to tolerate living in my home, and I still have only a temporary fix that doesn't completely solve the problem. And, DTE is proposing additional charges to opt out.

DTE could probably use my home as an example of a smart meter success story: Their records should show that my energy usage has gone down since smart meters were installed in my neighborhood. It's a good example of how misleading it can be to just look at one source of data. My "real" energy usage is up—considerably. I consumed a lot more energy when you consider:

- transportation to doctors,
- products purchased to remediate my home
- medications I will need that I would otherwise not have needed
- driving and flying to destinations in order to stay away from home
- utilities consumed at visiting destinations

These are not just monetary expenses for me. They involve energy expenditures that far outweigh any energy savings DTE might claim.

My home no longer feels like "home." The number of places I can go and remain symptom-free is dwindling as Ann Arbor, the rest of Michigan, and the rest of the country is being installed. I would sell my house and move, but, at this point, I don't know where I could go.

Q. Please list all of the health problems you currently experience from the digital meter on your home?

A. Since my last mitigation, my most common symptoms are buzzing in my head, jitteriness, and breathing problems. The breathing problems are the ones that concern me the most.

Q. Do you experience problems when you enter homes or other buildings with smart meters?

Yes. I can tell immediately if there is a smart meter.

A. Have the health effects you experience as a result of smart meters affected your ability to interact socially with others? If the answer is yes, describe how.

1
2 A. Yes, of course. I am avoiding going places that have smart meters. It limits where I can go
3 and who I spend time with.

4 **Q. Have the health effects you experience as a result of smart meters affected your**
5 **ability to access public services, such as the public library, government offices? If the**
6 **answer is yes, describe how.**

7
8 A. Not yet.

9
10 **Q. Have the health effects you experience as a result of smart meters affected your**
11 **ability to access religious or spiritual services? If the answer is yes, describe how.**

12 A. I am involved with a meditation group. I have not been attending programs because I
13 experience symptoms if I am in the building for an extended period of time.

14
15 **Q. Have the health effects you experience as a result of smart meters affected your**
16 **ability to freely access health services? If the answer is yes, describe how.**

17 A. Not yet.

18
19 **Q. Have the health effects you experience as a result of smart meters affected your**
20 **ability to perform one or more major life activities not already mentioned? If the**
21 **answer is yes, describe what activities and how the effects have affected your**
22 **performance of these activities.**

23 A. So far I have been lucky. Most of the places I frequent do not have smart meters yet. I am
24 not looking forward to the day when smart meters are everywhere. It will be a nightmare for
25 me.

26
27 **Q. What do you feel is a reasonable accommodation to allow you to perform major**
28 **activities of daily living?**

29 A. A free opt out for everyone.

30 An analog meter option.

31 The Establishment of Smart Meter Free Zones and/or Facilities

32 The removal of smart meters everywhere.

**PRE-FILED DIRECT TESTIMONY
OF [REDACTED]
MPUC Docket No. 2011-00262**

Q. Please state your name and address.

A. [REDACTED]

Q. Was a smart meter installed at your residence?

A. Yes. PG&E gas & electric smart meters were installed in January, 2010. Attached as Exhibit A is a photograph of the electric smart meter (Landis + Gyr) that was installed.

Q. Was the meter removed and replaced with an analog meter at your request?

A. In January, 2012, I called and wrote to PG&E, asking them to immediately remove and replace the smart meters that were making me so sick. The PG&E spokesman I reached on the phone read rather woodenly from some kind of prewritten script, repeating over and over again how "smart meters are harmless." I explained to him that I have a degree in physics from [REDACTED], and am well aware that many kinds of radiation that we currently don't have health standards or studies for are far from harmless, and that I was certain I am experiencing extremely negative effects from smart meters installed on my home. Eventually, this so-called "help" line staffer informed me that there was nothing I could do—there was no way (yet) to opt out.

A few weeks later, I attended and spoke at a public hearing of the California Public Utility Commission (CPUC) in San Francisco. Dozens of people spoke about how they, too, have been adversely affected by smart meters, and I was shocked to hear reports of people who have become so electro hypersensitive that they are living in their cars. Beginning in February 2012, California residents in Pacific Gas & Electric's territories could opt out, for an initial price and an on-going monthly extra charge. On February 8, 2012, the gas and electric smart meters on my home were replaced with analog meters.

Q. Are you paying the opt-out fees?

A. Yes.

Q. Please describe the symptoms and adverse reactions you have experienced.

A. I noticed I was having daily nosebleeds and migraine headaches in October 2011. In November, I got a welcome break from home and spent ten days in a smart-meter-free area in Maui. . . where all my symptoms cleared up and I felt fine. That's when I started wondering, "What's making me so sick at home?" When I looked up my symptoms and saw they matched "microwave sickness" very well, I began to suspect smart meters as the culprit at that point, and found information about people resisting the PG&E smart meter rollout in the San Francisco bay area.

I took no notice when smart meters were first attached to my house in January 2010, without notification by my utility, and without my express permission. I didn't notice that one by one, smart meters were being installed on homes to either side of mine, and all around my neighborhood. I didn't notice that slowly but surely, my entire city was being outfitted with smart meters... until one day in October 2011 I wondered why I awoke each morning feeling dizzy, with nosebleeds, blurred vision, ringing in my ears, and migraine headaches. I wondered why when I was just sitting and watching TV or reading, my heart would often skip a beat, and bizarre muscle tremors would inexplicably spasm muscles on my face, arms, legs, and all over my body as if I'd just been given an invisible electric shock.

