

20-1025 (Lead); 20-1138 (Consolidated)

**UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT**

ENVIRONMENTAL HEALTH TRUST; CONSUMERS FOR SAFE CELL
PHONES; ELIZABETH BARRIS; THEODORA SCARATO

CHILDREN'S HEALTH DEFENSE; MICHELE HERTZ; PETRA BROKKEN;
DR. DAVID O. CARPENTER; DR. PAUL DART; DR. TORIL H. JELTER; DR.
ANN LEE; VIRGINIA FARVER, JENNIFER BARAN; PAUL STANLEY, M.Ed.

Petitioners

v.

FEDERAL COMMUNICATIONS COMMISSION;
UNITED STATES OF AMERICA

Respondents

Petition for Review of Order Issued by the
Federal Communications Commission

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137	6623-6692	Sep. 3, 2013	Rachel Cooper	Smart Meters; Assessment of Radiofrequency Microwave Radiation Emissions from Smart Meters; Sage Associates, Environmental Consultants; 2011
138	6693-6699	Jul. 7, 2016	Environmental Health Trust	Smart Meters; FCC Maximum Permissible Exposure Limits for Electromagnetic Radiation, as Applicable to Smart Meters. Dr. Ron Powell PhD.; 2013

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146	7135-7142	Nov. 18, 2013	Kevin Mottus	Cancer -Brain Tumors; Meta-analysis of long-term mobile phone use and the association with brain tumours, Prof. Lennart Hardell MD. PhD. 2008
147	7143-7156	Jul. 11, 2016	Environmental Health Trust	Cancer - Brain Tumors; Case-control study of the association between malignant brain tumours diagnosed between 2007 and 2009 and mobile and cordless phone use. International Journal of Oncology.(Hardell et al); 2013
148	7157-7183	Nov. 18, 2013	Kevin Mottus	Cancer - Brain Tumors; Use of mobile phones and cordless phones is associated with increased risk for glioma and acoustic neuroma. Pathophysiology. (Hardell et al); 2012

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150	7194-7210	Dec. 10, 2018	Environmental Health Trust	Thermal and non-thermal health effects of low intensity non-ionizing radiation: An international perspective. Environmental Pollution. (Belpomme et al); 2018
151	7211-7224	Sep. 28, 2016	Kevin Mottus	Cancer - Brain Tumors; Mobile phones, cordless phones and the risk for brain tumours. International Journal of Oncology (Prof. Lennart Hardell MD., PhD.); 2009
152	7225-7251	Sep. 3, 2013	Paul Dart MD	Cancer - Cell Phones; Cell Phones and Risk of Brain Tumor, Dr. Paul Dart MD. (Petitioner); 2013
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157	7418-7421	Apr. 29, 2019	Environmental Health Trust	Testing; Microwave Emissions From Cell Phones Exceed Safety Limits in Europe and the US When Touching the Body. IEEE Access. Prof. Om P. Gandhi PhD.; 2019
158	7422-7426	Sep. 12, 2019	Environmental Health Trust	Testing - Children; Absorption of wireless radiation in the child versus adult brain and eye from cell phone conversation or virtual reality. Environmental Research. (C. Fernandez et al); 2018
159	7427-7431	Jul. 11, 2016	Environmental Health Trust	Yes the Children Are More Exposed to Radiofrequency Energy From Mobile Telephones Than Adults. IEEE Access (Prof. Om Ghandi PhD); 2015
160	7432-7441	Jul. 7, 2016	Environmental Health Trust	Testing - Children; Children Absorb Higher Doses of Radio Frequency Electromagnetic Radiation From Mobile Phones Than Adults. IEEE Access (Robert D. Morris et al); 2015

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165	7603-7614	Sep. 3, 2013	Dr. Joel M. Moskowitz PhD	“Comments on Notice of Inquiry, ET Docket No. 13-84” GAO Report “Exposure and Testing Requirements for Mobile Phones Should Be Reassessed.” Dr. Joel Moskowitz PhD.; 2012
166	7615-7628	Sep. 2, 2013	Consumers for Safe Cell Phones	Organizations; Consumers for Safe Cell Phones Comments (Petitioner)
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179	8189-8279	Sep. 24, 2013	Grassroots Environmental Education, Inc.	US Agencies - Radiation Sickness; US Access Board Acknowledgement of Radiation Sickness (Electromagnetic Sensitivities); 2002
180	8280-8377	Sep. 24, 2013	Grassroots Environmental Education, Inc.	US Agencies - Radiation Sickness; National Institute of Building Sciences (NIBS), IEQ Indoor Environmental Quality; Recommendations for Accommodation for Electromagnetic Sensitivity; 2005

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184	8412-8424	Jul. 7, 2016	Environmental Health Trust	US Agencies; EPA Letter to the FCC, Comments on FCC 93-142 Environmental Effects of RF; 1993
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190	8627-8628	Sep. 16, 2019	Joel M. Moskowitz PhD.	Radiation Sickness; Reliable disease biomarkers characterizing and identifying electrohypersensitivity and multiple chemical sensitivity as two etiopathogenic aspects of a unique pathological disorder. Rev Environ Health. (Prof. Belpomme et al); 2015
191	8629-8637	Sep.3, 2013	Kevin Mottus	Radiation Sickness; Electromagnetic hypersensitivity: evidence for a novel neurological syndrome. Int J Neurosci. (McCarty et al); 2011
192	8638-8641	Nov. 18, 2013	Toril H. Jelter MD	Radiation Sickness - Children; Dr. Torill Jelter MD. (Petitioner) Comments
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198	8735-8747	Jul. 11, 2016	Environmental Health Trust	Radiation Sickness; Could Myelin Damage from Radiofrequency Electromagnetic Field Exposure Help Explain the Functional Impairment Electrohypersensitivity? A Review of the Evidence. Journal of Toxicology and Environmental Health. (Redmayne and Johansson); 2014
199	8748-8773	Jul. 11, 2016	Kate Kheel	Radiation Sickness; No Safe Place - shattered lives, healthcare set to crash – you can't fix this fast enough; Letter to a Mayor, Olga Sheean, Jun. 15, 2016
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**PRE-FILED TESTIMONY
OF [REDACTED]
MPUC Docket No. 2011-00262**

1 **Q. Please state your name and address.**

2 **A. [REDACTED]**

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

4 **A. Yes. I was not advised when it was done, but I believe it was installed in April or May**
5 **of 2012.**

6 **Q. Had you asked CMP to not install the meter?**

7 **A. Yes. I contacted CMP in the Spring of 2011 and told them that my wife had lived**
8 **through a brain tumor and we did not want to risk any complications caused by radio**
9 **frequency waves from a smart meter. They wrote back to in March of 2011 (see**
10 **attached) agreeing not to install the meter until further notice. They sent me a form letter**
11 **in early 2012 saying the meter would be installed unless I paid “opt-out fees.” I called to**
12 **complain but they said it was “take it or leave it.” I finally wrote back in February, 2012**
13 **(see attached) saying do what you have to do. I signed under protest. I cannot afford the**
14 **special fees on my fixed income retirement.**

15 **Q. Please describe why you do not want a smart meter at your residence.**

16 **A. My wife was diagnosed with a brain tumor in 1983 and God miraculously healed her**
17 **less than a week before surgery. The meter on our house is right outside our bedroom**
18 **window, not more than seven feet from her head as she sleeps. I am aware of some of**
19 **the risks associated with radio frequency waves. I am a retired [REDACTED]**
20 **Director. I remember a PR story we did many years ago about an early warning radar**
21 **system developed by Raytheon in Massachusetts. I remember clearly talking with**

1 people at the site in which it was mentioned that there was a poultry farm nearby and
2 that many of the poultry became sterile.

3 Also, my father-in-law, now deceased, holds original patents on radar. I
4 remember conversations with him on his work. Talking about one Raytheon story with
5 him, it became apparent that there were serious questions about the little-known
6 biological effects that radar can have.

7 **Q. Please tell us anything else that you want us or the Public Utilities Commission to**
8 **know about your experiences and circumstances.**

9 **A.** The complete indifference on the part of all parties to our concerns. They could care
10 less. The moral indifference is appalling and shows extremely poor corporate ethics.
11 We are still very concerned. The least they could do is put a shield between the meter
12 and our bedroom, which I had requested them to do.

13 We are watching the situation closely

Dated this 17 day of January, 2013.

STATE OF MAINE
YORK, ss:

January 17, 2013

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

Constance Y. Brine

Notary Public/Attorney-at-Law

CONSTANCE Y. BRINE

Name Typed or Printed

My Commission Expires: Feb 29, 2016

CONSTANCE Y. BRINE
Notary Public, Maine
My Commission Expires February 29, 2016

2

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

1 **Q. Please state your name, address and occupation.**

2 **A.** [REDACTED]
3 [REDACTED]

4 **Q. Was a smart meter installed at your residence? If so, state approximately the**
5 **date when it was installed.**

6 **A.** SCE&G/SCANA without my consent or knowledge installed an AMR on my gas
7 meter in December of 2009 and an AMR on my electric meter in January of 2010.

8 My three requests to have the AMR meters removed for dire medical
9 reasons and the request of my physician to have the meters removed from my
10 home were not honored and I was forced to abandon my home.

11 **Q. Please describe why you do not want a smart meter at your residence.**

12 **A.** In February of 2010, not long after the AMR meters were installed, I became very
13 sick. It started out like a flu virus. I had a fever and my body was aching all over.
14 Then all the joints in my body became swollen and incredibly painful: my fingers,
15 hands, wrists, feet, and even my head was swollen. I was in excruciating pain. I
16 lay in bed for six months crying. I had a rash all over my torso and arms. Due to
17 the lack of strength in my hands, I could not drive or even peel an apple. I had the
18 worst headache of my life. It took a year and a half for the pain and swelling in
19 my joints to subside.

1 I was constantly sick with colds and the flu. I had horrible nausea and
2 fatigue. My eyes hurt and were often very red. My throat was always sore. I
3 developed a sensitivity to sound that persists today.

4 Six months after I became so sick in February 2010, my intolerance to
5 chemicals exploded. I developed intolerances to things that had NEVER bothered
6 me before like commercial printing ink, chlorine, synthetic fabrics.

7 In the summer of 2010, I began to have problems when I worked on my
8 computer. At first it started with my face getting red and my head getting very hot
9 after I had been working on my computer for 40 minutes or more. Then it got
10 worse. I would experience horrible intestinal cramping, nausea and fatigue from
11 working on the computer.

12 The problems I experienced when using my computer led me to learn more
13 about EMF radiation. I had all the dimmer switches in my home removed. I
14 stopped using my wireless router, microwave oven and hair dryer. I even
15 reluctantly gave up my cell phone! But I was still sick and I was always sick at
16 home. If I took a long car ride, I felt better. But, as soon as I returned home my
17 symptoms returned: excruciating headaches, muscle cramping (especially in my
18 legs), extreme fatigue, nausea, problems with my eyes, sweating all over my body,
19 difficulty breathing and irregular heartbeats. The tissue in my brain was hurting
20 and felt like it was burning. I had dry chapped lips; I was waking up in the middle
21 of the night for no reason. I had gone into early menopause.

1 On February 23, 2012, I called my utility company which was
2 SCE&G/SCANA and asked if they had installed any Smart Meters on my home.
3 An SCE&G customer service representative told me that yes they had! Without
4 my consent or knowledge, SCE&G had removed the analog meters from my home
5 in Charleston, SC and put a wireless automated meter reader (AMR) on the gas
6 meter in December of 2009 and another AMR on the electric meter of my home in
7 January of 2010. I was stunned to realize that the installation of these devices
8 coincided with my becoming so very sick. I asked 3 times for them to remove
9 these devices and they refused each time.

10 In August of 2012, I was diagnosed with Toxic Encephalopathy (349.8) and
11 Neurologic EMF Related Encephalopathy (348.30; E926.0). I have become
12 Electrically Sensitive and am symptomatic around just about anything that is
13 plugged in or has a computerized motor.

14 **Q. Do you experience electromagnetic sensitivity symptoms in proximity to other**
15 **radio frequency devices, such as Wi-Fi, microwave ovens, cell phones or**
16 **cordless phones? Please describe the symptoms and the circumstances when**
17 **they occur.**

18 **A. YES. I cannot go near a Wi-Fi or wireless router.**

19 If I accidentally get near a wireless router I get a searing pain in my brain
20 tissue that feels like a dagger and a horrible headache. The tissue in my brain
21 swells and I have intense pain in cranium, skin and hair follicles of my head. I then
22 become nauseated and am overcome by intense fatigue. The pain, nausea and

1 fatigue will last for 36-48 hours. As a single mother of a young child this is an
2 unbelievably awful situation to be in. My 2007 automobile makes me ill. Every
3 time I drive it I become nauseated and get a headache. I have been looking since
4 August for a low EMF car, but have not found one yet. I cannot be near office
5 equipment or large electrical equipment (like in a grocery store) or I become
6 nauseated. I have difficulty breathing and get abdominal cramping. If I am unable
7 to get away quickly, I will start sweating all over my body.

8 I am sick, in almost constant pain. My Electro Magnetic Sensitivity or
9 Radio Wave Sickness is almost completely debilitating. I cannot go near a
10 wireless router without becoming horribly ill for 36 hours and experiencing
11 horrible pain in my brain tissue. I cannot be near cell towers. I cannot be near
12 office equipment or electrical equipment without becoming symptomatic. I can go
13 almost nowhere. I cannot go to the grocery store. I had to hire someone to bring
14 me my groceries once a week. I cannot go to the Library anymore. I cannot be
15 near a CFL light bulb that is turned on. I have trouble being near the table lamps
16 in the house we are renting! I cannot stand under an overhead lamp. I cannot be
17 near other people's cell phones. I experience debilitating nausea, fatigue and
18 headaches daily. My life is a nightmare. I am still searching for a car that has low
19 EMF emissions. I get a headache and become nauseated every time I have to get
20 in my car to take my son to school. Every aspect of my life has been affected.
21 Even the land line phone makes me sick. I had to buy a special phone back in the
22 spring, and now I can only use it over the speaker phone sitting 6 feet away from it

1 AND I can only use it for a total of 60 minutes a day and never after 6:30 at night.

2 I turn the computer on usually once a week for an hour. I wrote most of this letter
3 out long hand and had a friend type it for me.

4 **Q. If you have physical or medical conditions, including sensitivity to**
5 **electromagnetic radiation, have these conditions been diagnosed? Identify**
6 **the diagnosis or description of the condition.**

7 A. Yes, See attached Diagnosis from my physician, Dr. [REDACTED] In August of
8 2012, I was diagnosed with Toxic Encephalopathy (349.8) and Neurologic EMF
9 Related Encephalopathy (348.30; E926.0). I have become Electrically Sensitive
10 and am symptomatic around just about anything that is plugged in or has a
11 computerized motor. Attached as Exhibits A, B, C and D are Dr. [REDACTED] RX
12 notes, dated August 21, 2012, her September 19, 2012, letter to SCE&G/SCANA,
13 and a description of her background and credentials obtained from her website.

14 **Q. Has your physician or other medical care provider made any**
15 **recommendations about exposure to electromagnetic devices, including smart**
16 **meters? Please attach any recommendations in writing from your health care**
17 **provider.**

18 A. My physician has stated that I am in a crisis state and that I have no margin for any
19 further exposure to EMF. Please see attached Rx form (Exhibit A) that states that
20 I "have medical conditions that affect major life activities of essential neurologic
21 function and/or breathing. It is medically necessary for her to have removal of
22 EMF sources, including 'Smart Meters' (AMR)."

1 Q. If you had a smart meter for a period of time and experienced or observed
2 symptoms or adverse reactions, did those symptoms or adverse reactions
3 cease when the smart meter was removed? Describe the circumstances.

4 A. Meter was never removed, but if I went away from the home for extended period
5 of time to an area without Smart Meters my symptoms lessened.

6 Q. Has your experience with smart meters caused any disruptions in your daily
7 living? Please describe the circumstances?


8 A. My experience has been devastating. Almost every aspect of my life has been
9 affected. I had to abandon my home and move to a new community 45 minutes
10 away. I had to find a new school for my son, my marriage fell apart. I am
11 disabled now. Simple everyday functions like preparing a meal are complicated
12 and medically risky for me now. I cannot be near our electric range and have to
13 cook using the circuit breaker. I am so intolerant to natural gas that using a gas
14 range is not an option for me. I cannot go to the library, the grocery store, or my
15 friend's houses in Charleston because they have AMR meters on their homes. I
16 cannot even go into my child's elementary classroom because his school has wi-fi,
17 which I believe to be a very ill-considered decision on the part of the headmaster
18 now that I have been forced to learn about long term health effects of wireless and
19 EMF radiation. Electrical Sensitivity which my doctor has stated I acquired
20 secondary to exposure to the AMR devices put on my home without my
21 knowledge or consent has had a devastating impact on my life. It is not medically

1 known how much recovery will be possible for me. I must try to avoid exposure
2 to EMF radiation, which is becoming more and more difficult in this country.

3 Q. Please tell us anything else that you want us or the Public Utilities
4 Commission to know about your experiences and circumstances.


5 A. These devices are not safe. They have not been tested. Children, babies in utero,
6 pregnant women, the elderly, those with inflammatory, immune system and
7 genetic disorders are all particularly at risk. As a group this is a large segment of
8 our population.

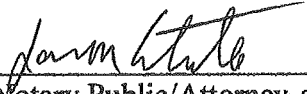
Dated this 29th day of January, 2013.



STATE OF SOUTH CAROLINA
CHARLESTON, ss:

January 29, 2013

Personally appeared the above-named  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,



Notary Public/Attorney-at-Law
James M Entwistle
Name Typed or Printed
My Commission Expires: 3/31/2014

Occupational and Environmental Medicine

NAME _____ AGE _____

ADDRESS _____ DATE 8-21-12

R My patient, Ms. _____ is a qualified person under Federal disability law and regulations because she has a medical condition that affect major life activities of essential neurologic, and/or breathing.

It is medically necessary for her to have removal of EMF sources, including "Smart Meters", and other essential reasonable accommodations to minimize exposures to VOC's, respiratory irritants, pesticides, herbicides and other toxins and pollutants. Please contact me for questions.

LABEL The above is within reasonable medical certainty.

REFILL 0-1-2-3-4-PRN _____

M.D.

GENERIC SUBSTITUTION YES _____ NO _____

FAX COVER SHEET

FAXED
8-21-12

Send To: SCE&G/ SCANA	From: [REDACTED] M.D., Dr. P.H.
Attn: David Kibler	Date: 8-21-12
Office Location:	Office Location: [REDACTED]
Fax No. 803-933-7633	Re: [REDACTED]
<input checked="" type="checkbox"/> Urgent <input type="checkbox"/> Reply ASAP <input type="checkbox"/> Please Comment <input type="checkbox"/> Please Review <input type="checkbox"/> For Your Information	

Total Pages (including cover page): _____

Attn: David Kibler
[REDACTED] M.D., DR. P.H. 803-933-7633
 Occupational and Environmental Medicine
[REDACTED]

NAME **[REDACTED]** AGE _____
 ADDRESS _____ DATE **8-21-12**

R Dx toxic encephalopathy (349.8) and neurologic EMF related encephalopathy (348.30; E926.0).

There is an urgent medical need to remove the AMR meters from **[REDACTED] Charleston SC 29403**, to stop the ongoing very severe, disabling neurologic effects that began to become disabling shortly after the installation of the AMR meters on her home (without her knowledge or consent). The above is within reasonable medical certainty.

LABEL **Please call per question.** **[REDACTED]** M.D.
 REFILL 0-1-2-3-4-PRN _____
 GENERIC SUBSTITUTION YES _____ NO _____

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TRANSMISSION VERIFICATION REPORT

TIME : 08/21/2012 16:34
NAME :
FAX :
TEL :
SER.# : BROM0J239187

DATE, TIME	08/21 16:33
FAX NO./NAME	18039337533
DURATION	00:00:27
PAGE(S)	01
RESULT	OK
MODE	STANDARD
	ECM

[REDACTED] MPH*, Dr. P.H.**

Occupational and Environmental Health
[REDACTED]

*Johns Hopkins

**Harvard

CERTIFIED LETTER RETURN RECEIPT

September 17, 2012

Keller Kissam
President of Retail Operations
SCE&G/SCANA
220 Operation Way
Cayce, South Carolina 29202-3701

Dear Mr. Kissam:

I have a patient from Charleston, South Carolina who developed encephalopathy secondary to exposure to two automated meter readers (AMR), one located about 2 feet from the head of her bed and one located only a few feet from her kitchen where she spent significant time. She was unaware these were installed in December 2009 (for gas) and January 2010 (for electric). Unfortunately, these were installed without her knowledge or consent. However, she was unaware of them until February 2012 by which time she had developed progressively serious debilitating neurologic effects.

Unfortunately, the location of these devices contributed to harm. The location near her brain at night and repeatedly throughout the day has had a disastrous effect on her which is permanent because there is inadequate medical knowledge to reverse this form of damage.

When I inquired for medically necessary reasonable accommodation, I was treated with rudeness by the company representative for SCE&G/SCANA, accommodation was refused and I was told that these devices were "safe".

I am a nationally known expert in occupational and environmental medicine and have been in medical practice for 39 years. I am familiar with variation in human response to EMF/RF emitting devices. Occupational and environmental medicine is a subspecialty of public health. I obtained public health training at Johns Hopkins and Harvard including but not limited to training in scientific methodology.

Because SCE&G/SCANA has represented these devices as completely "safe", I request a copy of all scientific studies used to support such a statement.

Corporate representatives must stop representing these devices as "safe" for everyone. Individuals must be informed that if they have had symptom/health changes after installation of these devices that they describe these changes in a note or letter to the company and a properly designated agency. Any individuals requesting that the devices be removed should be honored both as a reasonable accommodation for persons who are affected and for others who are concerned about the location of the devices and wish to take measures to prevent damage to their brain and nervous system.

Neurologic changes can manifest themselves in many ways. These include cognitive changes, headaches, skin rashes, hormonal disturbances, muscle pain/spasm/twitching, changes in blood pressure, heart rate and rhythm (autonomic nervous system), changes in pain, inflammation, autoimmune response (biochemical changes associated with EMF/RF can increase free radicals inducing inflammatory changes), and other effects.

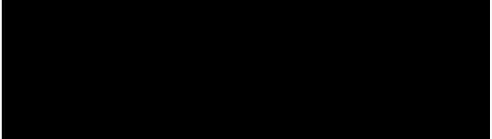
It is medically unacceptable to install devices without the knowledge or consent of individuals. Merely putting a note in a monthly bill is insufficient notification for such a serious hazard. Many people do not notice or understand such inserts, most individuals regard inserts in their monthly bill as advertisements or other irrelevant information and it is easy for such notices to be omitted during the mailing and notification process. It also completely fails to address the vital issue of location. Would anyone put a device near the head of a child, pregnant woman, elderly person or anyone at all given the current lack of human safety data?

Present standards for exposure rely heavily on the amount that would raise temperature of body tissue. This neglects evaluation of neurotransmitter function, which can be altered by much smaller doses. I recognize that device manufacturers should be expected to have more expertise than a utility user company. SCE&G/SCANA may have been misled by manufacturer or industry association lack of knowledge and /or misinformation.

Action is now essential to scientifically evaluate health effects and to take prompt corrective measures to prevent more individuals from developing problems, and to prevent the further disabling of persons who have been affected.

I await a response regarding both the submission of scientific studies documenting "safety" of these residential devices (where 24/7 exposures can occur), which I need promptly, and the corporate plan to assess and minimize damage to the health of the public.

Sincerely,


Cc: Governor Nikki R. Haley
Patricia Green, Director of Columbia FHEO Field Office
Dr. Margaret Chan, Director-General of World Health Organization
Tom Clifford, Executive News Director of The Post and Courier

About Dr. [REDACTED]

Dr. [REDACTED] M.D., Dr. P.H. has been practicing medicine for 38 years, with a major focus on public health and prevention as well as medical care. She received her M.D. in 1967 from the University of Kansas College of Medicine, the state of her childhood and youth. After two years of volunteer work in South Vietnam as a physician to civilians (1968-1970), she began her public health training, with a Master of Public Health at Johns Hopkins (1971), and a Master of Science and then Doctor of Public Health at Harvard (1975).

She returned to join the Johns Hopkins faculty, also attending courses there in toxicology (numerous courses), occupational medicine, industrial hygiene, and occupational and environmental epidemiology. She has been active in worker education, teaching occupational medicine to medical students at the University of Maryland School of Medicine, and occupational health policy at Johns Hopkins School of Public Health.

Dr. [REDACTED] has been a consultant for Maryland OSHA, the New Jersey Department of Health (writing fact sheets on about 1,000 chemicals), Maryland Department of the Environment, WHO, US Congress, Walter Reed, National Academy of Sciences, US Environmental Protection Agency, US Agency for Toxic Substances and Disease Registry, US Department of Agriculture, California Department of Health Services, American Lung Association and other agencies.

She has also had an active medical practice evaluating and caring for patients with chemical injury, in documenting treatable biochemical and pathophysiological changes resulting from chemical injury, and developing science-based, non-harmful means of effective treatment. Education of patients, the public and professionals about the prevention, early recognition and science-based treatment of chemical injury remains an ongoing and vitally important interest.

[REDACTED]

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

1 **Q. Please state your name and address.**

2 A. [REDACTED]

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

4 A. No. I requested early in the deployment that no smart meter be installed. CMP
5 customer service made it difficult to agree with the request. I felt I had to keep
6 watch of my house/analog meter for fear of not having my request upheld.
7 Customer Service was argumentative and threatening. They made me give a
8 reason for the request. They said it would have to be swapped out at a later date
9 because the opt-out would not pass. Trying to get to the correct department was
10 difficult and I was handed off to numerous people. I had to call numerous times to
11 get them to finally agree with the request.

12 **Q. If you do not currently have a smart meter, are you paying the opt-out fee?**

13 A. Yes

14 **Q. Please describe why you do not want a smart meter at your residence.**

15 A. I am EMF & RF Sensitive to the point of daily discomfort in most public places.
16 Symptoms include: heart palpitations, headache, dizziness, failing eye sight when
17 around meters, body aches, restlessness, interrupted sleep, forgetfulness and
18 shakiness. I have felt first-hand what the meters do to me physically. The
19 deployment throughout CMP's area has caused me to change the way I live.

1 **Q. Please describe the symptoms and the circumstances when they occur.**

2 A. I cannot work in an office setting in most buildings due to facilities having Wi-Fi
3 and multiple cell phone users or close to smart meters. This makes for a non-ADA
4 environment for me and I can't function. When I do enter into spaces that have
5 wireless technology I can only stay for a short time due to the symptoms described
6 above. When I'm around iPhones and iPads I am in pain. In fact I tried using an
7 iPad on 10/15/12 for the first time and was instantly dizzy and nauseous.

8 I have experienced relief from pain in my hands when using an external
9 keyboard as opposed to my lap top keyboard. The EMF that comes off a laptop is
10 such that it was causing arthritic-like joint pain.

11 Being in other public spaces such as stores and people's homes with
12 wireless and smart meters makes me uncomfortable as well. I limit my exposure
13 as much as possible but it's difficult to live a normal life with the fear of exposure.

14 I am also very sensitive to cell towers. When driving I can typically feel
15 pain when a tower is about ¼ mile away. I don't even have to see the tower...I
16 know it's coming up. The combination of cell towers, the smart grid, radio towers
17 and high tension lines causes severe pain mostly in my legs and hips but
18 occasionally in the temples and chest. When I'm closer to them the other
19 symptoms occur.

20 I don't have wireless connection in my home, never put a cell phone to my
21 head and have replaced the cordless house phone for a land line. I check my cell
22 phone on occasion throughout the day by using speaker only.

1 **Q. Have you experienced symptoms while in the proximity of smart meters?**

2 A. Example 1: When smart meters were first installed in my old neighborhood I
3 detected a change while watching TV one night. I had a really strange feeling
4 wash over me and I exclaimed to my husband that something is different like a
5 surge of some sort. I thought it was from a cell tower but the pain and the new
6 ache in my right temple was different. I had no prior knowledge the meters had
7 been installed earlier in the day. A friend who lived approximately ½ mile away
8 mentioned the next day her smart meter was installed. I felt the beginnings of the
9 smart meter mesh deployment as it crept into my life that evening and now has
10 consumed me every day since.

11 Example 2: On another occasion as I was raking leaves on the side of the
12 house closest to my neighbor's smart meter, I experienced worrisome heart
13 palpitations and dizziness that made me stop what I was doing to clench my chest.
14 I realized within seconds as I looked around that I was by their meter. I had
15 completely forgotten to be cautious of being on that side of the house as I assisted
16 with the Fall yard clean-up. When I realized my proximity to the meter I
17 immediately moved to the back yard. It was then as I moved away from the meter
18 that the palpitations subsided.

19 There have been so many other occasions but these stand out. They both
20 were significant in that I wasn't tuned into the cautious state of fear of avoiding
21 exposure...I was just living my life as I did pre-smart meter.

1 Q. If you have physical or medical conditions, including sensitivity to
2 electromagnetic radiation, have these conditions been diagnosed?

3 A. Diagnosed by:

4 [REDACTED] Associates – [REDACTED]

5 [REDACTED] Therapy Associates – [REDACTED]

6 [REDACTED] CN – [REDACTED]

7 Diagnosis: EM & RF Sensitive

8 See Attached Exhibits A and B.

9 Q. Has your physician or other medical care provider made any
10 recommendations about exposure to electromagnetic devices, including smart
11 meters? Please attach any recommendations in writing from your health care
12 provider.

13 A. All have recommended to keep away from devices that cause my symptoms
14 as well as to not have a smart meter.

15 [REDACTED] Associates – Acupuncture for radiation/electromagnetic detox.
16 Monthly radiation-detox baths.

17 [REDACTED] Therapy Associates – Supplements + drink hemp milk as
18 an antidote.

19 [REDACTED] – Radiation-detox baths, supplements, test and use if needed
20 Stetzerizer throughout home. Use of a cell phone radiation bag.

21 Q. Has your experience with the smart meters caused any disruptions in your
22 daily living? Please describe the circumstances.

23 A. YES! My husband and I moved to [REDACTED] in an area where homes are not
24 close to each other. We moved in June of 2011. I was unable to withstand the
25 symptoms in our [REDACTED] home any longer. The house was in a fairly
26 dense neighborhood with one neighbor's meter approximately 20' away and others
27 not much further from the house.

1 I am extremely limited to where and for how long I can shop, visit friends
2 and be in other public spaces due to the mesh network. I had to move to a home
3 where the neighbors' houses are further apart. I can't work in a building with
4 smart meters and wireless. I share space downtown with another group but rarely
5 go there due to feeling sick within minutes. I have to go weekly or bi-weekly to
6 acupuncture for treatment. This is not covered by my insurance. I have to pay
7 CMP to opt out of having the smart meter. I can't even go to my own rental
8 properties since the tenants have the meters. One property has 4 units on [REDACTED]
9 Hill in amongst cluster housing. Because of the opt-out fees our tenants who are
10 on a limited budget can't afford the additional expense of the fees.

11 I struggle with the symptoms of exposure every day. Going for walks is
12 now limited due to the heavy exposure in neighborhoods. I live in fear of the pain
13 or heart issues that occur as I drive through densely populated neighborhoods with
14 meters. The smart meter mesh has been and continues to be a financial, emotional
15 and physical burden.

16 **Q. Please tell us anything else that you want us or the Public Utilities**
17 **Commission to know about your experiences and circumstances.**

18 **A.** As it relates to my sensitivity to all things wireless:

19 Another wireless device that I'm particularly sensitive to is the wireless
20 units in automobiles, planes and busses. My car is a 2008 VW Passat. Within a
21 week of ownership I experienced a discomfort in my legs and hips. Nothing else
22 had changed other than the new car. I had the fuse pulled from the heated seats, I

1 adjusted the position of the seat to insure I wasn't putting pressure on the back of
2 the knee/leg which would interfere with blood circulation. I also drove my 2001
3 VW Beetle (without or limited wireless) for a few days to see if there was a
4 difference. There was definitely a difference in the pain driving the two cars. It
5 wasn't until 2011 when my mechanic mentioned there is wireless diagnostics in
6 my car. It's constantly seeking information to then display on the dashboard.
7 That's when it all made sense. The wireless in the car was why my pain has
8 continued to this day. When I asked the VW dealer to tell me where the wireless
9 'hub' was located and could it be disarmed, they were not willing to be of help.
10 Purchasing a 'new' car will not solve the problem. I would have to buy an older
11 car without the wireless system.

12 Wireless in public transportation is horrible for me as well. I also do not go
13 through the radiation scanners at airports. The first (and only time) I've gone
14 through one, I immediately got a headache and eye pressure. Another disruption
15 to my life...I now have to be delayed at the airport due to the only reasonable
16 alternative...the pat-down.

17 The whole smart meter fight has been weary, I've been extremely
18 disappointed in whole procedure and I worry about my health and well-being.
19 When testifying before the PUC Legislative Committee, it was clear the majority
20 of them were bored. Many decided to focus on reading/answering emails or left
21 the room in the middle of testimonies or had side conversations or thumbed
22 through other materials. I've never seen such a display of rudeness in my life!

1 This is serious stuff and the casual attitudes by many on the panel were so
2 transparent. We were each given a few minutes to make our case and we were
3 made to feel hurried. These are people who are supposed to represent the citizens
4 of Maine and what we got was what appeared to be a group who were bothered
5 having to listen to us. I hope this time around different people are
6 involved...people who care...people who have the citizen's health, safety and
7 well-being at heart.

8 The unfortunate thing with all of this is that scientists will take time (years
9 most likely) to do research in order to publish studies. All of us who are feeling
10 the chaos from the wireless smart meters are the canaries in the coal mine. We are
11 living with the bombardment every day. But for some reason that has not counted
12 towards being real in the eyes of science. It's all very sad.

Dated this ____ day of January, 2013.

STATE OF MAINE
CUMBERLAND, ss:

January ___, 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,

Notary Public/Attorney-at-Law

Name Typed or Printed

My Commission Expires: _____

1 attitudes by many on the panel were so transparent. We were each given a
2 few minutes to make our case and we were made to feel hurried. These are
3 people who are supposed to represent the citizens of Maine and what we
4 got was what appeared to be a group who were bothered having to listen to
5 us. I hope this time around different people are involved...people who
6 care...people who have the citizen's health, safety and well-being at heart.

7 The unfortunate thing with all of this is that scientists will take time (years
8 most likely) to do research in order to publish studies. All of us who are
9 feeling the chaos from the wireless smart meters are the canaries in the coal
10 mine. We are living with the bombardment every day. But for some
11 reason that has not counted towards being real in the eyes of science. It's
12 all very sad.

Dated this 9th day of January, 2013.

STATE OF MAINE
CUMBERLAND, ss:

January 9th, 2013

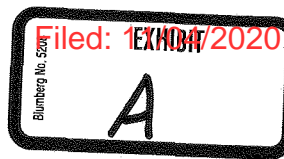
Personally appeared the above-named [REDACTED] and stated under oath that the foregoing Affidavit made by her is true and based upon her own personal knowledge, information or belief, and so far as upon information and belief, she believes the information to be true. Before me,



Notary Public/Attorney-at-Law
Christy Soucy

Name Typed or Printed
My Commission Expires: _____

CHRISTY SOUCY
Notary Public, Maine
My Commission Expires December 6, 2014



November 10, 2012

RE: [REDACTED]

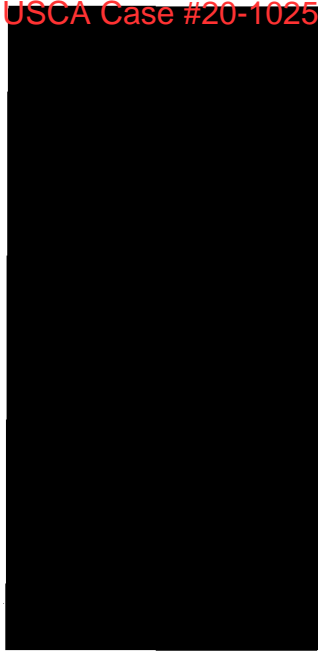
To whom it may concern;

[REDACTED] has been my patient for a number of years for physical therapy treatment of an ongoing hip problem. I have observed, on several occasions, that when my cell phone is in my treatment room during [REDACTED] therapy, there is a palpable increase in overall muscle spasm with a significant decrease in range of motion. When I remove my cell phone from the treatment room, palpation of her muscles reveals a decrease in overall muscle spasm with an improvement in joint range of motion. If you have any questions please contact me.

Sincerely,

[REDACTED]

[REDACTED]



11/9/2012

To Whom It May Concern:

Re: Client, [REDACTED]

I am a member of the Academy of Environmental Medicine. I have studied and worked in the environmental health field for over thirty years. Every minute of every day, we are inundated by chemicals in our food, our water and in the air. The world's dependence on chemicals has definitely forced its citizens to run a chemical gauntlet, in which not only the environment, but the people of the world are at risk. As a Certified Nutritionist, I see clients from all over New England and the United States who have become highly reactive to environmental chemicals.

Now we are facing another huge risk to our health and well-being: microwave radio frequency radiation. The World Health Organization classified microwave radio frequency radiation as a category 2B carcinogen, same as DDT and lead. In the past 7 years, I've seen an increase of people who are extremely sensitive to the effects of wireless technology.

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

1 Q. Please state your name, address and occupation.

2 A. [REDACTED]
3 [REDACTED] but because
4 of EHS I have been unable to work.

5 Q. Was a smart meter installed at your residence?

6 A. No. I do not want, cannot, and would not live in a house with a
7 “smart” meter because it emits microwave electromagnetic radiation.
8 In July 2009, I became extremely Electromagnetic Hyper Sensitive
9 (‘EHS’). Before the date, I was an avid user of wireless technology.
10 I spent hours a day using my cell phone despite the fact that like
11 many others, sometime I had occasional pains from it in my head.
12 My laptop was my best friend. I am now unable to use or be near
13 any of these devices without experiencing severe physiological
14 reactions to electromagnetic fields and especially from those in the
15 radio and microwave frequencies (‘RF’ and ‘MW’ respectively)
16 such as “smart” meters.

17 Q. Please describe your symptoms and the circumstances when they
18 occur.

19 A. The symptoms I experience are varied but most seem to be
20 neurological. Some symptoms are usually correlated to a certain type
21 of exposure and others are changing. Amongst the symptoms I
22 experience from RF/MW sources:

- 23 (1) Heart palpitations
- 24 (2) Chest pains
- 25 (3) Difficulties breathing
- 26 (4) Tightness in my throat
- 27 (5) Sensation of electric shocks in my brain and penetrating pain
- 28 (6) Severe and intense pressure in my head, which also impairs
- 29 my cognitive abilities
- 30 (7) Intense pressure in my neck
- 31 (8) Headaches
- 32 (9) Sharp pain in my ears

- 1 (10) My eyes are jumping and I feel pressure at the back of my
2 eyes
3 (11) Tingling feeling in my feet and hands
4 (12) Severe weakness that brings me to the verge of fainting and
5 an inability to move
6 (13) Memory problems (especially a difficulty remembering
7 words) and even problems thinking
8 (14) Dizziness
9 (15) Nausea
10 (16) Inability to sleep when exposed.

11 **Specific symptoms by type of exposure:**

12 WiFi – I get intense pressure in my head, my legs become very
13 weak, and I can get to the verge of fainting. When exposed I am
14 unable to think properly and function, I get nausea, and am unable to
15 sleep.

16 **Cell Phones:** Each cell phone affects me differently but usually the
17 symptoms will include sensations of electric shocks in various parts
18 in my body, difficulty breathing, my face becomes hot and many
19 times, and I may experience heart palpitations.

20 **Radars from planes** – They are extremely painful – very sharp and
21 disabling pain in the head. Many times it can cause me to lose my
22 balance as well as feel severe chest pains, as if someone stub me in
23 the chest area and I cannot breathe.

24 **Antennas** – I feel pressure in the head, tingling in various parts of
25 the body (mainly in the feet and hands), chest pains, difficulty
26 breathing, and an inability to sleep.
27

28 Attached as Exhibit A is a summary of my experience with EHS.

29 **Q. Have your symptoms been diagnosed?**

30 **A. I have 2 medical conditions:**

- 31 (1) **Hypothyroidism (Hashimoto)** (since 1994) – An autoimmune
32 condition which prevents the thyroid from releasing the hormone
33 which regulates various activities in the body.
34

1 (2) Electromagnetic Hyper Sensitivity (since 2009) – Various
2 physiological symptoms in response to exposure to electromagnetic
3 fields.
4

5 Both conditions have been diagnosed by medical professionals.

6 Q. Has your physician or other medical care provider made any
7 recommendations about exposure to electromagnetic devices, including
8 smart meters?

9 A. Yes. My doctor, Prof. [REDACTED] MD, PhD., recommended a
10 complete avoidance of exposure to electromagnetic fields, mainly
11 from RF/MM frequencies (such as Smart Meters) to which I am
12 especially intolerant. Dr. [REDACTED] is the head of Emergency Medicine
13 and Toxicology in [REDACTED] School of Medicine, [REDACTED]
14 University in [REDACTED] See letter from Prof. [REDACTED]
15 MD, PhD (Physics) attached as Exhibit B.

16 Q. Please tell us anything else that you want us or the Maine Public
17 Utilities Commission to know about your experiences and
18 circumstances.

19 A. I have been personally contacted by hundreds of people who have
20 become electro-sensitive because of "Smart" Meters. Many are
21 successful professionals who became electro-sensitive after "Smart"
22 meters were installed in their houses/apartments. Outrageously,
23 many of these people were forced to leave their homes and have
24 become refugees, many of whom are now living in their cars under
25 inhumane conditions and torturous pains. To claim that these people
26 are imagining what they are feeling is an absurdity, ridiculous, and
27 against common sense and established science! Even if the science is
28 not established, human evidence should suffice as most medical
29 discoveries are based on human observation between cause and
30 effect. Recently in the guidelines published by the Austrian
31 Medical Association in March 2012 instructing medical doctors on
32 how to diagnose electro-sensitivity, it was correctly stated:

33 "EMF exposure should in principle be taken into
34 consideration as a potential cause, especially if the
35 patient suspects that it may be the cause."

36 Following my efforts to ban Wi-Fi in schools the Israel Inter-
37 Governmental committee on the issue (comprised of the Ministry

1 of Health, Ministry of Education and Ministry of Environmental
2 Protection which is responsible to regulate radiation) acknowledged
3 electro-sensitivity and its correlation to exposure to RF/MW. Every
4 week I am contacted by people who are contemplating committing
5 suicide because they have nowhere to go and have lost hope.
6 Anyone who is supporting "Smart" meters is in some way part of
7 creating these (and many other) tragedies.

8 On August 19, 2012, the Deputy Health Minister of Israel (there is
9 no Minister and so he is the Acting Minister) sent a letter to the
10 Minister of Education, demanding to ban Wi-Fi in school. In fact, he
11 stated that he is terrified of exposing children to chronic radiation
12 and believes that this is going to cause us to regret our actions for
13 generations to come. The letter and the English translation are
14 attached as Exhibit C.

15 On August 28, 2012, I submitted a petition to the Supreme Court in
16 Israel asking for a complete ban since the government admitted the
17 health effects of RF/MW; any involuntary exposure of the children
18 in schools should be banned without exception. It is important to
19 note that the government acknowledged that there is a moral and
20 legal responsibility not to expose the children to this harmful
21 radiation.

22 On October 1st, 2012, the Ministry of Education of Israel,
23 acknowledging the potential health effects of RF/MW and the
24 increased sensitivity of children, issued a decree to all the schools
25 instructing them to use only wired networks (essentially banning
26 WiFi, with one exception). Nevertheless, we continue our case to get
27 a complete ban without exceptions and to ensure enforcement of this
28 policy.

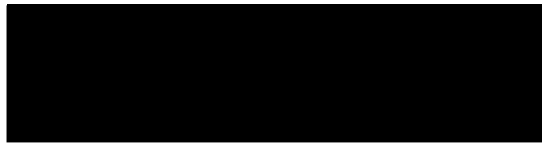
29 The person who is responsible for establishing the radiation
30 standards in Israel, Prof. Stalian Gelberg (Physics Prof.), sent an
31 email supporting a complete ban of WiFi in schools. In essence, by
32 supporting a complete ban he is admitting that the existing standards
33 are not safe, especially in regards to children. Any unnecessary
34 exposure such as from "Smart Meters" should be banned, or at least
35 should not be forced on people and their children in their own home!

36 In a tort case in Israel from 2009, a judge ruled against a cell phone
37 company and a neighbor who leased his apartment to the cell phone
38 company to install a cell phone antenna. The court decided that in

1 the matter of science where there is not a consensus yet, and is not
2 completely determined, once the plaintiff proved some correlation
3 between the cause and the effect the burden of proof is reversed. It
4 then shifts to the Defendants to prove that there is a 0% chance that
5 their actions are the cause of damage. Unless they can prove it, they
6 are liable.

7 Forcing Smart Meters on people in their homes will, in effect, be
8 forcing people (especially children) to endure radiation which
9 has been proven to be harmful to humans (and especially to
10 children).

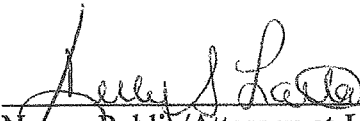
Dated this 18 day of January, 2013.




STATE OF NEW YORK
GREENE, ss:

January __, 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,



Notary Public/Attorney-at-Law


Name Typed or Printed

11

Kelly S Latta
Notary Public in the State of New York
Qualified in Greene County
No. 01LA6020528
My Commission Expires: 03-01-15

5

EXHIBIT A**Testimony of [REDACTED]****Summary of EHS experience**

Until July, 2009, like most people, I preferred to enjoy my cell phone and Wi-Fi and not think about the harmful effects of wireless technology. I was 36 and an attorney in NY and Israel with an MBA. I was 'Miss Gadgets' and was the embodiment of this wireless age. I did not have a home phone and I spent hours a day using my cell phone despite the fact that like many others, sometime I had occasional pains from it in my head. My laptop was my best friend. I was one of the first to purchase cellular wireless Internet connection for my laptop to ensure that I had Internet connection wherever I went. I even met my husband while 'stealing' wireless connections and wondering why there wasn't any Wi-Fi everywhere when most people had no clue what it was (this was over 7 years ago). My husband at the time (we divorced because of my EHS), is an MD, with PhD in molecular biology. When he received an appointment at [REDACTED] University after working for an investment company in Manhattan as the adviser to the Chairman, I decided to start my own law practice and have a baby. A few months later, I became electro-sensitive ('EHS') and now as a result, I cannot work, I divorced my husband, I live in isolation and I would not have children and be a mother with the uncontrolled and irresponsible expansion of wireless technology (including "Smart" meters). I don't know for how long I will be able to survive in this world.

I became EHS on July 19th, 2009, when excited, I got a new Mac laptop for the law practice I was starting, but when I got home and used it something was wrong. The area near the mouse pad was vibrating and I started feeling a tingling sensation in my hands and feet. The logical inference was that I was feeling static electricity as a result of the defect and just planned to change the computer the next day. But after changing 5 laptops in 3 weeks when all the laptops were confirmed by technicians (including Apple technicians) to be defective - and I was getting more and more symptoms - it was clear that something was wrong.

When I tried to use the laptops I started feeling pressure in my chest, increased heart rate, difficulty breathing, dizziness, headaches, my face would become red and hot, and I was nauseous. I had weird cognitive problems - I could not find words and when my husband talked to me 5 minutes later I would not remember that he did. I suddenly could not touch my cell phone and if I put it near my head I felt intense and penetrating pain, as if someone was drilling in my brain. While it was clear that I was reacting to something to do with 'electricity' it took me 5 months and 10 doctors to figure out that I now suffered from electro-sensitivity, a condition I never heard about before. It also took time to identify all the causes of pain such as intense Wi-Fi signals from all the apartments around me and 3 cell towers within 500 yards...

1
2 The first doctor I went to see was a cardiologist from [REDACTED]. When I told her about the
3 symptoms she said that she also got nauseas when she was using her laptop. The
4 second doctor was a neurologist who said he never heard of the problem before and
5 that if he did not meet me he might have thought it was a mental problem; however,
6 now that he saw my condition it was clear that it was not. The only thing he could offer
7 was a pain clinic. Eventually I called a family doctor my husband knew from [REDACTED] and
8 when I explained the symptoms to the secretary she immediately said, "You suffer from
9 EHS," and gave me some internet links. Around the same time, a friend who is a Prof. of
10 Pediatrics in [REDACTED] who knew what was going on with me called me and said that
11 there was an article about my problem in 'Prevention Magazine'; the pieces started to
12 fall into place. I was lucky to figure out what was going on and so immediately I tried to
13 practice avoidance.