When I spent ten days away from my home and away from smart meters in Maui, I was amazed at how much better I felt. Gone were all the symptoms which I'd been thinking might have been signs of sudden aging. When I returned home, all the aforementioned symptoms returned, and I wondered what could be causing them. In January 2012, a couple of months later, I caught strep throat and felt sicker than I'd ever been in my life. Unable to feel comfortable anywhere in the house, due to feelings of pain in my head, eyes, ears, heart, and all over my body I slept on the living room floor, and turned my full attention to the question of what, exactly, was making me feel so terribly sick.

When I looked up my symptoms, I was amazed to find that many of them matched what used to be known as "microwave sickness." The first scientific report of microwave sickness appeared in 1974, with symptoms including: fatigue, headaches, palpitations, insomnia, skin symptoms, impotence and altered blood pressure. In cases of extreme exposure, symptoms also included: warming sensations, nausea, neuropathy (numbness, tingling, even paralysis in toes and fingers), stomach cramps, dyesthesia (a crushing sensation) and irritability. People in these studies had been accidentally exposed to microwave radiation, and no clear biological markers at that time were found, so these were not the kind of long-term studies that could establish safe exposure levels.

way that toxins are more easily carried into the brain.

With mounting questions from an increasingly concerned public wishing to know what is being installed in our homes, and interested in knowing what effects wireless smart meters have on ourselves, our children, our friends and our families, it's time we hold policy makers accountable for ensuring that a democratic, truly transparent decision-making process is taking place with respect to smart meters. The current "*Ready-Fire!-Aim*" approach to rolling-out wireless smart meters for the smart grid is negatively affecting human health and the environment.

Just as we recognized the proverbial "writing on the wall" with regard to technological wonders of their times: Agent Orange, Asbestos, CFCs, Diethylstilbestrol (DES), Dioxin, DDT, lead paint, and Thalidomide ... it's time for us to stop, wait for results from current scientific studies, do a thorough job gathering all relevant wireless smart meter information, engage in open dialogue all involved communities, and take a careful look at what role we really want wireless smart meters to have in our world today. If smart meters are harming increasing numbers of people, we potentially have a huge ticking time bomb on our hands... one that is leaving few habitable places left on Earth for growing numbers of individuals who have less and less tolerance for modern day electrosmog.

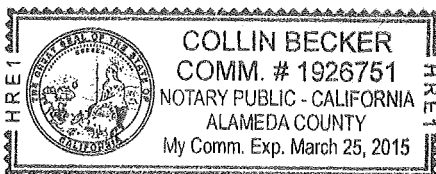
Dated this 9th day of January, 2013.



STATE OF CALIFORNIA
ALAMEDA, ss:

January 09, 2013

Personally appeared the above-named [REDACTED], and stated under oath that the foregoing Affidavit made by her is true and based upon her own personal knowledge, information or belief, and so far as upon information and belief, she believes the information to be true. Before me,



[Signature]
Notary Public/Attorney-at-Law

Collin Becker

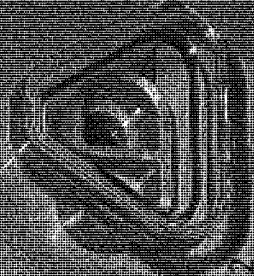
Name Typed or Printed

My Commission Expires: March 25, 2015

EXHIBIT
A

Silver Spring Networks
0013500200A29A7D
FCC ID: OWS-NIC507 IC: 5875A-NIC507

WET-THUNDER



FOCUS AXR-SD
FORM 25 CL200 240V 3W 60Hz TA=30 Kh 7.2
1006122296

AR 60 min
DS
PCBE
SmartMeter

104 670 748

Landis+Gyr

**PRE-FILED DIRECT TESTIMONY
OF [REDACTED]
MPUC Docket No. 2011-00262**

1 **Q. Please state your name, address and contact information.**

2 **A. My name is [REDACTED]**

3 **Q. Was a smart meter installed at your residence?**

4 **A. No.**

5 **Q. Did you offer to provide testimony in another proceeding about your experience with**
6 **smart meters?**

7 **A. Yes. I have had serious health problems related to smart meters and to all types of digital**
8 **meters (including smart meters and radio-off smart meters), and I offered testimony in a**
9 **Michigan Public Service Commission hearing (Case No U-17053) reviewing a proposed opt-**
10 **out program for Detroit Edison Company's Advanced Metering Infrastructure. I am an**
11 **Intervenor in that case. This testimony was offered to show that an analog meter needed to be**
12 **offered as a smart meter alternative. Unfortunately, the Commission struck this testimony,**
13 **holding that the type of meter to be used in Detroit Edison's opt-out plan was not open to**
14 **consideration and that, therefore, the health testimony was not relevant.**

15 **Q. Is the attached document marked as Exhibit A a true and accurate copy of the testimony**
16 **that you offered to provide to the Michigan Public Service Commission?**

17 **A. Yes, it is.**

18 **Q. Are the statements that you made in the attached Exhibit A still true and accurate?**

19 **A. Yes.**

20 **Q. Do you wish to add anything here not included in your statement in Exhibit A?**

21 **A. Yes. Things took a turn for the worse when I spent a five days at my parents' in Arizona over**
22 **Thanksgiving 2012. I have not slept well there for about a decade, but attributed it to the time**

1 change. In 2001, I slept really well. The next year, I couldn't sleep. I just tossed and turned
2 and finally, after a very long time, would sleep fitfully. I thought it must be the bed, and
3 moved to a different bed. It didn't help, but I stayed in that bed. Every year since, I have slept
4 poorly, and wondered about the bed and the time change and wondered why, even if I spent
5 two weeks there, I could not adjust and sleep.

6 The last two years, I basically haven't slept at all while there. Turns out, my parents
7 have a Turtle meter on their home. It doesn't transmit wirelessly, but over the power line. It's
8 digital. That's been on the home since 2002, which is about when I began experiencing a lot of
9 difficulty sleeping. In about October or early November of 2012, my father told me that they
10 had a digital meter on their home, and that he thought it had been put on about 4 years ago.
11 This was actually good news to me, because I thought, *Well, I don't feel anything at my*
12 *parents.* Everywhere there is a smart meter, I can feel the meter immediately when I enter the
13 building, so I had made the assumption that if I couldn't feel it, it wasn't a problem for me (or
14 at least not an immediate problem; from what I had read, I knew that down the road it could
15 potentially be a health problem). I was so glad, because I felt like if worst came to worst, I
16 could move back to Arizona and live in the electric cooperative district (Trico) that includes my
17 parents' home.

18 I spent five days there sleepless, again wondering why I could not sleep and wondering
19 why I couldn't adjust to the time change. The last day I was there, my father told me that the
20 meter on their home is a Turtle meter. That night, as I lay sleepless, it suddenly dawned on me:
21 I couldn't sleep because they had a digital meter! But then the question was, Why was it even
22 worse the last two years?

23 When I got back to Ann Arbor, I continued to talk to my parents about this. My mother
24 reminded me that two years ago, they got wireless. (My parents live in a very rural part of

1 Arizona, so a strong wireless antenna is required.) Clearly, the addition of the wireless to the
2 dirty electricity already generated by the Turtle meter made the problem even worse! The
3 bedroom where I sleep is about 15 feet from the wireless antenna (I didn't know there was an
4 antenna nor where it was located until I spoke with my mother this year about it). In 2011 (the
5 year the wireless was installed), I was there for 11 days, and exhausted the entire time. My
6 sleep was abominable, although I actually did sleep. This year, I essentially did not sleep. I lay
7 awake the entire night, tossing and turning, managing to grab a small amount of unrestful sleep
8 early in the morning. I would awake exhausted, and spent the entire vacation, just like the year
9 before, feeling terrible and barely able to function, barely being able to even take a walk,
10 unable to read or do much of anything. This year, I would get up, walk a tiny bit, lie down for
11 an hour, walk home, then lie down outside and try to sleep.

12 Interestingly, when I went to the Tucson International Airport to go home, I couldn't
13 even feel the wireless in the terminal.

14 The cumulative effect that exposure to EMFs creates became apparent to me on the
15 plane ride home, and afterward in Ann Arbor. I was in the plane, tired, just looking out the
16 window (we'd probably been flying for about an hour, maybe less) and suddenly I got a
17 headache. I attributed to the wireless on the plane (though I hadn't experienced that on the way
18 out). As I said, I was looking out the window, and we were passing over wind turbines. I
19 didn't think much of it. The headache passed within about 10 minutes. I was reading, about an
20 hour later, and suddenly got a headache again. I stopped reading in order to be with my
21 headache, looked out the window, and lo and behold, we were passing over another wind farm!
22 Unbelievable. The headache passed as we moved away from the farm. I didn't experience any
23 more headaches on the plane.

1 My ears rang intensely for 3 days after I got home, a high-pitched, intense ringing
2 unlike anything I'd experienced before. The ringing has never stopped, two months later,
3 though it's decreased in intensity. My body buzzed for three days, something I again had never
4 experienced.

5 Since my visit to my parents, my sensitivity has increased many-fold. I went to the
6 [REDACTED] Medical Library at the University of [REDACTED] on December 2, 2012. I felt a crush of
7 what I now call one of the various EMF feelings I experience. I had never felt that in that
8 library before. In fact, now that Ann Arbor was almost entirely installed with smart meters, I
9 considered the University of [REDACTED] one of the few possible places I might spend time, since
10 the university has its own power plant and presumably wouldn't be getting smart meters. I
11 spent 3.5 hours at the med library. I felt really good and wired and awake when I got home
12 around 8 p.m. That night, just like at my parents', I was unable to sleep the entire night. The
13 next day, I was in the room of my house reserved for my occupation when I felt an EMF
14 sensation. I couldn't understand it. The next day, I felt it again. I used a meter that measure
15 voltage transients, and found out that one outlet in the room, an outlet into which nothing has
16 ever been plugged, was emitting a high amount of transients. I checked it again the next day—
17 I wasn't feeling anything strange, and the meter showed a normal reading. Since then, I feel it
18 off and on.

19 The list could go on and on. On December 8, I felt something strange in my body, and
20 sensation I associate with smart meters, though brief, and that I'd felt recently a few times in
21 my kitchen. I noticed my neighbor using their garage door opener. It is only this neighbor's
22 garage door opener that bothers me. The fluorescent lights at the outdoor farmer's market
23 bothered me, yet another place I now cannot spend time in. On the 14th, I went to a friend's
24 house that does not have a smart meter, for a meeting. I could barely stand it. She has

1 fluorescents, halogens, dimmer switches. I asked her to turn some of them off. I still did not
2 feel good, and some time later asked her if we could move to another room where I knew she
3 had incandescent lights. I still did not feel good. Then she told me she had wireless. She's had
4 wireless for some time, but this was the first time I could feel it. Then, we left the house. I was
5 walking about five feet behind two people as one of them, about five feet from her car, when
6 suddenly, wham!, something passed through my falx cerebri (the connective tissue membrane
7 that separates the two lobes of the brain) and a millisecond later I heard her car door opener and
8 heard the beep of it. Even this I was now sensitive to. As I said, the list goes on, and the
9 passage of time has not improved things. Even my computer is problematic, and I feel strange
10 sensations coming from it. If I stay away from buildings with smart meters, fluorescent lights,
11 and my computer for a few days, I recover to some extent—that is, I can then interact, briefly,
12 with these devices without feeling anything. In my living room, I have had a dimmer switch for
13 15 years, which I have always left turned up all the way because otherwise it bothered me.
14 About a month ago, even that, turned up all the way, bothered me intensely, I kept the light off
15 in my living room, illuminating the room by means of the lights from other rooms. I was
16 finally able to put a regular switch on it a couple of days ago.