14
15 Israel - And so my first action was to decide to go to Israel. I thought that since they
16 build houses differently and better, I will feel better there; it was an unfortunate choice.
17 On my first day there my body collapsed. While I was driving I felt intolerable pain. I
18 looked up and I saw 'white stripes' on the roof of the mall, it was clear the pain was
19 coming from there, and when I asked my mother what they were, she told me that they
20 were cell phone antennas. Until that moment I did not know I felt antennas. I had tears
21 in my eyes and all I could say was "For God's sake, there are children growing up here."

22
23 Until the time I went to Israel I was already EHS, but I could still function to some extent;
24 however, from that moment on my condition quickly went downhill and my life became
25 a nightmare. I could not sleep anymore, the pain was intolerable and life had become
26 impossible. How can you survive in a wireless world with a sensitivity to wireless?

27
28 At my parents' house I had to be on the floor until we shielded one of the rooms. I
29 spent much time in bed with tormenting pains, crying quietly and just wanting to die.

30
31 Green Bank, West Virginia - When I came back to the US a month later I was a very
32 different person, very EHS. For a month I was unable to sleep, which was torture for I
33 was desperate to sleep and get a break from the pain. I purchased shielding fabrics and
34 other items that were supposed to help, but nothing did. When I heard that there was a
35 place in West Virginia without cell towers and radiation because of an observatory that
36 belongs to the Federal Government, I just took a car and drove there. I stayed in a tent
37 for a week; while I could not sleep as it was too cold, for the first time in months I had
38 clarity in my head.

39
40 I found a job on a farm and spent 3 months there, taking care of horses, goats, lamas, a
41 sheep and painting fences; for a while I felt better.

42
43 Living in my car - Eventually I went back to NJ, and my husband (now ex-husband) and I
44 decided to try and find an isolated place in which to live. In those months I stayed in the

1 car, in impossible conditions and my health quickly deteriorated; it was a nightmare. I
2 could not be in my apartment, could not find a house, and I spent my days desperately
3 trying to find a place without radiation in which to park my car. Sleeping was impossible.
4 At nights I parked my car in parking lots and would cover the windows with dark cloths
5 and sheets so people would not see me. I could not really sleep as there is no place
6 without radiation and the pains were tormenting.

7
8 My marriage also deteriorated. There was nothing really my husband could do to help
9 and it was depressing him to see me suffer so much knowing he could not help. I
10 decided to get a divorce. As it was clear that with the expansion of wireless technology
11 my life was going to be a long nightmare, I felt that it was enough that my life got ruined
12 - I didn't want his life to be destroyed as well.

13
14 **Staying in South Carolina** - I spoke to a British EHS woman who is also an ER doctor (she
15 was in the US as her husband, a fighter pilot in the British Air-force was in an exchange
16 program) and she offered to let me come and stay in an isolated cabin in SC. I stayed
17 there for 6 weeks and slowly my body started to calm down and after 4 weeks I finally
18 was able to find a spot in the house to sleep.

19
20 **Back to living in my car** - My husband and I decided to try and save the marriage and so
21 I went back 'home' i.e., to sleeping in my car and trying to find an isolated house again.
22 The winter came and it was impossible to be in the car when it was freezing outside.
23 Eventually after physically checking almost 200 houses I found an isolated house in a
24 farm. After 18 months of nightmares I was finally able to sleep. However, the nightmare
25 still continued. I still could not go anywhere, not even to a doctor or to work; driving on
26 the roads was also impossible. My husband and I decided to divorce.

27
28 **Finding a house in NY (1 out of 500 houses)** - As I did not have to be in NJ anymore I
29 decided to move to the Catskills in NY, hoping to find a place with less radiation, less
30 antennas, less people and planes and mountains that could block the radiation. My
31 father came from Israel to help me look for a house as being on the roads with antennas
32 and cars full of gadgets was impossible.

33
34 Out of 500 houses we found only 1 in which I could be and even in that house I can use
35 only 1 room and a small area in the living room. There is no "Smart" meter (for now),
36 the closest neighbor is 300 yards away (such distance is required in order to not be
37 affected by a neighbor's Wi-Fi, cordless phones and other gadgets), there is only spotty
38 cell phone reception, and radiation from only one radio station.

39
40 **My life now**

41 I have been living in this house for a year now and my condition improved. I feel much
42 better as I have no exposure to RF/MW, but my life is pretty much still impossible as I
43 am a prisoner in my own house. I cannot go anywhere, be anywhere, or work. I cannot
44 access a doctor or even to go to court to enforce my rights. I go once a month to

1 civilization to buy groceries. Many times I cannot even do that and depend instead on
2 friends to buy food for me. My money is about to run out and as I cannot work I don't
3 know what I will do. Most of all though I am terrified of the day they will put "smart"
4 meters here too...where will I go?

5
6 From a vibrant, independent, healthy, and career-oriented woman, I have become a
7 disabled person without rights and or the ability to survive in this world. From a lawyer I
8 had to become an expert on electromagnetic fields and the science behind it. I was
9 astounded to discover this huge body of science which goes back to the 50's which
10 proves beyond any doubt the adverse biological effects of this RF/MW-based
11 technology. I also discovered hundreds of papers which prove the existence of EHS and
12 that it is actually the first condition that was attributed to RF and microwave radiation.
13 Considering we are dealing with EMF's it is very clear that symptoms which are
14 associated with the electric nervous system would be the logical manifestation of the
15 harmful effects of RF/MW. I believe that the focus on cancer is intended to mislead the
16 public from the real problems associated with RF/MW. I was horrified to discover the
17 extent of sickness this radiation is causing and it became clear that we are already
18 experiencing an epidemic and the biggest and most cruel deception ever visited on the
19 public.

20
21 My life as I knew it, worked for, and wanted to it to be is lost now. The only reason for
22 my life now is to help other people who suffer from this horrendous condition, to
23 inform the public about the harmful effects of this technology, to force governments to
24 take responsibility and to bring to justice all those who abused and betrayed their public
25 duty to protect the public. The adverse effects of this radiation are well established and
26 anyone who ignores them is and should be liable. I am working to ensure that people
27 with EHS will have basic human and civil rights which are currently and cruelly denied to
28 them; I am working to expose this deception on the public, as well, and am focusing my
29 efforts both in Israel and the US.

30
31 Following my efforts in Israel to ban WIFI in schools, the government admitted to the
32 existence of EHS and the ministry of education ordered the schools to use wired
33 internet as opposed to WIFI. Although the Government announced that wired networks
34 should be used after I submitted a case to the Supreme Court demanding to ban Wi-Fi in
35 schools, I continue with the lawsuit in order to force a complete ban and enforcement.

36
37 Is It Real?

38 No one who has been around me ever doubted what it was that I am suffering from.
39 Not my husband, not my family, not my friends and not my neighbors. Every journalist
40 that I met also was convinced immediately as it was very easy to prove. A journalist
41 followed me for the month that I was looking for a house in NY and has hundreds of
42 hours of film of how I am affected by EMF's. Doubting the existence of EHS is ignorant,
43 ridiculous and cruel.



DOCUMENTATION OF DISABILITY
BY MEDICAL OR OTHER PROFESSIONAL AUTHORITY

The testing and this form must be completed by a qualified diagnostician with comprehensive training and direct experience in working with adult populations. Diagnosticians should attach to this form a description of their academic credentials and qualifications that allow them to diagnose disabilities and recommend accommodations on the West Virginia Bar Examination.

Petitioner's Name [REDACTED]
(Please Print)

Date(s) petitioner was examined or under my care 4/22/2010

I last examined the petitioner on 4/22/2010

Petitioner's Subjective Complaints: Electromagnetic Field sensitivity

Treatment or testing consisted of Observation under exposure conditions

Examiner's Objective Findings (Attach separate sheet indicating specific tests performed and the petitioner's results, where applicable. Please be as specific as possible to facilitate a review of your findings by the Board's consultant):

Changes in physical condition & vital signs observed in presence of blinded exposure.

Nature and extent of disability: Electrohypersensitivity, must avoid fluorescent lights, cell phones & towers, computers & screens, etc.

Prognosis: No known cure at this time except avoidance.

Based on the foregoing information and my professional opinion, the patient's disability is [permanent / temporary]. If temporary, please explain:
(please circle one)

permanent

A description of the West Virginia Bar Examination is attached. Based on the examination information provided, how will the petitioner's disability affect his/her ability to read, write and/or concentrate during standard testing?

Unable to perform at level needed to pass bar exam in presence of electromagnetic fields & radiation.

Typical modifications in the past have included but have not been limited to questions in braille, audiotaped questions, large print, reader, sign language interpreter, writer, extra time (typically time and a half is the additional allotment for disabilities that necessitate extra time. Double time has been granted on occasion but the use of double time has been limited due to security concerns). Accommodations may not alter the nature or content of the examination or the Board's ability to determine through the examination that the applicant possesses the essential skills and aptitudes required for admission to the practice of law, or compromise the security, integrity, reliability or validity of the examination.

What modifications in standard testing would you suggest to accommodate the disability of this petitioner?

Room with no fluorescent, CFL lights. Away from cell phone towers. No wireless internet or cordless phones. No cell phones. No exposure to electric motors. No computers, printers, modems.

I declare under penalty of perjury that the above information is true and correct under the laws of the State of West Virginia.

Executed on 4/22/2010 by _____
(Date) (Signature)

m) Give extra time as mentation will be slowed.

Name: _____

Position: _____

Professional License Number: _____

Address: _____

Address: _____

Telephone: _____



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TRANSLATION:**THE LETTER OF THE ISRAELI DEPUTY HEALTH MINISTER (ACTING MINISTER)**

Ministry of Health

The Deputy Minister of Health (Acting as the Head of the Ministry)

August 19th, 2012

To my Esteemed & Honorable,

MP Gidon Saar,

The Minister of Education.

Hello and greetings.

I received the copy of the letter sent by attorney Michael Bach, in which he specify the possible health risks associated with the deployment of wireless internet in schools.

I deeply sympathize with attorney Michael Bach's letter. I had dealt with this subject in the past, and although I am not a professional, I do fear that there will come a day that we will all shade tears regarding the irreversible damage that we, in our own hands cause the future generation.

The process of deployment of wireless internet has to be paused and should be reconsidered comprehensively.

With Respect,

Rabi Yaakov Litzman, Deputy Minister of Health.

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

4 A. No. However, my health and the ability to perform activities of daily living were
5 affected as a result of smart meters installed in my neighborhood.

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.

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

19 A. Yes.

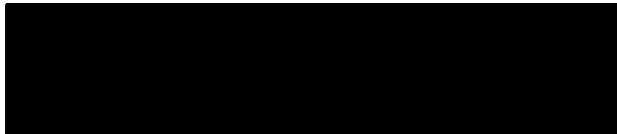
1 Q. Do you wish to add anything here not included in your statement in

2 Exhibit A?

3 A. Yes. I would like to add 3 pages of my physician's notes that document the
4 diagnosis of EMF sensitivity. True and accurate copies of the notes are attached
5 as Exhibit B.

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

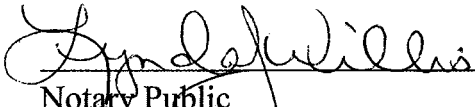
9 A. Yes. I submit the attached sworn testimony in support of complainants Ed
10 Friedman, et al in their case before the Maine PUC as evidence that smart meters
11 are not safe.




STATE OF MICHIGAN
WASHTENAW, ss

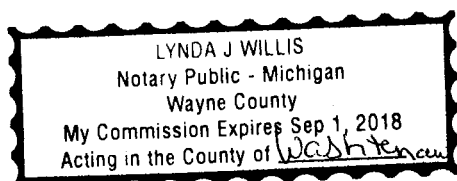
January 24, 2013

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,



Notary Public


Name Typed or Printed



My Commission Expires: 9-1-18

[REDACTED]

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
[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 and address.

5 A. [REDACTED]

6 Q. On whose behalf are you testifying?

7 A. That of Intervenor Linda Kurtz and Cynthia Edwards.

8 Q. What are your qualifications to testify?

9 A. The electricity on my house comes from Detroit Edison. I live in a neighborhood that has
10 been installed with smart meters. Both my health and my ability to earn an income have
11 been affected by the smart meter installation, as have various other rights and privileges.

DIRECT TESTIMONY OF [REDACTED]

1 **Q. What is the purpose of your testimony?**

2 A. To provide information that may help the Commission in determining whether smart and
3 digital meters create certain kinds of economic, medical, social, or other harm or hardship,
4 as outlined in Intervenor Linda Kurtz's Petition for Intervention, to some or all persons such
5 that Detroit Edison and the Commission must not require those who are or who are likely to
6 be so harmed to have a smart or digital meter placed on their home or place of business or
7 to be otherwise deprived of rights and liberties, as outlined in Intervenor Kurtz's Petition
8 for Intervention, by the deployment of the advanced metering infrastructure, smart meters,
9 or digital meters, and, in the alternative, that such persons must be able to avoid such harm
10 to their person and property without being charged a fee.

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

12 A. My husband and I have lived here for 19 years. We own our home.

13 **Q. What do you do for a living?**

14 A. I'm working in finance for clinical trial research at a public university.

15 **Q. Have you been diagnosed with EMF sensitivity, also known as electromagnetic**
16 **hypersensitivity, electrosensitivity, or electromagnetic hypersensitivity syndrome?**

17 A. Yes. I was diagnosed with EMF sensitivity on May 11, 2012 by [REDACTED] D.O. who is an
18 Environmental/Allergy physician.

19 **Q. How did you receive this diagnosis?**

20 A. For about 2 years prior to my diagnosis, I was on a quest to determine the cause of some
21 escalating and unusual symptoms. I had suffered for years with chronic neck pain and TMJ
22 issues stemming from a blow to my jaw from a horse when I was a teenager. Wearing a
23 dental appliance and getting occasional physical therapy and chiropractic treatment had
24 kept this in check.

25 However, in December of 2010 I noticed increasing difficulty with my singing voice as well
26 as my speaking voice and had to quit my choral activities, which was my prime hobby and
27 passion. I also had increased head and neck pain and noticed that in certain environments
28 both the voice problems and neck pain got much worse. When I attended day-long
29 conferences for work that were held in hotel banquet halls, my whole body ached. I blamed
30 it on sitting all day in an uncomfortable chair.

31

1 My primary care doctor ordered MRIs of my neck and thoracic regions and no significant
2 findings were found. I was referred to a rehab doctor, who could offer no help except to
3 refer me to a pain clinic. I refused. I knew there was something else going on. Being a
4 registered pharmacist, I knew I would be masking the pain with drugs and injections
5 without addressing the root cause, which remained a mystery.

6 I was diagnosed with several food allergies in 2011 by Dr. [REDACTED] and eliminating these
7 foods from my diet seemed to help some of the muscle and joint pain. I was also diagnosed
8 with chemical sensitivities. I began buying unscented skin-care products and asked friends
9 who would visit at my home to not wear fragrances. However, the neck and head pain
10 persisted

11 In February 2012, I was diagnosed with a visual impairment called *vertical heterophoria*. It
12 could have stemmed from the kick in the head by the horse. The new prescription lenses
13 corrected my vision with prisms and relieved some of the neck and head pain. But I still had
14 symptoms in certain environments, and these were becoming more intense.

15 **Q. What were those symptoms?**

16 A. In the spring of 2012, whenever I would enter the office at work, I began to feel facial
17 tingling and burning [from fluorescent lighting and cell phones], increased neck pain, and a
18 clamping sensation in my upper throat that made swallowing difficult. I also recognized this
19 sensation when I would enter a drugstore, or in certain churches I attended, in restaurants,
20 and even in the eye doctor's office. I asked myself, "What do these places all have in
21 common?"

22 **Q. What did you find they had in common?**

23 A. In April of 2012, I was able to put the pieces of the puzzle together after attending two
24 different churches and noticing a decrease in symptoms in one church compared to the
25 other. One church had wi-fi, the other did not. I had my husband turn off the wi-fi router in
26 our home and noticed immediate relief of head and neck pain and the clamping sensation in
27 my upper throat. We then removed all wireless technology in our home, such as cell phones
28 and our cordless phones and hard-wired our Ethernet connection. I've since learned that
29 the burning sensation occurs when I am in proximity to certain types of lighting (such as
30 Compact fluorescent lamps (CFLs), fluorescent lamps, or halogen lamps) which can emit a
31 radio frequency and/or magnetic fields. Cell phones also cause this burning sensation as
32 well as head/neck pain.

33 **Q. Were you sensitive to other wireless devices prior to your diagnosis of EMF**
34 **sensitivity?**

35 A. Yes.

36 **Q. When did this sensitivity begin, and how acute was it?**

1 A. A year or more, at least. I am certain I had some of this sensitivity for years, and it just got
2 more intense as time went on. In the spring of this year, I attended a concert at the church
3 my husband works at, and my neck was screaming at me the whole time. A month later
4 there was another concert at his church. My husband disabled the wi-fi, and I enjoyed the
5 concert free of neck pain.

6 Q. Were you sensitive to other electromagnetic fields, for instance fluorescent lights,
7 prior to your diagnosis of EMF sensitivity? If so, when did this sensitivity begin, and
8 how acute was it?

9 A. Yes. In the spring of this year I began noticing the facial tingling, mostly at work, then also
10 in other locations. I've deduced that this is due to radio frequency emissions from cell
11 phones and certain types of lighting fixtures. At work, the fluorescent lights and certain cell
12 phones caused my face to burn and tingle. I notice it also in certain stores that have a high
13 level of fluorescent lighting.

14 .
15 Q. Once you determined that the problems you experienced seemed to be dependent on
16 exposure to wi-fi, what did you do?

17 A. As I said, I saw my environmental/allergy physician, Dr. [REDACTED], in May, and he diagnosed
18 me with EMF sensitivity.

19 Q. What was your health like once you turned off the wi-fi in your home?

20 A. I felt much better in my home: a decrease in my head and neck pain, and a decrease in the
21 aching in my body. However, since I worked in an office with 30 others who used cell
22 phones, and where wi-fi was used, this presented a huge problem.

23 Q. What do you experience when at work?

24 A. Within about 5 minutes of entering the office I begin to experience facial tingling, a
25 clamping sensation in my throat, head pressure, head pain, and neck pain. I work in a large
26 office with 30 people who all have cell phones. Even if just one or two of my coworkers are
27 present I still feel these sensations, though they may not be as intense. It also depends on
28 how close in proximity I am to the cell phone. I also notice a reduction in my symptoms if I
29 turn off the overhead lighting in the office.

30 Q. What did you do about your work situation?

31 A. My supervisor at work was very understanding and allowed me to work most of my hours
32 in my home. I now come into the office only if necessary during the day for brief meetings.
33 Each day I come into the office after hours so I can work without the presence of multiple
34 cell phones and I keep the overhead lights in the office turned off.

35 Q. You took additional steps to mitigate your home. What were those steps?

1 A. During the spring of 2012, when doing research on-line about EMF symptoms, I came
2 across reports of something called a *smart meter* that was being installed in various parts of
3 the country. The meter used pulsed radio-frequency emissions to transmit energy-usage
4 information back to the utility company. The meter deployment was currently taking place
5 in Michigan. This was definitely something I needed to protect myself from. I researched
6 various materials that could be used to shield my home from RF. Several types of metal,
7 aluminum, for instance, does a good job of shielding against RF. We completely covered the
8 first floor windows with aluminum screening. Our home was already aluminum-sided on
9 the three sides that faced the backyards where the electrical meters are. I sewed curtains
10 made of a fabric that shields against RF for the upper-floor windows of our .home

11 Q. **Your diagnosis of EMF sensitivity was in May 2012, and you had begun mitigation of**
12 **your house in April 2012. That means you had about 6 months before the smart**
13 **meters were installed in your neighborhood. Between the time you began mitigation**
14 **and the time smart meters were installed, how was your health both within your**
15 **home and in other places? Please be specific about what improved, stayed the same,**
16 **or got worse.**

17 A. Before the meter install my home was the place where I felt the best. Now, after the install, I
18 feel ill effects (nausea, headache, malaise) on the second floor. Before the install I was able
19 to walk in my neighborhood symptom-free. Now, I get headaches and feel a general malaise
20 when I walk in my neighborhood ,

21 Q. **When were smart meters installed in your neighborhood?**

22 A. On October 12, 2012 they were installed on my street. I watched the installers from the
23 second-story window of my home as they went door- to-door to my neighbors'. I felt
24 confident that all of the preparations we did to shield our home from the microwave
25 radiation would be sufficient for me to remain at home and live comfortably. I continued to
26 work in our upstairs office.

27 Q. **What happened next?**

28 A. After a couple of hours after the installation of my neighbors' meters I began to feel a
29 general malaise, nausea, and headache.

30 Since that day I have had to sleep on the first-floor level of my home. My office had to be
31 moved to the first floor as well. Both of these impact my husband's piano studio, where he
32 teaches privately.

33 I cannot use the second floor of my home for more than 30 minutes before feeling ill.

34 Since the meter install, I feel ill in my backyard and cannot work or spend time there due to
35 the location of my neighbors' meters.

1 I feel the effects when walking through my neighborhood. Walking is my primary exercise. I
2 now drive to a remote and secluded portion of our subdivision where the lots were never
3 developed and walk there.

4 **Q. Have you been in houses with smart meters?**

5 A. On November 3, 2012, my neighbor invited me inside his home to see the improvements he
6 had made, as he was preparing to sell his home. Within about 10 seconds of stepping inside,
7 I felt intense head and neck pain and a consuming, painful pressure on my body from all
8 sides. This extremely alarming sensation allowed me to stay for only 4 or 5 minutes before I
9 quickly left. I felt physically traumatized. After this experience, I know I will no longer be
10 able to visit at the homes of family, friends or relatives who have one of these meters.

11 **Q. Prior to this experience at your neighbor's, had you been in houses with smart**
12 **meters?**

13 A. Yes, before I knew what a Smart meter was, we visited relatives on Harsen's Island a few
14 summers ago. This was a cottage where I had visited many times during my life. I was
15 talking with my cousin in the kitchen when the strange and extremely painful sensations
16 began. Every minute or two it felt like an electric current was being injected into my neck. I
17 didn't mention it to anyone because it was so odd. I also felt it outside the cottage about 60
18 feet away. In retrospect, I have deduced that these sensations were due to the Smart Meter
19 installed. The electrical box is on the wall of the kitchen. This past spring when doing
20 research on the DTE site I read that Harsen's Island was one of the first places in Michigan
21 where these meters were deployed. From this experience I knew I had to take drastic
22 measures to shield my home from the pulsed RF that these meters emit, and that I would
23 not be able to live in my own home if one was installed there.

24 **Q. How has this affected you in terms of going to other buildings with smart meters?**

25 A. Knowing these meters are deployed in Southeast Michigan, I am extremely cautious about
26 visiting businesses, shopping malls, doctor's offices, churches, the post office, the library,
27 etc. due to the possible presence of smart meters or other sources of microwave radiation,
28 such as Wi-Fi, WLAN networks, and cell towers. Since I've become electrically
29 hypersensitive, I spend most of my time in my own home, don't go shopping, or out to eat,
30 or to a movie, etc. I remained at home and could not travel with my family this summer to
31 visit relatives in another state, because they have these meters on their home. I make only
32 trips that are essential, such as doctor's appointments, brief trips to the grocery, or to places
33 that I know don't have the meters yet or if they do are in a distant enough location where I
34 am not affected. The drug stores have these meters, and I feel absolutely terrible in there. I
35 have to know exactly what I'm getting, get it, and get out as quickly as possible (I try to keep
36 it at 5 minutes max).

37 **Q. Have you been in public buildings / businesses you know have smart meters? How**
38 **has this affected you?**

1 A. Several of the public and federal buildings in Ypsilanti are now equipped with antennas on
2 their roofs that broadcast and receive radio signals. If my visit to the downtown Ypsilanti
3 Post Office this past summer is any indication of the environment of any of these buildings, I
4 will not be able to conduct business transactions of more than 10 minutes before feeling
5 extremely ill..

6 **Q. What happens to you if you are in a building for more than 10 minutes? Please be**
7 **specific, and tell us how long these symptoms last?**

8 A. I immediately experience all of the symptoms I've mentioned above: painful facial tingling,
9 neck pain, head pressure, difficulty speaking, clamping sensation in my throat. If I'm there
10 longer than 10 minutes my arms begin to go painfully numb. My whole body feels as if it's
11 going to go into some sort of crisis...I've never had a seizure, or stroke, or lost
12 consciousness, but these come to mind, in terms of the severity of the physical
13 consequences that possibly could occur to me. My gut instinct says "Get out now!" These
14 symptoms begin to subside when I remove myself from the environment, but depending on
15 the length of exposure it can take a few hours to feel better, physically. It's emotionally
16 disturbing as well

17 **Q. Please list all health effects and symptoms you experience when in the presence of**
18 **smart meters or subsequent to exposure to smart meters?**

19 A. See above.

20 **Q. Had you experienced any of these symptoms prior to the installation of smart**
21 **meters?**

22 A. Yes, I have similar symptoms when in close proximity to cell towers and WLAN
23 broadcasting equipment.

24 **Q. If the answer to the previous question is yes, did the severity of the symptoms lessen**
25 **or increase after smart meter installation?**

26 A. Same.

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

29 A. Yes, The impact is quite significant..I can no longer meet socially in my neighbors homes. If
30 my mother gets one of these meters I will not be able to visit her in her own home. I
31 anticipate problems going out to eat at restaurants, and if there are family events in banquet
32 halls or hotels this will also be a problem. I'm even concerned about visiting loved ones at
33 the next funeral., if the funeral home has one of these meters.,

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

4 A. Yes. I am immediately in pain when entering the post office. I am not certain if it is due to a
5 Smart Meter, or to the radio signals from the tower on the roof. I have not visited the library
6 or other government offices yet. Any place where I am required to wait and stand in line
7 could potentially be problematic, as my time is very limited before I become extremely ill.

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

10 A. If the location of the assembly is near a building with Smart Meters, then, yes, it would affect
11 my ability to freely assemble in that location. I would have to move quite a distance away.

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

14 A. My church's office has these meters, so I am unable to attend meetings there.

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. Yes. When I make the first appointment with a new health practitioner, there is always a
18 question as to whether or not they will have a meter on their building or not. I try to give
19 them notice that I am extremely sensitive to these meters so they know I may have to cancel
20 the appointment and look elsewhere for a different person. This is happening tomorrow as I
21 go to see a new dentist. Another case in point: a certain physical therapist was
22 recommended to me. However, she worked out of her home, and her home had both an
23 electric as well as a gas Smart Meter. I had to look elsewhere for PT services.

24 **Q. Is there anything else you wish to say about how smart meters have affected your**
25 **ability to perform major or minor activities of daily living?**

26 A. I am convinced that if my home was not aluminum-sided and if we had not taken the other
27 measures to cover windows with shielding material I would have been forced to find
28 another place to live when the smart meters were deployed in my neighborhood (even
29 though a smart meter has not been put on my home) .

30 I am grateful that after years of searching, I was able to solve the mystery as to the source of
31 my pain and voice difficulties, and that this revelation occurred before smart meter
32 deployment in my area, so that I could actively work with DTE to avoid having a smart
33 meter installed on our home. I thank Elaine Curtis, DTE representative, for her
34 understanding of my health concerns and assisting me in this process. Even though I don't
35 have one of these meters on my home, I am still affected in my home by the pulsed RF
36 signals from my neighbors meters such that I can't sleep on the second floor of my home, or

1 spend time in my backyard, or take walks through my neighborhood. I live in constant fear
2 that DTE will remove my analog meter and then I will have to move from my home to
3 another location

4 My heart goes out to those who are caught unawares and have no clue as to why they feel ill
5 and are trying to figure out why. It is getting increasingly difficult to find places that are free
6 of electrosmog so that it can be ruled out as a possible cause of illness. It is extremely tragic
7 for those who become ill in their own homes after a smart meter has been installed. The
8 general public, without knowing how the new meters work, have no reason to suspect it as
9 being a possible cause of illness, and weeks and months of harmful radiation exposure
10 occurs before the cause is figured out, if it ever is.

11 In closing, I would like to cite David Carpenter, MD, Public Health Physician in the State of
12 New York, who, having studied electromagnetic radiation and its effects on human health is
13 uniquely qualified in this area. He warns that the meters are not safe, and actually can cause
14 serious health issues, including electrical hypersensitivity. His brief video at
15 <http://www.electricsense.com/2225/smart-meter-radiation-3-things-you-must-know/> is
16 very good . The human suffering these meters have caused and will cause in the future is
17 unconscionable.

18 Since when is the utilities' need to control power usage put above the public's right to live in
19 a safe and healthy environment?

20 **Q. Given your sensitivity to voltage transients, also called *dirty electricity*, do you think**
21 **that you would be able to tolerate on your home a meter that generates dirty**
22 **electricity, whether or not that meter is a smart meter?**

23
24 **A.** Definitely not. I need to be able to keep my analog meter.

25
26 **Q. What do you feel is a reasonable accommodation to allow you to perform major**
27 **activities of daily living--working, sleeping, gardening, going to church, shopping,**
28 **etc.?**

29 **A.** As long as these Smart Meters are deployed I will have significant issues performing these
30 activities . In the very least I should be able to keep my analog meter, and even neighboring
31 meters be removed if need be. If I move, request that Smart meters be removed and replaced with
32 an analog meter,. If I happen to move to a condo or apartment building, then those Smart meters in
33 the vicinity (even on my neighbors condos/apts) should be removed as well so I can at least live
34 safely and without pain.

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EXHIBIT B

Patient	Date	Service Rendered	X-Ray Ref. No.
	1/13/12	neck & back @ RT	
		1) Alert & Amiable	2) Cord
		No pain over SS	Cord
		4) pain in 6) Gt m/m.	Caravan
			+ Creep
			Seed
			Extrad
		2) Pain over 6) ITIS	2) RT for
		4) Ant. rotation of both	6) Gt m/m
		hips & hamstrings @	pain
		ext.	X10
		3) Scoliosis @	3) Consider
		15) No pain	CS
		Amplified TMS	
		neck & back muscles	4) Cord
		Food allergies	exercise
		6) Shoulder pain	
		2 was	
	5-11-12	wt 136 BP 100/60 (D) 97.0 P 60 R 18 W 0	
		PE (lung) For @ Electro magnetic sensitivity (R1) (R2)	
	5/4	A/A Believes EMF is causing	
		her voice & neck problems	
		Certain churches/computers bother	
		her. none. Turning off WiFi	6) Discussed
		in home helped head neck avoidance of	Chairs
		pains & voice reacts to	
		many environments	
		2) Avoid	
		Food after	
		3) Rnky	
		1500	
		4) Purchase	
		EMF detector	

Patient	Date	Service Rendered	X-Ray Ref. No.
5-18-12		Food allergy EAE sensitivity Vif A test	5) Referred lab. + meds
		4P 1/10/12 90	6) Vif A CBC CMP Creatinine a Sugar HbA1c
			7) Rec work release
			8) 20 mins at
			10) Wave shield gold.
5-22-12	WT 135 PP 100/60 (-) 973 P W R 18 RF	Discussed LDA	
5-24	AA Has many ?'s about LDA Is on 100 mg of Levothyroxine a day. Taking hormone despite being hypothyroid 2° to joint + muscle pain. 1) Discussed Primary sys RMT + chemical error of joint + neck/shoulders, losing est Had black mold in attic, patches		2) A and Bad allergy

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JA 09826

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

1 **Q. Please state your name, address and occupation.**

2 **A. [REDACTED]**

3 **Q. Was a CMP smart meter installed at your residence? If so, state**
4 **approximately the date when it was installed.**

5 **A. Yes, March 2012**

6 **Q. If a smart meter was removed and replaced by an analog meter at your**
7 **request, please describe the circumstances of your request or complaint to**
8 **CMP and their response.**

9 **Q. My partner and I opted out of the smart meter program with CMP soon after being**
10 **notified that one was to be installed. The decision was based upon the potential**
11 **for negative impacts to our health. We received a notification from CMP that a**
12 **smart meter would not be installed at this time. It was in the late spring or early**
13 **summer of 2012, that we noticed our meter had been changed to a digital format**
14 **and had a blinking light. We examined it, but nowhere did it say it was a smart**
15 **meter. We began comparing our meter to others that were supposed to be smart**
16 **meters, but because ours looked a little different we thought we were safe and did**
17 **not have a smart meter. During this time we began experiencing disturbed sleep**
18 **patterns as did our dog. In further investigating smart meters and what they look**
19 **like, we began to suspect that we did, indeed have one even though we were not**

1 supposed to. My partner finally called CMP and the woman with whom she
2 spoke was very friendly and informed her that we did have a smart meter. My
3 partner immediately requested that it be removed and this was agreed to with the
4 attempt to charge us for the change. My partner successfully argued that she
5 would not pay for a meter that we did not want to begin with. A few days later
6 my partner and I awoke and both of us stated how well we had slept. In addition
7 the dog had slept and had not gotten us up in the night which had become a new
8 routine. I suddenly asked my partner if the smart meter had been replaced and
9 she stated that it had been done yesterday. We both realized that it was the smart
10 meter that had been seriously disturbing our sleep patterns.

11 **Q. Are you paying the opt-out fees?**

12 A. My partner pays the electric bill and she is paying for the opt-out fees out of fear
13 of losing our service.

14 **Q. Please describe why you do not want a smart meter at your residence.**

15 A. We are both aware of the potential negative health effects of electromagnetic
16 radiation. We also learned that smart meters were banned in Europe. It was a
17 no-brainer to opt out of a program that very likely would negatively impact our
18 health. We also experienced first-hand that the smart meter caused both of us and
19 our dog to have poor sleep and this condition appeared to worsen over time.

20 **Q. Do you or any of your family members experience electromagnetic sensitivity**
21 **symptoms in proximity to radio frequency devices, such as Wi-Fi, microwave**

1 ovens, cell phones, cordless phones, smart meters or other devices? Please
2 describe the symptoms and the circumstances when they occur.

3 A. To date only the smart meter has negatively impacted our health. We have not
4 sensed such effects from other devices.

5 Q. If you have physical or medical conditions, including sensitivity to
6 electromagnetic radiation, have these conditions been diagnosed?

7 A. The condition of disrupted sleep was personally experienced by us, our dog and
8 our neighbor and her dog and cat. We did not need anyone to formally diagnose
9 the problem.

10 Q. Has your physician or other medical care provider made any
11 recommendations about exposure to electromagnetic devices, including smart
12 meters?

13 A. Our health care provider was never notified because there was no reason to do so.
14 Furthermore, we probably know more about the health effects of EMFs than does
15 our health care provider.

16 Q. Have you observed any pets exhibiting adverse reactions to smart meter
17 transmissions? Describe the circumstances.

18 A. Yes. Our dog's sleep patterns were seriously impacted resulting in restless sleep
19 and getting up 1 to 2 times in the night to go to the bathroom. This same pattern
20 was experienced by our neighbor with her dog and cat.

1 Q. If you had a smart meter for a period of time and experienced or observed
2 symptoms or adverse reactions, did those symptoms or adverse reactions
3 cease when the smart meter was removed? Describe the circumstances.

4 A. Yes. As soon as the meter was removed restful sleep was restored.

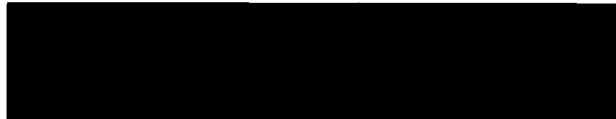
5 Q. Has your experience with smart meters caused any disruptions in your daily
6 living? Please describe the circumstances?

7 A. Yes. We were all tired and fatigued due to lack of sleep. This condition
8 negatively impacted our relationship and my ability to function efficiently at work.

9 Q. Please tell us anything else that you want us or the Public Utilities
10 Commission to know about your experiences and circumstances.

11 A. We will all be better off when corporate America actually cares and takes
12 responsibility for how it impacts peoples' lives.


Dated this 17th day of January, 2013.



STATE OF MAINE
WALDO, ss:

January 17, 2013

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


(Notary Public/Attorney-at-Law)

Name Typed or Printed Claudette Coyne
My Commission Expires: 1/20/20

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

1 **Q. Please state your name and address.**

2 A. [REDACTED]

3

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

5 A. No. I refused it to allow its installation. I responded to a paper from CMP stating
6 that I did not want the smart meter.

7 **Q. Are you paying the opt-out fees?**

8 A. Each month I pay my bill, but do not pay the opt-out fee. I work as a nurse's aide in
9 a nursing home. It is very difficult to stay current with my bills on my limited
10 income. Charging extra fees to protect my health is just not right.

11 **Q. Please explain why you do not want a smart meter at your residence.**

12 A. I believe that the electromagnetic radiation emitted by smart meters can be
13 dangerous to my health. I have had cancer in the past and do not want to take any
14 risks. I have read articles that convinced me of the potential health risks from
15 exposure to radio frequency radiation like smart meters. Attached as Exhibits A
16 and B are a couple of the articles I have read on the subject.

17 I should have the right to limit my exposure to potentially harmful radiation in my
18 own home. I should not be charged extra fees for wanting to maintain a healthy
19 environment in my own home.

20 **Q. Do you use other devices that emit radio frequency radiation, such as Wi-Fi,**
21 **microwave ovens, cell phones, or cordless phones?**

22 **A.** I have a microwave oven, but I never use it. I have a trac phone that I use
23 infrequently and turn off whenever I am not using it. I do not have a computer.

24 **Q. Has your experience with smart meters caused any disruptions in your daily**
25 **living? Please describe the circumstances?**

26 **A.** Yes. Every time I called CMP to say that I don't want a smart meter and can't
27 afford to pay opt-out fees I was crying my eyes out. Then there is the anxiety and
28 fear they will shut off my power.

29 **Q. Please tell us anything else that you want us or the Public Utilities Commission**
30 **to know about your experiences and circumstances.**

31 **A.** I have called CMP several times saying that I do not want a smart meter and cannot
32 afford to pay their opt-out fees. A lady called me to talk about this stating that the
33 fee was voted on and someone (in government) said CMP has a legal right to charge
34 us the fee. She said my bill will be allowed to go up to a certain amount (because
35 the fees are adding up) then CMP has the right to shut my power off.

29 A. Yes. Every time I called CMP to say that I don't want a smart meter
30 and can't afford to pay opt-out fees I was crying my eyes out. Then
31 there is the anxiety and fear they will shut off my power.

32 Q. Please tell us anything else that you want us or the Public Utilities
33 Commission to know about your experiences and circumstances.

34 A. I have called CMP several times saying that I do not want a smart
35 meter and cannot afford to pay their opt-out fees. A lady called me to
36 talk about this stating that the fee was voted on and someone (in
37 government) said CMP has a legal right to charge us the fee. She
38 said my bill will be allowed to go up to a certain amount (because the
39 fees are adding up) then CMP has the right to shut my power off.

Dated this 18 day of January, 2013.

STATE OF MAINE
OXFORD, ss:

January 21, 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,

Patricia Jane Galloway
Notary Public/Attorney at Law
PATRICIA JANE GALLOWAY Justice of the Peace
My Commission Expires September 17, 2013

Name Typed or Printed

My Commission Expires: _____

A Clear Call

America Unplugged - A Guide to the Wireless Issue

by B. Blake Levitt

The following was presented by award winning author B. Blake Levitt at the Berkshire-Litchfield Environmental Council: Environmental Tower-Siting Conference, held in Connecticut on May 10, 1997.

As the author of a consumer-oriented book on electromagnetic fields, which has an inclusive section on the radio-frequencies, I get calls from all over the country from worried homeowners and parents with telecommunications towers going up in their communities. I also get calls about satellite uplinks and power lines, and radio and TV towers. But by far, the greatest number of calls are about cellular and PCS systems, usually from extremely distraught people who have suddenly discovered that a cellular tower is planned near their homes, or on their children's school property.

Their driving concern is always the medical issues, with aesthetic concerns, and property devaluation following closely behind as part of the entire package. They are typically appalled to find out that their local governing agencies, as well as their boards of health, are not only uneducated on the health issues, but often apathetic and powerless to boot. And they are enraged that the telecommunications companies claim to have the ability to place towers in communities that don't want them. Most people at the local level, citizens and municipal agents alike, know nothing about the preemption moves by the telecommunications companies at the FCC over the last few years. But when they find out, they become angrier. The anger is often directed at the perceived apathy and incompetence of the planning and zoning officials. In Connecticut, it's often directed at the state siting council.

Every community across the country is facing what we are talking about here today. In fact, most communities have been involved with tower siting battles for several years now. Litchfield County has been very lucky so far. There are people in this audience from other states, and different areas of Connecticut, with war stories to tell us.

This is a serious business. An estimated 100,000 new cellular towers utilizing the 800 to 900 MHz frequencies (the so-called "old" systems) are

scheduled to go online across the country by the year 2000. An additional four new PCS carriers using the 1 to 3 GHz range were recently approved by the FCC for each area. That system will add many hundreds of thousands more. PCS antennas need to go every 2 to 8 miles apart. That's 2 to 8 miles apart, times the four carriers. The systems don't share frequencies so they all need their own antennas. By law, we have to site all four. That's a lot of antennas. Litchfield County cannot remain unscathed much longer, especially with our substantial population of weekenders who bring high discretionary incomes, and who already own cellular phones which do not work out here.

Siting the antenna necessary for the technology is a planning and zoning nightmare, and a serious threat to our health and environment in ways that Congress simply did not understand when they passed the Telecommunications Act of 1996. Legislation moved so fast through the last Congress that most of the legislators in Washington, who were voting on the Telecommunications Act, didn't even know what the implications of those preemption clauses were to their constituents back home. Now everyone is finding out, and no one is happy about it. Legislators all over the country are getting flack for this, and major sections of the act are likely to be revisited by Congress.

FCC Cheerleading Squad for Industry

Many observers think that the FCC is a government agency run amok under the directorship of Chairman Reed Hundt, a man with a reputation as a rigid free-market ideologue and a technophile. He seems more interested in stimulating the economy, and auctioning off our air waves, than in monitoring the communications companies. Martin Nolan, the respected Boston Globe columnist recently called Hundt's FCC "a cheering squad for the industry it supposedly regulates." Many also think that the very limited frequencies of the electromagnetic spectrum, which belong to the U.S. citizens like our national forests and other important resources, should not be sold off to private corporations without a public debate on the order of what occurs when logging or

Continued on next page...

A Clear Call continued...

oil drilling rights are sold in our forests. But such a national debate about selling the spectrum hasn't occurred, probably because the very finite "real-estate" that is the spectrum is invisible. It remains a monumental public policy issue that very few of us, as citizens, have had an opportunity to comment on before this telecommunications buildout occurred. The FCC is bending over backwards to help the industry, but no one is really protecting the best interests of the citizens, or the communities. And the subject seems so esoteric to most of us, that we are unaware of the fact that we should be concerned. Until, of course, a tower goes up in our back yard...

Before the Telecommunications Act became law, numerous communities across the country were simply banning cellular phone towers outright.irate citizens who looked at the health issues, which are real, simply refused to take the risks and insisted their town governments back them up -- which many did. The industry's response back in 1993 was first to petition the FCC to preempt all state and local zoning. Very few people knew this was happening at the federal level. It was a major power-grab of local and states rights by the telecommunications giants. Not since the robber-baron days at the turn of the last century, and the building of railroads, has there been such contempt for local land-use authority. There was not a single press article on the preemption moves at the time, that I am aware of. The petitions were filed two days before Christmas, after government officials had left for the holidays, and at a time when it was thought that most FCC observers would be otherwise occupied. There was only a 30-day public comment period. Nevertheless, a number of people, including several activists in this room, managed to get the word out quickly so that others, like the American Planning Association, the Connecticut Siting Council and Attorney General Richard Blumenthal, among others, had the opportunity to comment.

The FCC, by its own admission, is a licensing and engineering agency which defers to other agencies for research and standards setting. It

wisely turned down the preemption requests because to do otherwise would have been flagrantly outside their authority, not to mention against the 10th Amendment of the U.S. Constitution. Industry then went searching for a legislator to champion their cause at the legislative level and found one in Senator Klug from Wisconsin who introduced preemption clauses into the huge and complex telecommunications bill. Again, there was a mad scramble to educate concerned people and organizations about this new power-grab. Activists

were frantically lobbying representatives and senators, who knew nothing about why these clauses were in there, or even what they meant. -- They certainly didn't know

"We are irrevocably altering the electromagnetic signature of the world. And we are doing this with no clear understanding of the implications to humans or other species."

that there was a raging debate about the health effects of the radio-frequencies that had been going on for decades in scientific circles. A last ditch, bipartisan effort by Senator Diane Feinstein, a California Democrat, and Senator Kempthorn, an Idaho Republican, tried to remove the clauses, but that effort was defeated by a narrow 56 to 44 margin on the Senate floor. That will give you an idea of the kind of pressure that legislators have been under from their constituents to not allow this industry to have a clear, carte blanche shot at the country, as if there were no problems with this technology. But industry prevailed, due in large part to the pro-business, anti-environmental attitudes of the last Congress, a deal-making Clinton administration, and millions of dollars poured into re-election coffers by the telecommunications companies. Ask Senator Joseph Lieberman how he voted. And ask how much money the telecommunications companies donated to his campaign.

What became the law of the land in Section 704 of the Telecommunications Act was this: State and local governments preserve their authority over the placement, construction, and modification of personal wireless services. But they cannot discriminate among providers, nor prohibit -- directly or indirectly -- the provision of such services. The section further preempts state and local regulation of such placement on the basis of the

Continued on next page...

A Clear Call continued..

environmental effects of radio-frequency emissions, to the extent that such facilities comply with the FCC regulations for such emissions. That last statement goes directly to the heart of the problem. It's also like having an elephant in the room and trying to ignore it.

Local vs. Federal Control

Many people inside and outside of government know that all of this is on legal thin ice. Even the FCC admits they are surprised that no one has challenged this at the federal level yet, with an eye toward a Supreme Court case. Everyone seems to be waiting for that one tenacious community, with deep pockets, to draw the line, and just say no. There are significant legal issues regarding zoning and siting determinations; challenges to health and public policy authority regarding radiation standards-setting; property-rights and illegal takings regarding real estate devaluation; and even free-speech issues regarding our ability to simply discuss the environmental effects of the radio-frequencies at local planning and zoning meetings. These are a lot of rights that are in danger, and it's a classic battle of local vs. federal control.

The telecommunications industry is not a "nice" industry. The representatives who appear at the local level are usually great. More helpful people you won't find anywhere. They always want to "work with the towns." Offer to pay for fire, police and ambulance radio services on top of their own. That's an intentional strategy. They hold workshops to teach them this approach. And they teach them how to handle the media. But the industry behind the scenes is a multi-billion dollar conglomerate that plays big-time political hardball. Local zoning regulations are a major hassle to them and they want us out of the way, except as users and payers for their service.

Industry Moves to Ban Moratoriums

Among their most recent moves — which, again, most people are unaware of, and about which the press is asleep — include a request that the FCC ban local communities' ability to set temporary moratoriums; and a request that the FCC declare it illegal for communities to make the providers prove that they are in compliance with the RF emissions regulations. They are also trying to get the FCC to forbid discussion of the RF health effects at zoning hearings. But the most ominous move is going on as we speak. Industry has asked the Senate Commerce

Committee to preempt all state and local siting authority again, to consider telecommunications as an interstate commerce issue. That committee does have the authority to override state's rights. There's a two-week comment period that will start ticking around Wednesday. Consumers have been banned from commenting at the hearings. Industry is heavily represented. It's difficult to get any information about it, but I urge people to write. And Reed Hundt may declare moratoriums illegal as soon as next week. Well over 300 towns across the country have moratoriums in place. Industry doesn't want us to study this situation. The FCC is happy to oblige. Hopefully, there will be a public outcry that will include the voices of the people in this room.

All of this is by the way of political background. I'm a firm believer in understanding the big picture before getting to the nitty-gritty. But my real job here today is to talk about the medical and science issues. I hope to scare the planners and zoners in the room into doing the right thing to protect the towns. I hope to inspire the legislators in the room to re-think these laws and maintain local control. And I hope to encourage everyone to write their legislators who are not present, and say enough is enough.

Despite the preemptions, there's a great deal that we still can do. You just have to know why certain recommendations are being made in order to take them seriously. It's very tempting to consider the prospect of communications towers on scenic ridgelines or in neighborhoods as merely an aesthetic problem. And it's also very tempting to just hide them in church steeples, or on barn silos, or atop tall buildings, or to shield them in state forests. That's what you do to solve the aesthetics. But the health and scientific problems associated with this technology are much more complicated than that — as the telecommunications industry well knows.

The Medical Issue

So what are these medical issues, and what research backs them up? First, let me emphasize that at its core, this is a medical issue. The aesthetics and property devaluation problems are a by-product of the main concerns and will fall into line when the medical consequences are better understood.

When the industry talks about "environmental" effects, they mean health effects in humans. They are so afraid to say "health effects"

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A Clear Call *continued...*

and "cellular phones" in the same sentence that they have made the language fuzzy. The research for the radio-frequencies is nowhere near as abundant as it is for the 60 Hz power line frequencies. Some would say this is not an accident; that you can't find what you're not looking for. But a substantial amount of research does exist, certainly enough to get the general-lay-of-the-landscape.

One central problem exists with the RF research, though. Scientists are impatient humans like everyone else, and they want answers to their questions quickly. A lot of the studies used to determine human exposure standards are based on high-power, short-term test designs that are then used to extrapolate downward in order to arrive at presumed safety levels. But most exposures to the radio-frequencies in the real world, especially for those living near antennas, are of the long-term, low-level variety. These have very different biological parameters associated with them. So a lot of the research that's been done is of an inappropriate kind, and it's being used to reach inappropriate conclusions. The low-level, short term studies are much fewer, but every one of them is disturbing.

Radiation is a natural part of the universe. We are bathed in a constant stream of electromagnetic radiation produced by the power of the sun's solar winds, which give off high-energy ionizing radiation like x-rays, infrared, ultraviolet, gamma and cosmic rays, and some radio/microwave frequencies too. These interact in a complex way with the magnetosphere, which protects the earth from this barrage otherwise we wouldn't exist on this planet; as well as the ionosphere and the atmosphere closer to the earth.

The earth itself is a giant dipole magnet (like those little bar magnets we all played with as kids) containing a north and a south pole. Micropulsations in the 10-hertz frequency range constantly emanate from the earth's core. Scientists used

to think these micropulsations were an interesting but meaningless phenomenon. Today they think all living things are in a complex relationship with it; entrained by it, in fact. Entrainment phenomenon can be thought of as what occurs when a mother and child sleep together and their breathing rates synchronize. Energy is what we respond to, like plants to light. Every living thing is in harmony with these subtle signals. It's been found to control our most basic circadian biorhythms, our sleeping/waking cycles, important hormone production such as melatonin, and some crucial aspects of cell division itself. Human brain waves, in

Continued on next page...

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- ☛ A sample of zoning by-laws from Massachusetts, Connecticut, New York and Washington. Includes liability indemnification clauses for your town, setback information, and how to write zoning regulations for FCC-defined "adequate" coverage, rather than the blanket coverage preferred by industry.

- ☛ An updated RF test protocol, with recommended equipment to measure the environment before a tower goes on-line, and afterward, as well as on a regular basis to make sure installations are in compliance with FCC regulations.

- ☛ FCC Fact Sheet

- ☛ Sample moratorium language

- ☛ The Stamford, Connecticut Health Department Ordinance — considered the best in the country when reviewing RF applications, together with an article from the Johns Hopkins Applied Physics Laboratory Technical Digest which discusses the ordinance.

- ☛ Connecticut Siting Council Guidelines on what to consider with tower applications.

- ☛ Miscellaneous articles from *The Washington Post*, *Computers & Technology*, and *Radio Communications Report* among others.

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A Clear Call *continued...*

fact, function mostly around the 10 Hz frequency, just like these micropulsations. Other species also rely on this natural magnetic background. It is known to determine bird and butterfly migration patterns for example, among many other things.

Not All Energy Is Alike

But not all energy, which is expressed in wavelengths and frequencies, is alike. Nor is its properties, or effects. The electromagnetic spectrum is divided into ionizing and non-ionizing radiation. Ionizing radiation, like x-rays, is powerful enough to knock electrons off of their cellular orbits and therefore cause genetic mutations. The non-ionizing bands, like the microwave and radio frequencies, aren't powerful enough to do that, but can cause a range of other reactions such as tissue heating, like what occurs in a microwave oven. The dividing line between ionizing and non-ionizing radiation is in the visible light range, around the ultraviolet band, but no one can say precisely where one leaves off and the other begins. This is a concern for consumer products like color TVs and computer monitors which are multi-frequency products. A TV plugs into the wall at the extremely low frequency power line range of 60-hertz, and utilizes energy all the way up through the light frequencies. At the top end of the range, x-rays and UV particles are being given off. That's why it's a good idea to sit at least six feet from such screens.

Most medical doctors know nothing about this. What we're talking about are the subspecialties called bioelectromagnetics and biophysics -- arcane disciplines that are not taught in medical schools. But it has been known for years that the human anatomy is actually resonant -- in the strict physics sense of the term -- with the FM-frequency bands, and that the brain reaches peak absorption in the UHF bands -- right where cellular telecommunications operate. Some researchers think that a worse frequency could not have been chosen for the emerging technology regarding the human anatomy. Resonance, by the way, is what happens when an opera singer hits high-C in the presence of a crystal glass for a sustained period, and it dramatically shatters.

Light Bulb Theory Burnt Out

Telecommunications representatives at

public hearings and in the press routinely blur the distinctions between frequencies, likening their installations to 25 and 100 watt light bulbs in an attempt to confuse and placate concerned citizens. What they leave out is that their systems operate at ultra-high frequencies (UHF) in the microwave bands, which are maximally absorbed by human tissue. And they also don't specify that each channel is 100 watts. Channels can be split as user demand increases, and there can be hundreds of channels on some towers. This is no longer a low-powered transmitter suitable to sit on top of someone's barn silo, but rather something closer to the power output of a local AM-radio station. It is crucial that the towns be careful where they initially allow these installations to go. Any installation site will inevitably grow as others piggy-back onto it. And because they are what's called "line-of-sight" technologies, the initial sites will also determine the placement of the others. A regional plan is imperative if Litchfield County, ten years from now, is to look anything like it does today.

Not Safe At Any Level

But again, it's not just about aesthetics. Research exists to indicate that there are some frequencies which may be unsafe at any intensity, no matter how low the power is turned down. This is a critical point in siting considerations. The FCC standards are based on what's called a "thermal model", meaning the RF-frequencies ability to heat tissue like microwave ovens cook food. It is presumed, in thermal models, that if the power is turned down low enough, or if exposures are kept short enough, heating will not occur -- which is true. And so each time a tightening to this standard is attempted, either the length of the recommended exposure is reduced (which no one abides by anyway), or the power is turned down. But this is not enough.

Serious Nonthermal Effects

A range of non-thermal effects have been observed since the 1940's when the U.S. Bureau of Ships began studying health effects in Navy radar personnel during World War II. In 1953, Dr. John T. McLaughlin, a medical consultant at the Hughes Aircraft Corporation, noted for the first time in radar workers, internal bleeding, leukemia, cataracts,

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A Clear Call continued...

headaches, brain tumors, heart conditions, and liver involvement with jaundice, as effects from microwave/radar exposures. Other early research found disturbing blood abnormalities, cataract formation, and various cancers at non-thermal exposure levels.

Another early researcher, Dr. Allen Frey, reported in 1975 changes in the blood brain barrier in rats exposed to pulsed microwaves -- similar to what's used in today's new digital PCS systems. Increased blood brain barrier permeability has since been noted by several other researchers as well. The blood brain barrier is what protects the brain from access by any number of toxins, bacteria and viruses. It's not a good thing to tamper with its sentinel functions. Frey also noted in his early work -- which he recalled at an FDA conference -- that he and his laboratory assistants, as well as their test subjects, all developed severe headaches during the course of their microwave studies. He resolved back then not to use humans as test subjects after that.

The Body Electric

Frey's recent comments are in response to thousands of complaints about headaches in cellular phone users that are now surfacing around the world, much to the amazement of mainstream medicine. But anyone who knows anything about this subject is not surprised by these so-called "new" reports. Humans truly are "electrical" beings. The heartbeat is electrical. Brain waves are electrical. Most hormonal and neuronal activity is electrically regulated. Some crucial aspects of cell division itself are too. In humans, the eye was thought to be the only organ that had evolved to perceive a band of the electromagnetic spectrum -- that of visible light. But recent research has found that the pineal gland, located deep within the center of the brain, is probably a "magnetic" organ which determines our sense of direction, among other things. One could argue that not much happens in the human anatomy that isn't electromagnetic. So why wouldn't we react negatively to some frequencies, or, then again, positively to some others? In fact, many non-ionizing frequencies are used therapeutically, because of their deep penetration ability. Diathermy treatment is an example. And laser surgery, which is widely used today in surgical practices and a great improvement over traditional scalpel methods, uses highly concentrated light frequencies of different

colors. Each color has its own properties. So how good an idea can it be to have a cellular phone transmitter placed against the head on a regular basis? Those transmissions go directly through brain tissue. Living near a cell tower does the same thing.

Most laypeople understand this on a powerfully intuitive level. We experience ourselves as whole "energetic" beings -- as far more than the mere sum of our individual parts. It's easy to intuit that there could be a problem if we are subjected to an array of artificial energies. And that's why those who live near telecommunications installations are worried and threatened, and why parents across the country try to stop towers from being sited on school property. It isn't because they are hysterical NIMBYS, or anti-technology, as industry would have us believe. These become involuntary exposures when people are forced into them.

Without going through a long list of research findings, which usually bores everyone, let me point out just a few high spots... For those who want more detail, there's plenty in the book...

Here's what's been recently observed that translates to this technology, and hopefully to your planning and zoning, and legislative decisions...

Adey Research

There's the window-effects work of Dr. William Ross Adey, a neuroscientist at the Veteran Administration Hospital in Loma Linda, California, and Dr. Carl Blackman, a biophysist at the EPA Center at Research Triangle Park, in North Carolina. These two researchers have found in a series of studies that the human anatomy has critical "windows" which responded to some frequencies, but not to others. At set intervals in the non-ionizing bands, they observed changes in calcium ion flow. Calcium is the body's information "currency." Cells use it for any number of critical functions. It's not a good thing to tamper with. What they actually found was a kind of ion channel "dumping" of calcium that was quite dramatic. It could have effects on many cell functions, including cell division.

Szmigielski Findings

Then there's the on-going work of Dr. Stanislaw Szmigielski and his co-researchers at the Center for Radiobiology and Radioprotection in Warsaw, Poland. In microwave and radar personnel, they have noted sharp increases in cancer --

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A Clear Call continued...

including lymphomas, melanomas, leukemias, and brain tumors — high blood pressure, headaches, memory loss, and brain damage. They also noted immune system abnormalities; first an over-stimulation, then later immune suppression after continued exposure to low levels of the microwave bands. That's an important observation with this work because sometimes researchers note immune system enhancement and conclude that some of these exposures are actually good for people. In fact, Ross Adey completed work this year for Motorola studying test animals for exposures like those of cellular phones, and found just such a probable immune enhancement — at non-thermal levels. Some in the popular press extrapolated from this that cellular phones protect users from brain cancer. Researchers need to continue the tests beyond that initial phase to see what really occurs.

Guy Examination

In 1984, Dr. William Arthur Guy, at the University of Washington in Seattle, found an increase in malignant endocrine gland tumors, and in benign adrenal gland tumors in test animals. This was a five-year, \$5-million dollar study of long-term, low-level exposures that was funded by the U.S. Air Force. The study also indicated immune system malfunctions in that nearly all of the initial test animals died from infections. The studies had to begin again from scratch.

Lai Singh Investigation

In 1994, Drs. Henry Lai and N.P. Singh, at the University of Washington, Seattle, found both single and double-strand DNA breaks in test animals exposed to cellular and PCS-frequency pulsed microwaves. Double-strand DNA breaks are

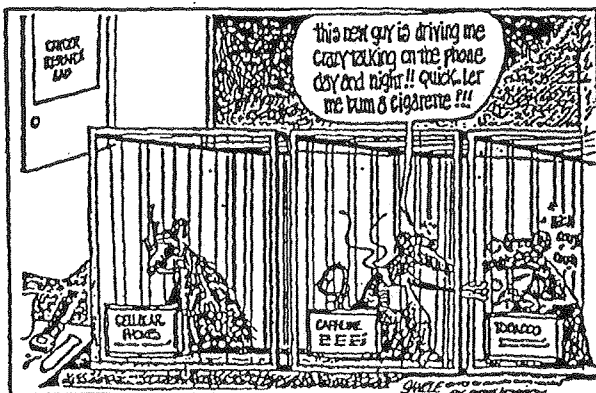
thought not to repair themselves and can lead to mutations. Dr. Lai just announced at an FDA workshop on this subject that in recent follow-ups, they noted that such breaks were blocked by the hormone melatonin. Melatonin, in several studies has been found to be suppressed in power line frequency exposures. Often, wireless technology is "modulated" with such ELF frequencies. There are complex synergistic relationships with many of the non-ionizing bands that fall well outside the range of thermal effects.

Repacholi Research

A recent Australian study hot off the presses that hasn't been reported in America yet, has found a significant increase in B-cell lymphomas in test mice exposed to long-term, low-level pulsed microwave frequencies in the cellular and PCS range. Changes in B-cells in the immune system are implicated in roughly 85% of all cancers. The study was funded by Telstra, the telecommunications conglomerate, and headed up by Dr. Michael Repacholi, an industry researcher widely known to espouse that cell phones are safe. Additional significance of this study is the fact that these changes occurred at what are called "far-field" exposures, not the near-field exposures such as would be experienced by cell phone users themselves. This has implications for those living near transmitter sites, as well as those in the immediate presence of people using cell phones. It's like the secondary smoke issue. Stand back from someone using a wireless device. Even the FDA recommends this, but few people know about it.

Kirschvink Findings

Another important body of work comes from Dr. Joseph Kirschvink, a geobiology professor at the California Institute of Technology. In 1992, Dr. Kirschvink discovered magnetite in human brain tissue in the blood brain barrier and the meninges which covers the brain. Magnetite interacts a million times more strongly with external magnetic fields than with other biological material. Although it has been known for years that bees, butterflies, birds and fish manufacture magnetite — often in thick clusters, or in long crystal chains, and use it as a navigational tool, it was thought that humans did not manufacture their own magnetic material. Any regulations for these technologies which surround us are based on a



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A Clear Call *continued...*

presumption that humans do not manufacture magnetite. This body of work has profound implications for the safety of MRI scans for instance, as well as wireless technologies.

Bise Research

Another study that I find haunting was conducted by Dr. William Bise in 1975, using ten human test subjects. Bise found severe alterations in human electroencephalograms at microwave and radio-frequency power levels that have now become common in many urban areas. The year-long study documented a kind of entrainment of test subjects brain waves with the external exposures, and radical changes in mood and behavior. That study alone should give us pause. Some frequencies are known to suppress serotonin production in the brain. Low serotonin is implicated in depression (that's what Prozac boosts), in increases in suicides and in violent aggressive behaviors.

Other researchers have noted significant increases in cancers of the liver, and breast cancers in RF/MW exposed groups -- all at levels thought to be safe, and which fall well within the FCC standards of today.

FCC Standards Inadequate

I trust everyone is getting the general theme... The research exists, and it is credible. It's a question of pulling it together and seeing it for what it is. I've only scratched the surface of it here. The FCC standards that are supposed to protect us, are inadequate. What's important to know, as planners, is that although you can't set more stringent standards at the moment, you can site installations in a way that accomplishes the same thing. It often takes decades for public policy to catch up with scientific research. We need to err on the side of caution as best we can in writing zoning by-laws. It's the one real handle we actually have.

An amazing paradox keeps popping up in this research. It's something that is usually ignored, probably because we just don't know what to make of it. The paradox is this: It is often observed that the most profound bioeffects occur at the lowest intensities... Researchers call it a "non-linear effect." It's probably due, in part, to entrainment phenomenon, and our relationship with the earth's natural fields. In the past, when an environmental "pollutant" has been identified, we've surmised a

theoretical safe level and tried to regulate it there. But if the energy modalities turn out to be more bio-reactive at the lowest levels, what does this do to our common regulatory wisdom? It turns it completely upside down.

It looks like we are dealing with a new scientific model with these energy modalities. The cutting-edge of most medical research is quickly undergoing a paradigm shift that's so subtle, that most researchers and clinicians are unaware of it, even as they incorporate it into their own practices. We are gradually shifting our understanding of the human anatomy from the familiar chemical-mechanistic model, to a much more refined, interesting, and complex emphasis on the human anatomy as a coherent electrical system.

With the wireless juggernaut now sweeping the country, however, an immense problem arises. Our standard regulatory approach is based on the conventional toxins model, such as chemical pollutants. But if we are dealing with a new model in which the most profound effects occur at the lower exposures, that toxins model is not only ineffective, but may actually be detrimental. We simply don't know. In the meanwhile, this technology is creating a seamless shield of new exposures in extremely close proximity to the population for the first time in our evolutionary history, often with characteristics -- such as digital signaling and unusual wave forms, that are simply not found in nature. We are irrevocably altering the electromagnetic signature of the world. And we are doing this with no clear understanding of the implications to humans or other species.

Don't let anyone tell you that the addition of these wireless services is just a drop in the bucket given that "energy happens." It's just not so. And perhaps if more consumers understood the legitimate medical issues which underlie this, namely that it may not be a good idea to have a transmitter of any kind against one's head -- no matter how low-powered, that fewer people would be rushing to buy cordless and cellular phones. If consumers understood that when they use wireless products, they are not just irradiating themselves but everyone else around them too, they might re-think their use of such devices.

What To Do Now

So what would be helpful right now? Given the fact that the horse is already out of the barn, and

Continued on next page...

A Clear Call continued...

we're probably going to have to site some towers... Others will speak to these points but here's a fast glimpse:

1. Institute 6-month moratoriums while you study the options. Have something on the books, or at least ready to go in case applications come in.

2. Write effective planning and zoning by-laws that establish "by-right" zones where telecommunications facilities can be sited, but nowhere else. Keep these zones away from residences, schools, hospitals, and nursing homes. (New Zealand, by the way, bans them on school property.) Establish large set-backs near such areas. If the towns own the land, and I recommend that they do, they can control the area around the facilities, and reap the licensing fees to benefit the taxpayers.

3. Don't allow private entrepreneurs to start telecommunications installations -- especially in residential neighborhoods. Most of the time, such entrepreneurs don't have the vaguest idea what they are getting involved with. This has become a nightmare in some communities. As installations grow, which they inevitably do, they become extremely complex, hazardous electromagnetic environments that become impossible to measure. Farmers in particular are vulnerable to approaches from the industry. While everyone wants to see our farmers make a good living, this can actually devalue everyone's property -- including their own. It also opens them to liability suits for a number of claims. There is no statute of limitations for EMF suits for health damage. There is also a move by industry at the FCC to shift all liability onto the site owners. Most people who are approached, or who offer their own land, are not told any of this, and they rarely know about the health effects other than what industry literature tells them.

4. Don't be tempted to lease space on town-owned buildings if those buildings are near populated areas. Don't be tempted to hide them inside silos or church steeples. This is not just about the aesthetics.

5. Make sure you have tower-sharing regulations in your zoning laws. Make every tower or new antenna array justify its placement. If existing towers are present, make newcomers lease space there, rather than establish new sites. Make

them prove from an engineering study that existing sites won't work. Economic reasons are not good enough to justify new tower sites. Get independent engineering reviews and make the companies pay for them. In cases where development has encroached on existing installations, either move the transmitters, or buy out the residents.

6. Establish regional transmitters, and group as many RF users together as possible. Create large setbacks near such facilities (miles, if possible -- not just feet), and regularly monitor them. Measure the ambient backgrounds at different distances and heights. Pay particular attention near metal objects and structures like water towers and metal roofs. High RF concentrations can occur near them. Keep a log at zoning offices and health departments. We have an unusual opportunity in Litchfield County to explore a regional approach. That option has already been lost in more populated areas of Connecticut.

7. Establish regular emissions monitoring, using specific measurement protocols, for all transmitters by independent licensed RF engineers. Require that the companies pay for this monitoring on an annual basis. The state cannot, and will not do this. Neither will the siting council. Communities have been asking them for years. One engineer can be shared by several towns. If a facility is found in violation of the FCC standards -- either by single users or in the aggregate -- impose daily fines until compliance is reached. After a set time, shut them down if the problem is not fixed.

8. Require pre & post testing, according to specific measurement protocols. Measure before a transmitter goes online, and after it goes online. This is the only way to accurately assess what we are changing in the environment, and when. It is also the best way to provide medical researchers with a baseline guide for future epidemiological studies. Such studies are often thwarted by the absence of this exact piece of information.

9. Restore and protect state and community rights in tower siting. Local communities know their typography much better than a distant engineer's computer model, or the siting council. And if a majority of people in a town want to live in a wireless deadspot -- that's their right. Let them.

Continued on next page--

A Clear Call *continued...*

10. Encourage satellite-based systems, such as Motorola's Iridium Network, which will greatly reduce the number of ground based transmitters. For those who use cellular phones, inform them of the associated risks with the higher-powered handsets that would have to accompany such a distant system. At least these exposures would then be voluntary, and hopefully based on informed consent.

11. Declare in your regulations that wireless technologies are not public utilities. Public utilities can go into residential areas unchallenged. These are for-profit businesses, and their service is a discretionary use.

12. Keep all liability on the providers of the services. It's the only way to keep industry responsible and accountable. Do not allow liability to be shifted onto the site owners. Make the companies indemnify the towns and site owners with a blanket coverage. Make them post bonds in the event that facilities become obsolete and must be removed.

13. Keep the courts accessible to those who seek damages. It is the only recourse of fairness for consumers. Restore the ability of attorneys who are federally funded in community law offices to file class action suits on behalf of consumers. This is another right that was recently taken away without enough fanfare.

14. Tell your legislators not to consolidate so much power at the FCC. We have paradoxically given them vast new authorities, yet cut their budget. Nine FCC field offices were closed last year. They were never adept at policing the local level for RF safety. Now they've abandoned even the pretense of it, and have in fact shifted that responsibility entirely onto the states and local communities. The FCC cannot even provide a complete list of all the transmission facilities in the U.S. The Connecticut Siting Council, by the way, can't either. This whole situation has created gaps in consumer safety that are too big to bridge without regular monitoring at the local level. Also tell your legislators to pay attention to preemption moves where ever they come up.

15. And last but most importantly, lobby your legislators for a comprehensive government research program for the

radio-frequencies. The only research being done today is by industry, which some liken to the fox guarding the chicken coop.

A government RF program should include — but not be dependent upon — matching funds from industry. Such a program should be protected from the political follies of changing administrations, as well as undue influence from industry, and great care should be taken to keep it unpoliticized. It should be housed at the EPA or the National Institutes of Health, but not at the Department of Defense. Such a program should fund the appropriate research — meaning long-term, low-level, continuous exposures across a range of non-ionizing frequencies, with modulation and other common characteristics taken into consideration. And the research should have a focus on understanding the non-thermal bioeffects.

Congress called for such research over 20 years ago, but it never came to pass. It is suddenly imperative that we have the answers to the medical issues in the face of wireless America. This buildout should not be allowed to continue without that information. Only when the medical and environmental issues are better understood, will the side-issues like siting, aesthetics, economics, and property devaluation, fall into line. In the meantime, we have what we've always had — the ability to write good, strong-zoning regulations to protect our communities.

B. Blake Levitt is the author of Electromagnetic Fields, A Consumer's Guide to the Issues and How to Protect Ourselves (Harvest Books/Harcourt Brace, 1995). She can be reached directly at 355 Lake Road, Warren, CT 06777; phone (860) 868-7437.

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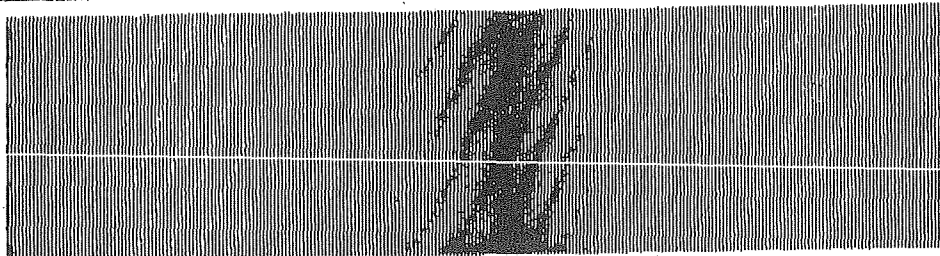
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MICRO WAVE NEWS



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A Report on Non-Ionizing Radiation

January/February 1997

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Plus Ça Change: Why We're Running in Place

Stronger Evidence for an Alzheimer's-EMF Connection

Epidemiological studies in the U.S. and in Sweden have produced new evidence of a link between Alzheimer's disease (AD) and occupational exposures to electromagnetic fields (EMFs). A specific biological hypothesis has been proposed that could account for the connection, and laboratory studies are planned to test it.

In the December 1996 issue of *Neurology*, Dr. Eugene Sobel and colleagues reported a fourfold increase in the risk of AD for subjects who had worked in jobs with medium-to-high EMF exposure. It was Sobel who reported the first evidence of an EMF-Alzheimer's link in July 1994, based on an analysis of three separate groups of Alzheimer's patients.

"It's an interesting observation," Dr. Zaven Khachaturian, director of the Alzheimer's Association's Reagan Research Institute, said in an interview from his office in Potomac, MD. He said that the finding should be followed up, but cautioned that the association might be caused by other risk factors in the workplace.

On November 21, Dr. Maria Feychting presented the results of her recent study in Sweden at the Department of Energy's annual research review in San Antonio. Among subjects who were 75 years or younger at the time of diagnosis, she found that those who had worked in jobs with the higher EMF exposures were five times more likely to develop AD.

Although these findings by Sobel and Feychting are both statistically significant, there are inconsistencies between them, and Feychting urged "a cautious interpretation." Still, she told *Microwave News*, she was surprised by her

(continued on p.6)

New Focus on Broadcast Radiation: Is There a Leukemia Risk?

Two new studies from the U.K. and Australia show elevated rates of leukemia near television and FM radio broadcast towers. The new results support past studies pointing to leukemia risks due to exposure to radiofrequency and microwave (RF/MW) radiation from communications and radar transmitters.

Rates of adult leukemia were nearly twice those expected within two kilometers of a TV and FM tower operated by the British Broadcasting Corp. (BBC) in Sutton Coldfield near Birmingham, England. Writing in the January 1997 *American Journal of Epidemiology* (AJE), Dr. Helen Dolk and colleagues at the London School of Hygiene and Tropical Medicine reported that the decline in leukemia risk with distance is highly statistically significant.

Dolk looked at leukemia rates in concentric circles around the Sutton Coldfield tower. Within a half kilometer, there were nine times the expected number of cases. In the area within the next half kilometer, the rate was double that

(continued on p.11)

guys could easily have explained their views on the scientific mechanism. But this decision makes the court act as the gatekeeper of scientific debate, and there's no precedent for that in Georgia."

The concept of the judge as "gatekeeper" of scientific evidence was central to the U.S. Supreme Court's *Daubert* decision, which was cited in the dismissal of David Reynard's original cellular phone lawsuit in federal court in Florida (see *MWN*, M/J95, S/O95 and M/J96). But *Daubert* is not part of Georgia law, and Motorola's brief made a point of stating that *Daubert* was not part of its argument.

"We think the *Ward* dismissal is a significant and important decision," said Motorola spokesperson Norman Sandler, "and we welcome the court's ruling." Sandler told *Microwave News*

that the *Ward* ruling confirms the message of *Reynard*: "We now have two cases that have been dismissed because they failed to submit enough credible scientific evidence to even move forward to trial. This exposes the hollowness of the claims advanced by these cases and others like them."

"It'll be unfortunate if one of these cases doesn't reach the point where it can educate a lot more people," commented Gray. "This is a very politically charged piece of litigation—probably even more so than tobacco, because of the level of public ignorance."

In late December, Gray asked the Georgia Supreme Court to consider an appeal. At press time, the state's high court had not yet responded. "If it's denied," said Gray, "it'll be difficult to go any further."

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expected. At greater distances from the tower, the leukemia rate declined steadily, until it reached background levels some eight kilometers away.

The London team did not make any RF/MW measurements, relying instead on a survey by the BBC, which showed that radiation levels generally declined with distance from the transmitter. The maximum radiation level found was 1.3 $\mu\text{W}/\text{cm}^2$ for TV, and 5.7 $\mu\text{W}/\text{cm}^2$ for FM, signals at a distance of 2.5 meters above the ground. Due to reflections from buildings and the ground, they found that, "There was considerable variability between different measurement points at any one distance from the transmitter," according to Dolk.

Dolk's study was prompted by reports of a cluster of leukemia and lymphoma cases near the tower (see *MWN*, S/O92). Dr. Mark Payne, a medical doctor in Birmingham who uncovered the cases years ago, told *Microwave News*: "I think my findings have been vindicated."

In an effort to put the Sutton Coldfield findings into perspective, Dolk also investigated the leukemia rates near 20 other antenna sites in the U.K. This study yielded results that were much less clear. They "at most give no more than very weak support to the Sutton Coldfield findings," Dolk wrote in a second paper published in the same issue of the *AJE*.

Meanwhile, an Australian study indicating a greater risk of leukemia among children living near four TV stations located on three broadcasting towers in Sydney has been published in the *Medical Journal of Australia* (see *MWN*, N/D95).

Dr. Bruce Hocking, an occupational medicine consultant based in Melbourne and the former chief medical officer at Australia Telecom (now called Telstra) reported that children living within four kilometers of the towers had a 50% greater incidence of leukemia and more than twice the expected mortality rate due to leukemia. For children and adults combined, there was a 25% increased incidence of leukemia. All three of these results are statistically significant.

Hocking's calculations showed that the maximum RF/MW power level from the TV stations near the three towers was 8 $\mu\text{W}/\text{cm}^2$ and declined to 0.2 $\mu\text{W}/\text{cm}^2$ at a distance of four kilometers. He did not make any actual measurements.

The U.K. and Australian studies add to a patchwork of previous work that points to a leukemia risk from broadcast radiation:

- In 1982, Dr. William Morton of the Oregon Health Sciences University in Portland found higher rates of leukemia and breast cancer near broadcast towers in Portland (see *MWN*, J/F82).
- Five years later, Dr. Bruce Anderson and Alden Henderson of the Hawaii Department of Health reported "significantly higher" leukemia rates in areas with broadcast towers in Honolulu as compared to areas without towers (see *MWN*, M/J87).
- Clusters of leukemia have also been reported next to two different U.S. Navy communications installations, one in Lualualei, Hawaii, and one in Thurso, Scotland (see *MWN*, M/J87 and S/O92).

In addition, two epidemiological studies of those who are exposed to RF/MW radiation show higher rates of leukemia:

- Dr. Stanislaw Szmitgielski of the Center for Radiobiology and Radiation Safety in Warsaw, Poland, found that military personnel exposed to RF/MW radiation had higher rates of leukemia and lymphoma. For younger soldiers, the risks reached over eight times that expected and are highly significant (see *MWN*, M/J95).
- Dr. Samuel Milham Jr. reported a significant excess mortality rate due to acute myeloid leukemia, multiple myeloma and cer-

RF/MW Radiation and Cancer References

Bruce Anderson and Alden Henderson, "Cancer Incidence in Census Tracts with Broadcasting Towers in Honolulu, Hawaii," Honolulu: Hawaii Department of Health, October 27, 1986.

Ray Cartwright, "Cancer and TV Towers: Association but Not Causation," *Medical Journal of Australia*, 163, pp.599-600, December 1996.

Helen Dolk et al., "Cancer Incidence Near Radio and Television Transmitters in Great Britain, Part I. Sutton Coldfield Transmitter," pp.1-9, and "Part II. All High-Power Transmitters," pp.10-17, *American Journal of Epidemiology*, 145, January 1, 1997.

Bruce Hocking et al., "Cancer Incidence and Mortality and Proximity to TV Towers," *Medical Journal of Australia*, 163, pp.601-605, December 1996.

Bruce Hocking, "A Protocol for Assessment of the Health Effects of RFR Products, Particularly Personal Communication Systems," *Radiation Protection in Australia*, 14, pp.43-45, April 1996.

Samuel Milham Jr., "Increased Mortality in Amateur Radio Operators Due to Lymphatic and Hematopoietic Malignancies," *American Journal of Epidemiology*, 127, pp.50-54, January 1988.

William Morton and David Phillips, "Radioemission Density and Cancer Epidemiology in the Portland Metropolitan Area," Research Triangle Park, NC: U.S. Environmental Protection Agency, June 1983.

Stanislaw Szmitgielski, "Cancer Morbidity in Subjects Occupationally Exposed to High-Frequency (Radiofrequency and Microwave) Electromagnetic Radiation," *Science of the Total Environment*, 180, pp.9-17, 1996.

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tain types of lymphoma among amateur radio operators (see *MWN*, N/D87 and J/F89).

"There are so many smoking guns linking RF to cancer that it's high time that somebody took a systematic look at the subject," Milham said in an interview from his office in Olympia, WA.

Dr. Ray Cartwright of the University of Leeds, U.K., took a more cautious position. In a commentary accompanying Hocking's paper, he noted that while there is now some support for a link between RF/MW and leukemia, a "more complete knowledge of the causes of childhood leukemia is essential in order to go down the road from association to causation. In that regard we have taken only the first few steps of a very long journey."

U.K. Advisory Panels Discount Cancer Risk

Radiation officials in the U.K. argued that the 20-tower study negated the Birmingham results and that there was no RF/MW cancer risk. In fact, they concluded that the issue was closed.

"Overall these data do not indicate that residence close to a radio/TV transmitting mast is associated with an increased risk of leukemia," read a statement from the Committee on the Medical Aspects of Radiation in the Environment (COMARE), a long-standing government advisory panel. The committee found that there was no need for further epidemiological studies.

Similarly, the U.K.'s National Radiological Protection Board (NRPB) in Chilton stated that, "The results of these studies provide no justification for further epidemiological studies around such sites, nor do they have implications for the siting of existing or new transmitters."

To buttress their arguments, COMARE and the NRPB noted that in the 20-tower study the incidence of non-Hodgkin's lymphoma (NHL) increased with distance from the towers. "Such opposing trends clearly do not demonstrate a pattern that would be consistent with a particular effect produced by the Sutton Coldfield transmitter," COMARE said.

"The apparently opposing trends with distance for leukemia

and NHL imply that the decreasing trend in leukemia risk with increasing distance may be due to chance," Dr. Alastair McKinlay, the head of the NRPB's non-ionizing radiation department, told *Microwave News*.

Most of the leukemia cases included in the 20-tower study were near a single tower at Crystal Palace in South London, which has nearly the same power output as Sutton Coldfield (4 MW), but which does not include a high-power FM transmitter. Dolk counted 62 adults with leukemia within two kilometers of the Crystal Palace tower, but only 17 cases at the same distance from the 19 other towers. Most of the towers are in sparsely populated areas.

Dolk did not observe the same decline in leukemia risk with distance from the Crystal Palace tower. But, when she categorized those towers which had either FM transmitters of greater than 250 kW or similarly powerful FM antennas and TV antennas, she found, in each case, a significant decrease in risk of leukemia with distance from the towers.

Because of the small number of cases, these relationships are not sturdy. "No clear interpretation seems possible as to whether the overall decline in risk with distance is associated specifically with TV or FM transmission or a combination of the two," Dolk wrote in the *AJE*. "The results in the second paper do not point strongly to an effect of transmission...and certainly not to differences between frequencies," she told *Microwave News*.

The two U.K. studies, which were released on Christmas Eve, attracted little attention from the British press. Indeed, Graham Brown, a BBC spokesperson, said in an interview that he had not even been contacted about the study.

The Australian study garnered much more attention—at least partly due to the intense controversy over the siting of cellular phone towers across the country and because the Australian government is considering relaxing its own RF/MW standards.

Hocking told the *Sydney Morning Herald* (December 10) that, "The research does not prove that radiofrequency caused the leukemia, but it does not reassure that mobile phone base stations are harmless."

"MICROWAVE NEWS" FLASHBACK

Years 15 Ago

- A U.S. District Court judge in Los Angeles dismisses a charge brought against the government by Marine Sergeant George Watson, who claimed that his exposure to RF/MW radiation at the U.S. Embassy in Moscow caused his son's birth defect.
- Dr. William Morton of the University of Oregon reports a significant association between extremely low levels of RF/MW radiation—possibly from TV towers—and lymphatic leukemia, adenocarcinoma of the uterus and breast cancer among Portland, OR, residents.

Years 10 Ago

- Dr. Stanislaw Szmigielski of the Center for Radiobiology and Radioprotection in Warsaw, Poland, releases preliminary results of a five-year study indicating a link between RF/MW radiation and cancer—especially leukemia and lymphatic cancers.
- Maryland officials protest the U.S. Navy's decision to site the EMPRESS II on the Chesapeake Bay, contending that the electro-

magnetic pulse simulator could cause EMI to ships' electronics, forcing Baltimore's port to close for 20 days a year, and could also interfere with a nearby nuclear power plant.

- Writing in the *American Journal of Epidemiology*, Dr. Richard Stevens suggests that EMFs and/or light-at-night may be responsible for increased breast cancer rates in industrial countries.

Years 5 Ago

- Eight people living near Patrick Air Force Base, FL—seven within 400 yards of an air traffic control radar—between 1967 and 1983 are diagnosed with Hodgkin's disease, according to a study by the state's Department of Health and Rehabilitative Services.
- Two brain cancer victims from the same street in Guilford, CT—whose stories were reported by the *New Yorker's* Paul Brodeur—sue Connecticut Light and Power. They charge that EMFs from power lines and from a substation caused their tumors.
- Wisconsin's Public Service Commission orders state electric utilities to use technology that minimizes EMF emissions.

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

1 **Q. Please state your name and address.**

2 A. [REDACTED]

3

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

5 A. No. We opted out.

6 **Q. Please explain why you do not want a smart meter at your residence.**

7 A. Both [REDACTED] and our daughter have an illness which affects their
8 immune systems and as a result they have become “electrically
9 sensitive.” Symptoms from this sensitivity can include insomnia,
10 heart palpitations, extreme jitteriness, dizziness, and nausea as well as
11 serious digestive problems, all of which my wife has experienced at
12 one time or another from prolonged exposure to computers, cell
13 phones, speakers and the myriad of x-rays, CT scans and MRI’s
14 which [REDACTED] has been subjected to. These symptoms are
15 debilitating and absolute hell to live with. [REDACTED] has managed
16 over the past ten years to control these symptoms by deciding what
17 she will expose herself to. With a smart meter there is no control.
18 The meter is attached to our home 24/7 – the one place that we

1 haven” – our sanctuary away from the plethora of modern technology
2 that affects [REDACTED]

3 **Q. Have you experienced symptoms when near other smart meters?**

4 A. [REDACTED]: Yes. My daughter lives in Tucson so my husband and I
5 decided to rent a house for the month of January 2011. I rented what
6 looked like the perfect dream house. I never once thought about
7 smart meters and never even thought of asking the rental agent if there
8 was one attached to the house. I assumed they didn’t exist in this tiny
9 retirement community.

10 I immediately didn’t feel right the first day I was in there. I
11 started experiencing stomach bloating and swelling around my rib
12 case, symptoms I’ve had in the past from electrical sensitivity. That
13 night I went to sleep in the bedroom which was on the other side of the
14 Smart Meter. I never fell asleep that whole night. I had symptoms
15 of jitteriness, heart palpitations, muscle twitching and chills. By
16 morning I was extremely ill. After a few hours of playing detective
17 and eliminating all possible causes, it dawned on me that just maybe
18 there might be a smart meter on the house and after checking, sure
19 enough it was there.

20 The following day my daughter asked to sleep over and, not
21 wanting to alarm her, I said nothing of the meter. That evening she
22 went to sleep in the same bedroom I had been in. About three hours

1 later, she came into the living room and complained that she could not
2 fall asleep and was experiencing jitteriness and heart palpitations.
3 She proceeded to sleep on the couch and woke up the next morning
4 sick to her stomach. She informed me that she would have to leave
5 as something in the house was making her sick. I still had not told
6 her about the meter at that point. [REDACTED] arrived a few days later
7 and after being in the house for four or five days, informed me that he
8 was waking up with headaches and nausea every morning. At that
9 point none of us wanted to be in the house.

10 A few days later my daughter and son-in-law came to pick us
11 up and my daughter wanted to show the meter to her husband. She
12 quickly returned inside informing us that she had the strangest
13 symptoms just standing in front of it. Her knees buckled and she felt
14 weak and faint and felt like passing out. Needless to say, it was the
15 vacation from hell and we left after two weeks.

16 I was convinced that this would not be a problem for me here
17 in Maine since I chose to opt out. What a shock and disappointment
18 it was when the Saturday before Christmas in 2011, I came home
19 from shopping and within 15 minutes of being in the house, I started
20 feeling weak all over, wanting to pass out with dizziness. I couldn't
21 imagine what was happening. My first thought was "smart meters"

1 and sure enough I went outside and saw that the meters were being
2 installed and activated on my street.

3 I haven't been the same since. In fact my health continues in a
4 downward spiral. Since that first day, I started developing
5 debilitating fatigue and severe vertigo on a daily basis. About a
6 month after the installation, my physician tested me for Epstein-Barr
7 virus which is associated with CFS and found that it had been
8 reactivated (normal under 22 and mine was 400) with no known
9 cause. I then started acupuncture in desperation to try and control
10 my vertigo. Clearly my immune system had deteriorated. I also
11 started experiencing excruciating muscle stiffness in my neck for
12 which I see a D.O. on a weekly basis with no resolution. All of these
13 symptoms were nonexistent before the meters were deployed in my
14 neighborhood.

15 In addition, a neighbor who has MS experienced an increase in
16 her symptoms and subsequently had her meter removed which
17 brought her back to her baseline. I also have other neighbors who
18 have gone from feeling well to developing bizarre symptoms but are
19 unaware of the cause and cannot afford to opt out.

20 Because of my extreme sensitivities, opting out is not the
21 answer for me. I am surrounded by at least 50 homes with smart
22 meters and some within 75 feet of my home. Clearly, I need to be

1 living in an area without smart meters but cannot sell my house as I
2 am upside down on my mortgage and I cannot afford to walk away
3 from the house either. My life, at this moment, is out of control and I
4 am at the mercy of CMP and the PUC.

5 **Q. Please tell us anything else that you want us or the Public Utilities**
6 **Commission to know about your experiences and circumstances.**

7 A. [REDACTED] Not everyone will react this way to smart meters. Some,
8 like me, who are sensitive, will, and in a short time become ill.
9 Others will take longer and many others may not notice it for a long
10 time and then not be aware of what is making them ill. People like
11 myself are the “canaries in the mine,” providing a warning to others.

12 Other countries have provided newer meters without “wireless
13 technology” making the health of their citizens a priority. There is
14 no reason this cannot be done in this country. I fear that if my
15 symptoms do not abate, or indeed worsen, we shall be forced from our
16 home.

17 [REDACTED] The smart meter issues we faced in Arizona resulted in a
18 simple choice. We cancelled our rental agreement and our daughter
19 never returned to visit us in that rental.

20 I, personally have a rare cancer treated by extensive radiation
21 therapy, tested with CAT scans and MRI’s and ongoing x-rays, but I
22 choose those exposures for obvious reasons.

1 Over the years, consumers have had to deal with many failed
2 products. Whether it be medications, oil spills, river pollution, etc.,
3 etc., all supposedly regulated by a government agency at one level or
4 another and many of those products have resulted in harm to the
5 consumer. Many of these products were studied, tested and
6 approved only to be taken off the market after a period of time.

7 We are self conscious in our home to be aware of all the “low
8 dose” labels especially on any radiation-emitting products with a
9 simple “dot-connecting” awareness that many low doses add up to
10 more than the sum of its parts. I and my family can choose to invite
11 these products into our home. We are reasonable people who value
12 and diligently exercise those choices. The bottom line is that WE are
13 accountable for our bad choices if given all the tested facts – not a
14 regulatory agency.

15 [REDACTED] and my daughter are sick and it is my eternal
16 responsibility along with them to choose without regret.

17 I have read the science on both sides of this issue, short-lived
18 as it might be. Will the regulators down the road say that they didn't
19 have enough unbiased science on smart meters? This is my family
20 whom I love to my core and the choice to put a smart meter on the
21 white ranch at [REDACTED] in [REDACTED] should, must and will
22 be mine.

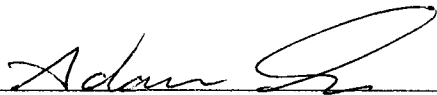
Dated this 12th day of January, 2013.



STATE OF MAINE
ANDROSCOGGIN, ss:

January 12, 2013

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



Notary Public/Attorney-at-Law

Name Typed or Printed
My Commission Expires: _____

Adam Dow
Notary Public of Maine
My Commission Expires May 6, 2015

**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 [REDACTED]

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.**

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

Radiation Sickness; Testimonials of Twenty People, Collected by
StopSmartMeters; 2013

**PRE-FILED TESTIMONY
OF JOSHUA HART
MPUC Docket No. 2011-00262**

1 **Q. Please state your name and business address.**

2 A. Joshua Hart, P.O. Box 30, Davenport, CA 95017. 831-421-0822
3 josh@stopsmartmeters.org

4 **Q. Briefly state your occupation, educational background and current employment.**

5 A. Currently I am Director of Stop Smart Meters!, an organization fighting the forced
6 deployment of utility meters that harm health, violate civil liberties and endanger public
7 safety. I have worked in the energy industry, as an urban and transportation planner,
8 environmental advocate, and freelance journalist. I obtained my MSc in Transport Planning
9 in the UK at University of West England, Bristol in 2008, and completed research entitled
10 *Driven to Excess*, presenting the social and quality of life impacts of car traffic on local
11 residents. The research was covered in over 100 international media outlets including the
12 BBC, the Guardian, Tehran Times, and the Daily Mail. Part of this work included the
13 creation and implementation of various surveys and questionnaires.

14 My writing has appeared in Surveyor Magazine, Walk Magazine, Make Magazine,
15 Carbusters and Lonely Planet's anthology Flightless: Incredible Journeys without Leaving
16 the Ground. Attached as Exhibit A is a copy of my CV.

17 **Q. Briefly describe your professional experience.**

18 A. I have worked for a number of professional health and environmental advocacy
19 organizations, including the Rails-to-Trails Conservancy, San Francisco Bicycle Coalition
20 and a UK based pedestrian advocacy organization called Living Streets. Since 2010, I have
21 been director of California-based Stop Smart Meters! I have studied the relevant literature

1 regarding aspects of the current “smart grid” deployment including studies on RF health and
2 environmental impacts.

3 **Q. Have you authored any papers or journal articles?**

4 A. I have published the results of a study I carried out between 2007- 2008 at the University of
5 the West of England entitled *Driven to Excess Impacts of Motor Vehicles on the Quality of*
6 *Life of Residents of Three Streets in Bristol UK*. The journal article was published in June
7 2011 in Volume 17.2 of *World Transport, Policy and Practice*.

8 **Q. Briefly describe your work and experience related to the study of electromagnetic**
9 **fields and radio frequency waves in the 30 MHz to 300 GHz range (“RF”), and about**
10 **their potential effects on biological systems. If you have conducted any studies or**
11 **published any writings on the subject, briefly describe them.**

12 A. As a grassroots journalist and citizen advocate, I have investigated hundreds of cases of
13 reported health and environmental impacts of smart meters and other wireless facilities. I
14 have also read hundreds of scientific reports on the subject and attended multiple
15 workshops, public forums, and conferences regarding RF, electromagnetic fields, and health.

16 **Q. In your role as Director of Stop Smart Meters! have you obtained information**
17 **confirming that utility customers have experienced adverse health effects associated**
18 **with smart meters?**

19 A. Yes. I have personally interviewed, read first person accounts and listened to first and
20 second hand accounts of smart meter victims suffering from a wide range of adverse health
21 effects from mild to severely debilitating. I am familiar with well over one thousand such
22 accounts. Many of these victims began suffering symptoms before they knew a smart meter
23 had been installed either on their home or in their neighborhood. Many of these people have
24 become so sensitized they have been forced from their homes [because of proximity to area

1 meters] and have been forced from their jobs because of RF in the workplace. For many
2 people who have become sensitized to RF, they have remained so even with removal of their
3 meter. While we may not have a sufficient understanding of the effects of RF and
4 mechanisms of interaction with biological systems to establish 100% certain causation, it's
5 astoundingly clear in repeatable real life situations that smart meters can cause adverse
6 biological effects and that sensitivity to RF can result from instant exposure and or exposure
7 over time.

8 **Q. Have you obtained information about smart meters being implicated in house fires and**
9 **appliance failures and fires?**

10 A. Yes. Hundreds of such fires, explosions, and electrical problems have been reported over
11 the past 3-4 years. We have reported on several such fires and electrical faults on
12 StopSmartMeters.Org. A series of 26 smart meter fires forced Peco Energy in Pennsylvania
13 to halt their smart meter deployment in August 2012.