17 Everything I'd been told about increasing sensitivity is, sadly, coming true. I didn't
18 think it would. I was not going to be that person. I was going to conquer this sensitivity.

19 I believe that the switched mode power supplies are as much of a problem as the RF.
20 Non-analog meters may solve the problem for some people, who are only apparently sensitive
21 to wireless, but they will not solve the problem for many of us. My experience at my parents'
22 makes that clear, as does the sensitivity I have always had to fluorescents.

23 I also want to add that in the testimony I submitted in U-17053, I noted that I could no
24 longer go inside my bank for banking purposes and switched to using an ATM. Since that

1 testimony was written, the bank installed new ATMs that have all sorts of lights around them. I
2 can no longer use those ATMs. I have switched to using the night drop to deposit my checks,
3 which is not always a good option because the money will not be picked up until the following
4 day and because I cannot check my balance except over the phone.

5 Q. Do you want to submit the statements in Exhibit A to the Maine Public Utility
6 Commission for consideration in its pending proceeding to investigate the safety of smart
7 meters?

8 A. Yes. I submit the attached sworn testimony in support of complainants Ed Friedman, et al in
9 their case before the Maine PUC as evidence that smart meters are not safe.

STATE OF MICHIGAN
WASHTENAW, ss

January 28, 2013

Personally appeared the above-named [REDACTED], and stated under oath that the foregoing Affidavit made by her is true and based upon her own personal knowledge, information or belief, and so far as upon information and belief, she believes the information to be true. Before me,

Mary Geneva Rickard
Notary Public

MARY GENEVA RICKARD
Name Typed or Printed

My Commission Expires: FEB 12 2017

MARY GENEVA RICKARD
NOTARY PUBLIC, STATE OF MI
COUNTY OF LIVINGSTON
MY COMMISSION EXPIRES Feb 12, 2017
ACTING IN COUNTY OF WASHTENAW

EXHIBIT A

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application and request)
of the DETROIT EDISON COMPANY seeking)
approval and authority to implement its) Case No U-17053
proposed Advanced Metering Infrastructure)
opt out program.)

QUALIFICATIONS AND DIRECT TESTIMONY OF



QUALIFICATIONS OF [REDACTED]

1 Q. Do you swear that the testimony you are about to give is the truth, the whole truth,
2 and nothing but the truth?

3 A. I do.

4 Q. Please state your name, address and contact information.

5 A. My name is [REDACTED]

6 Q. On whose behalf are you testifying?

7 A. That of myself as Intervenor.

8 Q. What are your qualifications to testify?

9 A. I take my electric service from Detroit Edison. I have been affected by the smart meter
10 installation in multiple ways: my health, my ability to earn an income, my ability to perform
11 major activities of daily living as defined by the Americans with Disabilities Act, my ability
12 to attend religious and spiritual services, my ability to access government services and
13 health-care services. My health is negatively impacted by the nontransmitting digital meter
14 Detroit Edison proposes as an alternative to the smart meter.

1 Q. What is the purpose of your testimony?

2 A. To provide information that establishes that there is a need for a no-fee opt-out and the
3 need for an analog meter option. To provide information that may help the Commission in
4 determining that smart and digital meters create certain kinds of economic, medical, social, or other
5 harm or hardship, as outlined in Intervenor Linda Kurtz's Petition for Intervention, to some or all
6 persons such that Detroit Edison and the Commission must not require those who are or who are
7 likely to be so harmed to have a smart or digital meter placed on their home or place of business or
8 to be otherwise deprived of rights and liberties, as outlined in Intervenor Kurtz's Petition for
9 Intervention, by the deployment of the advanced metering infrastructure, smart meters, or digital
10 meters, and, in the alternative, that such persons must be able to avoid such harm to their person
11 and property without being charged a fee

12 Q. How long have you lived at your current residence?

13 A. I have lived in my home since 199. I own my home.

14 Q. What has your experience with smart meters been since your first encounter with
15 them?

16 A. It has been terrible. There is the health aspect and then there is the social aspect.

17 Q. Tell us about the health aspect. What health effects have the smart meters had on
18 you?

19 I will list them.

- 20 • Insomnia. If I am in a building with smart meters for more than about 15 minutes, I
21 cannot sleep that night. Moreover, if I am in a building with smart meters for a half
22 hour or more, or for short periods of time over several days, I am unable to sleep for
23 several days.
- 24 • Heart palpitations. The same as with the insomnia, although I do not *always*
25 experience the heart palpitations when exposed. However, when I do get them, they
26 can go on for several days.
- 27 • Cognitive dysfunction. This is especially present when I am in a building that also
28 has a lot of wireless in it already. I forget what I came to the store to get. If I am
29 talking to someone, I cannot keep track of my thoughts. I have a thought, and then I
30 cannot complete it. I want to think and I cannot. I forget words. It is like being old
31 long before your time.
- 32 • Anxiety in my body. This isn't a mental anxiety—it is a physical feeling, *not*
33 accompanied by anxious mental thoughts.
- 34 • Pressure in my head, as described above.
- 35 • Pressure in my body, as described above.
- 36 • Occasionally, headache or incipient migraine.
- 37 • Tinnitus, sometimes.