14 **Q. Have you gathered accounts of adverse health effects from smart meters and if so**
15 **please describe how?**

16 A. Yes, Stop Smart Meters! has collected complaints about smart meters related to RF health
17 impacts, fires, overcharging, and other issues since October 2011. We worked with a web
18 professional who volunteered to design and manage the website <http://smartmeterhelp.com>.
19 Results of online surveys came in from all over the country, were entered into a SQL
20 database, and complaints from California periodically forwarded to the California
21 Department of Public Health, Governor Jerry Brown, the customer's utility company, and
22 the California Public Utilities Commission. More than 1200 complaints have been received.
23 These included a significant number of health related complaints. The attached declarations

1 (Exhibits B) were received in response to an e-mail request to those complainants who
2 entered an electronic complaint at smartmeterhelp.com

3 **Q. Are the attached Exhibits B true and accurate copies of the declarations received by**
4 **Stop Smart Meters! from people who had responded to your online survey?**

5 **A.** Yes. I have reviewed each of the attached declarations. They are all true and accurate
6 copies of the declarations received by Stop Smart Meters! and I have submitted them to
7 attorney Bruce McGlaufflin for inclusion as testimony in the present Maine investigation.

Dated this 29 day of January, 2013.

Joshua Hart



Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaulin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 22nd day of January, 2013 by:

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

Email [REDACTED]

[REDACTED]

Declaration of [REDACTED]

I, [REDACTED] 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 [REDACTED] and I had to move from [REDACTED] because I became physically, mentally and psychologically ill from SmartMeters for six apartment units placed less than 20 feet from my apartment.

2. I am a former utility customer of P.G.&E. To my knowledge, P.G.&E. turned on 12 SmartMeters in October of 2011 without informing me until I called them in January of 2012. I began having symptoms in November 2011, as a result of the SmartMeters being turned on. In November I began to go to bed around 8:00 p.m. which was unreasonably early for me. My regular bedtime had been 10:00 p.m. and I knew that it was strange for me to be tired so early but I reasoned with myself and blamed it on the fact that it was getting dark early.

At the end of November during Thanksgiving my face broke out in hives that were red and inflamed and they burned and itched. Nothing like this had ever happened to me so I blamed it on stress. When they didn't go away and the skin on my face became worse as well as unreasonably dry I made an acupuncture appointment. I saw an acupuncturist for the first time on December 9 for this and saw her until I had to move out of my apartment on January 30, 2012. (I can provide her notes if needed.)

In December 2011, I continued to go to bed early but as I slept I felt like I was drugged. I began to have low energy and noticed that it was an effort to ride my bike and to take dance classes. I am a very fit person and I didn't understand why this was happening. Around the second week in January 2012, I began having a pressure headache and pressure on my eyes whenever I was in my apartment. When I was at the beach or riding my bike this would go away.

By January 23, it became unbearable to be in my apartment. When I was there I would get a lump in my throat that made me not want to eat or drink. My face, scalp and the gums inside my mouth would become numb. The air became so thick that I had to gasp to get air into them. I began having heart palpitations when I would dance or ride my bike and have shortness of breath. I began spending less time in my apartment and at night I couldn't sleep anymore because I couldn't breathe and the intense pressure headache made it impossible to think. I couldn't concentrate and I started to not be able to think straight when working. On January 30, 2012, I called a friend while I was on the verge of having a mental break down. She picked me up and was shocked when she saw me. She said I looked like a cancer patient. My face was pale, my eyes were gaunt, dark and tired looking and I lost weight.

She took me to her house in the Sunset district of San Francisco, that did not have a SmartMeter. As soon as I got there I was able to feel that the air was thinner and I automatically began pulling air into my lungs. The first two days I spent with her I was very volatile emotionally. I was losing my mind and I was wishing for my life to end. The

hopelessness was so great that my friend and her boyfriend kept close watch over me. I knew my mind was sick from the electromagnetic poisoning from the SmartMeters and this fact helped me to stay sane and make it through the fact that I lost my job, home and independence in less than 4 months because of SmartMeters and no one could help me get them removed.

I took long walks on the beach which was about 15 blocks from my friend's house. I would feel better during those walks but as I walked back to her house I would start feeling sick from the SmartMeters emitting their pollution onto the city streets.

For the first week of February 2012, I went to visit a friend in Comptche, California who lives on 64 acres of trees and has no electricity. Within two days of being there I became my normally, healthy and fit self again. This is when I realized that I could not live in San Francisco anymore.

I went to the [REDACTED] Health Clinic on February 22, 2012 and had a full check up and full blood work. The test results came out healthy. My nurse practitioner advised me to get away from SmartMeters when I told her my story. (I can supply her notes if needed.)

Now back in San Francisco I stayed with my friend in the Sunset district and packed up my apartment to leave for Pennsylvania. I had to give away all my furniture and things because I needed to leave as soon as I could because each day I was back in San Francisco I became weaker and sicker from all the SmartMeters in the city. I couldn't even walk down the street to get away from all the SmartMeters. I moved across the United States to save myself physically, mentally and emotionally.

It took me 13 years to build my business in San Francisco and I had to give that business up due to P.G.&E. turning on the SmartMeters, in less than four months time. I have not worked since January 30, 2012 and am starting all over in Pennsylvania. I want to be compensated for all the hardship P.G.&E. has put me through. I want compensated for my move; for all the business I lost in San Francisco, for all the time I have not worked and for the cost of starting my business over in Pennsylvania.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed on this Wednesday, April 04, 2012 at Lancaster, Pennsylvania.

Signature: [REDACTED]

Smart Meter Health Effects Authorization

attached
I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlauflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 18th day of January, 2013 by:

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

Email [REDACTED]

AFFIDAVIT

I, the undersigned, being first duly sworn, state as follows:

1. My name is [REDACTED]
2. I am a customer of San Diego Gas & Electric Company – for Electric & Gas.
3. On or about May 15th, 2010 RF (radio frequency) “smart” utility meters replaced both of my analog electric and gas meters at my home in La Mesa, CA. The electric meter was placed on the wall of my bedroom, one foot (or less) from the pillow where I placed my head as I slept. The room has large mirrored closet doors so it is a highly reflective environment. This increases the radiation, I have been told by an expert. The gas meter was placed on the opposite end of my home, next to my home office. According to SDG&E documents filed with the CPUC, it communicates frequently with the electric meter, the signal passes through the length of the house, inside.
4. I was not advised by anyone at the time of installation that the new “smart” meters emitted rf microwave radiation. I did not know this for over six months. The installers just said they were installing a new meter, that ours were old and outdated. I assumed they worked the same, with a digital display. No one asked our permission. If I had known what was to happen, I would have refused and taken any steps possible to prevent this strong, constant pulsed radiation exposure, which has ruined my health and our lives. I do not want this to happen to anyone else, also.
5. Following the installation of the smart meter, I experienced increasing insomnia (during the summer, slept only one hour or two some nights), headaches that increased from dull daily ones to excruciatingly painful ones that lasted three days, chills, an unusual volcanic serious type of skin cancer on my face that had to be cut out, leaving a large scar, dizziness, nausea, cognitive problems, sensitivity to other rf-devices that never bothered me before, ringing of the ears that became shrill and even painful (ice pick type pain), clicking sounds heard (microwave hearing), breathing problems increased, and memory problems increased. My sinuses close when I enter my bedroom, they swell shut within seconds. If I take benedryl they re-open. The doctor says this is an allergic reaction to rf radiation. I recorded 15 symptoms that occur with the smart meter, and only with it, since it was installed. The sum totals of these have been very debilitating and like being tortured, daily.
6. I have been diagnosed with hearing loss from exposure to electromagnetic radiation by my ENT, in the ear with the loud microwave clicking.
7. For the first six months, I did not know that the electric smart meter utilized microwave radiation that was entering my home and that sleeping so close to it was a danger. My doctor told me when I reported some of the above symptoms to him and asked if I had a smart meter, where it was, and later wrote me a letter to send to the utilities and CPUC to request that it be removed as it was making me ill. For the first year, I did not know that the gas meter was also smart because it had dials. I found out that it also has a smart meter module on it by reading the

fine print on top of the meter. I get dizzy and nauseated when I am near that gas meter too long (more than a couple minutes).

8. The utility (San Diego Gas and Electric Company) and the California PUC did not cause the smart meters to be removed, even with the doctor letter requesting removal. They both denied that it was possible to be sick from the meter(s) and told me it was mandatory to have the smart meters, that essentially, there was nothing they could do, this is the new program of the state, required by the federal government. It turns out that is all false and I have the documents to prove it.

9. I asked the utility to come out to check the meters on the outside of my home and they have never done so. They claim that I forbid it, but I have the letters that prove otherwise. I wanted them to check the meters for defects.

10. I complained on the phone, in person, and in writing (by various methods) to my elected officials, US Dept of Energy, US Dept of Justice, CPUC, Governor of CA, and President Obama, all to no avail. No one helped at all. Most ignored me. Those who wrote back said it was not a problem they could help with, to contact the CPUC.

11. After that the doctor told me that it was the smart meter, and to avoid it, I tried sleeping further away from the smart meter on my bedroom wall. Moving the bed did not help. Moving into another bedroom across the hall helped somewhat, but I still got headaches and had the ringing ears. I put up shielding and it helped reduce the painful ringing in the ears but moderate ringing still occurred most of the time, occasionally less than moderate. Sometimes the ringing was so loud it woke me up. I still had some insomnia there in the guest bedroom.

12. I moved into the living room to sleep on the couch. There I had reduced symptoms and have slept there for 1 ¼ years now. I have a bad back and the couch makes it worse, so I am in pain sleeping there, but it is the only way I can survive this terrible exposure to rf radiation.

13. The exposure has been upsetting and torturous. I feel like I cannot control my own life or health. I cannot enter my bedroom anymore, I get an immediate tingling in the head (top) and pain in base of neck, then sinuses swell shut, severe headache ensues and lasts three days. This happened twelve times, till I finally gave up going near the meter inside. The same thing happens outside near the meter, or when I am in close proximity to other smart meters.

14. Other sources of rf radiation now bother me. I have become rf-sensitized by the smart meter, according to my doctor. I must avoid cell phones. I bought a shield for my cell phone and use it on speaker (as I always did before) with a shield, only in emergencies or urgent situations. No one can use a cell phone near me now, and that causes me to be isolated at times or stressed out due to so many people having them. I experience pain, nausea, headache, dizziness, and cognitive dysfunction when around cell phones being used. I have had to buy and use a shield for my computers and extended keyboards and mice so I am not as close to the computer.

15. I have a wired computer (cable connected to Internet), corded phones, and do not use a microwave, nor does anyone in my home. Cell phones are not allowed near me now and I ask visitors and family not to use them in the house or on the property.

16. I improved with avoidance of the smart meters, particularly the electric one. I have to live in the middle of my home, as there is a smart meter at both ends. I cannot go to either end of the property and work there or occupy the space as the smart meters bother me. Therefore, I have lost the use of my home and property by 2/3. I still have cognitive problems, dizziness, ringing ears, and occasionally, insomnia (if I get near smart meters). I feel more ill when I am in my house more. I am retired and my home is where I am nearly all the time. I have nowhere else to go. There is certainly nowhere left to go without smart meters in our state. I cannot move from our state as I have a disabled son and must remain where he is and where his services are located. Besides, all the states are starting to get these meters, rapidly.

17. Since both bathrooms are near the meter, and I cannot access the master bathroom without going through my room, I can only use one other bathroom and for a very short time. I cannot take a bath anymore, I take very quick showers as the radiation bothers me there. I have not been able to see my own bedroom or bathroom for over a year. I have not taken a hot bath, something I used to love to do, and had to do for a medical condition I have, for over a year. This upsets me.

18. I cannot access all of my clothing. There is nowhere to put the clothes from my closet. I have been cold as a result at times till someone can run in and get the clothing. I cannot.

19. I have not been able to sleep with my husband for over a year. This upsets us both very much. We are older and this is ruining our lives in so many ways.

20. Other members of my family have been impacted. My son, an adult with a disabling condition, was hospitalized three times (for a long time each time) in the first year of the smart meter installations. Only when we figured out that could be a trigger did his condition return to normal. He avoids the smart meters and stays at least 20 feet away. His doctor agrees that this is the right action to take. That means when he visits he cannot use the bathrooms but has to use the laundry room. He has to visit less. This is a terrible inconvenience and another loss of use of the property.

21. I feel like I am being raped daily by the utility company and the state utility agency, the state and federal governments as they are taking away my health, my life, and my property, without caring about it in any way that is humane. I am a disabled senior citizen who deserves better than this. I was a school teacher for 25 years, a special education teacher who made the world a better place. I deserve some respect and care. I am outraged that the citizens of our nation are being experimented on and attacked with such a horrific program. This experience is like being in a science fiction movie with evil perpetrators. It is shocking that this is really happening to me and to everyone in the nation and that so many don't even know it, even if they became sick they'd not be likely to know the source, nor would most doctors.

22. As I write this, my ears are ringing loudly and have been all day. Some days are worse than others. When I am away from the places where smart meters are, the ringing reduces or disappears.

23. Other people in my home report headaches if in the bedroom.

24. My immune system appears to be more sensitive each month to the rf radiation.

25. I have tested the house for radiation. It is elevated nearest the smart meters. There is also "dirty electricity" on the wiring nearest the electric smart meter. There is a pulse of microwave radiation that continuously occurs every few seconds that has been measured. It is nearly 300 times what normal background is. The microwave radiation is up to 35 times normal levels in the bedroom at about 12 feet from the smart meter. One foot from the meter cannot be measured with the equipment we had here, but it increases exponentially, we know that, so it has to be thousands of times more.

26. I have tried, to the best of my ability, to object, inform the public, and obtain an opt-out and dismantling of this dangerous wireless smart grid and smart meter mesh network. I started a nonprofit to do so, called Center for Electrosmog Prevention, for which I am a volunteer director. This has taken over a year. To date there is no opt-out for my part of the state of California.

27. I have written the utility and CPUC repeatedly and they always deny my requests to remove the meters.

28. The smart meters remain on my home, where I have shielded my home to reduce exposures, but it is not a complete nor satisfactory arrangement. Without the shielding I would be living in my car.

29. I personally know of many hundreds of people ill from the smart meters, some are near death, with emergency room trips for heart ailments, some with seizures from them, and some with bleeding sinuses and severe sleeping disorders, blocked arteries, and so on. Many are young people. Several are university professors, one is a former dentist, another is a doctor. None had the conditions before the meters and all are worsened with closer proximity and increased exposures. All are desperate to get these meters removed but no one in the country will help them from an official standpoint. Some seem to be suicidal at times as a result, especially as some have to live in their cars, and I have tried to comfort them and help them to hold on till we get an opt-out. For some, the opt-out will not be enough though, as many have neighboring meters aimed at their homes from next door. Some have up to 20 meters aimed at their homes from neighbors or condo units in a grouping.

30. My doctors are horrified and despair for the nation's health and healthcare system.

31. I reaffirm that the information contained in the paragraphs above are true and correct.


32. End of affidavit.

Dated this 25 day of February 2012.


Signature of Person Making This Affidavit

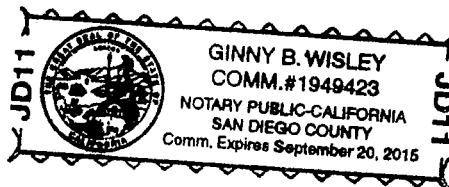
State of California)

County of San Diego)

Subscribed and sworn to (or affirmed) before me this 25th day of FEB, 2012, by
 of LA MESA CA
_____, personally known to me or proved to me on the basis of
satisfactory evidence to be the person who appeared before me.


Signature of Notary Public

Notary Public Seal



Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 21 day of January, 2013 by: [REDACTED]

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

Email [REDACTED]

Declaration of [REDACTED]

I, [REDACTED], 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 [REDACTED], and I reside at [REDACTED]
2. I am a utility customer of Pacific Gas and Electric (PG&E).
3. A Smart Meter was installed on my home over my objections in August 2010.
4. At first I did not notice any ill effects, but over time symptoms began to accrue.
5. By November 2011 I was suffering from insomnia, nosebleeds while sleeping, constant nausea, headaches, heart palpitations, fatigue, loss of balance, and depression.
6. I called PG&E several times to request removal of the Smart Meter. They refused.
7. On November 7, 2011 I sent a certified legal notice to PG&E demanding the removal of their Smart Meter within 30 days. Non-compliance would require my replacement of the Smart Meter with an analog meter.
8. There was no response, so on 12/19/11 I had the meters switched. My symptoms all disappeared.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this 8th day of April, 2012 at Chico, California.

[REDACTED]

Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 21 day of January, 2013 by:

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

Email [REDACTED]

Declaration re: Smart Meters

Declaration of [REDACTED]

I, [REDACTED] 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 [REDACTED], and I reside at [REDACTED]
2. I am a utility customer of P.G. & E.
3. I moved into the above triplex in October of 2011. I have been diagnosed with Bipolar disorder, and I have a ten year old special needs child who is on the spectrum for Autism and Aspergers Syndrome. Shortly after moving in here, I noticed that both my son and I were waking up in the night, unable to sleep despite medication, and both of us have become more agitated and depressed than usual.
4. Around that same time, it came to my attention that we have three smart meters installed right outside the door to my kitchen and in proximity to both our bedrooms.
5. I complained to P.G. & E. about my concerns regarding the dangers of these smart meters and my concerns for my health and the health of my son.
6. I also spoke to my neighbors living in the triplex, who told me that they had informed P.G. & E. that they did not want the smart meters installed, however, P.G. & E. came back when no one was home and installed them anyway.
7. P.G. & E. subsequently phoned me back and left a message that I could opt out of the smart meter by paying a fee and a monthly charge. This fee is difficult for me to come up with, as I am living on a fixed income, and my two neighbors here in the triplex told me that they do not have the money for this either, so even if I personally was able to come up with the money, I am still unable to afford opting out of all three existing smart meters.
8. I feel that P.G.& E. is harming us and in a sense holding us hostage with disregard for our health and wishes, and especially as we are "at risk" people who are particularly sensitive to this. We signed a year lease when we moved here in October of last year, and at this time we cannot afford to move a few miles west to the town of Fairfax, CA where smart meters are banned! And we are unable to pay the opt out fee imposed by P.G.& E., who installed the smart meters against the wishes of the residents here.

I declare under penalty of perjury that the foregoing is true and correct.

I 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.

This declaration was executed this 17th day of April, 2012 at San Anselmo, CA

[REDACTED]

CC: Marin County Health Dept.

Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 22nd day of January, 2013 by:

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

Email [REDACTED]

Declaration of [REDACTED]

I, [REDACTED], 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 [REDACTED], and I reside at [REDACTED]
2. I am a utility customer of CenterPointe Energy.
3. A Centerpointe employee knocked on my door on Friday 3/11/2011 and told me that he needed to get access to my electric meter. He had a new meter in his hand so I asked him, "Is that a smart meter?" He told me that it was and I then told him that I don't want it. I was told that I did not have a choice and being ignorant at the time I allowed him to change out my electromagnetic analog meter to the new smart meter.
4. Our meter is located just outside our master bedroom opposite from where our bed was located. My wife and I began having problems with insomnia. Before the smart meter I would typically wake up maybe once or twice during the night to go to the restroom and then would return fast asleep. Now we both wake up 4, 5 even 6 times each night for no apparent reason. I usually can fall back asleep only to wake up again in 30 or 40 minutes or maybe an hour. This is typical since receiving our smart meter.
5. I also have noticed since the smart meter was installed I wake up with night sweats, sharp intermitting headaches, tingling in both arms, shoulder pain, dizziness, blurred vision, neck aches, aches in both knees, legs, and ankles. My wife [REDACTED] has experienced most of the above symptoms plus nausea, ringing in the ears, nose bleeds and drainage in the eyes. All of the symptoms have begun since our meters were replaced. I say meters because Centerpointe also serves our home with natural gas and they have since installed a smart gas meter as well.
6. These are just the symptoms we have noticed since getting our smart meters. What problems will we all be having in 10-20 years from now?
7. Another issue that we have discovered is that these meters are not UL approved! Every other electrical appliance in our homes have always been rigorously test in the Underwriters Laboratory to be determined it's safety. Why are smart meters exempt from these test?
8. The FCC guidelines do not adequately protect us from this very high pulsating frequency. We have recently purchased a RF Power Flux Density meter and found that both our electric and gas smart meters produce over 2000 micro Watts per meter squared four to five times per minute. (We have recorded these readings via video recorder) We were told by Center point that they would only be transmitting 3 or 4 times (microburst) during the middle of the night.
9. We have since reviewed much research about RF radiation and found that it is harmful to humans, plants, animals and the environment. Even our dog reacts strangely at times escaping to a small enclave in our bathroom to sleep.
10. The California Public Utility Commission has realized these health concerns and made the decision to allow customers to opt-out of the AMS program. Even this would do little to help us since we are in a subdivision with many neighboring meters around us. Also, how will an opt-out program benefit apartment dwellers?
11. After all, these smart meters are not mandated here, by federal or Texas state laws.

12. We have also learned how the information gathered by these devices can determine private information that should not and need not be revealed to our electric providers. And we question the security of this information as it is transmitted thru the airways. We viewed a video that displayed how an electronic technician was able, with a \$30.00 piece of equipment ordered over the internet, to hack into his smart meter! This is a violation of our 4th amendment rights to privacy!

13. On a more positive note, I purchased a RF shielding bed canopy on 3/16/12 and it was delivered on 3/21/12. I installed it over our bed that evening and now both my wife and I have been able to sleep throughout the night. This is yet more proof to me that the RF radiation is the culprit.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this 4th day of April, 2012 at Spring, Texas.



Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 22 day of January, 2013 by:

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

April 5, 2012

We had been living healthfully in Silicon Valley for 5 years before the Smart Meters came and changed everything. We had purchased an expensive house in an upscale neighborhood (Willow Glen in San Jose) thinking we would be there for the long haul and had established professions and personal relationships. We both worked at home at times, I more often as I moved from full time to marketing consulting work.

In early 2010, I began to have a number of health issues/symptoms and strange sensations: constant and loud ringing in my ears, bad insomnia wherein I awoke frequently shaking or trembling, tingling up the back of my neck and into my head, abdominal pain, moodiness, and fatigue. Thinking it was overwork, I cut back on my hours. However, my symptoms did not abate, they worsened. I began to have heart palpitations and pounding, intense eye pain, vision changes, flashing lights that seemed to be literally behind my eyes, and "shock like" sensations which jolted my body. I woke up frequently with the sensation that my head was in a vice (pressure on my head) and had an acute onset of chemical allergies which, like my other symptoms, was most prevalent inside our house.

Confused, I tried to determine what could be happening. My symptoms increased and I began to feel sicker in our house – nosebleeds, sore throat, weakness and hives were added to the list. I went to my primary doctor. Routine blood work collected on 3/16/2010 showed that my liver tests were abnormal (elevated) and that my blood had toxicity in it. (Attached). I had never had abnormal liver tests in my life.

As I began to discover that my symptoms were worst while inside the house and lessened when we were away down the coast visiting friends or up north in San Francisco, I analyzed what had changed and where I spent a lot of time. The trembling, hives, intense acute head pain, and flashing lights had all happened in the kitchen where I often worked or spent time cooking. The other symptoms were constant while in the house in general. I spoke with friends down the street who were also not feeling well. She had had a relapse of her MS, he was experiencing intense migraines and all their pets were sick. Thinking this was strange, I looked online.

I remembered that the electric (and gas) meters had been replaced and after doing some research online, I discovered that my symptoms were in line with many others suffering the effects of acute electromagnetic exposure following a smart meter installation. I learned that PG&E had been deploying the Grid in our area and that these were actually cellular devices communicating with all the other meters in our neighborhood and collection meters (the mesh system) which was never communicated to us by PG&E before install. Distraught, on 3/29/2010, I called PG&E to discuss the meter and my symptoms. I was told that the meters were no stronger than a microwave oven and that I was safe "at 6 feet" and that they were not removing them. Often, I had been closer than 6 feet to this meter given where our kitchen sink, island counter, phone, and kitchen table were.

I could not believe that the utility company would install something that was not safe; however, I tried to go on with my life and spend more time working on my health. I began working with a Naturopath – Dr. [REDACTED] ND, in Palo Alto to help with the EMF and chemical sensitivities. We made many changes to the interior of our house to reduce toxins including discarding furniture, throwing away our mattress and purchasing an all-natural mattress, and replacing carpeting with no VOC hardwood. I

worked aggressively to help detox my body. However, none of this did anything to relieve my symptoms. My health continued to deteriorate and I began feeling extremely agitated most of the time and couldn't concentrate well, often completely forgetting what I was talking about. I often lost balance, began to have chronic muscle spasms and muscle weakness and was weak and shaky often. I remember standing in the kitchen one day on the phone and starting to tremble. At one point, I had to rush to the counter as I was about to drop a cup of coffee.

Feeling awful, we moved into a hotel for 3 weeks in Los Gatos. I felt much better and was able to do some part time work for one of my clients. (I had had to leave my [REDACTED] role in June as I was unable to spend much time online now).

Again, on 11/3, I again called PG&E. I had heard you could have these removed. The representative (Liz) told me someone that I could speak to the Smart Meter group (hotline) about having it removed and someone would call to discuss my options. On 11/24, at 3:33 PM, the Smart Meter Department of PG&E called. The representative told me that PG&E "could not remove the meters, they were safe per the FCC, just stay 10 feet away from it".

I tried to stay out of the house as much as possible. We spent several weeks away in December and in January, we rented a colleagues house in Mountain View where the smart meter was much further away from the kitchen and bedroom. Finally, still unable to be in our house, on Feb 14th, 2011, we moved into a rental house in Santa Cruz where Smart Meters had not been deployed. There I was able to improve my health, if only for a few months as evidenced my improved blood tests. (Attached) We have since abandoned our house and California all together and relocated to Ann Arbor, Michigan where, sadly, the meters are now on their way. We are preparing to run again once they get to our neighborhood. These meters took years of my life away and have permanently damaged my health. I now have chronic EHS (MD documentation attached) and we were forced to abandon our plans to adopt a child.

In San Jose

After Smart Meter
Install

QUEST DIAGNOSTICS INCORPORATED

PATIENT INFORMATION

REPORT STATUS Final

ORDERING PHYSICIAN

DOB: [REDACTED] Age: [REDACTED]

GENDER: F

ID: [REDACTED]

COLLECTED: 03/16/2010 10:15

REPORTED: 03/18/2010 07:36

Test Name	In Range	Out of Range	Reference Range	Lab
COMPREHENSIVE METABOLIC PANEL (Continued)				
ALKALINE PHOSPHATASE	53		33-115 U/L	
AST (SGOT)		37 H	10-35 U/L	
ALT (SGPT)		43 H	6-40 U/L	
eGFR	>60		>=60 mL/min	

IF PATIENT IS AFRICAN AMERICAN, MULTIPLY REPORTED RESULT BY 1.21.

URINALYSIS, COMPLETE W/MICROSCOPIC

SJ

HYALINE CASTS	NONE SEEN	NONE SEEN
YEAST	NONE SEEN	NONE SEEN
RENAL EPITHELIAL	NONE SEEN	< OR = 3 per hpf
PROTEIN	2+	NEGATIVE
HEMOGLOBIN	3+	NEGATIVE
PH	7.0	5.0-8.0
SPECIFIC GRAVITY	1.009	1.001-1.035
GLUCOSE	NEGATIVE	NEGATIVE
KETONES	NEGATIVE	NEGATIVE
LEUKOCYTE ESTERASE	NEGATIVE	NEGATIVE
NITRITE	NEGATIVE	NEGATIVE
BILIRUBIN	NEGATIVE	NEGATIVE
WBC	NONE SEEN	0-5 per hpf
RBC	0-3	0-3 per hpf
EPITHELIAL CELLS	NONE SEEN	0-5 per hpf
BACTERIA	NONE SEEN	NONE SEEN
CRYSTALS	NONE SEEN	NONE SEEN
CASTS	NONE SEEN	NONE SEEN
COLOR	RED	YELLOW
APPEARANCE	CLEAR	CLEAR

LIPID PROFILE

SJ

CHOLESTEROL	159	125-200 mg/dL
TRIGLYCERIDES	47	<150 mg/dL
HDL CHOLESTEROL	85	> OR = 46 mg/dL
LDL CHOLESTEROL (CALC)	65	<130 mg/dL

RISK CATEGORY

LDL-CHOLESTEROL GOAL

VERY HIGH (E.G., DIABETES + CVD)	<70 mg/dL
HIGH (DIABETICS; CHD RISK EQUIVALENTS)	<100 mg/dL
MODERATELY HIGH	<130 mg/dL
(MULTIPLE (2+) RISK FACTORS)	
0 TO 1 RISK FACTORS	<160 mg/dL

*NCEP REPORT.CIRCULATION 2004;110:227-239.

CHOLESTEROL/HDL RATIO	1.9	< OR = 5.0 ratio
VLDL CHOLESTEROL	9	5-35 mg/dL

Page 2 - Continued on Page 3

PATIENT INFORMATION

REPORT STATUS Final

QUEST DIAGNOSTICS INCORPORATED
CLIENT SERVICE 800.722.8158

DOB: [REDACTED] Age: [REDACTED]
GENDER: F

ORDERING PHYSICIAN

CLIENT INFORMATION

SPECIMEN INFORMATION

SPECIMEN: A07422330
REQUISITION: 7343910101418
LAB REF NO: 7343910101418

ID: [REDACTED]
PHONE: [REDACTED]

COLLECTED: 03/16/2010 10:15
RECEIVED: 03/16/2010 10:14
REPORTED: 03/18/2010 07:36

Test Name	In Range	Out of Range	Reference Range	Lab
CUSTODIAL #:	LINCOLN			SJ
CBC/PLATELETS				SJ
WHITE CELL COUNT	4.6		3.8-10.8 thous/uL	
RED CELL COUNT	3.86		3.80-5.10 Million/uL	
HEMOGLOBIN	13.3		11.7-15.5 g/dL	
HEMATOCRIT	39.2		35.0-45.0 %	
MCV			80.0-100.0 fL	
MCH			27.0-33.0 pg	
MCHC	34.0		32.0-36.0 g/dL	
RDW	14.2		11.0-15.0 %	
MPV	9.6		7.5-11.5 fL	
NEUTROPHILS	59		40-75 %	
LYMPHOCYTES	27		20-45 %	
MONOCYTES	8		0-12 %	
EOSINOPHILS	5		0-6 %	
BASOPHILS	1		0-2 %	
ABSOLUTE NEUTROPHIL	2714		1500-7800 Cells/mcL	
ABSOLUTE LYMPHOCYTE	1242		850-3900 Cells/mcL	
ABSOLUTE MONOCYTES	368		200-950 Cells/mcL	
ABSOLUTE EOSINOPHIL	230		15-500 Cells/mcL	
ABSOLUTE BASOPHIL	46		0-200 Cells/mcL	
PLATELET COUNT	187		140-400 thous/uL	
ESR (WESTERGREN)	2		0-20 mm/h	SJ
COMPREHENSIVE METABOLIC PANEL				SJ
GLUCOSE	97		mg/dL	
			FASTING INTERVAL:	
			NORMAL:	65-99
			IMPAIRED:	100-125
			DIABETES:	>125
UREA NITROGEN	18		7-25 mg/dL	
CREATININE	0.71		0.59-1.07 mg/dL	
CALCIUM	9.0		8.6-10.2 mg/dL	
SODIUM	141		135 - 146 mmol/L	
POTASSIUM	4.4		3.5 - 5.3 mmol/L	
CO2	26		21-33 mmol/L	
CHLORIDE	106		98-110 mmol/L	
PROTEIN, TOTAL	6.5		6.2-8.3 g/dL	
ALBUMIN	4.2		3.6-5.1 g/dL	
GLOBULIN	2.3		2.2-3.9 g/dL	
A/G RATIO	1.8		1.0-2.1 ratio	
BILIRUBIN, TOTAL	0.6		0.2-1.2 mg/dL	

Indicates
Toxicity

102 H
34.6 H

Page 1 - Continued on Page 2

In Santa Cruz
 when there were no
 smart
 meters

QUEST DIAGNOSTICS INCORPORATED

SPECIMEN INFORMATION
 SPECIMEN: BA3240753
 REQUISITION:

PATIENT INFORMATION

DOB: AGE:
 GENDER: F FASTING: Y

ID:
 PHONE:

REPORT STATUS FINAL REPRINT

ORDERING PHYSICIAN

CLIENT INFORMATION

COLLECTED: 03/04/11 11:20
 RECEIVED: 03/04/11 11:15
 REPORTED: 03/10/11 17:01

COMMENTS: The original copy of this report was printed on: 03/05/11 at 10:30

CHART #: NOT GIVEN

Test Name	In Range	Out of Range	Reference Range	Lab
HEPATIC FUNCTION PANEL				
PROTEIN, TOTAL	7.1			
ALBUMIN	4.5		6.2-8.3 g/dL	SJ
GLOBULIN, TOTAL	2.6		3.6-5.1 g/dL	SJ
A/G RATIO	1.7		2.2-3.9 g/dL	SJ
AST (SGOT)	26		1.0-2.1 ratio	SJ
BILIRUBIN, TOTAL	0.7		10-35 U/L	SJ
BILIRUBIN, DIRECT	0.1		0.2-1.2 mg/dL	SJ
BILIRUBIN, INDIRECT	0.6		< OR = 0.2 mg/dL	SJ
ALT (SGPT)	27		0.2-1.2 mg/dL	SJ
ALKALINE PHOSPHATASE			6-40 U/L	SJ
			33-115 U/L	SJ
CBC (INCLUDES DIFF/PLT)				
WHITE BLOOD CELL COUNT	4.7		3.8-10.8 Thousand/uL	SJ
RED BLOOD CELL COUNT	4.24		3.80-5.10 Million/uL	SJ
HEMOGLOBIN	14.5		11.7-15.5 g/dL	SJ
HEMATOCRIT	42.2		35.0-45.0 %	SJ
MCV	100		80.0-100.0 fL	SJ
MCH		34.2 H	27.0-33.0 pg	SJ
MCHC	34.4		32.0-36.0 g/dL	SJ
RDW	13.6		11.0-15.0 %	SJ
PLATELET COUNT	213		140-400 Thousand/uL	SJ
ABSOLUTE NEUTROPHILS	3008		1500-7800 Cells/uL	SJ
ABSOLUTE LYMPHOCYTES	1175		850-3900 Cells/uL	SJ
ABSOLUTE MONOCYTES	329		200-950 Cells/uL	SJ
ABSOLUTE EOSINOPHILS	188		15-500 Cells/uL	SJ
ABSOLUTE BASOPHILS	0		0-200 Cells/uL	SJ
NEUTROPHILS	64		%	SJ
LYMPHOCYTES	25		%	SJ
MONOCYTES	7		%	SJ
EOSINOPHILS	4		%	SJ
BASOPHILS	0		%	SJ
SEDIMENTATION RATE (ESR)	7		0 - 20 mm/h	SJ

Normal

Better

Page 1 - Continued on Page 2

CONTROL THE ENVIRONMENT



ISOLATE THE INCIDENT

April 2, 2012

To Whom It May Concern:

RE: [REDACTED]

Ms. [REDACTED] is under my care for the treatment of Electromagnetic Field Sensitivity which is a physiological disorder characterized by symptoms directly brought on by exposure to electromagnetic fields.

Many patients exhibit health problems and experience symptoms when exposed to electrical stimuli. This is due in part to the patient's bodily response to antigens.

The body functions through cellular and intracellular changes in electrical parameters. Electrical impulses originate in the sino-atrial node of the heart and initiate heart muscle contraction. Cells assimilate and excrete through osmotic changes created by differences in electrical potential. The brain communicates and functions through electrical impulses carried from one nerve synapse to another.

This intricate function of the body can be affected by exposure to coherent electro-magnetic fields created by power transmission and usage and wirelessly transmitting devices. In sensitive individuals, exposure to even the lowest frequencies can create disruption in homeostasis.

Individuals who in the past may have experienced chronic or low level electro-magnetic exposure or acute high level exposure may exhibit symptoms resembling a feeling of shock, muscle spasms, headaches, dizziness or seizures. Intense ringing in the ears and eye pain are other common symptoms which develop and linger after exposure. Ms. [REDACTED] has talked at length about these symptoms following exposure to a Smart Meter on her previous home in California and was instructed by a prior physician to have a brain MRI given the severity and nature of her symptoms.

A recent physical examination finding revealed a positive Romberg's sign wherein Ms. [REDACTED] was unable to maintain balance while performing the tandem gait test with eyes closed indicating latent disorientation from EMF exposure. We also saw significant autonomic nervous system changes with symptoms including heart arrhythmia and elevations in blood pressure when she was tested for various frequencies in a double blind controlled EMF testing environment.

With my years of experience testing and treating individuals for this type of condition, I kindly request that a wireless digital meter or "smart meter" (or any other type of wireless transmitter or antenna) not be installed on her home. It could be quite detrimental to her health. Your assistance in this matter is deeply appreciated.

If you require additional information, please contact my office at [REDACTED]

Sincerely, [REDACTED]



**Pacific Gas and
Electric Company®**

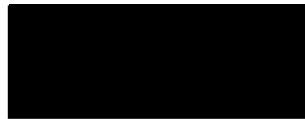
A little Too Late...

77 Beale Street
San Francisco, CA 94105-1814

Mailing Address
Pacific Gas and Electric Company
P. O. Box 770000
San Francisco, CA 94177-0001

415.973.7000

January 13, 2012



Dear Ms. [REDACTED],

I am writing to let you know that I have received and read the letter that you submitted to SmartMeterHelp.com regarding Pacific Gas and Electric Company's (PG&E) SmartMeter™ program. SmartMeterHelp.com submitted your letter to PG&E at a workshop that PG&E sponsored at the California Public Utilities Commission (CPUC) on December 9, 2011.

I want to start by telling you that we understand your concerns about SmartMeters™, and agree that choice is important when it comes to the meter at your home. We submitted a request to the CPUC in March 2011 that proposed choice for residential customers, and last month recommended to the CPUC that customers have the option to retain their analog meter if they choose. We are optimistic that the Commission will rule on our application shortly.

While awaiting a CPUC decision, PG&E has created a Delay List for customers who wish to postpone their meter upgrades. If you would like us to place you on that list, please call our dedicated helpline at 1-877-743-7378 and one of our representatives will be happy to assist you.

Warmest Regards,

Lavern Mitchell
Customer Relations
Pacific Gas and Electric Company

Smart Meter Health Effects Authorization

I _____, authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlauflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 21st day of January, 2013 by:

Name _____

Street Address _____

City/State/Zip _____

Telephone _____

Email _____

April 3, 2012

Smart Meter Help!
PO Box 30
Davenport, CA 95017

Declaration of [REDACTED]

I, [REDACTED], 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 [REDACTED], and I reside at [REDACTED]

2. The residence where I live is a utility customer of PG&E. I live with my two elderly parents who own the residence. I am their daughter and live without paying rent. I only pay for utilities. My two parents are old and don't understand my issues with the smart meters and refuse to have them removed as they feel the government or some official would be upset. So I am forced to live with them as there is no place that doesn't have one on them anywhere that I can afford to move to.

1. Smart Meter installation (two smart meters, one for gas and one for electric) where installed on my residence on July 18, 2011. Two hours later I began experiencing intense headache, heart palpitations and nausea symptoms. After screaming of pain for a couple of hours, I secluded myself in the farthest reaches of my residence, away from the two smart meters (which were placed on either side of my bedroom).

Now I live in that one room, our den, almost all the time, as any other part of the house gives me instant headache, heart palpitations and nausea.

2. I arrived at the hospital Emergency Room at [REDACTED] Hospital in [REDACTED] CA, about 5 hours after the installation of the two smart meters on the residence where I live currently, July 18, 2011. I have my bills from that date. They gave me a prescription of Zofran (a medication for nausea used to treat people taking chemotherapy or radiation treatments) and checked my heart. The EKG, a one minute test, said I wasn't having a heart attack and so they cut me loose, not knowing what to do to help.

3. The next day the symptoms remain. Since I couldn't stop crying and yelling due to the pain, and my Zofran was only a one day supply, I returned to the Emergency Room again, two nights later, on July 20, 2011 and again was treated for nausea, and again described all my symptoms including headaches/ringing in the ears and heart palpitations. As the doctors couldn't find out what was wrong, I was told to report the symptoms to my regular treating physician.

4. The next day I went to my usual clinic, July 21, 2011, Dr. [REDACTED] office, at [REDACTED] where I saw right away the Physician Assistant on Duty, [REDACTED]. She listened to my complaints, which were still headaches, ringing in the ears, intense nausea, dizziness and heart palpitations. She prescribed more Zofran but didn't have any advice for the rest of my symptoms, having no idea what a smart meter was.

5. Realizing I was on my own, I permanently moved into my families residence's den and have since remained there. It is as far as I can get away from the two meters but leaves me in the position of being in everyone's way. I don't know how long I can live this way.

I can only go out when necessary, as now I am electro-sensitive to Smart Phones and Laptops (which people carry around with them) as well (which happen about two

months after, I am guessing, the two meters got installed and the rest of our neighborhood as well) and to all the other smart meters in town. So I am afraid to drive for fear my periods of dizziness my result in a car accident and I stay out of all other buildings, unless I have to go in for groceries or tests, as they too have Smart Meters which adversely affect me.

6. I just saw my regular treating physician this week, Dr. [REDACTED] and he prescribed more Zofran and didn't feel that the radiation from the smart meters was what was affecting me. That is all he knew about them. He had no advice to offer me or could not help with any symptoms but my nausea. I am on my own he indicated indirectly by refusing to ask any questions and just stomped out of my exam.

7. After dealing with these two smart meters on my residence since July 18th of last year, I have turned my life upside down in order to keep from being in intense pain and just having now a very limited existence as I can do very little and go nowhere safely.

8. As these may be the last words I have to say on the topic, I fear that they will cause my early demise and since I can do nothing to stop this from happening, I live in perpetual fear of dying from either a Sudden Heart attack or from internal hemorrhaging...as it feels like my guts are being ripped out daily and my brain fried (especially feel my brain is being heated in my frontal lobes). As I can eat little, I am slowing losing weight as well and slowly becoming malnourished as I can only eat two small meals a day. I am also having memory issues and immune issues now (I constantly forget what I am saying in the middle of a sentence and I am getting colds monthly now).

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this 3rd day of April, 2012
at Santa Cruz, CA 95065

[REDACTED]

Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaulin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 22 day of January, 2013 by:

Name

Street Address

City/State/Zip

Telephone

Email



April 9th, 2011

I, [REDACTED] M.D., have personal knowledge of all facts set forth in this declaration and am competent to testify there to if called upon to testify in a court of law. I hereby declare:

1. My name is [REDACTED], and I reside at [REDACTED]
2. I am a utility customer of Pacific Gas and Electric.
3. In December 2009/ January 2010 I developed severe ringing in my ears particularly at night. One night I became desperate for a nights sleep and told my husband I would try sleeping outdoors to see if it would help. Much to my surprise it did help. I then slept outdoors at night in a tent for the next several months. This was around the time Smart Meters were installed in our neighborhood. We do not have a Smart Meter on our home because I requested no Smart Meter prior to deployment as I had occasional episodes of EMF sensitivity in the past if exposure was high. But we do have 7 close neighbors with 2 Smart Meters each. Moving outdoors reduced my total exposure by eliminating the exposure from my home. After Jan./Febr. 2010 I started having daily problems with EMF sensitivity. I had to limit the time I spent in buildings with Smart Meters. I tried 3 different offices where I had my private practice at [REDACTED] in Walnut Creek but the symptoms got worse and worse and eventually I had to close my practice on April 1st, 2011 at the [REDACTED] address. Gradually my symptoms of sleep difficulties worsened even outside. Some nights I traveled 2 hours south away from the Bay Area to a campground where I slept just fine. I started thinking I had to move. I got a job volunteering on an organic farm that didn't have cell phone reception. There I slept well in a tent every night for over 5 months. I felt well during the day and was able to help out on the farm. It was a joy to be making a contribution to society again even though it wasn't practicing medicine and helping children which I love to do. I stayed there from Memorial Day til November 15th, 2011. Meanwhile my husband tried to build me A Faraday cage so I could come home again. It didn't work. We got expensive assessments of our homes EMF situation and tried to lower the EMF of our home. This cost many thousands of dollars. We asked PG&E to measure the amp/voltage on our drop on our roof to find out if there was a problem with the electricity entering our home. They did a 24 hour recording for 4 days. They found the voltage dipped below normal (114?) and that means the amps running thru our wiring into our home was too high. So they replaced the wiring from our telephone pole to our home drop on our roof. This did help my symptoms somewhat but I was still unable to live in our home due to various symptoms like headache, fatigue and physical weakness, buzzing sensation in my left big toe and back etc.. While P.G.&E. did the work on our home they discovered a gas leak within 10 feet of our home, they sent about 8 vehicles to our home over the course of that day to repair the leak in the gas pipe entering our home. Date available upon request. I felt somewhat better after the gas leak was fixed. Still I wasn't able to live in our home. My husband hired 2 different electricians to put our wiring in metal casings. This cost several thousand dollars. Receipts available upon request.

1.



Toril H. Jelter MD FAAP
Board Certified Pediatrician
Specializing in Medical and Environmental
Aspects of Autism Related Illness

I visited my husband every other week-end. One week-end we had dinner with friends in a neighboring town. We sat at an outdoor table for my comfort. We enjoyed lively conversation. I was totally engaged. After about 1-2 hours I felt withdrawn, disinterested, became sad and felt weak. I asked my husband to take me home. 2 weeks later he took me back to this restaurant and asked me to look around. It was a narrow alley way about 20 feet wide. On one side of our table at head height was a Smart Meter on the wall of a building. On the other side, the opposite side of our table were 2 Smart meters. We had been sitting in the middle. Another time I visited a pizza restaurant. As we left we noticed a Smart Meter on the outside of the wall where I had been sitting. My husband said "Oh No!" I said it's OK I don't feel bad. This one was low to the ground about 1-2 feet up. That night I developed a severe allergic reaction with copious mucous from my nose and throat. I also had severe abdominal pain for about 4 hours. It was so severe it felt like child birth thru the abdominal wall rather than thru the birth canal. I couldn't sit still I had to keep moving to try to alleviate the pain. I considered going to the ER several times but held back as the ER is high EMF so I was afraid I'd get worse there. I have never had such severe abdominal pain before or after that night. The discomfort was noticeable to a milder degree for a week afterward. I have metal in my abdomen after previous surgery. One doctor told me this might be contributing and make me more vulnerable to EMF sensitivity. Over the past 2 years I have had many doctor visits to find out if anyone could help me. I have traveled all the way to Santa Barbara for help to see Dr. [REDACTED]. I have tried many supplements and detoxification procedures to see if there was anything I could do to myself to try to get so I could tolerate my home and work situation again. After many such attempts I am now able to live in my home if I limit my total EMF exposures thru out the day but have still not found a medical clinic setting to allow me to continue practicing medicine in a substantial way. We turn the electricity to our bedrooms off at night. I can only work for a few hours per week- not enough to sustain a practice in the long run. I can't find a medical clinic setting that has no Smart Meter and is otherwise low EMF. Soon my 7 neighbors will get a Smart Meter on their water supply. What will that do to me? I've asked a surgeon to remove the metal from my abdomen. He said it was not impossible but very difficult. I doubt any health insurance company would pay for this and the risks are high. Our lives have become a living nightmare. When I visit friends I have to limit the visit to their home. I can't visit family for very long if they have a Smart Meter because then I can't sleep at night. I am strongly opposed to electronic trespass thru our property. It is a human right to be able to live in ones home. We are being chased from our home and there seems to be no recourse. We have gone from 2 incomes to one. Our finances have been devastated. I am not only concerned about myself and my family and friends. As a society I am deeply concerned about the ramifications unbridled roll out of electromagnetic radiation (EMR) is having on our children. 1 of 88 children in the United States now has autism. That is over 1%! Researchers have identified many physiological abnormalities in these children. Over 50 of these physiological abnormalities can be caused or worsened by EMR. Details available upon request. That is shocking! Somebody, somewhere needs to do something. This is akin to rape of a whole generation but the weapon doesn't enter just one orifice in a child's body it enters every cell in their mind and body and harms them at levels of EMR that are currently considered "safe". EMR is the ultimate powerful weapon because the perpetrator has no blood on their hands. This has to stop. We must learn how to use



Toril H. Jelter MD FAAP
Board Certified Pediatrician
Specializing in Medical and Environmental
Aspects of Autism Related Illness

modern technology in a "safe" manner. If a utility already has proven repeatedly that they are unable to maintain the electrical distribution system (contact David Wilner (415) 898-1200 for more information) and the gas distribution system (i.e. San Bruno) why on earth do we permit a third tier that needs to be maintained? At least we can sometimes smell gas when there is a leak and stop the leak but we have no way of monitoring whether or not a Smart Meter is working right and even if it is it is harming people.

4. In summary I have had the following since the Smart Meters entered my community. Loss of health, loss of livelihood, loss of freedom to go where I please, loss of the ability to spend time with family and friends, temporary loss of my home and the potential for complete loss of my home unless Smart Meter free neighborhoods are established and many additional expenses for travel, EMF remediation and loss of vehicle returning from Santa Barbara and more.

I declare under penalty of perjury that the foregoing is true and correct. I have personal knowledge of all facts set forth and am competent to testify there to if called upon to testify in a court of law.

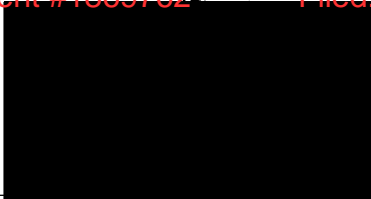
Sincerely,





The following physiologic dysfunctions have been found in some children with an autism spectrum disorder. The same dysfunctions can be exaggerated or caused by electromagnetic radiation that is currently considered to be “safe”.

- Genetic alterations and chromosomal changes
- Cerebellum changes on MRI
- Retina/ optic nerve damage/ visual problems
- Increased inflammatory reactions
- Increased hypersensitivity/ allergic reactions
- Immune shift or dysfunction
- Genotoxicity
- Increased oxidative stress
- Increased risk with older parents
- Altered fetal development
- Genetic dysfunctions
- Mutations
- Somatic alterations
- Disturbance of orientation in space
- Increased autoimmune risk
- Cerebral cortex abnormalities
- Altered molecular and cellular development
- Latent effect
- Brain and cerebellar nerve cell damage
- Microdeletions on chromosomes
- Protein expression abnormalities
- Increased cellular stress response
- Morphologic alterations of immune cells
- Changed lymphocyte viability
- Decrease of Natural Killer cells
- Decrease of T-lymphocytes
- Uteroplacental circulatory disturbance
- Increased membrane permeability
- Altered cytokine profile
- Disturbance of gastrointestinal function, gastric 'juices', enzymes, motility, inflammation etc.
- Serotonin dysfunctions
- Decrease of melatonin and sleep difficulties
- Dietary opioid peptide abnormalities
- Behavioral dysfunction
- Cognitive dysfunction

- 
- Hypo or hyperactivity
 - Memory problems
 - Deficits in understanding complex ideas
 - Increased seizure risk
 - Autonomic disturbance
 - Poor visual and perceptual motor skills and auditory memory
 - Headaches
 - Fatigue
 - Depression
 - Anxiety
 - Lack of concentration
 - Increased irritability
 - Decreased appetite
 - Aggression
 - Hormonal disturbance
 - Electromagnetic hypersensitivity (3.2% in California)-common reported signs and symptoms of the latter are: Headache, thought processing difficulties, memory impairment, heart palpitations, sleep disorder, general malaise, blurred vision, weakness, dizziness, chest discomfort, muscle pain, tinnitus, fatigue, nausea, night sweats, restless legs or paresthesias

When a researcher notices that environmental factor A can cause B and that entity B has been identified in children with autism the researcher will no doubt wonder if environmental factor A is somehow contributing to or causing dysfunction B in children with autism. What do YOU think a researcher thinks if electromagnetic radiation currently considered "safe" can cause or worsen over 50 of the pathological processes already identified in children with autism? There are many things we as a global community can do now if we wish to nurture the next generation of children. For example: Try a 2 week EMF remediation trial: See how your family feels: Turn off the wireless router for 12 hours at night and use an ethernet cable during the day, unplug all cordless phones use wired instead and turn off the electricity to the bedrooms at night IF you know how to do this safely. You may be surprised by what you discover!

For more information see the following websites:

Wired Child
EMF Safety network
Citizens for safe technology

Sources: The Bioinitiative Report by Dr. Carpenter and Cindy Sage
Autism edited by Andrew W. Zimmerman
Changing the Course of Autism by Dr. Bryan Jepson
Autism and its Medical Management by Michael G. Chez MD
Cross Currents by Dr. Robert O. Becker

Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 19 day of January, 2013 by:

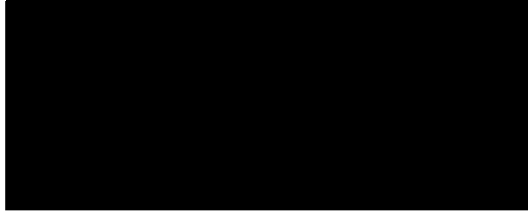
Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

Email [REDACTED]



April 6, 2012

I, [REDACTED] 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:

My name is [REDACTED], and I reside at [REDACTED]
[REDACTED] I am a utility customer of Pacific Gas and Electric (PG&E).

I live in a condominium complex where clusters of smart meters were installed on all the buildings several months ago. In early March, 2012, I began waking up every morning with ringing in my ears. I had never experienced this in my home before, ever. The ringing became gradually stronger and louder, becoming shrill and high pitched. The ringing was accompanied by a buzzing sound. At first, the ringing would go away when I was away from the house, but after several weeks the buzzing and ringing became so pronounced that it would continue even when I was away from home. I also began to feel a strange burning sensation along with mild nausea when I was at home. My sleep became disturbed. I instinctively knew it was from the smart meters, which I had never wanted installed in the first place. I went online to research common smart meter health complaints and found that my exact symptoms were shared by many others. Alarmed, I called my doctor and made an appointment. I was seen by Dr. [REDACTED] on March 28, 2012. She told me that ringing in the ears (Tinnitus) is a condition she takes very seriously because it can cause hearing loss. I was referred for an audiology exam which is scheduled for May 16, 2012.

"Opting out" of my own smart meter does not solve the problem for me because I am surrounded by everyone else's smart meters, which are in very close proximity to me. I have learned that PG&E has violated FCC regulations by "co-locating" the smart meters in clusters, which emit dangerously high levels of Electromagnetic Radiation, as determined by the FCC. No one is enforcing this regulation. In addition, the meters are installed such that all residents of my complex must pass within several inches of the meters to empty their trash. This is also an FCC

regulation violation, which states the meters are not to be within 20 cm of human contact.

I have been forced to move out of my bedroom and am sleeping at the bottom of my staircase, up against a wall that is the farthest away from the meters. This has helped to diminish the ringing somewhat. Some nights, however, it is so intolerable in my home that I have driven to my place of business in [REDACTED] Ca, late at night to sleep in my office. I find that the more time I spend away from home, the better I feel. I am no longer comfortable in my own home and feel as though I have been invaded.

It has become clear to me that if this situation is not remedied, I will be forced to move out of the home that I love. I have spent hours researching methods to protect against EMF radiation and have scheduled contractors to shield the inner walls of my home with copper paint and cover my windows with copper screens. This is going to be quite costly for me, as well as time consuming, since I will need to re-paint over the copper paint, even though I just painted my entire interior less than one year ago. I am hoping that the shielding will allow me to stay in my home until PG&E is forced to remove the meters or at the very least abide by the FCC regulations and have no more than one meter per building. Of course I will not be protected from the meters when outside, such as when going from my home to my car or emptying trash. Taking walks in my neighborhood, sadly, is no longer safe.

It has been well documented by doctors, scientists, and public health officials that smart meters are a serious public health issue. I have had the levels of radiation coming into my home and emanating from the smart meters on my building measured with the use of an RF meter, and have documented evidence that these levels are dangerous. I will do whatever is necessary on my part to ensure that this unwanted, unsafe, abominable smart meter nightmare comes to an end as quickly as possible.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this 6th day of April, 2012 at Capitola, California.

[REDACTED]

Department: [REDACTED]

Description: Female DOB: [REDACTED]

3/28/2012 1:20 PM Office Visit

Dept Phone: [REDACTED]

Provider: [REDACTED]

MRN: [REDACTED]

Reason for Visit

Tinnitus

ringing in ears

Your Vitals Were -
Last RecordedBP
106/52Pulse
59Temp(Src)
98.5 °F (36.9
°C) (Oral)Resp
12Weight
68.312 kg (150
lb 9.6 oz)SpO2
97%

Today's Orders

REFERRAL TO AUDIOLOGY, INT

Immunizations or injections administered on date of encounter - 3/28/2012

No immunizations on file.

Test and Procedures

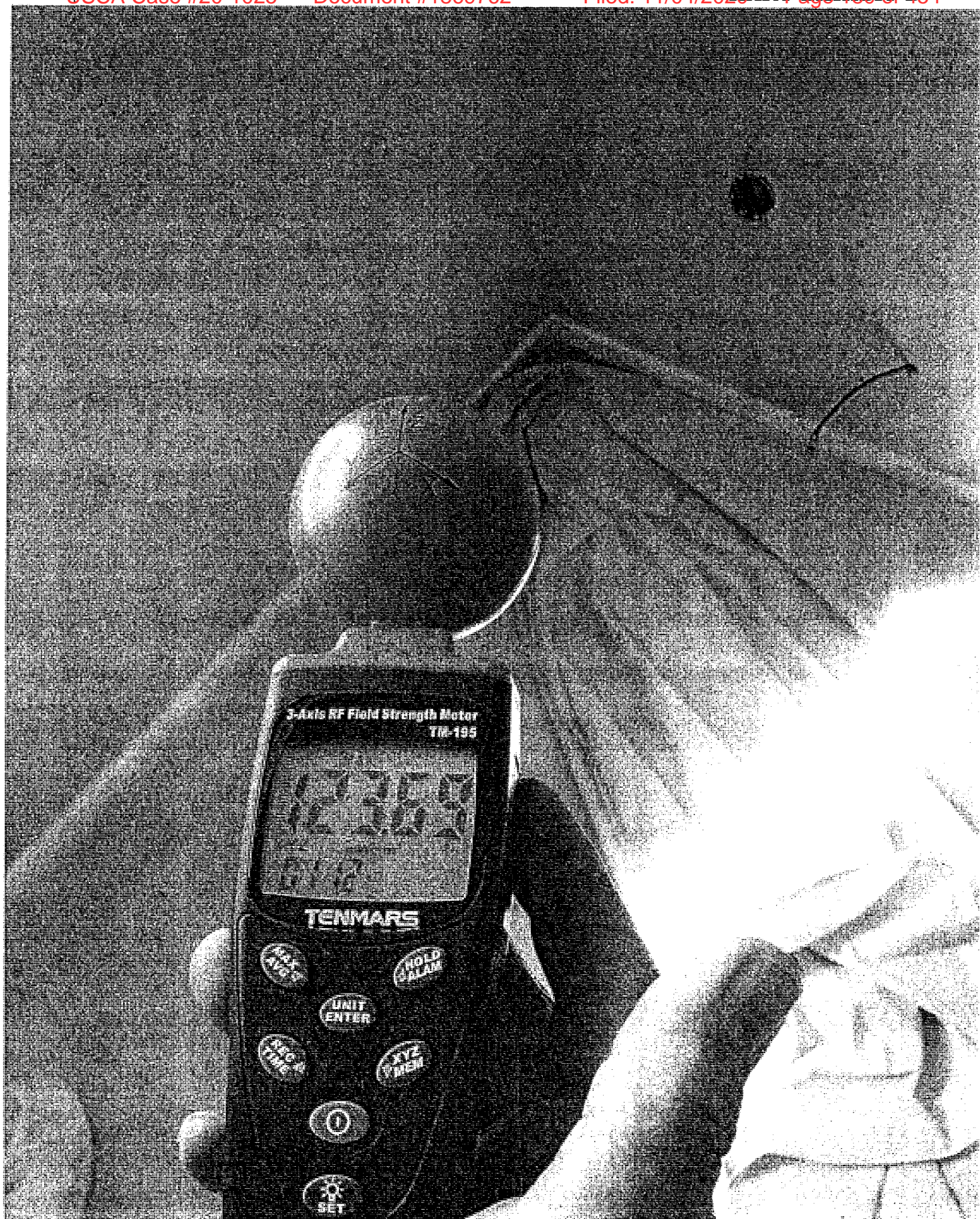
Internal Referral:

REFERRAL TO AUDIOLOGY, INT

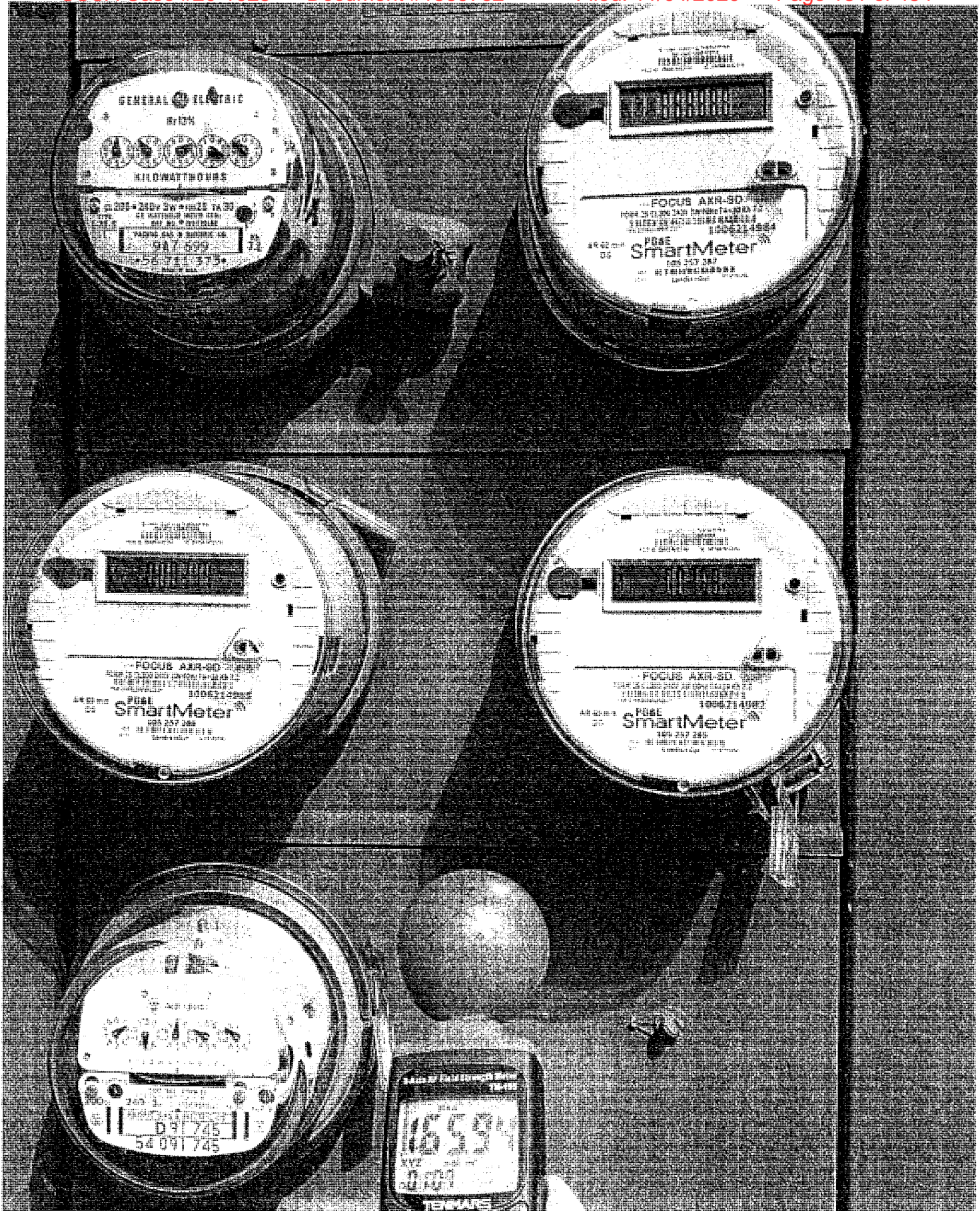
If the Audiology Department has not contacted you within 3 days to schedule your appointment, please call the number below.

Allergies as of
3/28/2012

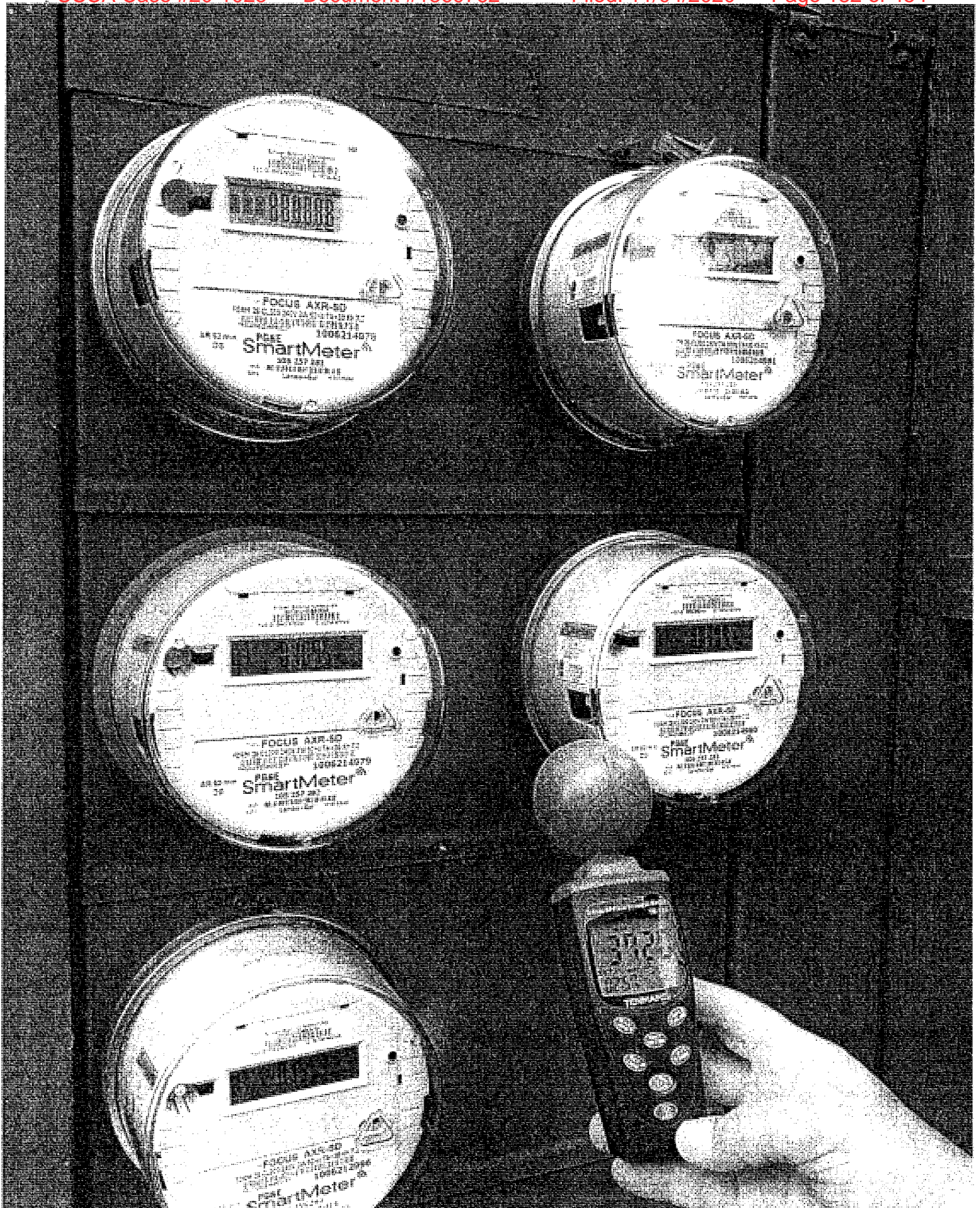
No Known Allergies



April 5, 2012 upstairs bedroom during oven fan shielding



My building (2 "out-outs")



Directly across from me

Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 21 day of January, 2013 by:

Name

Street Address

City/State/Zip

Telephone

Email

Declaration of [REDACTED]

I, [REDACTED] 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 [REDACTED] and until March 2012, I resided at [REDACTED]
2. Until March 2012, I was living with my sister and her husband, who were utility customers of Pacific Gas and Electric.
3. I was unaware that a Smart Meter had been installed on our house, but I suddenly began having severe, debilitating headaches, joint and muscle pain, muscle cramping, elevated blood pressure, irregular heartbeat, insomnia, and an intermittent buzzing/tingling sensation in my legs and feet that happened every few seconds day and night, and I realized on checking with the electric company, that my symptoms began right after the Smart Meter was first installed. What further confirmed for me my suspicion that my symptoms were connected to the Smart Meter was the fact that my symptoms completely disappeared when I would go to stay a few days at my daughter's house in Marin County (which has placed a moratorium on Smart Meter installation, so consequently none of the houses or businesses in her area have Smart Meters).
4. The effects of the Smart Meter were so debilitating for me that I have relocated to [REDACTED], to an area where there are no Smart Meters.

I declare under penalty of perjury that the foregoing is true and correct. I 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. This declaration was executed this 3rd day of April, 2012 at Asheville, North Carolina.

[REDACTED]

Smart Meter Health Effects Authorization

I _____ authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 22nd day of January, 2013 by:

Name _____

Street Address _____

City/State/Zip _____

Telephone _____

Email _____

Signature _____

Declaration of [REDACTED]

I, [REDACTED], 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 [REDACTED] and I reside at [REDACTED]
- (2) I am a utility customer of Florida Power & Light Company, NextEra Energy Resources, LLC.
- (3) Approx Feb 28th to March 1, 2012 FPL/NextEra installed smart meters on both my neighbor's homes. I did not have a meter installed on my home. I started getting sick on 29th-1st March.
- (4) I was not able to go to the left side of my house or the right side I was confined to my great room which was in the middle because of the smart meters on my neighbor's homes. I could not cook in my kitchen because my condition got worse, the use of my bathrooms had to be quick because both on my bathrooms were on the side of the house were my neighbors smart meter was.
- (5) I was in good health before the smart meters were installed because of FPL/NextEra installing the smart meters my quality of life went down hill. I was subjected to extreme pain and agony. I experienced severe insomnia, diarrhea, agitation and irritability, flu like symptoms, extreme fatigue, CONSTANT stabbing migraines, extreme nausea, heart palpitations, muscle pain, earaches, severe anxiety, and an induced seizure. On March 10th I suffered a seizure in Which EMS rushed me to the hospital were I was diagnosed as having a seizure. My husband also started to get migraines when they installed the smart meter my Neighbor's homes.
- (6) On March 11th I called and left a message with the customer advocate for FPL Clara Scutt and notified her that I had a seizure from the smart meters on my neighbors Homes and that my husband was terrified to go to work and leave me alone in fear Of me having another seizure from the smart meters. Clara Scutt called me back on Monday March 12 and said she will see what she can do. Clara Scutt called back I am not sure of the time line 1 day or 2 and stated FPL could not remove the Smart Meters from my neighbors homes unless my neighbors contacted FPL and made A request.
- (7) FPL/NextEra have very devious business model. FPL/NextEra did not call and ask if homeowners wanted the smart meter installed I checked with 3 neighbors and many friends, workers and people who live in this county. FPL/NextEra changed the smart meters BY FORCE they have the gall to say to me they need permission to remove the smart meters. When FPL/Next ERA removed the smart meters from my neighbors homes the side effects I was feeling subsided 1 day after the removal.

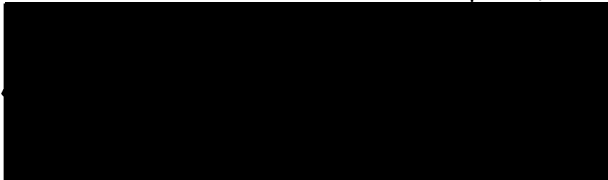
(8)14 years ago I had overcome a neurological condition, my doctor was extremely pleased with my progress over the past 9 years we where discussing taking me off meds I no longer need a goal I had sought all this time; he was also pleased my thyroid condition was also under control other than a migraine disorder I have enjoyed a relatively good health until now.

Now I find it difficult to speak without stuttering even trying to get words out. I have huge memory loss, difficulty concentrating or doing any critical thinking. I have spasms on the left side of my body and my equilibrium is off. My migraine disorder has been exacerbated. Not related to my migraine disorder I wake up and go to bed feeling sick every day since the smart meter installation.

I don't know if I will ever return to normal, this is what I face since FPL/NextEra decided to put smart meters on to peoples homes with no testing. FPL/NextEra has made my husband and myself guinea pigs to dangerous technology. The side effects I have mentioned in the beginning of (8) still remain to this day and could possibly be permanent.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this April 19, 2012 Port St Lucie, FL 34983



Smart Meter Health Effects Authorization

I _____, authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlauflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 22nd day of January, 2013 by:

Name _____

Street Address _____

City/State/Zip _____

Telephone _____

Email _____

4/7/2012;

Declaration of [REDACTED]

I, [REDACTED], 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 [REDACTED] and I reside at [REDACTED]
2. I am a utility customer of Pacific Gas and Electric (PG&E).

I have been suffering debilitating headaches and dizziness since Smart Meters were installed on homes in my neighborhood and place of work in 2010. At the onset of the headaches and dizziness I was uncertain of their cause and sought medical attention. Doctors tried many tests and prescribed medications to try to find the source and alleviate the symptoms all with no success at alleviating the headaches and dizziness. The answer became very clear when in June of 2011, I left Marin County to go visit my Mother in Agoura (southern California). For my nine day visit, I had no headaches or dizziness. Upon my return home, the headaches immediately resumed. As suggested by doctors, I had been keeping a headache journal in an attempt to find some source whether diet, environmental, behavioral, etc. I was getting 15 to 18 debilitating headaches per month every month since the time the smart meter was installed. I began to suspect the SmartMeter variable and tested this as a possible source by simply leaving to areas without them and returning. The response was consistent; my headaches went away when I was not anywhere around Smart Meters.

I called PG&E on 8/25/11 and asked them to remove it and was told they were waiting on the CPUC. I filed a complaint with the CPUC on that same day. I put an aluminum shield around the outside of the meter (a turkey roasting pan), and shielded the interior wall the meter was up against with aluminum foil. This helped reduce my headaches from a level that was causing extreme nausea and photo sensitivity to a simple plain old irritating headache that did not keep me from going about my business.

On 9/15/11 one of my doctors diagnosed me with electrical sensitivity. I never had this problem prior to the smart meter. On 9/20/11 a second doctor confirmed this diagnosis and wrote a letter for me to submit to PG&E stating that the smart meter was causing my electrical sensitivity and "it is medically necessary that her analog meter be restored on her home". This letter was submitted to PG&E and the CPUC. The smart meter on my home was finally removed on 2/2/12.

I am fortunate that I live in a small court up against open space and that I have neighbors who also do not want Smart Meters. The headaches and dizziness I was experiencing are gone for the most part

when I am in my own home. I sometimes still have trouble when I have spent too much time outside of my home environment and gotten electrically loaded up. Unfortunately, the larger neighborhood I live in and my workplace still have Smart Meters. I cannot walk my dog in our neighborhood without getting very dizzy. The dizziness subsides when I get home, but this is just not acceptable. These horrible devices should all be removed!

I have spent thousands of dollars on doctors, EMF specialists, EMF reduction devices that don't seem to work, massage and other therapists to try to alleviate the headaches and dizziness. I have been distraught about potentially having to move and to sell my home when I am not in a financial position to do so. I am even more upset about the thought of having to leave the job of teaching High School Auto Shop in Mill Valley that I absolutely love in order to escape the Smart Meters and their effects on me.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this April 7th, 2012 at Novato, California.



9/20/2011

To Whom It May Concern:

Patient, [REDACTED] has been suffering from chronic severe headache since her gas and electric SmartMeter's were installed. She has developed electrosensitivity as a result of excessive exposure to this RF microwave radiation. It is medically necessary that her analog meter (s) be restored on her home.

Thank You,

[REDACTED]

MD

Smart Meter Health Effects Authorization

I [REDACTED] authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

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Signed this 22 day of January, 2013 by:

[REDACTED]

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

Email [REDACTED]

Declaration of [REDACTED]

I, [REDACTED], 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 [REDACTED], and I reside at [REDACTED]

2. I am a utility customer of PGE (Portland General Electric)

a.) meters were installed. i started waking several times throughout the night with the most awful uncomfortable feeling of feverish chill in my bones i have ever felt, and a state of anxiety, panic, and "feeling of impending doom". i had 4 day long incredibly painful migranes, nausea, and a prickly sensation on my face. i was waking several times throughout the night. i had no idea what the cause was at the time.

b.) after a week, i noticed the millions of frogs that thrived here werent chirping anymore, and the crickets chirps had all but left as well.

c.) the trees started exhibiting grey/white patches on their bark, some patches as thick as paint. the bark was splitting on most trees, and appearing scabbed over and covered in fungi, lichen, and moss. now these trees, from portland, throughout beaverton, hillsboro, and forestgrove are dying and falling to the ground at an alarming rate. ALL trees, that i have seen, are showing signs of disease or infestation, even the huge ancient ones (one of these fell in forest grove a week or so ago and blocked traffic).

d.) late march 2010, my symptoms immediately tripled, and i woke up panicked, my heart pounding out of my chest in a state of emergency, i vomited, my nose bleeding. i stepped outside to get some air, i felt like i couldnt breathe. i witnessed them completing the installation of a collector meter on the street pole at the intersection of [REDACTED] rd. and [REDACTED] blvd, right outside my end apartment. i walked over and looked, and it was a smartmeter similar to the 2 on my sons bedroom wall. for lack of knowing what to do, out of frustration, and in a physical state of panic, i googled "electric meters making me sick", and was shocked to read the results. i found several websites talking about the dangers of these meters, in other states than mine, and proceeded to call PGE and OREGON PUBLIC UTILITIES, to beg them to turn them off. OPU's smartmeter excuse person was the rudest, coldest, most unfeeling woman i have ever had the displeasure of speaking with in my life. PGE put a public relation person on the line and told me i was the only one complaining, that the meters were safe, and i should find out whats causing my problems because it certainly wasnt the meters. the experiences i was finding on these websites were identical to mine. i started making phone calls, and sending emails, everywhere i could think of, to no avail.

e.) i have been sleeping on a couch in my living room for over a year. the "pulse" in my bedroom, and my sons bedroom, is much stronger than in my living room for some unknown reason, and my son now lives with his dad. they hooked Portland up to this grid about september, 2011. the trees rapid decline increased then, and again, my symptoms. i cant fall asleep at all until after 3-5am many nights, and i toss and turn the whole time, many times not being able to sleep at all.

f.) my symptoms now, and for the past year have increased to : 1.) tinnitus (CONSTANT ringing in the ears, worse when the frequency is ramped up), 2.) chronic migranes lasting 4 days sometimes, 3.) chronic insomnia (no sleep at all sometimes and no restful sleep ever, and not able to pass out even with a sleep aid until after 3am) 4.) chronic fatigue, 5.) nausea, sometimes so bad i am unable to eat, and vomiting, not like flu, like vomiting from stress 6.) pain and feverish chill in my bones. 7.) pain in my ears 8.) eye strain and vision disturbance, words jump around on pages, focus goes in and out. 9.) pain in jaw and teeth. 10.) organs feel swollen. 11.) heart palpitations so bad i feel i must have a phone nearby in case of heart attack. 12.) involuntary muscle contractions, inability to "unflex" my muscle tissue for hours and whole nights at a time. muscles twitch, and cramp, and my lower back gets so strained i can hardly use the restroom by myself sometimes 13.) frequent urination and dehydration (i sleep with a gallon of water by me the thirst gets so profound. 14.) nosebleeds and sinus pressure 15.) psychological: fear, anxiety, constant stress, unable to put sentences together to speak, cant find words i want to use and cant remember how to spell them anymore., depression and despair, feeling no hope, no joy whatsoever and no energy to live at all, confusion, panic, inability to focus at all, constantly "drawing a blank". knowing i wont survive much longer if i continue to be exposed. the frogs are gone, the trees are dying, and once this grid is fully activated, all will surely die. my cats who slept with me since the day they were born spend most of their time outside now, not that the pulse can be escaped. at first i could leave the immediate area and find relief, but now, all cities connected, no relief to be found. my cats are nervous wrecks and my smallest spends days without coming in to eat. this is one of my pleas for help i have sent out attempting to resolve this. i have since become unable to fight this in any way, as my medicaid doctor acknowledges my symptoms, but knows nothing of the cause and refuses to test for electrohypersensitivity, so i have no where else to turn and no one else i havent written to or spoken with and im just to tired and to sick to continue. i feel i have no life left:

To whom it may concern: Pleading for help to stop the pain and suffering. Smart meters are killing me and everything else

in their path. I am disabled, in a subsidized apartment complex with 150+ meters on site. I have 2 on my bedroom wall and 2 more every 20 ft. and a powerful data collector meter on the street corner added in April, tripling my already torturous symptoms when first installed before they turned on the RF. My bones began to ache and become chilled, as if I had a permanent really bad flu, the feeling is awful. My heart began pounding and racing feeling as if I were having a heart attack, all day and night, unless I left the area. After a week, the millions of frogs here and all the crawfish in the creek completely disappeared. The trees started exhibiting cracks in the bark, and started decaying from the inside out. I started getting migraines, 4-5 days out of the week. I couldn't get any rest at all and became extremely fatigued, when I left the immediate area, all symptoms completely disappeared, until now. They installed in all of the adjoining cities. There is no escape, no healing time, no removing yourself from the pulse. Then, they turned on the wireless. Now the pine trees are burning alive, the feeling of dis-ease has tripled. My muscles are contracted 24/7, my neck and back stiff and sore. My ears ring 24 hours a day, my nose bleeds, my ears hurt. The nausea over time becomes so prevalent, I've lost 40 lbs because I just can't eat. I have muscles that twitch for hours on end, headaches that pound for whole weeks straight, and I slur my words when it's really bad. I get no restful sleep. For over a year now, I can't pass out until 3-5am...ever, and I have to drug myself to sleep at all. I don't know where to turn. I don't know where to go. I am losing my memories and brain function. My words become slurred. My cats I've raised for over 3 yrs will no longer sleep with me, as they have done all their lives, and they, and some of the chipmunks outside, are becoming aggressive. The chipmunk I feed is becoming disoriented and appears "drugged". I'm depressed, I have unexplained sense of panic and anxiety 24 hours a day. Cell phones never made me sick before, or Wi-Fi. Now it hurts to use a cell, or be anyplace that has free Wi-Fi. Every agency I've called says I have no choice and they are not liable or responsible. I am desperate for a way to stop these. The lives of myself, and every creature with cells depend on shutting these devices off. And don't fall for their non radio transmitting replacements. Several people have and their health was just as bad, so it's not just the wireless causing this. I am suffering in torture, the trees and life forms here are suffering, and I am at a total loss for what to do. I have tried foiling the meters. It's just not helping. I also tried upping my mineral intake, orgonite, and aluminum screen faraday cage. They aren't even easing the suffering. I don't know what to do. I do not drive, have no friends that drive, and couldn't afford a truck to move, or the expenses, or a location that accepts housing for my 6 cats. There is no area here without these meters, and without transportation I can't go rural, although I would love to. My income is \$674 a month. I am barely surviving and cannot afford to try other devices to help. I'm trying to find a way to save my life, the lives of my now aggressive and agitated cats, and the trees and ecosystem. I get mild relief when out of the residential areas, but I cannot rest there, and cannot go in to most malls and restaurants or libraries now because I have become sensitive to Wi-Fi, and do not wish to further my pain. Lawyers refuse to take on the utility corps, and the police are on the side of the corps. I have filed reports with the Oregon public utility commission, the FTC, the attorney generals office state and federal, the utility company Portland General Electric, the state public health department, the city commissioners office, and my local city council.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this thursday ,5 day of April, 2012 at Beaverton,Oregon
signed [REDACTED]

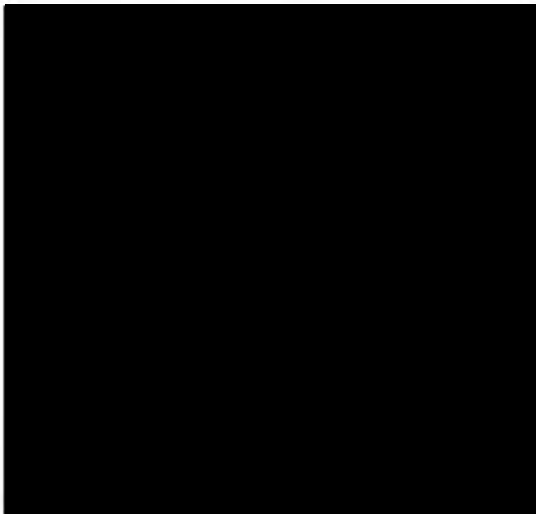
4-5-2012

Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 22nd day of January, 2013 by:

A large black rectangular redaction box covering the signature area.

Declaration of [REDACTED]

I, [REDACTED] 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:

My name is [REDACTED] and I reside at [REDACTED]

[REDACTED] I am a utility customer of Pacific Gas and Electric (PG&E) and Sacramento Municipal Utility District (SMUD):

I am writing to you regarding perceived and real health issues related to the SmartMeter that PG&E installed on my home. I do not want any SmartMeter devices installed on my home or property. I have refused to allow the Sacramento Municipal Utility District (SMUD) access to install yet another meter on the back of my house directly outside the bedrooms.

The PG&E SmartMeter was installed in the front of my house on the wall directly outside my living room. I did not grant permission for the installation of the SmartMeter device nor was I asked for consent. Recently, I received information regarding their "opt-out" program and intend to contact them to take avail of it.

Since the installation of SmartMeters in our neighborhood, I have suffered with tinnitus, muscle cramps, sleep disturbance, chronic fatigue, heart palpitations, migraines, blurred vision, and dizziness. I am lucky if I get 4 hours of disrupted sleep a night. When I visit my father in Shasta County who lives in an area where there are no SmartMeters as yet, the tinnitus stops completely. I sleep well and feel much better. I informed my doctor about this at a recent appointment in March, 2012.

I am aware of health concern risks related to the wireless transmissions that the SmartMeters use. Scientific evidence indicates potential harm from sporadic and cumulative exposure. Sensitivity among people varies and many may fail to make the connection of symptoms to these devices. Furthermore, the stated output of these devices has been grossly misleading and false. I do not want these devices on my home or in my neighborhood. I do not want to risk the health of my family from SmartMeter pollution.

I informed SMUD of my disapproval and explained my reasons for refusal of installation of a SmartMeter. At a recent board meeting, SMUD discussed their 'opt-out' program. At this meeting, they discussed intentionally informing only their customers who have so far refused installation of the SmartMeter and not disseminating the information to all customers. They also made improper comments about those who like me feel that there are verifiable health risks involved with this technology. SMUD's *munificent* opt-out is to make it grossly unaffordable to their customers. The fees they discussed for opting out and monthly charges thereafter far exceed what PG&E is offering. One board member actually said that if SMUD customers didn't like it or couldn't afford it, they could move to PG&E territory.

It is perplexing that during this recession and lack of jobs, that this type of program is being allowed. How many jobs are being replaced by these units? I am appalled that the complaints and health risks posed by these devices are not being taken seriously. I want to stop this insane and ill-conceived technology from being promoted and deployed further.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this 4th day of April, 2012 at Sacramento, California.

[REDACTED] April 4, 2012

Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 22nd day of January, 2013 by:

[REDACTED]

Name

[REDACTED]

Street Address

[REDACTED]

City/State/Zip

[REDACTED]

Telephone

[REDACTED]

Email

[REDACTED]

[REDACTED]

Declaration of [REDACTED]

1. My name is [REDACTED], and I reside at [REDACTED] I am [REDACTED] years of age.
2. I am a utility customer of PG&E.
3. the electric meter type (PG&E - Landis Gyr focus - silver spring networks) was installed may 2010 on the outside of the wall of my house 1 foot from a bedroom.
4. I first noticed symptoms in about may 2011 when I moved into the bedroom near the meter from another bedroom in the house. At that time I would sleep about 3 feet from the smartmeter. The symptoms that I noticed were less physical mental energy, more body aches and increased nose bleeding, and episodes of chest pain heart palpitations.
5. When I finally suspected (feb 2012) that the smartmeter's rf electromagnetic radiation emission might be making these symptoms worse, I tried moving the bed farther away from the meter and the symptoms seemed to improve.
6. today with the smartmeter replaced by PG&E on march 13 2012 in "opt-out", my symptoms are still better. So I therefore believe that the PG&E - Landis Gyr - Silver Spring Network transmitter rf radiation was harmful to my health.
7. I am worried that the additive excessive radiation from these pg&e electric meters (mesh network) is causing negative health effects to the people in the community.

Thank you very much

This declaration was executed this

2nd day of MAY 2012 at 9:00AM

[REDACTED]

Smart Meter Health Effects Authorization

I _____, authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 23rd day of January, 2013 by:

Name_____

Street Address _____

City/State/Zip _____

Telephone_

Email_____

Declaration of [REDACTED]

I, [REDACTED] 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 [REDACTED] and I reside at [REDACTED]

2. I am a utility customer of Oncor.

Around October of 2010, a utility serviceman came to our house, telling us that he had come to replace our electrical meter with no further elaboration. Being uninformed about the advanced metering controversy, we gave him permission to do so. Our assumption was that they were changing out older equipment and no more than that.

Almost from the date the meter was installed – if not as of the day it occurred – I began experiencing heightened problems with insomnia. Since then, I have been awaking pretty regularly at 2:30 – 3:30 each morning. This is two or more hours earlier than I want to wake up, and I almost never am able to go back to sleep.

I lodged a protest with the state public utilities commission and Oncor after later being informed as to possible ill effects of such meters and making an association with lost sleep and the approximate time that meter was installed, requesting that ours be removed and replaced with the analog variety. As a result, a representative was sent to our home. While here, he somehow calibrated the meter to its lowest level. (Why this isn't done as a "default" from the beginning is a mystery to me.) Promptly thereafter, I noticed my insomnia problem was mitigated slightly, making me think that the meter was indeed a complicating factor. The relief has been minimal. Instead of being awakened around 2:30 a.m., it is now – say – 2:45 to 3:00 a.m. And this is almost a daily problem.

Nothing is, of course, absolutely predictable. Occasionally, I may sleep until 4:00 or so. However, I also may wake up at 2:00. But the routine has been to regularly wake up around two or more hours earlier than desired, like it or not.

I am aware of many studies that have shown electromagnetic forces to be harmful to sleep (e.g. through the disruption of rapid eye movement phases of sleep, etc.) My long-time personal physician, [REDACTED] of [REDACTED], is also knowledgeable of this phenomenon. He also has informed me that, if needed, he would willingly provide a statement to substantiate my history of sleep problems and its exacerbation due to increased electromagnetic activity in my home.

Sleep debt is a serious condition which can pose many adverse effects to a person's health. And I am coming forward in this manner to hopefully bring about a reversal in the problems I have endured since the meter was installed on my home as well as to forestall potential health issues traceable to this technology.

I declare under penalty of perjury that the foregoing is true and correct. I have personal knowledge of all facts set forth in this declaration and am competent to testify thereto if called upon in a court of law.

This declaration was executed this 9th day of April, 2012, at Keller, Texas.



Smart Meter Health Effects Authorization

I [REDACTED] authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 22 day of January, 2013 by:

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

Email [REDACTED]

Declaration of [REDACTED]

I, [REDACTED], 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 [REDACTED], and I reside at [REDACTED]
[REDACTED]

2. I am a utility customer of Portland General Electric

a.) smartmeters were installed 2010

b.) since installed i am having an incredibly hard time breathing sleeping and with my brain function

c.) i have gained over 200 lbs in 2yrs and am now disabled

d.) i have to breath with a C-PAP machine now and i cant walk more then 20 ft without stopping to catch my breath

e.) january 4, 2010, my father passed away abruptly, i believe from theses meters. i miss him alot

d.) i cannot tolerate much more. please stop this deadly program

e.) i cant remember much more, my memory and thinking processes are now nonfunctional

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this Friday, 6th day of April, 2012 at Hillsboro, Oregon.
signed, [REDACTED] 4-6-2012

Smart Meter Health Effects Authorization

I _____ authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 21st day of January, 2013 by: _____

Name _____

Street Address _____

City/State/Zip _____

Telephone _____

Email _____

DECLARATION

I, [REDACTED] 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 [REDACTED] and I reside at [REDACTED]
[REDACTED]

2. I am a utility customer of PG&E.

3. In October, 2009, I suffered a severe electrical shock to my head while using a cell phone plugged into an electrical wall socket in my home. Since then, I've suffered from chronic nerve pain, headache, heart palpitations, insomnia and other symptoms when in proximity to wireless devices, including wireless Smart Meters, fluorescent lighting, and many electrical appliances.

4. In January, 2010, I contacted PG&E through its website requesting an opt-out from the Smart Meter program due to health reasons. My request was rejected.

5. On or about March 20, 2010, I filed Complaint No. 28145 with PG&E and was put on the "Last to Install List" due to health reasons.

6. In and around August 31, 2010, PG&E's subcontractor Wellington Energy installed electric and gas Smart Meters throughout my neighborhood in Santa Rosa. I refused installation.

7. Since deployment of Smart Meters in my neighborhood in late August, 2010, my symptoms of electrosensitivity have worsened, and I have lost the use of portions of my home and property because I must avoid proximity to neighborhood wireless Smart Meters.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This Declaration was executed this 7th day of April, 2012, at Santa Rosa, California.

[REDACTED]

Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 19th day of January, 2013 by:

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

Email [REDACTED]

[REDACTED] 1/19/13

Declaration of [REDACTED]

I, [REDACTED] 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 [REDACTED] and I reside at [REDACTED]
2. I am a utility customer of SDG&E.
 1. I moved into the above-named address April 2011 to care for my 91 year old husband with Parkinson's, my 88 year old mother, and my 91 year old father.
 2. Shortly after moving in, we noticed a rapid decline in our health. I would come home from work, and my husband, who is confined to one room, one chair, would beg me to get him out of the room, that he kept getting buzzing and shocks.
 3. We both noticed we couldn't sleep. Night after night we lay awake most of the night.
 4. I had previous health issues (MS), but they were all completely under control. Yet suddenly, all hell broke loose. I was suffering depression, irritability, inability to sleep and more. My husband complained night and day of the same things.
 5. Then sometime during the month of May our son came to remove some blinds on the windows. He offered to unstick the windows which had been stuck closed for years. When he did he poked his head out and declared, "Oh! There's your electric meter".
 6. It was like a huge lightbulb had been lit. We were sleeping right under a "smart meter", which we'd heard about, but had no idea was there. Our bodies were literally inches from the meter.
 7. Shortly thereafter we hired someone to change it back to an analog, and *peace* was restored. All the irritability, the depression, the inability to sleep, shocks, buzzing - *gone*.
 8. Recently the electric company has come and put "their" analog on (after asking if they could - but I was at work, and my 88 year old mother didn't know what to do). We're skeptical. We're pray they didn't figure out a way to make a smart meter merely *look* like an analog.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this 4th day of April, 2012 at San Clemente, California.

[REDACTED]

Re: Maine Public Utilities Commission

<https://webmail.lycos.com/wm2/driver?nimlet=getemail&action=print&fid=INBOX&mid=12...>

Print

subject: Re: Maine Public Utilities Commission
from: Joshua Hart <joshuahart@baymoon.com>
date: Tue, Jan 29 2013 at 8:09 PM
to: [REDACTED]

Hi [REDACTED]

If you could print out the below text, fill it out, sign it, scan it, and send it back to me by e-mail that would be great. If you could do this asap, we'll get it included in our packet.

Thanks [REDACTED] I will get in touch with someone who can come interview you.

Josh

Smart Meter Health Effects Authorization

I, [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 29 day of January, 2013 by:

Name [REDACTED]


Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

1 of 2

1/29/2013 8:10 PM



I'm not quite sure of the date but I'm sure Edison knows when a utility worker from the Corix company came to my house to change my old analog electric meter over to the new smart meter. At the time I knew nothing about smart meters and had never even heard of them. So I agreed and the utility worker quickly installed the new meter and left. The new meter that was put in was located on the inside back porch of the house and at the time I had an old electrical system that still used the old glass fuses.

It was not long after that when I started to notice that I had developed a constant ringing in my ears and was always fatigued along with heart palpitations but I couldn't figure out why I might be having these issues. I went and had my hearing tested and was diagnosed with tinnitus.

Around the first part of April of 2012 I decided to have the electrical system of the house upgraded. Southern California Edison came by and did a meter drop and wanted the new meter placed on that alley side of the house so that the wires from the utility line would not cross over any structures. The upgrade took a couple of weeks to complete. The new meter panel along with the smart meter now sat right outside of one the bedrooms which I use has a music studio where I spend most of my time which is usually from early morning to late in the evening. The way my computer desk was set up put me directly in front of the smart meter which was about 4 feet away from where I would sit most of the time.