1 Inevitably, I get the insomnia. Inevitably, if in a building for more than 15–20 minutes, I get
2 the cognitive dysfunction. Inevitably, if I am in a house for more than 5 minutes, I get the
3 pressure and other weird sensations, as well as the agitation/anxiety in my body. If I am in a
4 bigger building, it may take up to 10 minutes to feel these sensations, though it usually
5 happens more quickly. And sometimes, especially if it's a house, I feel them the moment I
6 cross the threshold.

7 I have sometimes been barely able to sleep for 3 days and have had heart palpitations for
8 three days after being in a building with smart meters. My second encounter with smart
9 meters occurred toward the end of June (June 22–23), when I was forced to be in buildings
10 with smart meters for hours two days in a row. One of these encounters was at my doctor's
11 office, again, where I did not know they had been installed. However, the moment I stepped
12 over the threshold of the building, I could tell they were on the building. After the incident
13 at my doctor's I had heart palpitations for the next three days.

14 On top of all this, I have now become more sensitive to all sorts of electrical and wireless
15 devices. This did not happen immediately. But now, there is hardly a building in Ann Arbor
16 without a smart meter, so in order to do anything, I must be exposed to them. I have to get
17 groceries, I have to do other errands. I do them as quickly as I can, but I cannot do
18 everything in under 10 minutes. About a month ago, I began to notice that I was bothered by
19 things that had never bothered me—the cordless phones in my home; sometimes the
20 headset from my cell phone (the EMF travels up the wires); fluorescent lights in buildings
21 that don't have smart meters on them, wireless in the Michigan League. With the fluorescent
22 lights, I will feel the same agitation in my body and a very strong desire to leave the store
23 immediately.

24 The effect on me is much, much worse in a home than, usually, in a big building. I assume
25 that that is because the walls in a home are much closer to me--thus all the currents are
26 closer to me and have greater impact. Also, the smart meters are way, way closer in a home.
27 In one friend's house, if I stood in her kitchen, the meter would be five feet away from me,
28 and that is standing as far away from it as possible.

29 **Q. How do you know it's smart meters that are affecting your health?**

30 A. It's obvious. When I step over the threshold of a building, I know whether there's a smart
31 meter on the building because I can feel it. I feel all these weird sensations, like I've
32 described above. Then, I don't sleep that night. And/or I get heart palpitations. And/or the
33 other symptoms I've listed. Buildings that I was once fine in, one day I step inside, and it
34 feels terrible. And so I know the smart meters have been installed.

35 Moreover, nothing else in my life has changed. When I heard about smart meters, I was
36 concerned, but very hopeful that they would not bother me, since my cell phone did not
37 bother me.

38 **Q. Did you have these problems before smart meter installation?**

1 A. Before smart meter installation, I rarely experienced insomnia. Poor sleep, yes; insomnia—
2 very rarely.

3 Heart palpitations—I had a strange feeling in my heart many years ago, different than what
4 I feel now. It was as if my heart were beating very fast. It lasted for a few days and never
5 came back. This was different than what happens with smart meters.

6 Now that smart meters are everywhere in Ann Arbor, I sometimes feel strange sensations in
7 my heart even when I have not been in a building with smart meters for a day or two. The
8 first time I got that feeling was after being in my doctor's office and the other buildings.

9 Cognitive dysfunction—occasionally, but rarely to the degree I experience with smart
10 meters and certainly not a *sudden* change from clear-headed, incisive thinking to sudden
11 cloudiness. I have mitochondrial dysfunction, so I have periods of fatigue, and sometimes
12 that is associated with trouble completing a thought or finding the right word. But that is
13 something that creeps up slowly—it doesn't happen nearly instantaneously. With smart
14 meters, I step over the threshold of a building with smart meters and within a few minutes
15 to ten or twenty minutes, my brain goes in and out of working, I lose thoughts, there are
16 empty spaces in my thinking. Yesterday, I had to be in a building with smart meters,
17 interviewing someone. I could feel the smart meter the moment I stepped over the
18 threshold. I didn't in fact know whether this meter might be installed on this building, but I
19 asked my interviewee. She said there was. I felt pressure like a vise around my head, and a
20 weird vibration in my body. About 20 minutes into the interview, I was no longer able to
21 think, to ask questions. With a lot of effort and time, I could make some headway, but only
22 with some help from the person helping with the interview. I'd also like to add that this
23 interviewee, like several other people I have interviewed who have positions of authority in
24 the community—doctors, people with directorial or supervisory roles in government—have
25 given an interview, then consulted with their attorneys and told me not to use their
26 interviews. These are people who have been made sick by the smart meters and are also
27 seeing the effects on the people they treat, provide services to, and/or supervise. They have
28 been excited about providing information and being heard. Then, they consult an attorney
29 and refuse to testify. Everyone is so afraid of DTE.

30 Pressure—no.

31 Bodily sensations of agitation—no.

32 Headaches or migraines—occasionally.

33 Tinnitus—I have had a very, very mild tinnitus at least since the age of 12, but not even
34 enough to remark to the doctor about. However, with smart meters, I can have the kind of
35 tinnitus that people normally describe: the buzzing isn't something so mildly in the
36 background you barely notice it; it is front and center.

1 Q. When did you first notice that your health was affected by smart meters?

2 A. The first time I ever encountered a smart meter was sometime in June of 2012. Someone I
3 knew peripherally invited me over to her house. I walked into the house, which was on Huron
4 Street in Ann Arbor, and was nearly bowled over. It is really hard to describe the effects one feels
5 from something like this because they are not sensations we experience in normal life and so we
6 don't have good words for them. There was a way in which it was like being pressed upon from all
7 sides, sort of like the pressure you feel when taking off really, really quickly in an airplane, the kind
8 of pressure I imagine astronauts feel. That pressure was all over my body, though that particular
9 type of pressure was probably slightly less in my head.