After about a month of sitting in front of the smart meter on around 05/2012 I noticed on the right side of my neck what looked like a burn which later had my skin looking like it had been cooked. The burn was about 2 inches long by about a half inch wide. Shortly after that I reported it to my doctor at the [REDACTED] Medical Center and was given Triamcinolone Acetonide Cream to apply. It took close to maybe a month before the burn cleared up but then I started noticing that I was having a problem swallowing pills. I have an herbal medication that I take that sort of has a gel cap coating to it that would pop right back up after swallowing it. I also noticed that sometimes I would spit up small amounts of blood if I would try to clear my throat to aggressively. I went back to my doctor at [REDACTED] with these complaints and he set me up for a barium swallow test.

By this time I was starting to feel like the smart meter had something to do with the way I was feeling. After several complaints to Edison to remove the meter I was getting quite desperate and feeling quite ill. The last night before they removed it I could not even sleep in my bedroom which was on the same side of the house as the smart meter approximately 15 feet or so from my bed. I ended up sleeping on the floor that night in the living room. The next day an Edison utility worker came out and removed the smart meter.

I had been reading and learning about the difference between smart meters and analog meters so when the Edison utility worker showed up I knew that I did not want anything to do with smart meters or any Trojan horse replacement meters made up to look like analog meters. I asked the Edison installer several times if this was a true analog replacement meter that was not set up for transmitting or collecting information and his exact words were "well it might send out a ping". I told him if that's the case then it's not a true analog meter like the original meter I had before Corix installed the smart meter. At any rate he installed the replacement meter which was made up to look like an analog meter and left.

After he left I went on line and did a Google search for the meter the Edison worker had installed and found that it indeed had transmitting and data collecting abilities. Upon discovering that I was really pissed off that Edison would try to be so deceitful. I went on line and found a place where I could buy my own legal analog meter and purchased one. I gave Edison fair notice and asked them to come out and remove it or I would replace it with the one I purchased. In addition I also purchased a Electrosnog meter so that I could measure the EMF's coming off all my devices.

A few days after I sent Edison the letter asking them to remove the Trojan meter which goes by the name of "Landis Gyr + MX Family" at around 9:30 in the evening my ears began ringing really loud. Something told me to check the new Edison meter with my Electrosnog meter and I saw that it was registering for about 20 minutes that the Edison meter was transmitting a signal. The next day I removed the Landis Gyr meter and sent it back to Edison and had an electrician install my replacement meter.

After that Edison became very hostile and began to threaten that they would turn off my power. They sent out one of their Revenue Protection agents a Mr. Anthony Medina who claimed I was stealing electricity because I did not have one of their meters on my house. The new analog meter which I had installed could be easily read and had been calibrated by the factory but I was told it was not expectable as far as Edison was concerned. Mr. Medina wanted to reinstall the same meter that I had sent back to Edison and I told him that I didn't want it. He said that he could get an analog meter that would be a non-transmitting meter but that he would have to drive all the way back to his office in Fullerton to get it. He was back in about 30 minutes with the same meter claiming it was different then the first one. I knew he was lying because there is no way he could drive from my house to Fullerton and back in 30 minutes.

Edison left me alone for a few weeks and then I got two more threatening phone calls from a woman at Edison threatening now to turn off my power immediately and also a fine for \$250 for tampering with Edison equipment. Shortly after that Mr. Medina came back out and reinstalled the same Landis Gyr + MX meter on my house that I had returned to them. The \$250 fine shortly followed which I paid. I was just tired of fighting with them.

I also wanted to mention that I also wrote a letter complaining to the California Public Utilities Commission about the Trojan meter the Landis Gyr+ MX meter that Edison was forcing me to take and I got a reply back from Ana Montes telling me that Edison was not in the wrong and that the meter was perfectly expectable as far as the CPUC was concerned.

Fast forward to about the first of November 2012 I went back to the doctor because I was having real bad heart burn for a couple of weeks and I thought that it might be because of a hernia that I had so my doctor set me up to see about having a hernia repair done. Before the hernia repair I decided to finally go and get the Barium Swallow done that he wanted and I mentioned to him my suspicions and why I did not want to do the Barium Swallow was because I did not want to get bombarded with more X rays because of my suspicions about the smart meter. He told me that he had discussed it with some of his colleagues and that they saw no connection.

So now comes the day of my hernia operation and they roll me into the operating room to do the surgery. When I wake up I don't feel any pain or scars and a minute or so later a recovery room nurse comes over and tells me that my surgery was cancelled because they couldn't get a air tube down my throat on the operating table because of a mass in my throat. That was on 11/16/12. Anyway, when I get home later that evening I was drinking a cup of tea when all of a sudden I spit up what looked like a piece of raw hamburger with blood in it about the size of quarter. Since it was on a Friday and late in the evening the only thing I could think of was to quickly put the specimen in a small glass jar and freeze it.

On Tuesday, November 20th I went to [REDACTED] Medical Center in [REDACTED] to the ENT department to see a Dr. [REDACTED] where I dropped off the specimen. When I came back for a follow-up visit on 12/12/12 that was when I got the diagnosis that the specimen was cancerous. So the cancer that I have is at the bottom right side of the back of my tongue the same side as the burn on my neck and has to be treated with radiation and chemo because I was told that it's too much of a high risk for complications to do surgery on. I have never been a smoker or a drinker. Not a big cell phone or cordless phone user either. I have always been pretty health conscious and about seven or eight months ago switched to more of a vegan type diet.

Sincerely, [REDACTED]
01/28/2013



P.O.Box 800, G.O. 1
Rosemead CA, 91770
714-870-5124/PAX 55124
Fax: 714-870-5155
anthony.medina@sce.com

Anthony Medina
Revenue Protection



My replacement meter



Smart Meter on porch



Edison Trojan Meter

Smart Meter Health Effects Authorization

I, _____, authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaulin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 28 day of January, 2013 by:

Name _____

Street Address [REDACTED]

City/State/Zip _____

Telephone _____

Email [REDACTED]

[REDACTED]
April 5, 2012

Smart Meter Help!
P.O. Box 30
Davenport, CA 95017-0030

Declaration of [REDACTED]

I, [REDACTED], 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 [REDACTED] and I reside at [REDACTED]
2. I am a utility customer of Pacific Gas & Electric (PG&E)
3. Without my knowledge or consent, "smart" meters were installed in my home.
4. On the evening of Friday, Nov 18, 2011, I returned from a 10-day trip out of town to a smart-meter free location, and immediately heard an incessant ringing in my ears. By Sunday, Nov 20th, I noted a return of chronic upper respiratory hemorrhaging that had began in October 2011, and got progressively worse before my trip, cleared up during my trip, and came back with a vengeance upon my return home along with difficulty sleeping, blurred vision, trouble concentrating, and headaches. There was no other change in my life other than installation of smart meters. The pulsating high-pitched ringing in my ears never stopped, but instead got louder and more intense whenever I open my mouth to talk, eat, or yawn.
5. By Jan 16, 2012 I contacted PG&E by phone and letter stating I need smart meters removed from my home, but received no clear reply--until the day of the CPUC ruling, Feb 1, 2012 when PG&E officially invited opt-out requests, which I made that same day.
6. The week of Jan 21st, 2012, while sick with strep throat, I became keenly aware of numerous debilitating symptoms far beyond strep, so when I made a complete recovery from strep throat, I was far from well. My symptoms included: chronic upper respiratory hemorrhaging, constant ringing in my ears, blurred vision, heart palpitations, and body-wide random muscle spasms whenever I was home. The non-stop ringing in my ears precipitated intense headaches with accompanying nausea and feelings of depression. Before smart meters were installed in my home I had one headache a year at most. These smart meter induced headaches were of such debilitating nature I was unable to think clearly nor go about business as usual daily activities, including feeling well enough to eat, bathe, or get dressed.
7. On February 8th, 2012, Rodney, a PG&E representative, replaced the smart meters with analog meters. While I still hear some ringing in my ears (likley from neighbors' smart meters), my headaches, blurred vision, nausea, heart palpitations, muscle spasms and upper respiratory hemorrhaging stopped since smart meters were replaced.

I declare under penalty of perjury that the foregoing is true and correct. I 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.

This declaration was executed this 5th day of April, 2012, at Berkeley, California.

[REDACTED]
cc: Alameda Cty Public Health Dpt, 1000 Broadway Suite 500, Oakland, CA 94607-4033

Smart Meter Health Effects Authorization

I [REDACTED], authorize use of my declaration regarding personal health effects from smart meters previously submitted to Smart Meter Help! or Stop Smart Meters!, to be used in the current smart meter safety investigation before the Maine Public Utilities Commission in the matter of Ed Friedman, et al- MPUC Docket No. 2011-00262.

I further authorize Josh Hart of Stop Smart Meters! to attach my declaration to his testimony in the MPUC proceeding to be submitted by Bruce McGlaufflin, Esq., representing the complainants, Ed Friedman, et al, in that case, with the understanding that my declaration will become part of the public record in that proceeding.

Signed this 32 day of January, 2013 by:

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

Email [REDACTED]

April 4, 2012

DECLARATION OF RITA FIELD

I, RITA FIELD DECLARE THAT IN OCTOBER OF 2012, I BEGAN EXPERIENCING A CONSTANT, UNNERVING, PAINFUL, BUZZING IN MY EARS. I, now have insomnia, headaches, and involuntary eye twitching.

I had none of these health problems, before the installation of smart meters. I have done research on Smart Meters, and found that I am not alone. People all over the United States, Canada, and other countries are also experiencing, the same health problems.

I have written the FCC, and told them that the Radio Frequency, is too strong, and that I should not hear the buzzing sound. They send me back information about, how they comply by a standard.

I am electro sensitive, as are many people. What ever the FCC standard is, does not comply with the electro sensitive. I believe that in order for it to be safe, it should not be heard. It should not cause headaches, involuntary eye twitching, or insomnia, but it does, so therefore, it is not safe.

So strong is the Radio Frequency, that, I had such strong pain in my chest, that I have been to the Emergency Room twice.

APS, the electric company, in Prescott, Arizona, where I reside, is a benefactor to the Yavapai Regional Medical Center, so the hospital is not recognizing, that Radio Frequency, is a health threat.

The Yavapai Community Health Department, knows about the problem, but they cannot do anything about it, they tell me.

Our good mayor, Marlin Kuykendall, was instrumental, in the removal of 88 Smart Meters from Canyon Run Senior Village, where I reside.

It is the mission of APS, to install Smart Meters, on every building. This grid system, is harmful, and dangerous.

I should be asleep right now. It is 3:30 am. Instead I am awake with buzzing in my ears. These smart meters are torture devices. My ears are sore. I have been to my Doctor. He does not know what to do for me.

I have been in contact with the Arizona Corporation Commission, and the Public Utilities Commission.

I am suffering because of Radio Frequency.

Rita Field

701 White Spar Rd Apt 103 Prescott, Arizona 86303-4685 field Rita@hotmail.com

Radiation Sickness: Doctor's Diagnosis Letter for Peter Rose; 2010

Erica M. Elliott, M. D.

board certified in family practice and environmental medicine

June 21, 2010

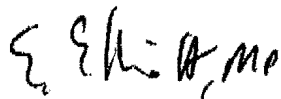
TO WHOM IT MAY CONCERN:

Re: Peter Rose

I am writing on behalf of my patient, Peter Rose, who suffers from hypersensitivity to electromagnetic fields. Under the Americans With Disabilities Act, I am requesting that he be given reasonable accommodations. Specifically, Peter Rose needs a room that is free of microwave radiation from wireless devices. When he is exposed to intense wireless frequencies, he is at risk of having seizures.

If you have any questions regarding my recommendations, please do not hesitate to contact me.

Sincerely,



Erica M. Elliott, MD

Radiation Sickness; Doctor's Diagnosis Letter for Steven Magee

Comments on Notice of Inquiry, ET Docket No. 03-137

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,

A handwritten signature in black ink, appearing to read "Robert D. Kaplan, MD", with a long horizontal flourish extending to the right.

Robert D, Kaplan, MD

European Manifesto in support of a European Citizens' Initiative (ECI)

European Manifesto in support of a European Citizens' Initiative (ECI)



For a regulation of EMF exposure, which truly protects public health.

1. APPLICATION OF THE PRECAUTIONARY PRINCIPLE AND THE ALARA (As Low As Reasonably Achievable) AND ALATA (As Low As Technically Achievable) PRINCIPLES FOR EMF EXPOSITION (INMISSION), in accordance with the European Environment Agency ⁽¹⁾ and items 5, 8.1.2 and 8.4.3 of Resolution 1815 (2011), of the Parliamentary Assembly of the Council of Europe -PACE- ⁽²⁾, and with its constant update on the basis of the latest knowledge on biological effects.

2. REVISION AND MINIMIZATION OF EMF EXPOSURE (INMISSION) LIMITS ⁽³⁾, WITH MONITORING FOR ITS COMPLIANCE, on the basis of existing knowledge about biological and adverse health effects (thermal and non-thermal), as requested by items 8.1.1 and 8.1.2 of the PACE Resolution 1815, and the various declarations of the European Environment Agency on the basis of the Bioinitiative Report ⁽⁴⁾ and 2010 ICEMS Monograph on non-thermal effects of electromagnetic fields ⁽⁵⁾, and by the ICEMS resolutions since 2002 ⁽⁶⁾.

2.1. RADIO-FREQUENCY ELECTROMAGNETIC FIELDS (RF-EMF):

▪ **Starting** with the maximum exposure limit for the sum of RF-EMF exposures, on the basis of bio-effects and adverse effects listed in the BioInitiative Report 2007, which reviews over 2000 studies:

Indoors, recommended in item 8.2.1 of the 1815 PACE Resolution 2011:		
0.01 $\mu\text{W}/\text{cm}^2$	0.1 milliwatt/m²	$\cong 0.2 \text{ V/m}$
... And outdoor equivalent:		
0.1 $\mu\text{W}/\text{cm}^2$	1 milliwatt/m²	$\cong 0.6 \text{ V/m}$

▪ **Real-time comprehensive monitoring** of compliance with the exposure limit through continuous monitoring areas with public information in real time over the Internet covered by some regulations ⁽⁷⁾, in accordance with item 8.4.3 of the PACE Resolution 1815, item 9 of the European Parliament resolution P6_TA(2009)0216 ⁽⁸⁾ and Article 5 of the Aarhus Convention ⁽⁹⁾.

2.2. EXTREMELY LOW-FREQUENCY ELECTROMAGNETIC FIELDS (ELF-EMF):

▪ **1 mG –milligauss- (0.1 μT -microtesla-) in living areas as a maximum exposure limit for the ELF/CEM of the power grid (power lines, substations, transformers, ...)**, that is secured by a urban planning a safe distance from inhabited areas of 1 m for each Kilovolt rated voltage covered by some regulations ⁽¹⁰⁾, in accordance with items 8.4.1 and 8.4.2 of the PACE Resolution 1815, and items 8 and 26 of the European Parliament resolution P6_TA(2009)0216 ("to minimize the exposure of residents in the case of extension of a network of high-voltage power lines"), based on scientific bibliography supported by the EEA for the PACE in 2011 and the recommendation of the Seletun Scientific Panel 2009 ⁽¹¹⁾. These exposures limits must be considered a minimum agreement since has been reported about bioeffects in limits lower than 1 mG.

2.3. PROGRESSIVE REVIEW/UPDATE OF THOSE LIMITS:

- On the basis of the latest scientific studies and publications on bio-effects as already included in the BioInitiative 2012 Report updates, review of more than 1,800 new studies, and raised at the Potenza Picena Resolution 2013 ⁽¹²⁾, and the future studies.

3. INFORMATION AND EDUCATION:

- **Information campaigns, with the participation of organizations of concerned citizens in accordance with the Convention of Aarhus**, to raise public awareness on the basis of the European Parliament resolutions 2008 and 2009 -**to minimizing exposure to EMF**-, of the item 8.2.4 of PACE Resolution 1815 -**reporting of potential risks**-, recommended by various resolutions European health agencies, professional associations and scientific ⁽¹³⁾. Recommend the promoting wired instead of wireless connections and teaching to recognize. Minimize the risks involved in the use of cell phones and other wireless devices (reduce the time in use, Increase the distance between wireless devices and the head and the body in general, avoid the moments of maximum exposure, use of the cable phones for long calls, ...), especially for higher risk populations ⁽¹⁴⁾, as well as the risks of using wireless devices to access data networks ⁽¹⁵⁾. These awareness campaigns should also include health risks associated with household appliances (and how to minimize them), as requested in item 18 European Parliament resolution P6_TA(2009)0216, and the lamps (CFL).

Report the effects described in medical bibliography on active or passive exposure (as in the case of tobacco) to EMF short to medium term [headache, insomnia, anxiety; altered cognition, memory and learning, behavior, reaction time, attention and concentration, brain activity (altered EEG), ...] **and long term** [EHS, chronic fatigue, fertility problems, vascular, degenerative and oncological diseases ⁽¹⁶⁾,]

- **Schools as Healthy Zones EMF-FREE**, in the same category as the existing "Smoke-Free Zones":

Protection and education for children and young people given their special vulnerability (higher risk) in their growing years (crucial time for the acquisition of habits), **ensuring the internet wiring** (neither Wi-Fi nor the other wireless devices), as requested in item 8.3.2 the PACE Resolution 1815.

Health education for education related agents about the risks of radiation from wireless devices, given the higher vulnerability of children and young people to EMF exposure and the peer and advertising pressures (addictive behaviors), urging a delay of the start-up age in children and adolescents. **Establish and strengthen health and environmental education programs on specific risks of EMF**. As requested in item 8.3.1 the PACE Resolution 1815, item 17 of the European Parliament P6_TA(2009)0216 and numerous recommendations of health agencies, professional and scientific associations. And on another, the participation of stakeholders is contemplated by the Aarhus Convention.

4. RECOGNITION OF EHS, PROTECTION OF EHS PEOPLE AND ZONES PROTECTED FROM EMFs:

- **Official recognition of the existence of the "electro-hypersensitivity" syndrome as an environmental disease and – as it is done in Sweden ⁽¹⁷⁾ - as a Functional Disability** (functional disorders and their resultant disabilities), including both adaptation of the work environment and work disability compensation. Within the meaning of item 8.1.4 of the PACE Resolution 1815, and item 28 of the European Parliament P6_TA(2009)0216.

- **Establishing health screening and intervention protocols, already made by institutions such as the College of Physicians of Austria [and the European Academy for Environmental Medicine] ⁽¹⁸⁾**. Educating health professionals about the existence of this syndrome and promoting their learning about environmental diseases.

- **Public places as WHITE ZONES, EMF-FREE:** schools and kindergartens, hospitals and health care facilities in general, governmental buildings and others (such as post-offices, libraries, etc) attending the public, public transport, community centers and residences for the aged, shopping

centers, ...; in compliance with the general principles of **International Convention on the Rights of Persons with Disabilities**, of non-discrimination, full and effective participation and inclusion in society, equality of opportunity, accessibility, ... ⁽¹⁹⁾

▪ **Ensuring livable housing for EHS people:** establishment of WHITE ZONES in towns and cities, as an emergency measure for people at increased risk, and the granting of state aid for the protection of their homes. All this in the line with item 8.1.4 of the PACE Resolution 1815 and in compliance the articles 19 and 28 of the International Convention on the Rights of Persons with Disabilities.

5. MEASURES FOR INDUSTRY AND PUBLIC AUTHORITIES:

▪ **Public participation in the process of implementation and monitoring of mobile phone base stations and terminals and high-voltage lines**, as requested in 8 of the European Parliament resolution P6_TA(2009)0216, item 8.4.4 of the PACE Resolution 1815 and Article 6 of the Aarhus Convention.

▪ **Regulation of advertising promoting microwave emitting devices**. Prohibition of advertising promoting an excessive use of wireless devices and prohibition of advertising of these devices aimed specifically at children and adolescents (most vulnerable), as denounced in Item 23 of the European Parliament Resolution P6_TA(2009)0216. This regulation follows the footsteps of the European Directive on publicity of tobacco 2003. ⁽²⁰⁾

▪ **Mandatory labeling of wireless devices**, in accordance with the item 8.2.3 of the PACE Resolution 1815 and Following the steps of the measures labeling applied by the European Directive 2001 on tobacco products ⁽²¹⁾. Print an alert of potentially “**injurious to health**” next to the classification as **carcinogenic, category 2b** by IARC/WHO, with the disclosure of health potential risks associated with their use and tips to minimize those risks. Mandatory information on SAR printed on the packages of cell-phones and on their selling outlets. ⁽²²⁾

▪ **Withdrawal from the market of cell phones and wireless devices specifically intended for children** [which is already contemplated in the legislation of some European Member States ⁽²³⁾], which are in contradiction with items 8.1.1 and 8.3 of the PACE Resolution 1815, **well as the withdrawal of ordinary DECT dispositives [DECT cordless phones and wireless baby monitor]** – which should be replaced with wired devices [as landline telephone and wired baby monitor] or lower emission “ZERO” DECT [zero radiation in standby]: as “Eco Plus” and “Full eco” modes [or as “VOX mode” (voice-activate) in the case of baby monitor] ⁽²⁴⁾. On the line specified in item 8.1.5 (promoting “technologies which are just as efficient but whose effects are less negative on the environment and health” -or that do not have them-) of Resolution 1815 of the PACE.

▪ **Installation of warning devices the conversation after 3 minutes**, in prevention of the increased incidence of brain tumors, as recommended by the Russian National Committee on Non-Ionizing Radiation Protection ⁽²⁵⁾, on the line specified in item 8.1.1 of Resolution 1815 of the PACE ⁽²⁾. [See note and classification of IARC / WHO (2011) and the conclusions of subsequent studies (2014/2016) ⁽¹⁶⁾].

▪ **Health standards of living** to discourage talk on the cellphone about pregnant women, children and adolescents and anyone who requires their right not to become passive user, in compliance with the International Convention on the Rights of Persons with Disabilities, and in according to protection standards of passive smokers of tobacco smoke (especially in childhood and maternity) listed in the WHO Framework Convention on Tobacco Control, 2003. ⁽²⁶⁾

▪ **Withdrawal from the market of incubators whose engines expose infants to the ELF-EMF**, enhancing the design of incubators with the engine away from the baby or using suitable ELF-EMF absorbing panels to protect your body (like Mu-metal) ⁽²⁷⁾, within the meaning of item 8.1.5 of Resolution 1815 of the PACE of promoting technologies which are just as efficient but whose effects are less negative on the environment and health.

- **Moratorium** on the use and deployment of "Smart Meters" ⁽²⁸⁾ and 4G [/ 5G] networks, on the line specified in item 8.1.1 ("take all reasonable measures to reduce exposure to electromagnetic fields") and item 8.1.5 (promoting "technologies which are just as efficient but whose effects are less negative on the environment and health" -or that do not have them-) of Resolution 1815 of the PACE.
- **Mandatory liability insurance covering also health damages** for the cell-phone and other wireless devices industry, whose absence is evidenced in item 26 of the European Parliament resolution P6_TA(2009)0216.
- **Promotion of independent research and studies**, as requested in items 8.5.4-8.5.7 of Resolution 1815 of the PACE. Increased public funding, independent commissions for the allocation of public funds, mandatory transparency in lobbying, incompatibility of participation and funding from foundations supported by the telecommunications and energy sectors in public agencies ⁽²⁹⁾ with the obligation to report the source of funding of the studies included in the risk assessments of these bodies.
- **Ensure transparency, impartiality and plurality of expert assessments** ⁽²⁹⁾ on health risks of non-ionizing electromagnetic fields (EMF), within the meaning of item 7 Resolution 1815 of the PACE, at all levels of decision including the appointment of experts, the presentation of alternative scientific interpretations, the inclusion of the "views" of citizenship with the presence of the relevant groups in this area in implementation of the Aarhus Convention, ...
- **Replacement of wireless networks by wired connections wherever possible**. Establishment of a European network of coaxial / optical fiber cable, on the line specified in item 8.1.1 ("take all reasonable measures to reduce exposure to electromagnetic fields") and item 8.1.5 (promoting "technologies which are just as efficient but whose effects are less negative on the environment and health" -or that do not have them-) of Resolution 1815 of the PACE.
- **Promotion of technologies and techniques biocompatible and sustainable future from the point of view of environmental and human health** ⁽³⁰⁾, within the meaning of item 8.1.5 of Resolution 1815 of the PACE and item 7 of the European Parliament resolution P6_TA(2009)0216.

Madrid, 29 June 2013

See [Notes](#) [last updated July 2016]

See the [List of signatories](#) [last updated June 2016]

NOTES [last updated July 2016]:

1.- See communications from the **European Environment Agency (EEA)** in support the Bioinitiative Report, among others, as basis for our early warning on EMF.

- In 2007, the EEA advisory entitled "Radiation risk from everyday devices assessed" [<http://www.eea.europa.eu/highlights/radiation-risk-from-everyday-devices-assessed>].

- In 2008-2009, in the **Committee on the environment, public health and food safety of the European Parliament**.

- In 2009, in the **International Expert Conference on Cell Phones and Health: Science and Public Policy Questions**, Washington, on 15 September 2009. See "Statement on Mobile Phones" [<https://ecfsapi.fcc.gov/file/7022311538.pdf>, http://www.emrpolicy.org/files/15sep09_mcgilade_statement.pdf].

- In 2011:

In the **Council of Europe Hearing on EMF**, Paris, on 25th February 2011. See "Statement on Mobile Phones and the Potential Head cancer risk" [<http://www.icems.eu/docs/StatementbyJMGFeb252011.pdf?f=/c/a/2009/12/15/MNHJ1B49KH.DTL>].

In the Committee on the environment, agriculture and local and regional affairs of PACE. See document 12608 - section B, point 4.21 – [<http://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=13137&lang=en>].

- In 2013: The EEA publishes 'Late Lessons from Early Warnings, volume II'. See the Chapter 21 "Mobile phone use and brain tumour risk: early warnings, early actions?" [<http://www.eea.europa.eu/publications/late-lessons-2/late-lessons-chapters/late-lessons-ii-chapter-21/view>].

2.- **Resolution 1815 of the Parliamentary Assembly of the Council of Europe (PACE)** on potential hazards of electromagnetic fields and their effects on the environment (27.05.2011): <http://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=17994&>. See Doc. 12608, 06 May 2011, report of the Committee on the Environment, Agriculture and Local and Regional Affairs, rapporteur: Mr Huss [<http://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=13137&lang=en>].

3.- **The limits set by the ICNIRP are INSUFFICIENT and IRRELEVANT:** never have protected the biological effects and chronic exposure to long-term (only have been based on the thermal effects of short term exposure -6 minutes exposure-: <http://www.icnirp.org/cms/upload/publications/ICNIRPmfgdl.pdf>), along the lines set in paragraphs 21, 22 and 23 of the European Parliament Resolution of September 2008 on Mid Term Review of Environment and Health Action Plan (2004-2010) (<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP/TEXT+TA+P6-TA-2008-0410+0+DOC+XML+V0//EN>), and item 8.1.2 of the PACE Resolution 1815 (<http://assembly.coe.int/nw/xml/XRef/Xref-XML2HTML-en.asp?fileid=17994&>). Currently there are countries inside and outside the European Union with more protectionist regulations, in one way or another, that the ICNIRP criterion (see: http://ec.europa.eu/health/electromagnetic_fields/docs/emf_comparison_policies_en.pdf, <http://nebula.wsimg.com/fbed8bb8a26c6f14262cff2e8fd4dc7?AccessKeyId=045114F8E0676B9465FB&disposition=0&alloworigin=1>).

4.- **Bioinitiative Report 2007/2012/2014.** August 2007 Edition: review of over 2,000 studies. Update December 2012: a review of more than 1,800 new studies. Update April 2014: a review of more than 400 new studies.

- BioInitiative Working Group, David O. Carpenter. New Studies Show Health Risks from Wireless Tech: Warnings from the BioInitiative Working Group at www.bioinitiative.org. University at Albany, Rensselaer, New York /April 16, 2014 [<http://www.bioinitiative.org/new-studies-show-health-risks-from-wireless-tech/>].

- BioInitiative Working Group, Cindy Sage and David O. Carpenter, Editors. BioInitiative Report: A Rationale for Biologically based Public Exposure Standards for Electromagnetic Radiation at www.bioinitiative.org, December 31, 2012.

- BioInitiative Working Group, Cindy Sage and David O. Carpenter, Editors. BioInitiative Report: A Rationale for Biologically based Public Exposure Standard for Electromagnetic Fields (ELF and RF) at www.bioinitiative.org, August 31, 2007.

5.- **The ICEMS Monograph**, "Non-Thermal Effects and Mechanisms of Interaction Between Electromagnetic Fields and Living Matter", edited by Livio Giuliani and Morando Soffritti for the "European Journal of Oncology" - Library Vol. 5 of the National Institute for the Study and Control of Cancer and Environmental Diseases "Bernardo Ramazzini", Bologna, Italy, 2010, Part I and Part II [<http://www.icems.eu/papers.htm>, http://www.icems.eu/papers/ramazzini_library5_part1.pdf, http://www.icems.eu/papers/ramazzini_library5_part2.pdf].

6.- The International Commission for ElectroMagnetic Safety (ICEMS) is founded for the purpose of promoting research to protect public health from electromagnetic fields and to develop the scientific basis and strategies for assessment, prevention, management and communication of risk, based on the precautionary principle. See: www.icems.eu/.

7.- **Real-time monitoring** detects the instantaneous peak values (based on the existence of non-thermal effects), unlike the means (based only on the thermal effects). In Spain, a Municipal Ordinance of Leganés on the siting, installation and functioning of the equipment's of telecommunications services on January 2011 (https://www.bocm.es/boletin/CM_Orden_BOCM/2011/01/18/BOCM-20110118-39.PDF). It foresaw decrease **4,000 times** the allowable limit in Spain (Article 3b - now repealed -) and deployment of a system of real-time control of the EMF immissions, to ensure compliance with this limit and informing the public (Article 19, paragraph 4, now repealed-). The continuous monitoring system initially provided for in this legislation focused on the actual exposure of the population (sum of emissions from various wireless transmitters) in the different parts of the town. See "Monitoring maximum peak power density values as a more reliable marker for measurement procedures to elucidate RF EMF health effects: Leganes project", C. Maestú, A. Cortés, N. Jiménez, R. López, F. del Pozo. Centro de Tecnología Biomédica, Universidad Politécnica de Madrid (Biomedical Technology Center, Technical University of Madrid). Poster presented to the 33rd Annual Meeting of the Bioelectromagnetics Society 2011, Halifax, Canada, 12-17 June 2011 (http://oa.upm.es/13170/1/INVE_MEM_2011_109836.pdf).

8.- **European Parliament resolution of 2 April 2009** on health concerns associated with electromagnetic fields (P6_TA(2009)0216 [<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP/TEXT+TA+P6-TA-2009-0216+0+DOC+XML+V0//EN>].

9.- **Aarhus Convention**, of the Economic Commission for Europe United Nations, on access to Information, public participation in decision-making and access to justice in environmental matters. The Council Decision 2005/370/EC of 17 February 2005 (<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex:32005D0370>) approves the Århus Convention (signed by the European Community and its Member States in 1998: <http://www.unece.org/env/pp/treatytext.html>) on behalf of the Community.

10.- See Article 52 of the General Municipal Management Plan of the Jumilla Council (Spain) on 18 March 2005: <http://www.borm.es/borm/documento?obj=bol&id=11833> (page 17 [6773]).

11.- **The Seletun Scientific Panel 2009**, on electromagnetic fields health risks: consensus points, recommendations and rationales [<http://emfsafetynetwork.org/wp-content/uploads/2011/02/Scientific-panel-on-EMF-Health-Risks.pdf>]. Watch the following video "Olle Johansson, PhD Announcing Seletun Scientific Statement": <https://vimeo.com/18018440>

12.- **The Potenza Picena Resolution 2013**.

<https://www.dropbox.com/s/k0ij5i6al3uy72/POTENZA%20PICENA%20SCIENTIFIC%20RESOLUTION%202013.pdf>

13.- In line with the **numerous recommendations** against immoderate use of mobile phone and / or protection of wireless technologies in children and young people, from the public **administrations (in particular the health administrations)** and / or the **health professional associations** (in states such as Austria ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#)), Australia ([1](#)), Belgium ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#)), Canada ([1](#), [2](#), [3](#), [4](#), [5](#)), Cyprus ([1](#)), Finland ([1](#)), France ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#), [10](#), [11](#)), Germany ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#), [10](#), [11](#), [12](#), [13](#), [14](#)), India ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#), [10](#)), Ireland ([1](#)), Israel ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#), [10](#), [11](#), [12](#)), Italy ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#), [10](#), [11](#)), Poland ([1](#), [2](#), [3](#)), Russia [where, for example, the health standard SanPIN-2003 (2.1.8/2.2.4.1190-03, item 6.9) recommended to restrict mobile phone use in children the age of 18 years] ([1](#), [2](#), [3](#), [4](#), [5](#)), Spain ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#), [10](#), [11](#), [12](#), [13](#), [14](#), [15](#)), Switzerland ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#)), Taiwan ([1](#)), United Kingdom ([1](#), [2](#), [3](#)), USA ([1](#), [2](#), [3](#), [4](#), [5](#), [6](#), [7](#), [8](#), [9](#), [10](#), [11](#), [12](#)), Taiwan ([1](#)), as well as at the European (eg. the **European Environment Agency**) and international level (e.g. the International Commission for Electromagnetic Safety, **ICEMS**), and the **numerous scientific declarations** (e.g. the **International Scientists Appeal** to U.N. to Protect Humans and Wildlife from Electromagnetic Fields and Wireless Technology, 2015: Over 220 Scientists from 41 nations engaged in the study of biological and health effects of non-ionizing electromagnetic fields –EMF-: <https://www.emfscientist.org/>).

See:

- **"Governments and Health Authorities are Taking Action and Doctors and Scientists Appeal for Stricter Wireless Technology Regulations**, Environmental Health Trust, latest online-updating of 2016 [<http://ehtrust.org/policy/international-policy-actions-on-wireless/>].

- Redmayne M. **International policy and advisory response regarding children's exposure to radio frequency electromagnetic fields (RF-EMF)**. Electromagnetic Biology and Medicine. 2015 Jun 19:1-9 [<http://nebula.wsimg.com/fbed8bb8a26c6f14262cff2e8fd4dcb7?AccessKeyId=045114F8E0676B9465FB&disposition=0&alloworigin=1>].

- Oberfeld, G. (2012), Section 22. **Precaution in Action - Global Public Health Advice Following BioInitiative 2007**, 50pp. BioInitiative Working Group, October 2012 [http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec22_2012_Precution_in_Action_Global_advice.pdf].

- Safe School 2012. Medical and Scientific Experts Call for Safe Technologies in Schools: <http://wifischools.org.uk/resources/safeschools2012.pdf>. Also see a list of schools and organizations that have taken action regarding wireless technology (2014) [http://wifischools.com/uploads/3/0/4/2/3042232/schools_and_organizations_wifi.pdf].

14.- Fetus, pregnant women, children and youth, holders of electronic implants, ...

15.- Continuous connection = **continuous radiation**.

16.- **"The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as possibly carcinogenic to humans (Group 2B), based on an increased risk for glioma, a malignant type of brain cancer, associated with wireless phone use"** (IARC press release N° 208, 31 May 2011: http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf). See IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 102 (2013), Non-Ionizing Radiation, Part 2: Radiofrequency Electromagnetic Fields [<http://monographs.iarc.fr/ENG/Monographs/vol102/index.php>].

- On October 2012, a **judgment of the Italian Supreme Court recognizes the causal link between prolonged use of mobile and cordless phone in the left ear for employment purposes** (5-6 hours a day, for twelve years) **and the appearance of a brain tumour ipsilateral**, for employment reasons. The Court recognizes, in this case, a disability of 80% caused by occupational disease [<http://www.dailymail.co.uk/news/article-2220002/Mobile-phones-CAN-cause-brain-tumours-court-rules-landmark-case.html>].

- The **BioInitiative Report (Update April 2014) concerning**, among other things, **the sufficient evidence of carcinogenicity in humans**: «New studies intensify medical concerns about malignant brain tumors from cell phone use. *"There is a consistent pattern of increased risk for glioma (a malignant brain tumor) and acoustic neuroma with use of mobile and cordless phones"*, says Lennart Hardell, MD, PhD at Orebro University, Sweden, according to studies released in 2012 and 2013. *"Epidemiological evidence shows that radiofrequency should be classified as a known human carcinogen. The existing FCC/IEEE and ICNIRP public safety limits are not adequate to protect public health."*... ». **New Studies Show Health Risks from Wireless Tech: Warnings from the BioInitiative Working Group** / University at Albany, Rensselaer, New York /April 16, 2014 [<http://www.bioinitiative.org/new-studies-show-health-risks-from-wireless-tech/>].

- The **BioInitiative Working Group note (Mai 2016) on the Cell Phone Radiation Study made by US NTP confirming the Cancer Risk**: «The **National Toxicology Program under the [U.S.] National Institutes of Health** has completed the largest-ever animal study on cell phone radiation and cancer [see the report of Partial Findings in <http://biorxiv.org/content/biorxiv/early/2016/05/26/055699.full.pdf> and further information about this study in <http://ehtrust.org/cell-phone-radiofrequency-radiation-study/>]. The results confirm that cell phone radiation exposure levels within the currently allowable safety limits are the 'likely cause' of brain and heart cancers in these animals, according to Dr. John Bucher, Associate Director of the NTP ... ». In this line, «Lennart Hardell, ... says "(T)he animal study confirms our findings in epidemiological studies of an increased risk for glioma and acoustic neuroma among people that use wireless phones, both cell phones and cordless phones (DECT). Acoustic neuroma is a type of Schwannoma, so interestingly this study confirms findings in humans of increased risk for glioma and acoustic neuroma. In 2013, we called for upgrading the risk in humans to Group 1,

the agent is carcinogenic to humans. It is now time to re-evaluate both the cancer risk and other potential health effects in humans from radiofrequency radiation and also inform the public... **This NTP evidence is greatly strengthening the evidence of risk, is sufficient to reclassify cell phone radiation as a known cancer-causing agent**, and confirms the inadequacy of existing public safety limits" ...». **Cell Phone Radiation Study Confirms Cancer Risk** / Orebro University, Sweden May 31, 2016 [<http://www.biointitiative.org/cell-phone-radiation-study-confirms-cancer-risk/>].

17.- DIFFERENT LEVELS OF RECOGNITION OF THE EHS AS A DISABILITY IN THE FOLLOWING COUNTRIES:

- In Sweden (2000), the electrohyper-sensitivity (EHS) is an officially fully recognized functional impairment

Precedents: In May 1995, the Swiss Government decides, according to the SFS 2000: 7 §2, to subsidize the disability associations for their activities. (Government decision No. 8 950 621, Ref: S1995 / 2965). The Disability Federation (HSO), an umbrella organization of the Swedish disability associations, incorporated the Association of persons injured by the Electricity and computer display (FEB) in 1994 (the FEB becomes the ElectroSensitive Association in 2001).

The National Action Plan on Disability (1999/2000: SoU14), government bill, is approved by the Swedish Parliament in 2000. The then Social Affairs Minister Lars Engqvist writes: "The action plan refers to persons with disabilities generally. No disability is especially highlighted and nothing is excluded. People who are disabled as a result of electromagnetic hypersensitivity are therefore covered by the action plan". See: National Action Plan on Disability (SoU14), May 31, 2000 [https://www.riksdagen.se/sv/dokument-lagar/arende/betankande/nationell-handlingsplan-for-handikappolitiken_GN01SoU14].

- **The European Parliament resolution of 2 April 2009** on health concerns associated with electromagnetic fields, "calls on Member States to follow the example of Sweden and to recognise persons that suffer from electrohypersensitivity as being disabled so as to grant them adequate protection as well as equal opportunities" [<http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//NONSGML+TA+P6-TA-2009-0216+0+DOC+PDF+V0//EN>].

- **The Section for Transport, Energy, Infrastructure and the Information Society (TEN) of the European Economic and Social Committee (EESC) adopted an opinion on Electromagnetic hypersensitivity (7 January 2015).** This opinion seeks recognition of EHS in the health, labor and social fields [<https://webapi.eesc.europa.eu/documentsanonymous/eesc-2014-05117-00-02-as-tra-en.doc>].

- In USA (2002): The **United States Access Board** (also known as the Architectural and Transportation Barriers Compliance Board), independent agency of the United States government devoted to accessibility:

"The Board recognizes that multiple chemical sensitivities and electromagnetic sensitivities may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual's major life activities. The Board plans to closely examine the needs of this population, and undertake activities that address accessibility issues for these individuals." (September 2002): <http://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/background/ada-accessibility-guidelines-for-recreation-facilities/general-issues>

"People with chemical and/or electromagnetic sensitivities can experience debilitating reactions from exposure to extremely low levels of common chemicals such as pesticides, cleaning products, fragrances, and remodelling activities, and from electromagnetic fields emitted by computers, cell phones, and other electrical equipment. According to the Americans with Disabilities Act (ADA) and other disability laws, public and commercial buildings are required to provide reasonable accommodations for those disabled by chemical and/or electromagnetic sensitivities". Recommendations for Accommodations in Indoor Environmental Quality (IEQ) (2006), a project of the National Institute of Building Sciences (NIBS) with funding support from the Access Board [<https://www.access-board.gov/research/completed-research/indoor-environmental-quality/recommendations-for-accommodations>]

- In Canada (2007): the Canadian Human Rights Commission. See the following publications of the:

Policy on Environmental Sensitivities (reviewed January 2014) [http://www.chrc-ccdp.ca/sites/default/files/policy_sensitivity_0.pdf].

The Medical Perspective on Environmental Sensitivities (2007) [http://www.chrc-ccdp.gc.ca/sites/default/files/envsensitivity_en_1.pdf].

Accommodation for Environmental Sensitivities: Legal Perspective (2007) [http://www.chrc-ccdp.ca/sites/default/files/politique_hypersensibilite.pdf].

RECOGNITION OF EHS AS A DIAGNOSIS CODE IN THE ICD-10 (International Statistical Classification of Diseases and Related Health Problems) in Denmark, Finland, Iceland, Norway and Sweden:

- The **Nordic Adaptation of Classification of Occupationally Related Disorders** (Diseases and Symptoms) to ICD-10 (ICD-10: International Statistical Classification of Diseases and Related Health Problems). Nordic Council of ministers. 2000: http://www.nordclass.se/ICD-10_Nordic%20Occupational_2000.pdf . The Nordic Council of Ministers (Denmark, Finland, Iceland, Norway and Sweden) is the official body for Nordic intergovernmental co-operation.

EXAMPLES OF THE COURT JUDGMENTS ON EHS THAT RECOGNIZE PERMANENT DISABILITY PENSIONS OR OTHER COMPENSATIONS:

- Australia (28 February 2013):

- The Administrative Appeals Tribunal (AAT) has ruled that the federal government's insurer, Comcare, should compensate an EHS person (75% of his salary) for "aggravation of a condition of nausea, disorientation and headaches" [<http://www.austlii.edu.au/au/cases/cth/AATA/2013/105.html>]. See also: <http://www.news.com.au/technology/csiro-scientist-dr-david-mcdonald-wins-compensation-for-wifi-pain/story-e6frfrnr-1226729178281>

- France (2014 and 2015):

- On January 2014, the Departmental Home for Disabled Persons (MDPH) in Essonne has provided financial assistance to a person electro (a first in France) to arrange his home and personal protection [<http://www.journaldelenvironnement.net/article/dans-l-essonne-l-electrosensibilite-reconnue-comme-un-handicap,45060>].

- On August 2015, a judgment of the Toulouse inability Dispute Tribunal recognize disability due to "hyper sensitivity to electromagnetic waves Syndrome" (first time in France), emphasizing that "the description of the clinical signs is irrefutable". [<http://www.lemonde.fr/planete/article/2015/08/25/premiere-reconnaissance-en-justice-d-un-handicap-du-a-l>]

electrosensibilite.4736299.3244.html#YhEyjiUXkE8xS2ug.99, <https://www.theguardian.com/world/2015/aug/27/french-court-awards-woman-disability-grant-for-allergy-to-gadgets>

- Germany (April 2014):

- The Federal Administrative Court (Bundesverwaltungsgericht) finally recognized as an occupational disease, the EHS of a German soldier who was hired as a radar mechanic in the German army, because of their exposure to radio frequencies on the workplace: <http://www.bverwg.de/entscheidungen/entscheidung.php?ent=10041482836.13.0>

- Spain (2011 and 2016):

- On May 2011, a judgment of the Madrid Labour Court nº 19 to declare permanent incapacity (100% of his base salary) of a worker Complutense University of Madrid who suffered from chronic fatigue and environmental and electromagnetic hypersensitivity (the EHS is mentioned for the first time in Spain as cause of disability) [http://elpais.com/elpais/2011/07/12/actualidad/1310458634_850215.html]
- On July 2016, a judgment Nº 588/2016 of the High Court of Madrid has recognized for the first time a situation of total permanent disability for the exercise of the profession of a telecommunications engineer as result of "electrosensitivity syndrome (EHS)". For the first time in Spain, this EHS condition is considered as the main cause of disability involved [<http://mieuxprevenir.blogspot.com.es/2016/08/spain-high-court-of-madrid-ruling.html>].

- UK (2012)

- In July 2012, a judgment of the Social Entitlement Chamber of the First-tier tribunal grants an awarded Employment and support to a person EHS under ESA Regulation 29 (Exceptional Circumstances). The Judge stated that "were it not for EMR the appellant would lead a normal life with little or no functional impairment" and that expectations of getting a suitable working environment in the current circumstances are "null". See reference 171, page 65 in *Electromagnetic Hypersensitivity. A Summary by Dr Erica Mallery-Blythe. December 2014* [<http://www.iemfa.org/wp-content/pdf/Mallery-Blythe-v1-EESC.pdf>].

18.- Guidelines of the Austrian Medical Association (2012) and the European Academy for Environmental Medicine (2015):

- **Guideline of the Austrian Medical Association (ÖÄK) for the diagnosis and treatment of EMF-related health problems and illnesses (EMF syndrome).** Consensus paper of the Austrian Medical Association's EMF Working Group (ÖÄK AG-EMF), March 2012: <https://www.diagnose-funk.org/download.php?field=filename&id=216&class=DownloadItem> . English version in: <http://www.magdahavas.com/wordpress/wp-content/uploads/2012/06/Austrian-EMF-Guidelines-2012.pdf>
- **EUROPAEM EMF Guideline 2016 for the prevention, diagnosis and treatment of EMF-related health problems and illnesses.** Igor Belyaev, Amy Dean, Horst Eger, Gerhard Hubmann, Reinhold Jandrisovits, Markus Kern, Michael Kundi, Hanns Moshhammer, Piero Lercher, Kurt Müller, Gerd Oberfeld, Peter Ohnsorge, Peter Pelzmann, Claus Scheingraber and Roby Thill. Reviews on Environmental Health. ISSN (Online) 2191-0308, ISSN (Print) 0048-7554, DOI: [10.1515/reveh-2016-0011](https://doi.org/10.1515/reveh-2016-0011), July 2016. View full original article online with access to supplementary material: <http://www.degruyter.com/view/j/reveh.ahead-of-print/reveh-2016-0011/reveh-2016-0011.xml>. Downloadable in pdf format: <http://www.degruyter.com/downloadpdf/j/reveh.ahead-of-print/reveh-2016-0011/reveh-2016-0011.xml>

19.- Convention on the Rights of Persons with Disabilities 2006 [<http://www.un.org/esa/socdev/enable/rights/convtexte.htm>].

20.- Directive 2003/33/EC of the European Parliament and of the Council of 26 May 2003 on the approximation of the laws, regulations and administrative provisions of the Member States relating to the advertising and sponsorship of tobacco products [<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32003L0033>].

21.- Directive 2001/37/EC of the European Parliament and of the Council of 5 June 2001 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco products [<http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32001L0037>].