10 In my head, as I stood, and later sat, in that house, it felt like something would shoot in. Not like a
11 shooting pain. It was wider than a pain, and it wasn't painful per se, though it was extremely
12 unpleasant. It was as if what I can best describe as "empty rays" shooting through my head from
13 time to time. Like two or three, and then it would stop for a while. It was really, really weird.

14 I found that my body was becoming agitated. It wasn't a mental agitation, per se, but an agitation of
15 my body. It quickly became hard to think. I would lose my thoughts.

16 I can tell you more about what it was like, and this has been my experience in other houses with
17 smart meters: It is like you are in the middle of a funnel cloud of electromagnetic current—you are
18 encircled by these currents and can feel them. That is what is really weird about it. Then, on top of
19 that feeling, these "empty rays" pass through your head from time to time. Like I said, these are
20 wide, and sort of like a light beam in that they are kind-of empty inside. I know this sounds weird,
21 but think of how science fiction writers describe things. This *is* science fiction. Science fiction
22 writers have been incredible predictors of the developments of the future—and we are now living
23 in some of that world.

24 Those "empty rays," when they pass through, it is like for a moment or two your thought processes
25 stop. It is really weird, because it is so quick you know it's happening and yet you don't. If you have
26 ever had general anesthesia administered, then you might have an inkling of what it is like. When
27 they administer general anesthesia, you are fully present and then suddenly there is this huge blank
28 space. When you get anesthesia, the blank space (the loss of consciousness) lasts for a long time—a
29 half hour to several hours. With a smart meter, it is so brief. But it can happen repeatedly. And in
30 that moment, you are blank. And aware a millisecond later that you *were* blank. It's very unsettling.
31 You know it is happening—just like when you are coming out of anesthesia, or when they haven't
32 administered enough—yet you can do nothing about it.

33 As I read more about the effects that smart meters can have on the human system, this experience
34 made sense: It is interrupting the communication of the nerve cells in my central nervous system.
35 As a biodynamic craniosacral therapist and a student of human anatomy and physiology, I learned,
36 as we all did in school, that neurotransmission is an electrical and chemical phenomenon.

37 Q. You described being in a funnel cloud of electromagnetic radiation.

1 A. Yes. As time went on, it came to me that that is the best description, and, on my own, I
2 figured out why. Later, as I did more reading, I found out that what I figured out on my own was
3 exactly what any electrical engineer or electrician would tell you about what was happening. You
4 see, in a home, you are surrounded by wires, encircled by them as they pass behind every wall.
5 They are also often above you, in the ceiling, and below you, in the basement. And if you are in a
6 house like that first house I was in, which was three stories, each tenant has their own electronic
7 equipment on, pulling electricity through the house, and the funnel cloud is very, very high, much
8 higher than in a ranch house. So in a multi-storied house, the effect—at least this is my
9 experience—is increased. You feel like you're are in a soup of vibration and also that that suddenly,
10 out of nowhere, a current will shoot transversely through your body. I couldn't figure out why there
11 were these multiple sensations--vibration and these currents or rays. But then I learned that the
12 *magnetic* part of the electromagnetic field runs at right angles to the electrical field. So you have
13 these currents encircling you as you sit in a room (and probably running above you and below you
14 to a usually lesser degree) and *in addition* to that electrical field encircling you, you have the
15 magnetic field running perpendicularly out to you. I wonder whether the "empty rays" I felt are
16 those magnetic fields or whether they are the radiofrequency hot spots from intersecting smart
17 meter RF waves.

18 Now, please understand that I learned all this terminology after my first encounter with smart
19 meters. You know, this is the interesting thing about science. In science, we *observe* phenomena.
20 Then we seek to explain it. Despite what is commonly taught as how the scientific method works,
21 most science is actually done inductively, not deductively. Thus, we observe phenomena, we seek to
22 explain it. We don't waltz in with a theory and attempt to prove it. Here, the phenomena are these
23 extraordinary sensations in the body and other physiological phenomena: momentary lapses of
24 consciousness, tinnitus, agitation, inability to think, and so on. When I first felt them, I had no idea
25 what was going on. But I could feel the sensations. Thus, I could ask the question, "What is causing
26 this?" And the simple, but in some ways not terrifically informative answer is, "Smart meters." But
27 *how* do they cause it? And that is where an understanding of how the currents work—the electric
28 *and* the magnetic fields—comes in. Once you understand that, the seemingly crazy becomes
29 explicable. Like gravity. None of us can see it, but all of us can feel it. And it exerts a powerful yet
30 invisible force on our bodies.

31 That is part of why this sensitivity to EMF is so hard to grasp. You can't see electric fields. You can't
32 see magnetic fields, either, though you can see how the magnetic fields operate if you get a magnet
33 and some iron filings. It's so hard for anyone to believe that something you cannot see is wreaking
34 havoc with your ability to think and sleep and your heart to function properly. I completely
35 understand. I am very sensitive to these fields, but not as sensitive as some people I know, and
36 when they say that they can feel something, for instance, effects from a cell phone tower, I feel a lot
37 of skepticism. It's human nature to mistrust someone else's experience when we've never felt it. So I
38 understand why people who can't feel it are skeptical

39 But remember this, we can't feel cancer, we can't feel the AIDS virus, we can't feel when we've
40 swallowed a batch of E. coli, and most smokers don't feel bad when they smoke, yet *each one of*
41 *those things is invisibly killing us*. We should have learned by now that just because we can't see it or

1 can't feel it doesn't mean it's not real. And just because we can't see or feel it doesn't mean it's safe!