22.- Currently you cannot consider the knowledge of the SAR as a relevant measure itself to protect from the effects RF non-thermal effects, as indicated, for example, the Seletun Scientific Statement (2010) and the French Agency for Food, Environmental and Occupational Health Safety –ANSES- (2016):

- "The Current Accepted Measure of Radiation Risk—the Specific Absorption Rate ('SAR')—Is Inadequate, and Misguides on Safety and Risk. SAR is not an adequate approach to predict many important biologic effects in studies that report increased risks for cancer, neurological diseases, impairments to immune function, fertility and reproduction, and neurological function (cognition, behaviour, performance, mood status, disruption of sleep, increased risk for auto collisions, etc.)". Point 6 of the 10 Key Points Consensus Agreement of the *Seletun Scientific Statement* in *Fragopoulou A, Grigorov Y, Johansson O, et al. Scientific panel on electromagnetic field health risks: consensus points, recommendations, and rationales. Rev Environ Health. 2010;25:307–17*. See in <http://electromagnetichealth.org/electromagnetic-health-blog/the-seletun-statement/>

- According to the French Agency ANSES, also it seems necessary to:

- "reconsider the reference levels aiming to limit environmental exposure to electromagnetic radiofrequency fields, in order to ensure that the safety margins are large enough to protect the health and safety of the general population, and particularly of children; reassess the relevance of the specific absorption rate (SAR) used to establish exposure limit values for individuals, for the purposes of protection against the known and proven health effects (thermal effects) of radiofrequencies, and develop a representative indicator of the actual exposure of mobile telephone users,"
- regardless of the conditions of use: signal used, good or bad reception, method of use (voice calls, loading data, etc.)". *Exposure of children to radiofrequencies: a call for moderate and supervised use of wireless technologies, ANSES, Jun 2016*: <https://www.anses.fr/en/content/exposure-children-radiofrequencies-call-moderate-and-supervised-use-wireless-technologies> . See France's National Health and Safety Agency Calls For Reducing Children's Wireless Exposures: ANSES 2016 Report. Environmental Health Trust (EHT), July 2016: <http://ehtrust.org/frances-national-health-safety-agency-calls-reducing-childrens-wireless-exposures-anses-2016-report/>

23.- This may be found in the legislation of some Member States UE as **France** and **Belgium**:

- **The French law no. 2010-788 of 12 July 2010 on “the national commitment to the environment”** encompasses the prohibition of specific radio-electronic devices for children under 6 years by limiting public exposure to EMF over-exposure (Art. L. 5231-4) and prohibits any advertising that promotes the mobile phone use by children under 14 years of age (Art. L. 5231-3) [http://cdd.asso.fr/content/download/447/2543/version/1/file/2010.07.13_Loi_n-2010-788_12juillet2010_engagement_national_pour_lenvironnement.pdf].

- **The Belgian Royal Decrees of July 30, 2013 on “the prohibition of placing on the market of mobile phones designed specifically for young children”** [http://www.etaamb.be/fr/arrete-royal-du-30-juillet-2013_n2013024306.html] and on “the availability of information to the attention of consumers on the specific absorption rate of mobile phones and advertising for mobile phones” which prohibits advertising for the use of mobile phones aimed at under seven years [http://www.etaamb.be/fr/arrete-royal-du-30-juillet-2013_n2013024307.html].

24.- Since constant exposure (24 hours a day) to a small DECT base station of a **DECT cordless phone** or a **wireless baby monitor** at home can be hundreds of times greater than that received by the mobile phone masts outside EMF.

- **About the DECT cordless phone:** Where this is not possible dispense with the use of wireless technology, government agencies, like the **German Federal Office for Radiation Protection (BfS)** (August 2012), recommends strategies for minimizing personal exposure using those **DECT phones** with an option not to emit radiation in standby (see: https://www.bfs.de/SharedDocs/Downloads/BfS/DE/broschueren/emf/info-dect-telefon.pdf?__blob=publicationFile&v=3). The **Swiss Federal Office of Public Health (FOPH)** to minimize EMF exposure in their home or at work, the following advice: 1) Activate the low-emission mode (ECO mode) offered by modern cordless phones. 2) Ensure that DECT base units without an ECO mode are placed at least 50 cm away from relaxation places or work stations occupied for long periods. See: <http://www.bag.admin.ch/themen/strahlung/00053/00673/00674/index.html?lang=en>

- **About the wireless baby monitor:** According to the **Swiss Federal Office of Public Health (FOPH)**, “however, advisable to reduce the infant’s exposure to emissions as far as possible: 1) Place the baby monitor at least a meter away from the cot. 2) Do not use systems that transmit continuously. Set the baby unit to voice activation mode. 3) If the baby monitor is mains operated, ensure that the adaptor is plugged in at least 50 cm away from the cot. See: <http://www.bag.admin.ch/themen/strahlung/00053/00673/03012/index.html?lang=en> . See also the advice of the German Federal Office for Radiation Protection (BfS) (Last update: 7 March 2016: http://www.bfs.de/DE/themen/emf/hff/anwendung/babyphon/babyphon_node.html).

- **About the Smartphones:** in line with the idea of “Fewer apps means less radiation” the Vienna Medical Association the following advice in December 2015: “...Minimize the number of apps and disable the most unnecessary back-ground services on your smartphone. Disabling “mobile services”/“data network mode” turns the smart-phone into a conventional mobile phone. You can still be reached, but you avoid a lot of unnecessary radiation from background data traffic! ...” (http://www2.aekwien.at/dlcentre/uploads/Handy-Plakat_6_Auflage_Dez2015_440x1000_English-1458811156.pdf). In this regard, it is necessary to establish an 'eco mode' in the user interface, which turns off all wireless internet connections (only calls and text messages).

25.-The **Russian National Committee of Non-Ionizing Radiation Protection (RNCNIRP)** in its recommendations about the use of mobile phones in September 2001 and advises "The duration of phone calls should be limited to a maximum of three minutes, and after make a, you should wait at least 15 minutes before making another ":

<https://translate.google.com/translate?hl=en&sl=ru&tl=en&u=http%3A%2F%2Fwww.vrednost.ru/docrnk.php&sandbox=1> ,
<https://translate.google.com/translate?hl=en&sl=ru&tl=en&u=http%3A%2F%2Fwww.vrednost.ru/docvip.php&sandbox=1> ,
<http://www.zakairan.com/CosmicCookies/HealthCookies/EMR%20Russian%20Report.pdf>

26.-**WHO framework convention on tobacco control.** A56/8. Geneva. World Health Organization (WHO), 2003 [http://www.who.int/fctc/text_download/en/].

27.- Bellieni CV et al 2008. **Electromagnetic fields produced by incubators influence heart rate variability in newborns.** Arch Dis Child Fetal Neonatal Ed 93(4):F298 - 301 PMID: 18450804: <http://www.avaate.org/IMG/pdf/incuvadorafn132738.pdf>

28.- See also Chapters 16 and 19 of the Report BioInitiative 2012:

- http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec19_2012_Fetal_neonatal_effects_EMF.pdf
 - http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec16_2012_Plausible_Genetic_Metabolic_Mechanisms.pdf

Medical organizations as the **Austrian Medical Chamber** (2012) [<http://www.apdr.info/electrocontaminacion/Documentos/Artigos/OAK20120118.pdf>] and as the **American Academy of Environmental** (2012), warn of the dangers of "Smart Meters" implementation [<https://www.aeonline.org/pdf/AAEMEMMedicalConditions.pdf>]; and scientists and experts such as the signatories to the letter “**Smart Meter Dangers: The Health Hazards of Wireless Electromagnetic Radiation Exposure**” (2012) [<http://www.globalresearch.ca/smart-meter-dangers-the-health-hazards-of-wireless-electromagnetic-radiation-exposure/31891>].

- **In the United States:**

In some states are many examples of the groups, lawmakers, counties and cities who have called for a moratorium, the right for consumers to opt out, adopted an ordinance banning meters, requested more research on health and safety impacts, or are opposing Smart Meters. See partial list of California (<http://emfsafetynetwork.org/smart-meters/>) and twenty-four units of local government units of the State of Michigan (<https://michiganstopsmartmeters.com/more-city-governments-voice-opposition/>).

- **In Canada:**

- More than **60 municipalities, regional districts and First Nation governments in British Columbia** have passed resolutions calling for a moratorium on Smart Meters (2011-2015: <http://www.castanet.net/news/BC/140770/Smart-meter-moratorium>).

- The provincial government of Saskatchewan in 2014 ordained mandatory withdrawal 105.000 smart meters (<http://ici.radio-canada.ca/regions/saskatchewan/2014/07/30/006-remplacement-compteurs-intelligents-saskpower.shtml>).
- The electricity company Hydro-Quebec (Quebec government-owned public utility) offers since December 2015 a option of withdrawal in the province of Quebec (<http://compteurs.hydroquebec.com/installation>).

- In France:

Between 2015 and 2016, more than 225 municipalities reject the Smart Meters (Linky and Gazpar) (<http://refus.linky.gazpar.free.fr/>).

29.- Public agencies and advisory committees such as the Executive Agency for Health and Consumers (EAHC), The Committee on Environment, Public Health and Food Safety (ENVI), Scientific Committee on Emerging and Newly Identified Health Risks (SCHENIR), European Economic and Social Committee (EESC), etc.

See the following complaints and calls for ensure transparency, impartiality and plurality of expert assessments:

- Complaint from European organisations to the European Ombudsman (March 2015: <http://www.iemfa.org/wp-content/pdf/newsletter/Pressrelease-SCENIHR-2015.pdf>) and to the European Commission about the SCENIHR 2015 opinion on health effects from electromagnetic fields (September 2015: <http://www.iemfa.org/news/scenihr-2015-opinion-complaint-to-the-european-commission/>)
- Conflicts of Interest among the Members of the International Organization ICNIRP. AVAATE letter (10th July, 2015) (<http://www.iemfa.org/news/conflicts-of-interest-among-the-members-of-the-international-organization-icnirp/>).
- Assessment of the elaboration process of the European economic and social committee (EESC) opinion on electromagnetic hypersensitivity (EHS). An EESC Failure: conflicts of interests block the rights of people with EHS-functional impairment. The European associations defending EHS people's rights and the European associations fighting against electromagnetic pollution (February 2015) (<http://www.iemfa.org/wp-content/pdf/Assessment-on-the-EESC-EHS-Process-EN.pdf>).
- Letter of Notice holding EESC member Richard Adams personally accountable for betraying public trust by ignoring evidence on the hazards of RF/EMF. The letter of notice by EM Radiation Research Trust UK (18th February 2015) is supported by more than 85 organisations and Platforms (<http://www.iemfa.org/news/holding-eesc-member-richard-adams-personally-accountable-for-betraying-public-trust/>).
- The opinion of NGOs on the WHO preliminary draft on Radio Frequencies and health effects, signed by 47 NGOs in many countries Globe (December 2014) (<http://www.iemfa.org/wp-content/pdf/NGO-Opinion-WHO-Consultation.pdf>).
- In order to ensure the transparency, impartiality and plurality of expert assessments in the SCENIHR. AVAATE/PECCEM letter (22th September 2014) (http://www.iemfa.org/wp-content/pdf/Letter_of_PECCEM.pdf).
- On the need for Independent and Credible Environmental Assessment. Opinion de la the International EMF Alliance (IEMFA), March 2011 (<http://www.iemfa.org/wp-content/pdf/IEMFA-Opinion-on-Independent-Environmental-Assessment.pdf>).

30.- For example, the Visible light communication (VLC) emitted by LED lamps (Li-Fi technology), that prevents deep penetration in the body as in the case of microwave and other radio waves (<http://www.bemri.org/visible-light-communication.html>, <http://www.ijettjournal.org/2015/volume-28/number-4/IJETT-V28P231.pdf>, <http://www.silicon.fr/wp-content/uploads/2015/04/wifo.jpg>, http://www.lifi-centre.com/wp-content/uploads/2014/07/131201_LiFi_RaD_summary.pdf).

There are consumer protection and environmental protection organizations such as the German "Diagnose: funk" that call for caution: Although "many problems WLAN [Wi-Fi] today can be avoided by using the VLC technology [Li-Fi]", this organization recognizes that to ensure a safe internet connection in schools "It is preferable to await and continue to use solutions based on the cable connection until the VLC technology [Li-Fi] where tested to that biological risks are assessed." See *Empfehlungen für Schulen. Bestrahlung der Schüler vermeiden, Diagnose:funk* (2015) (<https://www.diagnose-funk.org/themen/mobilfunk-anwendungen/computernetze-wlan-powerline/empfehlungen-fuer-schulen>).

THE LIST OF SIGNATORIES OF THE EUROPEAN MANIFESTO *in support of an European Citizens' Initiative (ECI) for a regulation of EMF exposure, which truly protects public health*

[Updated in June 2016]:

Amongst the signatories to this *European Manifesto* there are scientists, researchers and experts, as well as professional bodies and associations and representatives of civil society organizations (from health advocates, consumers, neighbours, environmentalists, ecologists, trade unions, parents of students, people with central sensitization syndromes -electro-hypersensitivity, multiple chemical sensitivity, chronic fatigue, fibromyalgia, etc.-, brain tumour patients, concerned citizens and activists associations working in the field of electromagnetic pollution) coming from 26 countries (Argentina, Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, India, Ireland, Italy, Macedonia, Netherlands, Panama, Poland, Portugal, UK, Russia, South Africa, Slovakia, Spain, Sweden, Switzerland and USA).

The first signatories / scientists, researchers and experts

- Prof. [Enrique Navarro Camba](#), Ph.D., MSc.; Department of Applied Physics, University of Valencia – Valencia, Spain.
- Prof. [Jaume Segura García](#), Ph.D.; Department of Applied Physics, University of Valencia – Valencia, Spain.
- [Manuel Portolés](#), Ph.D.; Cell Biology and Pathology Unit, Research Center, University Hospital La Fe – Valencia, Spain.
- Prof. [Ceferino Maestu Unturbe](#), Ph.D.; Centre for Biomedical Technology /CTB, Technical University of Madrid /UPM. Director of the [Leganés/ LEGACONRAD Project](#), a real time RF-EMF monitoring in a wide urban area through self-developed technology – Pozuelo de Alarcón, Madrid, Spain.
- Prof. [Darío Acuña Castroviejo](#), Professor of Physiology; Biomedical Research Center, University of Granada – Spain.
- Prof. [María Jesús Azanza Rúa](#), Professor of Biology and Magnetobiology; Faculty of Medicine, Zaragoza University – Zaragoza, Spain.
- Prof. Emer. [Agustín del Moral Gamíz](#), Dept. of Physics of Condensed Matter /DFMC - Faculty of Science of the University of Zaragoza – Zaragoza, Spain.
- [Emilio Mayayo Artal](#), MD; Pathological Anatomy Unit, Faculty of Medicine and Health Sciences /IISPV, University Rovira i Virgili – Reus, Spain.
- [Alfonso Balmori Martínez](#), Ph.D., biologist; researcher into the effects of radio frequencies in living things – Valladolid, Spain.
- [José Luis Bardasano](#), Ph.D., Honorary Professor, Dept. of Medical Specialties, Faculty of Medicine /University of Alcalá de Henares – Madrid, Spain.
- Prof. [Fidel Franco González](#), Ph.D.; Department of Applied Physics, Polytechnic University of Catalonia, Spain.
- [Jean-Loup Mouysset](#), medical oncologist, formed in environmental health. Founder and director of [Centre Ressource](#) – Rambot Provençale, Aix-en-Provence, France.
- [Donald Maisch](#), Ph.D.; author of “The Procrustean Approach, Setting Exposure Standards for Telecommunications Frequency Electromagnetic Radiation”, webmaster of [EMFacts Consultancy](#) and board member of [International EMF Alliance \(IEMFA\)](#) – Hobart, Tasmania, Australia.
- Prof. Dr. [Hanns Moshhammer](#), Senior Researcher, Inst. Environmental Health, ZPH, Medical University of Vienna. Journal Editor of Biomonitoring. Co-President of the [Austrian Doctors for a Healthy Environment \(AeGU\)](#) / Austrian section of International Society of Doctors for the Environment (ISDE) – Austria.
- Prof. [Paul Héroux](#), Ph.D.; Department of Epidemiology, Biostatistics and Occupational Health, McGill University Faculty of Medicine; Department of Surgery, [InVitroPlus Laboratory](#) – Montreal, Quebec, Canada.
- [Ying Li](#), Ph.D.; McGill University Health Center; Department of Surgery, [InVitroPlus Laboratory](#) – Montreal, Quebec, Canada.
- Professor Emeritus [Pankaj Gadhia](#), B.Sc., M.Sc., Ph.D.; genetic consultant & advisor, SN Gene Laboratory and Research Centre – Surat, India.
- Prof. [Stanislaw Szmigielski](#), MD, Ph.D.; Professor of Pathophysiology, Consulting Expert, former director of Dept. of Microwave Safety, Military Institute of Hygiene and Epidemiology – Warsaw, Poland.
- Prof. Emeritus [Eugene Sobel](#), Ph.D.; Dept. of Preventive Medicine, Keck School of

Medicine /USC – University of Southern California. His primary research interests include very early diagnosis of cancers, melatonin as a treatment for cancer, and health effects of ELF-EMF exposure – Los Angeles, CA, USA.

- Dr. [Raymond Singer](#), Ph.D.; Neuropsychologist /Neurotoxicologist, ex-consultant in neuropsychology and neurotoxicology, United States Department of Justice, Environmental Crimes Section, and Federal Bureau of Investigation – Santa Fe, New Mexico, USA.
- Dr. [Philip Michael](#), M.B., B.Ch., B.A.O., D.C.H., MCIG; Hon. Secretary [Irish Doctors Environmental Association \(IDEA\)](#), Vice President (Europe) [International Society of Doctors for the Environment \(ISDE\)](#), Millbrook Medical Centre – Bandon, County Cork, Ireland.
- Dr. [Jean A. Monro](#), M.B., B.S., MRCS, LRCP, FAAEM, Dip. ABEM; Medical Director of the Breakspear Medical Group Ltd., and internationally recognized specialist in environmental medicine. Fellow of the [American Academy of Environmental Medicine](#), Board Certified US examination, Principal Medical Advisor Breakspear Hospital Trust. Hemel Hempstead – Hertfordshire, England.UK.
- [Denise Jourdan Hemmerdinger](#), Honorary CNRS Researcher (human sciences), co- founder of HHorages-France, member of administrative council of [CRIIGEN](#) (Comité de Recherche et d'Information Indépendantes sur le génie Génétique) – Thiais, Île de France, France.
- [William J. Rea](#), M.D., F.A.C.S., F.A.A.E.M.; President of the [American Environmental Health Foundation](#), vicepresident of the [American Board of Environmental Medicine](#) and previously served on the board of the [American Academy of Environmental Medicine](#) – Dallas, Texas, USA.
- Dr. [Joel M. Moskowitz](#), Ph.D., M.A., B.A.; Director and Principal Investigator, [Center for Family and Community Health](#), the UC Berkeley Prevention Research Center School of Public Health /University of California – Berkeley, USA
- Dr. [Lebrecht von Klitzing](#), Prof. Ph.D.; Medical Physicist (DGMP). Veteran medical physicist and researcher. [Umweltphysikalische Messungen GbR](#)– Wiesenthal, Rhön, Thuringia, Germany.
- Dr. rer. nat. [Stefan Spaarmann](#), Dipl. Physiker. He is [participated](#) in [Working Group Elektrobiologie](#)Munich, [BEMRI](#)-London, [BUND](#)-Saxony (Honorary citizen Project of the Foundation), [HESE Project](#), [Kompetenzinitiative](#) – Taucha, Germany.
- [Hanna Tlach](#), Dipl. Psych, DGIP, DGPT, BDP, LPK; Speaker of Agenda Health group in [www.allensbach.de](#) – Allensbach, Lake Constance, Konstanz district, Baden-Wuerttemberg, Germany.
- Dr. med. [Christine Aschermann](#), Neurologist, Psychiatrist, Psychotherapist. Founding Member of [the Freiburg Appeal](#) – Leutkirch, Germany.
- [Mikko Ahonen](#), M.Sc.; Ed. Researcher University of Tampere / Sustainable Mobile Inc. Tampere, Finland
- Prof. Dr. [Alvaro Augusto Almeida de Salles](#), B.Sc., M.Sc., Ph.D. (electrical engineering); Federal University of Rio Grande do Sul – Porto Alegre, Brazil.
- [Peter Sierck](#), Principal and Industrial Hygienist; Certified Indoor Environmental Consultant, Founder the institute of Inspection Cleaning and Restoration Certification and ET&T Inc. Encinitas – California, USA.
- [Susan Foster](#), MSW; Advisor to the [Radiation Research Trust](#) (UK), Medical Writer, Honorary Fire-fighter for Life, San Diego Fire Department, Co-Author in [Resolution 15, International Association of Firefighters](#); Organizer of the Pilot Study of California Firefighters Exposed to RF-EMF – Rancho Santa Fe, California, USA.
- [Richard H. Conrad](#), Ph.D.; biochemist, expert in EHS and in reducing EMF exposures in home and workplace – Waianae, Hawaii, USA.

- [Christopher Busby](#), Ph.D. in Chemical Physics; Co-founded a number of organisations looking at various aspects of the health effects of radiation (as the [European Committee on Radiation Risk](#) and [Green Audit](#)), and has joined many more. Researcher the health effects on non-ionising radiation since 1998 – United Kingdom.
- [Cyril W. Smith](#), Ph.D.; Physicist, DIC, Honorary Senior Lecturer (retired) in the Electrical Engineering Department, University of Salford, Manchester, England. Involved with the diagnosis and treatment of electrically sensitive patients (EHS) since 1982, author and co-author of various publications as "Electromagnetic Man: Health and Hazard in the Electrical Environment" – Manchester, United Kingdom.
- [Paul-Gerhard Valeske](#), Dr.med. NHV, homoeopath – Kempten, Bavaria, Germany.
- [Dr Lauraine M H Vivian](#), M. H. M.Sc., Ph.D., Senior Lecturer the Primary Health Care Directorate, Faculty of Health Sciences, University of Cape Town – South Africa.
- [Massimo Scalia](#), senior environmentalist researcher and Professor of Mathematical Physics at the Department of Mathematics of the Sapienza University, Rome, Italy; member of the Italian Scientific Board of the Interuniversity Research Centre for Sustainable Development /[CIRPS](#), Co-Chair of the Scientific Committee the UN Decade of Education for Sustainable Development /[DESD](#) during 2005- 2014, founder of the League for the Environment, now [Legambiente](#) – Rome, Italy.
- [Karl Hecht](#), Dr. med. habil. Professor Emeritus of Neurophysiology and appointed Professor of experimental and clinical pathophysiology – Berlin, Germany.
- Mathias Borchardt, Dipl. Ing. (TU), DB Projektbau – Dresden, Germany.
- Dr. [Carlos Sosa](#), M.D.; Former doctor the emergency services of the Hospital Pablo Tobón Uribe (Medellín, Colombia) who has-been [diagnosed with EHS](#) – Medellín, Colombia.
- Prof. [Giuseppe Vitiello](#), Ph.D.; Professor of Theoretical Physics, Department of Physics. "E.R. Caianiello", University of Salerno – Fisciano, Italy.
- Prof. [Francisco de Assis Ferreira Tejo](#), Dr; Group of computational electromagnetism and Bio-electromagnetism, Department of Electrical Engineering, Federal University of Campina Grande – Paraíba, Brazil.
- [Cindy Sage](#), professional environmental consultant, co-editor of both the [BioInitiative Report](#) (2007 and 2014) – Montecito, California, USA.
- Prof. [Paul Héroux](#), Ph.D.; BioInitiative Working Group member; Associate Professor of Health Effects of Electromagnetic Radiation; Occupational Health Program Director of the Department of Epidemiology, Biostatistics and Occupational Health /McGill University Faculty of Medicine, and Department of Surgery, [InVitroPlus Laboratory](#), Royal Victoria Hospital /McGill University – Montreal, Canada.
- [David O. Carpenter](#), M.D.; Director of the [Institute for Health and the Environment](#), University at Albany – State University of New York /SUNY. Co-editor of both the 2007 BioInitiative Report and the [BioInitiative 2012](#) – Albany, New York, USA.
- [Igor Beliaev](#), Dr.Sc.; Head, Laboratory of Radiobiology of the Cancer Research Institute, Slovak Academy of Science, Bratislava, Slovak Republic; Professor, Laboratory of Radiobiology, Department of Ecological and Medical Problems, Prokhorov General Physics Institute, Russian Academy of Science – Moscow, Russia.
- Prof. [Mauro Cristaldi](#), Naturalist, Professor Associate, Department of biological and biotechnological, Research Center "La Sapienza" for Applied Sciences in Environmental Protection and Cultural Heritage C.N.R. The Sapienza University of Rome – Italy.
- [Roberto Romizi](#), General Practitioner, President of [ISDE - Associazione Medici per l'Ambiente](#) Italia and [ISDE scientific Office](#) – Arezzo, Italy.
- [Mariangela Migliardi](#), architect, Project Manager and founding partner of [GEA - Geobiophysical Environmental Analysis](#) School Institute – Mombaruzzo, Asti, Italy.

- [Cristina Rovano](#), architect, expert in geology and geophysics analysis – Turin, Italy.
- [Patrizia Signorotto](#), expert in radiation health physics, professor of radiology at the Specialization School of the University Vita-Salute San Raffaele. Scientific activities with several national and international publications. Vice-President of the [Circolo Legambiente "Angelo Vassallo"](#) – Pollica, Italy.
- [Massimo Sperini](#), physicist, teacher of electronics and telecommunications, Electronic Laboratory, Institute R. Rossellini (Roma), expert techniques of measurement of electromagnetic fields. Co-author of books as “Fascino Discreto ll'Elettromagnetismo” and “Ioni aerei e salute umana” – Rome, Italy.
- Dr. [Morando Soffritti](#), M.D; Oncologist, author of more than 150 publications, Scientific Director of the [European Foundation for Oncology and Environmental Sciences “B. Ramazzini”](#) – Bologna, Italy.
- [Fiorella Belpoggi](#), Ph.D., FIATP, is the Director and Chief of Pathology of the Cesare Maltoni /Cancer Research Centre of the [Ramazzini Institute](#), where she has been working since 1981. Since 2010 she is also Director of the European Experimental Laboratory, where GLP studies are performed. Her research interests include long- term studies with particular regard to energy (fuels, gamma radiation, electromagnetic fields) – Bentivoglio, Bologna, Italy.
- Prof. Ing. [Giancarlo Spadanuda](#) Electrical Engineer, EMF Specialist, Technical Consultant of the Judiciary in more than one District Judiciary, on the subject of electromagnetic fields – Catanzaro, Italy.
- [Caterina Tanzarella](#), Prof. of Genetics, Cytogenetics Laboratory, Department of Biology at the University of Roma Tre – Roma, Italy.
- Pierre Le Ruz, PhD in animal physiology, European expert on electromagnetic pollution and radiation protection. Author of books and publications on the biological effects of non-ionizing radiation. President and on behalf of the [Centre de Recherche et d'Information Indépendante sur les Rayonnements Electromagnétiques](#) (CRIIREM) – Rennes, France.
- [Igor Nazarov](#), Research Assistant, Ph.D., MPhTI, Research and Teaching at EU and US – Eagle Point, USA.
- [William Lee Cowden](#), MD, MD(H), a USA board-certified Cardiologist & Internist; Chairman of the Scientific Advisory Board and Professor of the ACIM - [Academy of Comprehensive Integrative Medicine](#) /Panama – Panama City, Republic of Panama.
- [Ageorges Guillaume Pierre Henri](#), addictions specialist, the Secretary for the SERA - Santé - Environnement en Rhône-Alpes, member of the [ASEF](#) - national federation of associations of regional environmental health – Lyon, France.
- [Mark McGuire](#), M.Sc.; Health Research Methods. M.A. Social & Health Policy. President at [Health Systems Innovations Inc](#) – North York, Ontario, Canada.
- [Milena Aran](#), EMF Researcher, director of the ONG [School Without Wi-Fi](#) Catalonia – Reus, Tarragona, Catalonia, Spain.
- [María Josefa Delgado Guerrero](#), Retired associate Professor of Physiology; University of Sevilla – Spain.
- [Vincent Lauer](#), Engineer, scientist, specialist of the interaction of the immune system with electromagnetic waves – La Chapelle sur Erdre, France.
- Peter Williamson. Retired IT technician, analyst, and consultant. La Nucia, Alicante, Spain.

- [Alasdair Philips](#), BSc (Eng), DAGE. Independent researcher into environmental health issues including EMF/RF effects. He is the director of the [Powerwatch](#).— United Kingdom.
- [Dr. Isaac Jamieson](#), PhD, DIC, RIBA, ARB, DipAAS, BSc(Hons), MInstP. Member of the Institute of Physics' Electrostatics Group, of the RIBA Regulations and Standards Group (representing them in 2011 on the UK Health Protection Agency's ELF EMF Communication Working Group) of the Expert Group at the European Commission. Regular contributor to the CIBSE Intelligent Buildings Group, especially on matters related to biosustainability issues – United Kingdom.
- [Dr. Fiorenzo Marinelli](#), Ph.D., researcher on biological effects of EMFs, Institute of Molecular Genetics - National Council of Research (CNR) of Bologna. Member of [International Commission for Electromagnetic Safety \(ICEMS\)](#). Evaluator member of the European Commission for European research projects on EMF – Bologna, Italy.
- [María Cornejo](#), architect, on behalf of the [Acupoftea](#) architectural studio, specialized in bioconstruction as well as construction of new plant and / or adaptation of housing for people with MCS (Multiple Chemical Sensitivity) and Electromagnetic hypersensitivity (EHS).

The first signatories / professional associations

- Dr Tomica Ancevski, as President and on behalf of the [Zdruzenie na Doktori za zivotna sredina](#) / MADE- The Macedonian section of International Society of Doctors for the Environment (ISDE) –Macedonia.
- José Pelayo Míguez Baños, as Dean and on behalf of the [Colexio Oficial de Biólogos de Galicia](#) / the Galician Official College of Biologists – Santiago de Compostela, A Coruña, Galicia, Spain.
- Prof. Dr. [Hanns Moshhammer](#), as Co-President and on behalf of the [Austrian Doctors for a Healthy Environment \(AeGU\)](#) / Austrian section of International Society of Doctors for the Environment (ISDE) – Austria.
- Dr. med. Edith Steiner, as central committee member and on behalf of the [Ärztinnen und Ärzte für Umweltschutz](#) / the Swiss section of International Society of Doctors for the Environment (ISDE) – Schaffhausen, Switzerland.
- Dr Francis Glémet, on behalf of the [Coordination Nationale Médicale "Santé Environnement"](#) (CNMSE) / the Medical French National Coordination "Health Environment" – Paris, France.
- Dr Philip Michael, as Hon Sec and on behalf of the [Irish Doctors Environmental Association \(IDEA\)](#), and as VP (Europe) [International Society of Doctors for the Environment \(ISDE\)](#) – Bandon, Co. Cork, Ireland.
- Peter Matz, as chief and on behalf of the [Human ecological social economical Project](#) (h.e.s.e. project) - working group EMF -. He is responsible of the [elektrosmognews.de](#) – Germany.
- Dipl. Phys. Dr. Stefan Spaarmann, on behalf of the [Kompetenzinitiative zum Schutz von Mensch, Umwelt und Demokratie e.V.](#) / "Competence Initiative for the Protection of Humanity, Environment, Democracy e.V." (international initiative of scientists and physicians).
- [Roberto Romizi](#), as President and on behalf of the [Associazione Medici per l'Ambiente - ISDE Italia](#) / The Italian section of International Society of Doctors for the Environment (ISDE) – Arezzo, Italy.

The first signatories / people and social organizations

- Kerstin Stenberg, as contributor to the development the ECI Manifest on behalf of the [Stralskyddsstiftelsen](#) – the Swedish Radiation Protection Foundation. He is board member the [International EMF Alliance \(IEMFA\)](#) and Regional Delegate of Alsace of the [PRIARTEM](#) in the French region of Alsace.
- Pierre Boulet, on behalf of the [Coordination Nationale des Collectifs contre les antennes relais](#) / the French National Coordination of Groups against the indiscriminate implementation -in all directions- of wireless base stations and for the implementation of Resolution 1815 of the Parliamentary Assembly of the Council of Europe. He is one of the contributors to the development of the “ECI Manifesto” and active member of [Robin des Toits](#) in Aquitaine – Pouillon, Aquitaine, France.
- Asunción Laso, on behalf of the [Plataforma Estatal Contra la Contaminación Electromagnética \(PECCEM\)](#) / the Spanish Platform Against Electromagnetic Pollution and the [AVAATE - Asociación Vallisoletana de Afectados por las Antenas de Telecomunicaciones](#) / the Valladolid Association of Injured by Telecommunications Antennas. He is also one of the contributors to the development of the “ECI Manifesto” as one of the Castile and León Coordinator of the PECCEM – Valladolid, Castile and León, Spain.
- Julio Carmona, on behalf of the [Asociación Pola Defensa da Ría \(APDR\)](#) / Pontevedra Association in Defence of the Estuary, and the [Federación Ecoloxista Galega](#)/ the Galician Environmental Federation. He is also one of the contributors to the development of the “ECI Manifesto” as one of the Galician Coordinator of the [PECCEM](#) – Pontevedra, Galicia, Spain
- Stéphane Sanchez, as President and on behalf of the [Association Sans Onde](#) / the French [Association No Wave](#). He is also one of the contributors to the development of the ECI Manifest – Bordeaux, Aquitaine, France.
- Giorgio Cinciripini, as one of the contributors to the development of the ECI Manifest and as a coordinator of the [Rete Electtromog-Free Italia](#) / the Italian Electrosmog-Free Network – Crema, Cremona, Italy.
- Francesca Romana Orlando, as one of the contributors to the development of the ECI Manifest, as Vice President and on behalf of the [Associazione per le Malattie da Intossicazione Cronica e/o Ambientale \(A.M.I.C.A.\)](#) / the Italian Association for Environmental and Chronic Toxic Injury – Rome, Italy.
- Antonio Gagliardi, as one of the contributors to the development of the ECI Manifest on behalf of the [Associazione Elettrosmog Volturino](#) – Volturino, Foggia, Italy.
- Luc Leenders, as one of the contributors to the development of the ECI Manifest as Coordinator and on behalf of the Flemish Association StralingsArmVlaanderen - [StralingsArmVlaanderen.org](#) – Maaseik, Limburg, Belgium.
- Christine Duchateau, as one of the contributors to the development of the ECI Manifest, and on behalf of the Flemish Association StralingsArmVlaanderen - [StralingsArmVlaanderen.org](#) – Belgium.
- Samuel Martín-Sosa Rodríguez, as responsible for international affairs and on behalf the [Confederación de Ecologistas en Acción](#) / the Spanish Confederation of Ecologists in Action – Madrid, Spain.
- Nuno Sequeira, as President of the national board affairs and on behalf of the [Quercus](#),

[Associação Nacional de Conservação da Natureza \(ANCN\)](#) / the Portuguese National Association of environmental conservation – Lisbon, Portugal

- Pablo Andrés Gerbolés Sánchez, as Secretary of the [Confederación Estatal de Asociaciones de Vecinos \(CEAV\)](#) / the Spanish Confederation of Neighbourhood associations – Madrid, Spain.
- José Garcia, as General Secretary and on behalf of the [Syndicat des locataires](#) / the Belgium association of Tenants Union – Anderlecht, Brussels region, Belgium.
- Jesús Ulloa Barrocal, as President and on behalf of the [FACUA - Consumidores en acción de Castilla y León](#) / Castile-León Federation of consumers Associations of the [FACUA - Consumers in action](#) – Valladolid, Castile-Leon, Spain.
- Una St.Clair-Moniz, as Executive Director and on behalf of the “[Citizens for Safe Technology](#)” Society (CST) – Langley, British Columbia, Canada.
- Anton Fernhout, environmental engineer, as committee member and on behalf of the [ARA - Association Romande Alerte aux Ondes ElectroMagnétiques](#) / the Romande Association to alert electromagnetic waves – Morges, Switzerland.
- Dr. Leendert Vriens, physicist, as webmaster of the [www.StopUMTS.nl](#) – Kneegsel, Netherlands.
- Michael Bevington MA (Oxon.), MEd, as Chair of Trustees and on behalf of the [Electrosensitivity U.K. /ES-UK](#) – London, United Kingdom.
- Agnes Ingvarsdottir, on behalf of [Mast-Victims.org](#) – Malvern, Herefordshire, United Kingdom.
- Sosthène Berger, Ing. Dipl. HES, as webmaster of [www.GigaSmog.ch](#) – La Neuveville, Switzerland.
- Diana Hanson, as Chair of [the CAVI Society](#) (Children Against Vested Interests) and National Coordinator of the [SSITA](#) (Safe Schools Information Technology Alliance – Solihull, West Midlands, United Kingdom).
- Silvana Lund, on behalf of the [EHS Foreningen af el-overfølsomme](#) / the Danish Association of electro-hyper sensitives – Hobro, Denmark.
- Elisabeth Buil, as Vice President and on behalf of the [Une Terre pour les EHS](#) / “A Place for the EHS” – France.
- Georges Cingal, as Secretary-General and on behalf of the [Fédération des Sociétés pour l'Étude, la Protection et l'Aménagement de la Nature dans le Sud-Ouest SEPANSO](#) France Nature Environnement Aquitaine) / the Federation of the Societies for the study, protection and Management of the nature (the representative of « France Nature Environnement » in Aquitaine). He is Responsible for European and International Affairs at France Nature Environnement, Correspondent of the European Environmental Bureau and Member of the European Economic and Social Committee since 21 September 2010 – Bordeaux, Aquitaine, France.
- Eileen O'Connor, as Director and on behalf the [EM Radiation Research Trust \(RRT\)](#). He is Deputy Member of the Board of the [International EMF Alliance \(IEMFA\)](#), Stakeholder for the EU Commission Dialogue Group and Member of the UK Health Protection Agency, EMF Discussion Group – United Kingdom.
- [Marion Dupuis](#), as a veteran French EMF/EHS activist. He is Coordinator of Haute- Savoie of the [PRIARTEM](#) - Pour une réglementation des antennes relais de téléphonie mobile / the French national PRIARTEM association for the regulation of placement of mobile

phone antennas – Annecy, Haute-Savoie, the Rhône-Alpes region, France.

- Johan Bonander, Clergyman, freelance journalist in areas such environmental, health psychology and Christian faith. He is Secretary of [Östmarks Fiber ekonomisk förening](#) / Östmarks Fiber Cooperative Society – Östmark, Torsby Municipality, Värmland County, Sweden.
- Sissel Halmøy, Master of Science Cybernetics, Chair [International EMF Alliance \(IEMFA\)](#) and Secretary General of the [Folkets strålevern](#) / Citizens' Radiation Protection – Norway.
- Ellen K. Marks, as Director and on behalf the [California Brain Tumor Association](#) – California, USA.
- Brian Stein, as Chair and on behalf of [EM Radiation Research Trust \(RRT\)](#) – England, United Kingdom.
- David Barcenilla Asensio, as President of the [Agrupación de Asociaciones Vecinales de Cáceres](#) / the Federation of Neighbourhood associations of Cáceres – Cáceres, Extremadura, Spain.
- Juan Asensio Moreno, on behalf of the [Asociación de Vecinos del Poble d'Ortells](#) / the Poble d'Ortells Neighbourhood association – Morella, Castelló, Valencian Community, Spain.
- Manuel Prieto, on behalf of the [Asociación Vecinal Rondilla](#) / the “Rondilla” Neighbourhood association of Valladolid – Valladolid, Castile and León, Spain.
- The Directive Group of the [Associació Castelló Sense Soroll](#) / the Castellón Association against noise – Castelló, Valencian Community, Spain.
- Rafaela Amezcua Casas, on behalf of the [Asociación de Vecinos de Favara](#) / the Favara Neighborhood Association – Valencia, Valencian Community, Spain.
- The Directive Group of the [Asociación de Vecinos las Musas](#) / the Las Musas Neighbourhood Association, in Madrid district of San Blas, Spain.
- Xosé Miguel López Pérez, on behalf of the [Asociación Veciñal de Esteiro](#) / the Esteiro Neighbourhood Association – Ferrol, A Coruña, Galicia, Spain.
- Carlos Javier Martín Sánchez, on behalf of the [Asociación en Defensa del Río Alberche \(ADRA\)](#) / – the Association in defence of the Alberche River – Madrid, Spain.
- Francisco Caño Sánchez, as Environmental Manager and on behalf of the [Federación Regional de Asociaciones de Vecinos de Madrid \(FRAVM\)](#) / the Regional Federation of Neighborhood Associations of Madrid – Madrid, Spain.
- Jesús Abad Soria, on behalf of the [Asociación Geográfica Ambiental](#) / the Geographic Environmental Association – Solosancho, Avila, Castile and León, Spain.
- Luisa Feliu Rius, on behalf of the [INDIA asociación](#) / the Initiative Nobody Damaged no more by Irradiation of Antennas – Girona, Catalonia, Spain.
- Carlos Requejo, as Vice-President and on behalf of the [DOMOSALUD - Asociación Ciudadana por la Salud Ambiental](#) / the Citizens Association for Environmental Health – Barcelona, Catalonia, Spain.
- Alberto Andrés Casado, on behalf of the [Asociación para la Defensa de la Sanidad Pública de Aragón](#) / the Aragón Association for the Defence Public Health – Zaragoza, Aragón, Spain.
- The Directive Group of the [Asociación Vecinal Actur Rey-Fernando](#) / the Neighbourhood

Association in Zaragoza district of Actur Rey-Fernando – Zaragoza, Aragón.

- Pilar Diego, on behalf of the [Plataforma contra la Especulación Urbanística y Ambiental de Candeleda](#) / the Platform against Urban and Environmental Speculation of Candeleda. – Ávila, Castile and León, Spain.
- The Directive Group of the [Asociación Vecinal “Cárcavas San Antonio”](#) – Hortaleza-Madrid / the Neighbourhood Association of the “Cárcavas San Antonio” in Madrid district of Hortaleza – Madrid, Spain.
- Enrique García, on behalf of the [Asociación Vecinal “Aires Nuevos](#) of Getafe / the Getafe Centre Neighbourhood Association called “Aires Nuevos” – Getafe, Madrid, Spain.
- Manuel Campón, as president and on behalf of the [Asociación Vecinal “Antonio Canales” de Cáceres](#) / the Antonio Canales Neighbourhood Association of Cáceres – Extremadura, Spain.
- Alejandro Arizkun, on behalf of the [Ekologistak Martxan de Iruña](#) / the Ecologists in Action of Iruña – Pamplona-Iruña, the Basque Country, Spain.
- Joaquin Espinazo Gonzalez, on behalf of the [Asociación de Fibromialgia, Síndrome de Fatiga Crónica y Síndrome de Sensibilidad Química Múltiple de Navarra \(AFINA\)](#) / the Navarran Association of Fibromyalgia, Chronic Fatigue Syndrome and Multiple Chemical Sensitivity – Zizur Mayor, Navarra, Spain.
- The Directive Group of the [Ecologistas en Acción de Tudela](#) / the Ecologists in Action of Tudela – Tudela, Navarra, Spain.
- Pedro Belmonte Espejo, on behalf of the [Ecologistas en Acción Región Murciana](#) / the Ecologists in Action of the Murcia region – Murcia, Spain.
- The Directive Group of the [Coordinadora El Rincón-Ecologistas en Acción LA OROTAVA](#) / the Ecologists in Action of the Orotava – Orotava Valley, Tenerife, the Canary Islands, Spain.
- [María José Moya Villén](#), as creator and webmaster of “[Mi estrella del mar](#)”, pioneer Blog in Spain dedicated to bring awareness on Multiple Chemical Sensitivity (MCS) issue – Madrid, Spain.
- The Directive Group of the [Ecologistas en Acción Estella-Lizarra](#) / the Ecologists in Action of Estella-Lizarra in Navarra – Lizarra, Navarra Spain.
- The Directive Group of the [Ecologistas en Acción de Burgos](#) / the Ecologists in Action of Burgos – Burgos, Castile and León, Spain.
- Antonio Amarillo, as president and on behalf of the [Asociación Ecologista “Jaedilla”-Ecologistas en Acción de Arahal](#) / the Ecologists in Action of Arahal – Sevilla, Andalucía, Spain.
- Javier Escudero Gonzalez, as Coordinator and on behalf of the [Ecologistas en Acción Palencia](#) / the Ecologists in Action of Palencia – Castile and León, Spain.
- Andrés Canales, on behalf of the [SFC-SQM MADRID - Asociación de Afectados por síndrome de fatiga crónica y por síndrome de sensibilidad química múltiple](#) / the Madrid Association of People Affected by chronic fatigue syndrome and multiple chemical sensitivity syndrome. He is the EHS member of their Board – Madrid, Spain.
- Fernando Ocampo, on behalf of the [Federacion Vecinal de Ferrol Roi Xordo](#) / the “Roi Xordo” Federation of the Ferrol Neighbourhood Associations and as President the [Asociación de Vecinos ENSANCHEA](#) / the Ensanchea Neighbourhood Association – Ferrol,

A Coruña, Galicia, Spain.

- Alberto Navazo, on behalf of the [Asociación Vecinal Monte Carmelo](#) / the Monte Carmelo Neighbourhood Association, in the Fuencarral-El Pardo district of Madrid, Spain.
- Maria Rosa Arregui, on behalf of the [Asociación Vecinal “La Flor”](#) / the Barrio del Pilar Neighbourhood Association – the Fuencarral-El Pardo district of Madrid, Spain.
- María Alonso, on behalf of the [Asociación de madres y padres “Surco” del Colegio Público Emilio prados de Sevilla](#) / the Fathers and Mothers Association of Emilio Prados School – Seville, Andalucía, Spain.
- Elena Navarro, as president and on behalf of the [Plataforma Nacional para la FM, SFC, SQM, reivindicación de derechos](#) / the Spanish Platform for Fibromyalgia, Chronic Fatigue Syndrome and Multiple Chemical Sensitivity, vindication of rights – Madrid, Spain.
- Jose Manuel Lopez-Menchero Gonzalez, on behalf of the “[Enarmonía Salud Geoambiental](#)” and as Coordinator of the [Escuelas Sin Wifi de Andalucía](#) (Fundación Vivo Sano) / school without Wi-Fi of Andalucía (Vivo Sano Foundation) – Seville, Andalucía, Spain.
- Vicente García Álvarez, on behalf of the [Asociación Leonesa Contra las Ondas Electromagnéticas \(ALCOE\)](#) / the Lion Association against electromagnetic waves – León, Castile and León, Spain.
- The Directive Group of the [Asociación para a Defensa Ecolóxica de Galiza \(ADEGA\)](#) / The Association for Ecological Protection of Galicia – Santiago de Compostela, Galicia, Spain.
- M^a Belén Bausela Magdaleno, on behalf of the [Asociación de Madres y Padres del IES Ribera de Castilla](#) / the Fathers and Mothers Association of Ribera de Castilla School – Valladolid, Castile and León, Spain.
- Pepita Costa Tur, as president and on behalf of the [Federación de Asociaciones de Padres de Alumnos de la isla de Eivissa, FAPA Eivissa](#) / the Federation of Father and Mother Associations of the island of Ibiza – Ibiza, the Balearic Islands, Spain.
- Maria José Gomez, as president and on behalf of the FAPAVA - [Federación Provincial de Asociaciones de Madres y Padres de Alumnado de Centros Públicos de Valladolid](#) / the Valladolid Provincial Federation of Father and Mother Associations of Public primary and secondary schools – Valladolid, Castile and León, Spain.
- Servando Pérez Domínguez, as president and on behalf of the [MERCURIADOS](#) - Asociación Española de Afectados por Mercurio de Amalgamas Dentales y Otras Situaciones / the Spanish Association of Affected by Mercury in Dental Amalgam and Other Situations – Teo, A Coruña, Spain.
- Maria Isabel Martinez Calabuig, on behalf of the [AAVV Rosas-Rafael Atard y Adyacentes de Manises](#) / the Rosas-Rafael Atard (and adjacent areas) Neighbourhood Association in Manises – Manises, Valencia, Spain.
- Pilar Martín Coruña, as President and on behalf of the [Federación de Asociaciones vecinales de la Comarca del Bierzo](#) / the Federation of the Bierzo region Neighbourhood Associations – Ponferrada, León. Castile and León. Spain.
- Frank Herdegen, German [EMF/EHS activist](#)– Steinbach, Hochtaunuskreis, Germany.
- Walter Gebhard, Prof. Dr. Founding member (along with Klaus H. Kiefer) of the Carl Einstein Society (1986). Founding member and Chairman of the humanitarian association training assistance to support the youth of the third world (1981). – Bayreuth, Bavaria,

Germany.