2 Someone who is contracting a sexually transmitted disease is probably feeling great while they are
3 contracting it!

4 **Q. Did you know there was a smart meter on the first house you encountered with a**
5 **smart meter?**

6 A. No, not when I went over there. Once I was in the house and felt all these terrific pressures
7 and sensations, I asked if there was a smart meter on the house. I went outside and looked and saw
8 *three* smart meters on the house. I had learned about smart meters a few weeks earlier. Someone I
9 know peripherally had sent out an email talking about smart meters and how badly they were
10 affecting her health. I didn't know if I would be affected, but I thought there was a chance. I didn't
11 know what a smart meter looked like, but since these meters didn't look like my own meter and had
12 a digital read-out, I assumed they were smart meters. Also, they had blue on them, which I later
13 learned is characteristic of the Itron smart meters.

14 **Q. Why did you think you might be affected?**

15 In 2008, I was given a laptop computer. I was so excited. I would be able to do computer work
16 outside or go to a coffee shop and cruise the Internet. I work out of my home, so to be able to go to a
17 place where there were other people, or to be outside in nature, was important to me. Well, I went
18 outside, turned the computer on (while holding it on my lap), and within a little bit of time began to
19 feel a bit weird. By the time I'd been on that computer for a half hour, I was feeling strange, woozy,
20 not able to think well. I persisted. "I'm not going to give in to this feeling," I thought.

21 **Q. How did you know it was the laptop?**

22 A. Well, it was pretty obvious. I turned it on, and in less than half an hour I felt ways I'd never
23 felt before. I was so frustrated. I also knew why I was likely feeling this way. I'd had a client the
24 month before, a young guy, college student, who had come to me for craniosacral therapy. He told
25 me he couldn't use his computer, couldn't use his cell phone, couldn't even watch TV. At first, it was
26 just that he couldn't use the computer, but then it was all these different electronic devices. He said
27 it was called *electromagnetic sensitivity*. Since I'd just been in a study group with someone who'd
28 mentioned learning about this type of thing, I had an inkling of what he was talking about and didn't
29 think he was coming from out of left field. But not in a million years did I think I would have that
30 problem! I thought it was sad for him.

31 **Q. So how did you resolve the problem with your laptop?**

32 A. I called the place I got the computer from. The guy told me how to shut the wireless off. I
33 was so bummed! I did it. It was slightly better, but still impossible for me to use this \$1000
34 computer that could not be returned!

35 So, I talked to the guy again, and he told me to try taking the wireless card out. I did that, and I can
36 use the computer just fine. And, in fact, the LED screen is a thousand times better than the CRT
37 screen I had before, which would make me exhausted. This screen doesn't tire me out to the same

1 extent—less flicker, less dirty electricity, all that. Everyone knows CRTs are much harder on you,
2 just like fluorescent lights.

3 **Q. Do you experience problems with other wireless or electrical devices?**

4 A. Some, but not all. Wireless in a room, at least before the installation of smart meters, was
5 not a problem for me. Like many people, I went to coffee shops to work on my computer, and there
6 is wireless at all of them. Perhaps I was affected in some kind of way (and from what I have now
7 learned about the hidden, unfelt effects of RF radiation on the human body, I probably have been),
8 but it was not anything I could directly feel.

9 Dimmer switches have always bothered me. I can hear the buzz if they are not turned all the way
10 up, and they make me feel weird if they are not turned all the way up. I feel that agitation I
11 described earlier.

12 Most CFLs I cannot stand, though certain ones I can tolerate.

13 Fluorescent lights exhaust me, like they do many people, if I am under them for a few hours, but,
14 prior to the installation of smart meters, I could not *feel* anything from most of them. It's just that I
15 would be fatigued after being around them.

16 My cell phone does not bother me, at least not now. We have measured the RF output from it, and it
17 is extraordinarily low. It is an old phone by today's standards—a 2008 model. But I never put it to
18 my ear—I use a headset and I often keep it shut off unless using it. Except for when I am walking, I
19 do not carry it next to my body.

20 But here is the clincher. When I received the laptop, I also got a wireless router, of course. I never
21 used it, never even opened the box because of that initial experience outside. But earlier this year, I
22 needed a router. I called the computer store, and the guy told me I wouldn't have any problem with
23 the router. I wasn't too sure about that, but he was, so I decided to try it. I plugged it into the wall
24 and *immediately* I felt something happen to my heart. Unbelievably scary—like it was being
25 penetrated by a current, by something that would twist it—right where the aorta enters the heart. I
26 pulled the plug immediately.

27 Also highly relevant, when I walked into Best Buy a few years ago, I felt all sorts of strange
28 sensations—a lot of things like I feel now with the smart meters. I couldn't really figure it out, but
29 came to the conclusion that they must have added wireless throughout the store and that was what
30 had changed. That made me a little concerned, because I knew that many coffee shops, at that time,
31 were adding wireless, but I didn't have those sensations anywhere else. I figured that the amount
32 and density of computer and stereo equipment in that store must be what made the difference. I
33 now suspect that the switched-mode power supplies in the equipment, combined with extremely
34 strong wireless, were what caused these feelings. I could barely stand to be in there, and from then
35 on, I never went to Best Buy unless I absolutely had to buy something, and I got in and out as
36 quickly as I could. But I didn't worry about it per se, I just figured it was Best Buy, since I didn't
37 experience these things anywhere else.

1 Similarly, but to a lesser extent, when I went to Ace Hardware on Stadium Boulevard a couple of
2 years ago, or maybe only a year ago, I noticed something different. I would get 15, maybe 20, feet
3 away from the checkout counters, and I would feel strange and uncomfortable. Not the same way as
4 in Best Buy, and certainly not as intense, but something along the same lines. I didn't like it at all. I
5 was fine in the rest of the store. I noticed all the clerks were walking around with headsets. I figured
6 it must be the wireless current. I didn't know much about that sort of thing then.

7 Oh, and once that happened, after a few months, the things you swipe your credit card through--in
8 some stores--specifically, Whole Foods and Ace Hardware--those card readers started to bother me
9 when I was close to them. There was this incredible intensity that came out of them. I think both
10 Whole Foods and Ace changed their card readers, because at some point this year, they didn't
11 bother me anymore. And note: I wasn't bothered at any other store, so clearly what is transmitted
12 through some is not transmitted through others.

13 Finally, I have a new washing machine, bought in June. It's computerized. Every time I press the
14 buttons, I feel jolts in my head. It's a quick click, as fast as the push of a button. This would have
15 been unbelievable to me, but by the time I had this experience, I had read about voltage transients,
16 so at least I knew what was going on. What I do in order to be able to use the machine is put the lid
17 up to block the control panel. Then I bend down so I'm at the same level as the lid to keep the
18 current from hitting me. I have to count the number of times to punch each button so that I can do it
19 without seeing. Yeah, it sounds crazy, but it's true. And it makes sense, because the thick metal of
20 the lid blocks most of the rays.

21 **Q. You live near a cell phone tower. Does that bother you?**

22 A. I live 1000 feet from a huge cell phone tower. When I first noticed it, quite a few years ago, I
23 got worried, because I'd heard that they could be bad for your health, but I realized that nothing felt
24 different to me. I was still sleeping okay, too. I think this is really important: The utilities tell us that
25 smart meters aren't bad for us, yet I am terribly affected by them, can feel them throughout my
26 body, they give me insomnia and heart palpitations, yet I can live next to a cell phone tower for
27 years and not feel these strange sensations nor have these *palpable* health effects (it may be
28 affecting my health, but I cannot *feel* it).

29 **Q. Have the health effects you experience as a result of smart meters affected your**
30 **ability to work and earn a living? If the answer is yes, describe how.**

31 A. Yes. I work for myself as a [REDACTED] therapist and [REDACTED] therapist, and I
32 [REDACTED] It affects my fatigue level and thus my competence and productivity; I cannot
33 take a job outside the home; I cannot keep up my continuing education credits and thus my
34 license.

35 When I have been unable to sleep because of smart meters, I cannot do [REDACTED] When I am
36 unable to sleep because of smart meters, I am not as good a [REDACTED] as I can be.
37 Furthermore, business this summer slowed considerably. I began to consider seeking work
38 elsewhere, perhaps partnering with another health-care practitioner, and realized that with

1 the deployment of smart meters, this was an impossibility. There is absolutely no way that I
2 can work in a building with smart meters. I can't be in a building with smart meters long
3 enough to get a massage, let alone long enough to give them all day!

4 Because of the deployment of smart meters, I was unable to attend my biannual [REDACTED]
5 [REDACTED] therapy conference in Maryland. I was so looking forward to this educational
6 and networking opportunity, especially because I am past president of the association and
7 its current journal editor. But in early September, I found out that smart meters had been
8 deployed in Maryland and I knew they were likely installed at the conference site. Which
9 they were. Part of my compensation as journal editor is that my expenses to, from, and at
10 the conference are paid for. I was unable to attend. I suspect that I will never be able to
11 attend a conference again. Not only will I not receive this compensation that I am owed (at
12 this point, the equivalent of \$5000), my ability to earn an income is severely limited because
13 I will not be able to keep up with developments in the field. BCST is a hands-on work. It is
14 not a skill that can be learned from reading books or taking a course online.

15 Furthermore, I had begun taking workshops on Hellinger work, which is a type of therapy I
16 can use as an adjunct in my work. Because smart meters have been deployed at the Ann
17 Arbor location where these workshops are held, I can no longer learn this modality. Like
18 BCST, it is a work that must be learned in in-person collaboration with others.

19 Moreover, each year, I attend the annual [REDACTED] therapy conference here in Ann Arbor. I
20 also practice Polarity Therapy. The building where those workshops are held has also been
21 smart metered, and I will never be able to attend the conference again. There is no way that
22 I can spend 3 hours a day in a smart metered building, let alone 8 hours a day for 4 or 5
23 days.

24 I will be unable to keep my [REDACTED] therapy license because of this. To be completely clear:
25 Michigan has passed [REDACTED] therapist licensing. No licenses have been issued yet, but as of
26 November 2009, all [REDACTED] therapists who wish to be licensed must be getting continuing
27 education credits. These credits include the modalities listed above, as well as [REDACTED]
28 therapy courses, which I also attend. I can no longer get these credits.

29 So what am I to do? Stop practicing? Go on welfare? Flout the law and hope I don't get
30 caught?

31 **Q. Have the health effects you experience as a result of smart meters affected your**
32 **ability to interact socially with others? If the answer is yes, describe how.**

33 **A.** My social life has dwindled to nearly nothing. I am unable to be in the home of any friend
34 because every friend has a smart meter on their home. I cannot meet a friend for dinner, go
35 to a movie. I cannot date, because I can't go anywhere.

36 Earlier this year, I joined a number of great Meetup groups. These are social groups where
37 people with similar interests get together weekly, monthly, perhaps a few times a week. I