- Ángel Bayón, as Coordinator the [Comisión estatal de contaminación electromagnética de Ecologistas en Acción](#) / the Spanish Confederate Commission of electromagnetic smog of Ecologists in Action and as one of Castile and León Coordinator of the [PECCEM](#) (the Spanish State Platform Against Electromagnetic Pollution) – Valladolid, Castile and León, Spain.
- Eduard Antequera, as President and on behalf of the [Asociación ENSALUT](#) / ENSALUT Association of Catalonia and as Catalonia Coordinator of the [PECCEM](#) – Barcelona, Catalonia. Spain.
- Jose Luis Martin, on behalf of the [Coordinadora Vasca de Afectados por Campos Electromagnéticos \(EKEUKO-COVACE\)](#) / the Basque Coordinator Affected by Electromagnetic Fields. He is one of the Basque Country Coordinators of the [PECCEM](#) – Basauri, Biscay, the Basque Country, Spain.
- Irune Ruiz, on behalf of the [SOS Electrohipersensibilidad - Enfermedades Ambientales de Sensibilización Central \(SOS EHS-EASC\)](#) / the SOS Electromagnetic hypersensitivity - Environmental Diseases of Central Sensitization. He is contributor to the development of the ECI Manifest as one of the Basque Country Coordinators of the [PECCEM](#). She is also member of the [EKEUKO-COVACE](#) and the [Spanish Confederate Commission of electromagnetic smog of Ecologists in Action](#) – Basauri, Biscay, the Basque Country, Spain.
- Fini Manso, as webmaster of “[Radiaciones electromagnéticas fuera de Ferrol](#)”/ Electromagnetic radiation out of Ferrol. He is contributor to the development of the ECI project as one of the Galician Coordinators of the [PECCEM](#) – Ferrol, A Coruña, Galicia, Spain.
- Carmelo Santolaya, as President and on behalf of the [Asociación de Afectados de Navarra por Campos Electromagnéticos \(ASANACEN-EEKNE\)](#) / the Navarra Association of Affected by Electromagnetic Fields. He is the Navarra Coordinator of the [PECCEM](#) – Navarra. Spain.
- Pedro Belmonte as member of the [Spanish Confederate Commission of electromagnetic smog of Ecologists in Action](#), and the Coordinator of the [PECCEM](#) of the Region of Murcia – Murcia, Spain.
- Yolanda Barbazan, on behalf of the [Comisión de contaminación electromagnética de la Federación Regional de Asociaciones Vecinales de Madrid \(FRAVM\)](#) / the Commission of electromagnetic smog of the Regional Federation of Madrid Neighbourhood Associations. He is one of the Madrid Coordinators of the [PECCEM](#) – Madrid, Spain.
- Minerva Palomar, as President and on behalf of the [Electrosensibles por el Derecho a la Salud \(EDS\)](#) / the electrosensitive for the Right to Health. He is one of the Madrid Coordinators of the [PECCEM](#) – Madrid, Spain.
- Juan Manuel Puértolas, on behalf of the [Asociación Independiente para Defender la Salud \(ASIDES\)](#) / the Independent Association to Defend the Health of Aragón. He is the Aragón Coordinator of the [PECCEM](#) – Zaragoza, Aragón, Spain.
- Rubén García, on behalf of the [Plataforma Asturiana Escuela sin Wi-Fi](#)/ the Asturian platform school without Wi-Fi. Cangas de Narcea. He is the Asturian Coordinator of the [PECCEM](#) – Cangas de Narcea, Asturias. Spain.
- José F. Ortega, as Secretary and on behalf of The [Faculty of Education of The University of Murcia](#) - Murcia, Spain.
- Purificación Pomares Cereceda, as secretary-administrator and on behalf of Reyes Catolicos residents' association of the Orihuela - Murcia, Spain

- José Francisco Caselles Pérez, as spokesman of [Plataforma Oriolana Contra las Antenas de Telefonía Móvil -POCAT-](#) / Orihuela Platform Against Mobile Phone Antennas - Murcia, Spain.
- Rosa Pérez Tomás, as President and on behalf of the Asociación IMAGINAmurcia - Murcia, Spain.
- Pierre Le Ruz, as president and on behalf of the [CRIIREM](#) Centre de Recherche et d'Information Indépendante sur les Rayonnements Electromagnétiques / Center of Research and Independent Information about electromagnetic waves- 72000 Le Mans, France.
- Janine Le Calvez, as president and on behalf of the [PRIARTEM](#), Association ayant Pour but de Rassembler Informer et Agir sur les Risques liés aux Technologies ElectroMagnétiques / French Association for information and action on the risks concerning electromagnetic technologies - 75010 Paris, France.
- Sophie Peletier, as Spokerperson for «[Collectif des Electrosensibles de France](#)» / Electrosensitivity of France (PRIARTEM member), French Association to the recognition and protection of electrosensibles people. - 75010 Paris, France
- Etienne CENDRIER, as national Spokerperson of the [ROBIN des TOITS](#), Association Nationale pour la Sécurité Sanitaire dans les Technologies sans fil / French National Association for Health Security in Wireless Technologies - 75008 Paris, France.
- Philippe Tribaudeau, as president and on behalf of [Une Terre pour les Electrosensibles](#) / A land of the EHS French Association for the recognition of EHS and the provision of "white areas" - Souvestrière, 26410 BOULC, France.
- Dominique Souillac, as president and on behalf [EHS France](#) / France EHS, Association for the recognition of the electrosensitivity and the protection of the electrosensitive people – France.
- [Alasdair Philips](#), as director and on behalf of the [Powerwatch](#) – United Kingdom.
- Elidia Da Silva and Emeline Aubert Dozeville, on behalf of the [EMOV mouvement des Victimes des Ondes ElectroMagnétiques](#) – France.
- Cara Mercier, on behalf of the [Irish Electromagnetic Radiation Victims Network](#) (IERVN) – Ireland.
- Frank Berner, as president and on behalf of [Elektrosensible und Mobilfunkgeschädigte.V.](#) – Munich, Germany.
- [Ethna Monks](#), as an electro-sensitive artist in Ireland, member of the Irish Electromagnetic Radiation Victims Network (IERVN) and [International Gallery of Electro-Aware Artists](#) - Wexford, Ireland.
- Joern Gutbier, as president and on behalf of [Diagnose: funk](#) – Germany.
- [Paulo Vale](#), PhD in Biology, on behalf “[Movimento para a Prevenção da Poluição Electromagnética](#)”. He is one of the contributors to the development of the ECI Manifest as Portuguese EHS activist and webmaster of <http://electrosensibilidade.blogspot.com.es> – Lisbon, Portugal.
- Carlos Martínez Camarero, on behalf of the [Confederal secretariat of the occupational health and the environment of the “Comisiones Obreras” \(CCOO\) Trade Union Confederation](#) – Spain.
- Samuel Fernández, as secretary-general and on behalf of the “[Corriente Sindical](#)

[d'Izquierda](#)", Asturian Trade Union – Spain

- Julio Salazar, as secretary-general and on behalf of the [Asturian Regional of the "Unión Sindical Obrera"](#) (USO) Trade Union – Spain.
- Liliana Palancio, as president and on behalf of [Asociación Civil Aletheia por la vida](#) / Civil Association "Aletheia in favor of life" – La Plata, Province of Buenos Aires, Argentina.

The first signatories / people and social organizations

- Toni Roderic, as Organizational Secretary and on behalf of the [Confederación de Los Verdes de España](#) / the Spanish Confederation of Greens and as President of [Els Verds del País Valencià \(EVPV\)](#) / the Valencian Federation of Greens – Denia, Alicante, the Valencian Country, Spain.
- Joan Carles Andrés Raga, on behalf of the electoral coalition [Compromís per Aldaia](#) – Valencia. Spain. Compromís per Aldaia.
- II Federal Assembly of [EQUO](#). Spanish member of the European Green Party.
- Michèle Rivasi, as French Member of European Parliament ([Europe Écologie – Les Verts](#)). He is Vice-Chair of the Group of the [Greens/European Free Alliance](#), Vice-president of the [CRIIREM](#), and Associate Professor of Biology at École Normale Supérieure in Valence. Expert in radiation protection, electromagnetic fields, major environmental issues and their relationship to public health. Founder and former President of [CRIIRAD](#), former director of [Greenpeace France](#), co-founder of the [vigilance Observatory and green alert](#) – France.

ADA/FHA; Verified Complaint, G v. Fay Sch., Inc.,
No. 15-CV-40116-TSH (U.S.D.C. Mass. Aug. 12, 2015)

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACUSETTS
(WORCESTER DIVISION)

_____)	
X, a 12-year-old minor	)	Civil No. _____
suing by a fictitious name for privacy reasons,)	
MOTHER, and FATHER, suing under)	
fictitious names to protect the	)	VERIFIED COMPLAINT
identity and privacy of X, their minor child,	)	SEEKING INJUNCTIVE RELIEF
	)	FOR VIOLATION OF THE
Plaintiffs,	)	AMERICANS WITH
	)	DISABILITIES ACT AND
-v-	)	DAMAGES FOR BREACH OF
	)	CONTRACT AND NEGLIGENCE
THE FAY SCHOOL,)	
by and through its Board of)	
Trustees, and ROBERT GUSTAVSON,	)	A PRELIMINARY INJUNCTION
	)	WILL BE SOUGHT
Defendants.)	
_____)	

Twelve year-old Child X (“X”), Mother, and Father allege as follows for their Complaint against The Fay School (“Fay”) and Robert Gustavson (“Gustavson”).

Summary Statement

(1) Defendants Fay and its head of school, defendant Gustavson, have violated and continue to violate the rights of plaintiff X, a student at Fay, along with the rights of his parents, plaintiffs Mother and Father. Fay has done so by (i) disregarding X's rights under the Americans with Disabilities Act (the “ADA”), (ii) breaching its contractual obligations to X, Mother and Father conferred by Fay’s Student Handbook, and (iii) failing to use ordinary care for X’s safety while X is at Fay during the school day. Fay has been informed repeatedly by Mother, Father and a qualified physician that X has a condition known as Electromagnetic Hypersensitivity Syndrome (“EHS”). This syndrome, causing physical harm and the risk of very substantial physical harm, is

triggered by exposure to high doses of radiofrequency/microwave radiation (hereinafter sometimes referred to as “emissions”) such as the radiation emitted from the high-density, industrial-capacity Wi-Fi system that has been installed in the classrooms at Fay. Fay’s Wi-Fi system is not the lower-intensity, low-emission variety used in most homes and in some other locations. Rather, the Wi-Fi system Fay chose to install produces extremely high levels of such emissions. Exposure to Wi-Fi emissions at the levels emitted by the type of Wi-Fi to which the children are exposed in Fay classrooms causes, in those persons affected, most notably children, the symptoms of EHS, which include severe headaches, fatigue, stress, sleep disturbances, skin symptoms such as prickling, burning sensations and rashes, muscle aches, nausea, nose bleeds, dizziness and heart palpitations. These reactions to the Wi-Fi emissions are a disability within the meaning of the ADA.

(2) Mother and Father have repeatedly asked defendant Fay to make reasonable accommodations for X’s disability, namely reasonable steps that would likely prevent exposing X to these emissions, or to reduce those emissions to a physically tolerable level. However Fay has repeatedly refused to do so or even to discuss how such an accommodation could be accomplished. Indeed Fay has taken a hostile attitude toward the parents’ concerns, instructing its nurse that legally it is not obligated to be concerned with these emissions, threatening Mother and Father that it will dismiss X from school if Mother and Father persist in expressing their concerns to anyone in the Fay community about the W-Fi system, and threatening to ban them from using the school email system, a system by which parents of Fay students can communicate with other parents and Fay teachers and staff.

(3) X's continued exposure to the high-density Wi-Fi emissions, without any attempt at a reasonable accommodation by Fay to avoid or minimize them, violates the ADA. Fay's refusal to attempt any accommodation is also a breach of the contract obligation by which Fay has undertaken to X, Mother, and Father, that X will be educated in a safe environment, and the specific contractual promise that his disability will be accommodated. Finally, exposing X to these harmful but avoidable emissions is negligence by Fay in that the failure to take reasonable measures to avoid exposing X to these dangerous emissions amounts to the lack of ordinary care towards the safety of X, a minor in Fay's care during the school day.

(4) This lawsuit seeks injunctive relief in the form of an order from this Court directing Fay to make the reasonable accommodations that could prevent the ongoing harm to X from Fay's Wi-Fi emissions because, unless such an order is issued, (i) X will lose his rights of access to Fay, a public accommodation within the meaning of the ADA, (ii) X will suffer the loss of the safe and non-injurious educational opportunity Mother and Father have paid for, X has worked for, and Fay has promised, and (iii) X, Mother and Father will continue to be denied their contract rights secured by the Fay Student and Parent Handbook, all of which will irreparably harm X in a manner not adequately compensated by monetary damages. This action also seeks damages for breach of contract and negligence, and for reasonable attorneys' fees as allowable under the ADA.

Jurisdiction and Venue

(5) This Court has subject matter jurisdiction in this case pursuant to 28 U.S.C. § 1331 because Count I, the claim brought under the ADA (Title 42 U.S.C. §12182(a)), is a claim arising under the laws of the United States.

(6) This Court has supplemental jurisdiction over the claims brought in Count II, for breach of contract, and Count III, for negligence, because these state claims are so related to Count I, which is within the original jurisdiction of this Court, that Counts II and III form part of the same case or controversy within the meaning of 28 U.S.C. §1367.

(7) Venue is proper in this District under 28 U.S.C. §1391 because, as more specifically alleged below, both defendants either reside or have their principal place of business within this District, and because a substantial part of the events giving rise to the claims alleged in this Complaint occurred and are continuing to occur within this District.

The Parties

(8) Plaintiff X resides within this District and sues herein under this fictitious name because he is a 12-year-old minor.

(9) Mother and Father are the parents of X and reside within this District. They sue as Mother and Father rather than by their own names because naming them would reveal the identity of X.

(10) Defendant Fay is a private educational institution incorporated under the laws of the Commonwealth of Massachusetts. It is operated by its Officers and a Board of Trustees, and has its campus and principal place of business in the Town of Southborough, Massachusetts, within this District. Fay is a place of public accommodation within the meaning of and subject to the ADA.

(11) Defendant Gustavson resides within this District. At all times referred to herein, Gustavson was the head of school at Fay. The actions of Gustavson, as described in this Complaint, were all undertaken within the course and scope of his duties at Fay

and while acting for and on behalf of Fay and, accordingly, Fay is bound by the actions of Gustavson.

Facts Relevant to all Counts

The Fay School

(12) Fay is a private, co-educational boarding school that offers both day school and boarding school programs for children from pre-kindergarten through the ninth grade.

(13) Fay is a “place of public accommodation” within the meaning of the ADA (42 U.S.C. §12181(7)(J)) and is therefore subject to the requirements of the ADA. As a result, Fay may not discriminate against any disabled student in any manner preventing that student from the full enjoyment of the services, facilities, privileges, or advantages offered by Fay. When any student has a disability but otherwise meets Fay’s academic requirements and complies with its rules of behavior, Fay must provide any reasonable accommodation to that disabled student that would allow that student to have the full and equal enjoyment of the goods, services, facilities, privileges, or advantages offered by Fay to all of its other students.

(14) Fay offers a day school program for children from pre-kindergarten through the ninth grade. Day students at Fay, such as X, come to the Fay campus weekdays during the school year (and they will sometimes be on campus for weekend events), attend their assigned classes in the classrooms chosen by Fay staff, participate in school functions offered outside of the classrooms, and then leave the campus in the late afternoon, returning home to their parents or guardians.

(15) Fay is responsible for day students' supervision, care and physical well-being while they are on its campus during the day. The students are under the control of Fay teachers and staff and are told what to do, how to conduct themselves, what classrooms to attend at particular times of the day, and where in those classrooms they should sit.

(16) Fay requires its students and their parents to sign and be bound by a Parent and Student Handbook (the "Handbook") which sets forth certain rights and obligations of the students, their parents, and Fay relating to student life at Fay. This Handbook is a contract between the parents, the students and Fay, and each is bound by its terms. Among other matters, this Handbook, by its wording, specifically obligates Fay to keep as a "core value . . . the wellness of mind, body and spirit of each student."

(17) Fay also promises in the Handbook that it will provide each student with "a safe and supportive environment," that "recognizes, respects, and celebrates the full range of human diversity," that it will help when students "are in physical need," that it will "recognize and celebrate . . . disabilities," that it "affirms the necessity of respect for individual differences," and that it will "maintain an environment in which all community members feel supported."

(18) In addition to those promises contained in paragraphs 16 and 17, above, the Fay Handbook assures all students and their parents that Fay will admit and educate any student otherwise qualifying for admission regardless of whether that student has "any disability that can be reasonably accommodated by the School." Fay also assures all students that they will be afforded:

all rights, privileges, programs, and activities generally accorded or made available to students at Fay School. The School does not discriminate on

the basis of such factors in the administration of its educational policies, employment policies, admissions policies, scholarship and loan programs, athletics, or other school administered programs.

By entering Fay, paying the required tuition, and signing the Tuition Contract that binds the parents and child to the terms of the Handbook, X, Mother and Father became entitled to all the rights conferred by the promises quoted in paragraphs 16 through 18, above, and Fay became and remains contractually bound to keep those promises.

X's Decision to Attend Fay

(19) X is a promising young man who has worked hard at his studies in order to maximize his opportunities to continue attending a worthwhile day school, thereby furthering his education and maximizing his opportunity to attend a good secondary school and, thereafter, a college or university of his choice. He is a student who, like most students, will live up to his academic potential in a physically safe and sympathetic school environment. He and his parents chose Fay over other educational opportunities in substantial part because of its promise of diversity and tolerance, its professed care for student wellness and fair treatment of all students, all of which, they believed, would maximize his chances for academic success and thus justify the sacrifice required in order to pay the private school tuition charged by Fay. In choosing to attend Fay, X and his Mother and Father gave up other educational opportunities in reliance on Fay's promises.

X's Performance at Fay

(20) From the time X arrived at Fay in 2009, and for the six academic years during which he has been attending Fay, X has been and remains recognized by both the Fay faculty and staff as a likeable, outgoing, and friendly young man. X has been and remains academically very capable and socially well adjusted. He had made very good

grades and has participated fully and positively within the Fay community. X observes all of the Fay School Rules and respects its Core Values. In all respects X meets and well exceeds the academic and social expectations and requirements imposed by Fay in its Handbook.

(21) X has now been in attendance at Fay for six years. On September 9, 2015, he will commence his seventh year at Fay as a seventh-grade student, having just three years remaining for the completion of Fay's nine-year educational program. He has become a fully participating member of the Fay community. He has six full years invested in the nine-year educational plan set by Fay. His friends and peers are at Fay, and he has made solid and important learning relationships with many of Fay's faculty and staff. Moreover, Mother and Father have invested many tens of thousands of dollars to secure X's ongoing place at Fay to enjoy the completion of all the benefits of its educational program. It would therefore be highly disruptive, both educationally and developmentally, to remove X at this time from Fay's program into which he has settled, and then to place him into an entirely different program, with a new faculty, leaving all his friendships and faculty relationships developed over six years.

EHS and the Symptoms Suffered by X

(22) Students at Fay are taught in classrooms in which the teachers and their students use computers as teaching aids. There are normally no more than 15 students in each class, and sometimes fewer students. The students each have or are loaned laptop computers (usually Chrome books or Surface tablets which are currently Wi-Fi enabled and used during class instruction, often times with the faculty and students using the internet to gain access to information concerning whatever topic is being taught.

Connection to the internet by either Ethernet cord or by Wi-Fi is therefore required but either is possible.

(23) Sometime in or around the spring term of 2013, Fay installed in its classrooms and in various other facilities a new Wi-Fi system, known as the “Aerohive Wi-Fi Network.” This is a high-density, industrial-capacity wireless system which, when operating, emits substantially greater radiofrequency/microwave emissions than the emissions coming from the more low-grade systems used in most homes and in certain other public places. Specifically, the Aerohive Network doubled the prior emissions in Fay classrooms from 2.5 GHz to 5 GHz.¹ Exposure to the emissions from the high-density Wi-Fi now used by Fay is dangerous to persons having an aggravated sensitivity to those emissions, as will be explained in more detail further below.

(24) Sometime after the above-described Wi-Fi system was installed, X started to experience occasional, troubling symptoms, which he reported to his parents when he came home from Fay at the end of the school day. These included headaches, itchy skin, and rashes. These symptoms receded after X had been home for several hours. Moreover, X had no such symptoms over the weekends, when he was not subjected to any such Wi-Fi system. These symptoms continued on and off for the remainder of the 2013 spring term but then abated at the beginning of the summer, when X was no longer in Fay classrooms.

(25) Thereafter, when X returned to the Fay campus in September of 2013 for the 2013/2014 academic year, and attended classes in the rooms in which the high-density Wi-Fi was used, X's symptoms experienced the preceding spring slowly returned.

¹ GHz is an abbreviation for Gigahertz which is a unit of measurement for electromagnetic wave frequencies equal to 1,000,000,000 Hz.

They became more pronounced as the 2014 academic year progressed, with X having to go to the infirmary with headaches, nose bleeds, dizziness, chest pains and nausea. He was frequently discharged from school for the day, early. More and more often he had to leave school early. Once home, as had been the case the spring before, X's symptoms abated over the course of the afternoon and evening, but would return the following day, if it was a school day. As had also been the case the academic year before, when Fay was not in session, on weekends and over holidays, X did not experience the intense symptoms, which only returned when he had been in the Fay classrooms.

(26) Mother and Father initially did not know what was causing these symptoms, except that they noticed the obvious pattern -- that the intense symptoms came when X had been at Fay and in its classrooms.

(27) X's symptoms intensified as the 2014 spring term progressed. Because of the above-described pattern linking X's symptoms to his physical presence on the Fay school grounds and in the affected classrooms, X's Mother and Father commenced researching potential causes related to the Fay classroom environment. During that spring, Mother and Father had X medically examined for many potential causes and the physicians involved found no medical cause for these symptoms among those for which he was being tested, which did not include EHS, as it was not yet suspected.

(28) Then, on April 11, 2014, Mother went to school to pick up X from the nurse's office and while there discussed the frequency of these symptoms with her. The nurse indicated that various children in the same classes as X was attending were reporting to the Fay Health Center with similar symptoms. This led the mother to a study of the Aerohive Network Wi-Fi system being used in the Fay classrooms and to a general

study of the possibility that X's symptoms were caused by the high-density Wi-Fi emissions emitted by that system.

(29) Mother concluded, after much research and study, that Fay's Wi-Fi was the probable cause of X's symptoms because X had a sensitivity to such emissions, called EHS. EHS, as will be shown next below, is a syndrome that affects numerous individuals when exposed to certain electromagnetic fields, including high density Wi-Fi emissions such as in the system used by Fay.

Electromagnetic Fields and EHS

(30) EHS, Electromagnetic Hypersensitivity Syndrome, is the term that has been adopted by various experts worldwide to describe the reaction of those who suffer adverse reactions to the effects of electromagnetic fields, such as Wi-Fi. This is not the speculative condition Fay has repeatedly asserted as a justification for its refusal to attempt any accommodation to X's symptoms. Fay has simply ignored the science to the point where it has refused to even attempt any accommodation or even to meet to confer on that subject. The science involved is certainly compelling enough to warrant such an accommodation by Fay.

(31) EHS has been recognized as a disability of those who suffer its effects. As reported in research on Indoor Environmental Quality by the United States Access Board², "electromagnetic sensitivities may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual's major life activities." Access

² The United States Access Board is an independent federal agency created by Congress in 1973 to ensure access to federal facilities by the disabled under the Americans with Disabilities Act. *See* www.access-board.gov.

Board, Background for Final Rule, Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities. Further,

The presence of electromagnetic fields from office equipment and other sources is a barrier for those with electromagnetic sensitivities

Measures taken to improve indoor environmental quality, such as reducing air pollution, noise and electromagnetic fields in buildings, will increase their accessibility for people with asthma and/or electromagnetic sensitivities, as well as provide a more healthful environment for all building occupants.

Id.

(32) Symptoms of those who suffer from EHS include a higher risk of developing headaches, increases in heart rate, arrhythmias, changes in blood pressure, dizziness, and sleep deprivation, among others. *See*, Environmental Health Trust,³ *Best Practices with Children and Wireless Radiation - a Review of Science and Global Advisories*, 4-5 (July 2015). Similarly, in an article prepared by Norm Alster through the Edmond J. Safra Center for Ethics at Harvard University, he cites a study conducted in 2013 by Indian scientists S. Sivani and D. Sudarsanam in which they state: “Based on current available literature, it is justified to conclude that . . . [electromagnetic fields] . . . can change neurotransmitter functions, blood-brain barrier, morphology, electrophysiology, cellular metabolism, calcium efflux, and gene and protein expression in certain types of cells even at lower intensities.” Norm Alster, *Captured Agency: How*

³ The Environmental Health Trust is an IRC 501(c) (3) organization that educates individuals, health professionals and communities about controllable environmental health risks and policy changes needed to reduce those risks. Past projects include: local and national campaigns to ban smoking and asbestos, exploring what factors lie behind puzzlingly high rates of fibroid tumors, breast cancer and endometriosis in young African American women, and building environmental wellness programs in Wyoming and Pennsylvania to address the environmental impacts of energy development on buildings and interior environments. *See* <http://ehtrust.org>.

the Federal Communications Commission is Dominated by the Industries It Presumably Regulates, 11 (Edmond J. Safra Center for Ethics, Harvard University, 2015)

(<http://www.ethics.harvard.edu>).

(33) The above-quoted studies, along with many others, have prompted many governments to address the effect that electromagnetic fields have on humans, most specifically on children. In an appeal made to the United Nations by 190 scientists earlier in 2015, Martin Blank, Ph.D., of Columbia University, stated:

International exposure guidelines for electromagnetic fields must be strengthened to reflect the reality of their impact on our bodies, especially on our DNA. The time to deal with the harmful biological and health effects is long overdue. We must reduce exposure by establishing more protective guidelines.

Business Wire, *International Scientists Appeal to U.N. to Protect Humans and Wildlife from Electromagnetic Fields and Wireless Technology* (May 11, 2015).

(34) Although the ADA Access Board has not created a list of disabilities, the Board is responsible for establishing building guidelines that adhere to ADA standards. In creating these guidelines, the Board takes into consideration those diagnoses that could be considered disabilities under the ADA definition. It noted: “According to the Americans with Disabilities Act and other disability laws, public and commercial buildings are required to provide reasonable accommodations for those disabled by chemical and/or electromagnetic sensitivities.” *See* Access Board Guidelines, *supra*.

(35) The Environmental Health Trust reports a long list of countries that have addressed electromagnetic exposure. According to EHT, France enacted legislation in 2015 banning the use of Wi-Fi in elementary schools; in 2013, Ghent, a municipality in Belgium, banned the use of Wi-Fi in public spaces that cater to children age 0-3 years;

Spain voted to urge the removal of Wi-Fi in schools; and countries with as differing cultures and political leanings as Switzerland, Germany, Austria, and Russia have recommended that Wi-Fi not be used in schools, and, as alternatives, that schools use Ethernet or fiberoptic connections. See, Environmental Health Trust, *Best Practices*, *supra*, at 13-16. The organization references similar efforts in the United States. For example, Suffolk County in New York began requiring in 2014 that public buildings using a wireless router place a label outside to alert the public of its use upon entering the building. *Id* at 16.

(36) The federal courts have also recognized this syndrome, noting that “some individuals suffer from a condition known as EHS which requires them to avoid exposure to sources of electromagnetic radiation.” This case law will be cited further in the Memorandum of Points and Authorities accompanying plaintiffs’ motion for a preliminary injunction. EHS is a disability within the meaning of the ADA because when it effects an individual it substantially limits one or more major life activity, including learning, reading, and concentrating, all of which are included within major life activities under the ADA, Title 42 U.S.C. § 12102(2)(A).

Fay’s Stubborn Refusal to Attempt Any Accommodation

(37) Because of the similarity of X's symptoms to those described in the EHS studies referenced above, among others, and because Mother and Father learned that the Wi-Fi system installed by Fay was an industrial-capacity system with high density Wi-Fi emissions, Mother and Father sought to work with Fay to find an accommodation that would allow X to continue at Fay without suffering the symptoms described above. Others concerned with this problem have brought to the attention of Fay various writings

describing EHS and the concern of its health impacts on children. In the summer of 2014, The Fay Board of Trustees received four letters⁴ from experts in electromagnetic fields and their effects in schools on students when these fields are present in high density. These letters all expressed concern that some students at the Fay school were experiencing the symptoms of EHS and urged the school's board to reconsider its choice of using Wi-Fi within the school, unless done with some attempt at accommodation. In his letter, Dr. Carpenter states:

. . . while acute electrosensitivity symptoms, like the ones I understand your students are experiencing, are of course of great concern (such as cognitive effects impairing attention, memory, energy levels and concentration; cardiac irregularities, including in children; or headaches or other symptoms in students wearing braces), the full effects for society from chronic and cumulative exposures are not known at this time. Given what we do know, however, including the DNA effects, I must, as a public health physician, advise minimizing these exposures as much as possible. Indications are that cell phones and wireless technologies may turn out to be a serious public health issue, comparable to tobacco, asbestos, DDT, PCBs, pesticides and lead paint, or possibly worse given the ubiquitous nature of the exposures.

[See, Exhibit A.]

(38) The concerns and advice expressed in Dr. Carpenter's letter were echoed by the three other experts who sent letters (see Exhibit A) to the school's Board, as well as by the studies and reports referred to further above, and through other materials publicly available.

⁴ See, the letters collectively annexed as Exhibit "A": Letter dated July 28, 2014 from Dr. David O. Carpenter, Director, Institute for Health and the Environment, University of Albany; Letter dated July 25, 2014 from Martin Blank, Ph.D., leading expert on the effects of electromagnetic fields on DNA and biology; Letter dated July 16, 2014 from Stephen Sinatra, M.D., co-founder of Doctors for Safer Schools; Letter dated July 24, 2014, from Olle Johansson, Associate Professor of neuroscience at Karolinska Institute, in Stockholm, Sweden.

(39) After learning of EHS, Mother and Father also had X examined by Dr. Jeanne Hubbuch, a physician to whom they were referred by environmental health specialists. Dr. Hubbuch specifically determined that X suffered from EHS as a result of exposure to the Fay Wi-Fi system. In a letter summarizing her findings, Dr. Hubbuch first noted that other causes of these symptoms had been ruled out by prior examinations, and wrote as follows:

Evaluation by X's pediatrician has not revealed any significant problems. He has a history of seasonal allergies and immediate IgE reactions to tree nuts and peanuts. He has [an unrelated condition.] None of these conditions explain his current symptom pattern. It is known that exposure to WIFI can have cellular effects. The complete extent of these effects on people is still unknown. But it is clear that children and pregnant women are at the highest risk. This is due to the brain tissue being more absorbent, their skulls are thinner and their relative size is small. There are no studies that show that exposure to these two vulnerable groups is safe. We do not know the long term effects of microwave radiation on students and teachers. According to reports from the nurse at The Fay School, there has been an increase over the last year of students complaining of similar symptoms, *i.e.* headaches, dizziness, nausea and chest pressure. A good reference for this is the website of Environmental Health Trust (www.ehtrust.org).

It is my opinion, based on my medical training and experience, especially my training in Environmental Medicine that [X] is being adversely affected by prolonged exposure to WIFI at school. Due to biochemical individuality some people are more susceptible to these effects than others. This should be considered seriously since subtle changes are occurring for all even if it is apparent in only a few.

I agree that the precautionary principle should apply here. Many countries have adopted this principle when approaching young children and have adopted stricter regulations to reduce exposure to wireless radiation.

If [X] continues to be exposed on a regular basis to WIFI, it is possible that his intermittent symptoms will become more constant and interfere with his school performance.

[See, Exhibit "B," Letter from Dr. Jeanne Hubbuch, dated August 7, 2014] Dr.

Hubbuch's letter was sent to Fay in the summer of 2014.

(40) Based on all of all of the above, Mother and Father sought to discuss with Fay the possible accommodations that Fay could attempt in order to determine if any accommodation would allow X, otherwise fully qualified and capable of meeting the academic and behavioral standards set by Fay for its students, to continue his education at Fay. Specifically, they have sought to meet and confer with Fay, to be shown the specific classrooms in which X would be taking classes in the spring of 2014, and later, when this request was not met, to be shown the specific classrooms where he would be taking classes this coming fall, commencing on September 9, 2015. From this requested walkthrough and meeting, the parents have hoped to determine, as they believe could be easily accomplished, if Fay would arrange, at the expense of Mother and Father, either (1) for Ethernet cords to be used in those classes instead of Wi-Fi, when X is in attendance,⁵ or (2) to determine if the Wi-Fi emissions could be turned down while X is in the classroom without losing their effectiveness, or (3) if there is a part of the classroom where the emissions are less strong. One or more of these arrangements should be easily accomplished in a manner not unreasonably disruptive to the educational activities occurring in the classroom and, indeed, in other locations where industrial Wi-Fi is used on Fay's campus. This walkthrough with these potential solutions have been

⁵ This Ethernet option has two separate possibilities. The first is to have Ethernet capability for all of the desks in the classroom. This would allow for the complete shut off of the Wi-Fi in the affected classroom. Another possibility would be to provide an Ethernet for the desk at which X is sitting. This by itself would allow for a substantial reduction of the Wi-Fi emissions to which X is exposed because a substantial part of those emissions come not from the Wi-Fi transmitter found somewhere in the classroom, which emanates throughout the classroom, but comes from the communication from the individual laptops back to that transmitter. That is indeed the more intense radiation. Allowing Ethernet to X's laptop alone would stop the need for those Wi-Fi emissions, the ones closest to him. If this option were tried along with placing X in the part of the classroom receiving the least intense emissions from the general Wi-Fi transmitter found in the classroom, there could well be an even greater avoidance of Wi-Fi emissions.

proposed to Fay and Fay has declined to allow the walkthrough or participate in any discussions about these or other alternatives.

(41) Instead, Gustavson, and others at Fay or speaking on its behalf and under the direction of Gustavson, have insisted that Fay's Wi-Fi system meets the requirements set by the Federal Communication Commission ("FCC") radiofrequency radiation guidelines adopted in 1996, as these had been recommended by the Environmental Protection Agency ("EPA"). They have refused to reconsider that position despite the fact that in 2002, the EPA itself clarified, by letter annexed hereto as Exhibit "C," that these guidelines were only applicable to thermal emissions and "do not apply to chronic, nonthermal exposure situations." (*Id.*, page 1.) Wi-Fi emissions have a non-thermal effect on the human body, and the EPA Guidelines were addressing thermal exposure. That publication goes on to explain that the FCC Guidelines "are believed to protect against injury that may be caused by acute exposures that result in tissue heating or electric shock and burn." *Id.* They have and the EPA states that they have no application to Wi-Fi emissions.

(42) Despite the stated inapplicability of these thermal guidelines by the agency issuing them now 19 years ago, when Wi-Fi was not even a factor in the educational systems in this country, and the fact that Fay has been repeatedly sent a copy of the EPA publication, Exhibit C, stating's its earlier guideline's inapplicability to Wi-Fi, Fay has stubbornly clung to its position that these guidelines are a complete justification for its refusal to take any action to accommodate X's disability or even to have any concern over the day-in, day-out exposure of all its students to the high-density, industrial Wi-Fi

emissions coming from its Wi-Fi network, despite the warnings and the reports it has received and the many more that are readily available to it.

(43) Fay and Gustavson have also insisted that Mother and Father not speak to various relevant personnel on campus about this problem except one designated individual, including not speaking to the Fay school nurse. They have threatened to refuse readmission of X to Fay if the parents discuss this problem with anyone else in the Fay community. Fay has also insisted that despite the opinion obtained by Dr. Hubbuch (Exhibit B) to the effect that X has EHS that is being triggered by the Fay Wi-Fi, that X be seen by “specialists.” Mother and Father, while believing that the EHS diagnosis already made by Dr. Hubbuch was sufficient, nonetheless arranged for the agreed-upon specialist in environmental health to examine X in the hopes that this would finally, without court intervention, cause Fay to meet and confer about possible accommodations. A report of that examination has been provided to Fay.

(44) That physician, by whom Fay insisted X be seen, for what Fay said would be a thorough examination by a specialist, saw X on June 29, 2015. Yet that physician conducted no tests. He only spoke to X for not more than 10 minutes, after speaking with Mother and Father. He then pronounced that in his view there was not enough study yet done to link Wi-Fi emissions to symptoms such as those X is experiencing at Fay School. This doctor stated in essence that he does not believe in EHS. Yet he made no alternate diagnosis. In the end, however, he recommended that X's parents and Fay work closely together to ensure that X has the optimal learning environment at Fay for the upcoming school year.

(45) Since the report of this physician was made and sent to Fay, on June 29, 2015, Mother and Father have reiterated their long-held request that Fay meet and confer with Mother and Father, examine the classrooms in which X will be seated in the upcoming year, and determine whether there is a way to make them Wi-Fi free at least as relates to X, or to minimize his exposure to Wi-Fi. Fay has responded that X must also be seen by other specialists before any such accommodation can be discussed. Yet when the Mother of X contacted those specialists' office, she was informed by the nurse practitioner and manager that they are not familiar with EHS, and had never heard of it.

(46) In summary, plaintiffs have attempted to work with Fay not only as the ADA requires of Fay, the Fay Handbook provides, but also as Fay's own recommended physician himself recommended. One with whom she met did a cursory and quick exam and then said that he did not believe in the condition. The nurse manager for the other two physicians chosen by Fay likewise announced lack of knowledge of the EHS condition. Despite the fact that they did not believe in EHS the one "specialist" with whom the Mother, Father, and X met did recommend that Fay work with the parents to "to ensure that X has the optimal learning environment in 7th grade."

(47) Mother brought this recommendation to the attention of Fay, but Fay has refused to make any accommodation or to discuss any possible accommodations, instead stating again that X should be seen by the "specialists" that they recommended, even though they are not familiar with EHS.

(48) Under the requirements of the ADA, when a disability affects a substantial life function, such as leaning, or concentration, or a student's safety at a school, the student or parents involved may request that the school make reasonable

accommodations to allow the student to partake in the full enjoyment of the services, facilities, privileges and advantages offered by the school, provided that the requested accommodation does not require the school to make a substantial modification of its programs or its academic standards. The school must then offer a reasonable accommodation. In X's case, this means a reasonable accommodation to his EHS if doing so can be accomplished without disrupting Fay's program or academic standards. X's Mother and Father have offered to work with Fay, even at their own expense, to examine the classroom Wi-Fi system, and to attempt installation of a reasonable alternative to their industrial capacity Wi-Fi for use when X is in attendance. Fay has refused to discuss the matter or allow a visit for such purposes to the classrooms. To date, Fay and Gustavson, who controls Fay's decision making on this issue, have not been willing to meet for a substantive discussion on the matter, much less walk-through of the classroom with persons knowledgeable about reducing Wi-Fi emissions or replacing Wi-Fi with Ethernet cords for use when X is in attendance, all as more particularly described in paragraph 40, above, all of which have been suggested by Mother and Father to Fay, ~~which has refused~~ implementation of any of these.

(49) At a hearing or trial on this matter, plaintiffs will show that substituting Wi-Fi with Ethernet cords for use when X is in attendance in a classroom is a reasonable accommodation that the parents are willing to fund. The internet system can be altered at low cost and low disruption so that it can, like many systems, alternate between cordless Wi-Fi and Ethernet cord methods for obtaining access to the internet during classes where such access is desired. There are at most 15 students per class and one or possible two faculty members. Installing the Ethernet cords to accommodate that number of

persons would require not much money, time or disruption, particularly if done before the upcoming school year commences on September 9, 2015. Moreover, if, for some reason, this alternate internet access method is not possible, something that cannot be determined until the classrooms are examined, Fay, Gustavson, and Mother and Father should be able to discuss and potentially agree upon other possible methods of accommodating X, such as one Ethernet cord for him, or a reduction of the Wi-Fi emissions, or both, all as described more particularly in paragraph 40 hereof.

(50) Mother and Father, on behalf of X, have been ready and willing to meet with Gustavson or any party to whom he delegates the decision-making for Fay on the issue of how to accommodate X.

(51) The evidence that will be produced at a hearing or at trial will show that it is very probable that X has EHS caused by the high-density Wi-Fi emissions from the Fay Wi-Fi system and devices. In this circumstance, Fay is required by the ADA to attempt reasonable accommodations. This is particularly so since the parents have taken X to many doctors and subjected him to many tests, after which one doctor has diagnosed X with EHS and determined in her written report that it was being triggered by the Wi-Fi emissions at Fay. No other doctor has made any alternate diagnosis. X's symptoms come when he has been in the Fay classrooms and abate when he leaves.

(52) X should be accommodated by the relief sought herein. Fay should work with X's parents to install an alternate system for use when X is in the classroom, or attempt in good faith by some alternate way to design a classroom situation so that X will not be subjected to the same emissions that are the very probable cause of his symptoms. Since Fay and Gustavson have been unwilling to accommodate X, as required by law,

and at the least provide this relief to determine whether it will solve the problem, they should be ordered by this Court to do so.

(53) Unless such an accommodation is made, X will have to withdraw from Fay and will, as a result, suffer injury and loss, including (i) loss of the enjoyment of the last three of his nine years at Fay, (ii) disruption of his educational plan now six years in the making and three years from completion, (iii) loss of the relationships he has developed with various of the Fay faculty and with it the benefits of those relationships in guiding and teaching X as the academic curriculum becomes more challenging in the later academic years, (iv) loss of his peer relationships, developed over the last six years, just as he heads into his adolescent years where those relationships are more valuable to his personal and healthy growth, (v) loss of the opportunity to graduate from Fay and receive a diploma certifying the same, and (vi) loss of the enjoyment and companionship of his peers at Fay and the shared sense of accomplishment that earning a diploma with them will provide. Moreover, instead of all these benefits just enumerated, X will find himself abruptly placed in an alternate educational program completely new to him and to which he will have to adjust without any support from his long-time peers, or the faculty and staff at the Fay school who have counseled him in the past. All of these losses are irreparable injuries that cannot be fully compensated by any award of money damages, and thus warrant equitable relief in the form of an injunction compelling Fay to provide an alternate internet access system. This relief is warranted not only under the provisions of the ADA, but also under Massachusetts contract law.

COUNT I
(Violation of the Americans with Disabilities Act)

(54) X repeats and realleges each of the above stated allegations set forth in paragraphs 1 through 53, as if separately pleaded herein in their entirety.

(55) The failure to accommodate X by attempting any alternate internet access system that avoids the use of high-density Wi-Fi emissions, or to work in good faith to find some other accommodation, has been and continues to be a violation of the ADA because it is a failure to make or attempt a reasonable accommodation to X's disability. Plaintiffs therefore seek injunctive relief as specified in the Proposed Order that will accompany the Motion for a Preliminary Injunction to be filed. The relief sought should be granted preliminarily and permanently. Plaintiffs also seek to recover the reasonable attorneys' fees allowable under the ADA.

COUNT II
(Damages for Breach of Contract)

(56) X repeats and realleges each and every allegation set forth in paragraphs 1 through 53, as if separately pleaded herein in their entirety.

(57) The actions by Fay as described herein have breached the contractual promises Fay made to X, Mother and Father as stated and undertaken in the Handbook. Specifically, Fay promised, as more particularly alleged in paragraphs 16 through 18 hereof, that it would accommodate "any disability that can be reasonably accommodated by the School," working to allow students with such disabilities "all rights, privileges, programs, and activities generally accorded or made available to students at Fay School." It has not kept that promise, or even attempted to do so.

(58) All plaintiffs have been damaged as a result of this breach in amounts that will be proved at trial.

**COUNT III
(Damages for Negligence)**

(59) X repeats and realleges each and every allegation set forth in paragraphs 1 through 53, as if separately pleaded herein in their entirety.

(60) By Fay's failure to have made any accommodation to X's EHS while X is in the custody of Fay and under its control, Fay has failed to exercise ordinary care for X's safety. This amounts to negligence and has proximately damaged X physically and deprived him of access to his educational experience on many days during the last school year.

(61) X has been damaged as a result of this negligence in amounts that will be proved at trial.

WHEREFORE, X, Mother and Father pray for judgment as follows:

- (A) For a preliminary and permanent injunction ordering Fay to accommodate X's disability by providing for X an alternate, non-Wi-Fi access to the internet in classes and other locations where he is being taught by use of internet access, with such wireless system disabled temporarily when X is present, or to meet and confer in good faith with Mother and Father to find some alternate manner by which these Wi-Fi emissions can be avoided by X in classrooms when X is in attendance, such as those specified in paragraph 40, hereof;
- (B) For damages in the amount to be proved at trial;
- (C) For costs of suit and attorneys' fees; and,
- (D) For such other relief as this Court deems just.

DEMAND FOR TRIAL BY JURY

Pursuant to Rule 38, Federal Rules of Civil Procedure, Plaintiff X,
Mother, and Father, demand trial by jury on all issues so triable.

Dated: August 12, 2015

Respectfully submitted,
/s/ John J.E. Markham, II
John J.E. Markham, II
(BBO No. 638579)
MARKHAM & READ
One Commercial Wharf West
Boston, Massachusetts 02110
Tel: (617) 523-6329
Fax: (617) 742-8604
jmarkham@markhamread.com
Attorney for the Plaintiffs

Verification of the Complaint

**[A verification with the full
names of the Declarants will be filed under seal]**

Mother (who signs herein to preserve the anonymity of her minor son) declares under penalty of perjury that she has read the foregoing complaint and believes that its contents are true to the best of her memory and belief.

Executed this 11th day of August, 2015, in Suffolk County, Massachusetts



Mother⁵

⁵ Mother has also executed a duplicate verification using her full name. It will be the subject of a motion to file under seal so that it can be filed without disclosing the identity of [REDACTED] the minor child, which would be disclosed if the mother's true name were publicly disclosed.

EXHIBIT A



Institute for Health and the Environment



July 28, 2014

Board of Trustees
Fay School
48 Main Street
Southborough, MA 01772

Re: Advisability of WiFi in schools

Dear Sirs/Madams:

This is concerning potential adverse health effects associated with exposure to radiofrequency/microwave (RF/MW) radiation, specifically that from wireless routers and wireless computers. I am writing to express concern that students at your school are experiencing electrosensitivity symptoms from these technologies.

I am a public health physician who has been involved in issues related to electromagnetic fields (EMFs) for several decades. I served as the Executive Secretary for the New York Powerline Project in the 1980s, a program of research that showed that children living in homes with elevated magnetic fields coming from powerlines suffered from an elevated risk of developing leukemia. I served as Director of the Wadsworth Laboratory of the New York State Department of Health, as well as Dean of the School of Public Health at the University at Albany/SUNY. I have edited two books on effects of EMFs, ranging from low frequency fields to radiofrequency/ microwave radiation, or the kind emitted by WiFi routers, cell phones, neighborhood antennas and wireless computer equipment. I served as the co-editor of the BioInitiative Report 2012 (Bioinitiative.org), a comprehensive review of the literature showing biological effects at non-thermal levels of exposure, much of which has since been published in the peer-reviewed journal, *Pathophysiology* (attached). Also, I served on the President's Cancer Panel that examined radiation exposures as they relate to cancer risk, in 2009, and a report from that testimony is also attached. Thus, this is a subject which I know well, and one on which I take a public health approach rooted in the fundamental principle of the need to protect against risk of disease, even when one may not have all the information that would be desirable.

There is clear and strong evidence that intensive use of cell phones increases the risk of brain cancer, tumors of the auditory nerve and cancer of the parotid gland, the salivary gland in the cheek by the ear. The evidence for this conclusion is detailed in the attached publications. The WHO's International Agency for Research on Cancer has also classified the radiation from both cell phones and WiFi as a Class 2B "Possible Carcinogen" (2011). WiFi uses similar radio-frequency radiation as cell phones (in the 1.8 to 5.0 GHz range). The difference between a cell phone and a WiFi environment, however, is that while the cell phone is used only intermittently, and at higher power, a WiFi environment is continuous, and transmitting even when not being used. In addition, WiFi transmitters are indoors, where people (and in this case, children) may be very close by, or certainly close to devices using the WiFi, such as wireless computers, iPads and smart boards, the radiation from which can be intolerable to sensitive people.

Furthermore, commercial routers, like those in schools, operate at much higher wattage than consumer routers. They are designed to penetrate through materials like cement, wood and brick, to handle dozens to hundreds of users, and to reach into outdoor areas, so industrial grade routers are of much greater concern.

An additional consideration to appreciate is that it is not only the power of wireless radiation that causes biological dysregulation, but the frequencies, pulsing, amplitude, and the quantity and kind of information being transmitted that can have effects as well. These 'non-thermal effects' have been shown in thousands of studies to be biologically active, and may be more important than the effects from the power. Thus, while a router may be in the ceiling, or not right next to a student, teacher or administrator, the known biological and health effects, particularly the non-thermal ones, are still very much occurring.

Finally, while acute electrosensitivity symptoms, like the ones I understand your students are experiencing, are of course of great concern (such as cognitive effects impairing attention, memory, energy levels, and concentration; cardiac irregularities, including in children; or, headaches or other symptoms in students wearing braces), the full effects for society from chronic and cumulative exposures are not known at this time. Given what we do know, however, including the DNA effects, I must, as a public health physician, advise minimizing these exposures as much as possible. Indications are that cell phones and wireless technologies may turn out to be a serious public health issue, comparable to tobacco, asbestos, DDT, PCBs, pesticides and lead paint, or possibly worse given the ubiquitous nature of the exposures. While unfortunately we must wait for federal regulation to catch up with the science, the prudent thing to do in the interim would be to exercise precaution at every opportunity.

Computers and the world-wide web have tremendous value in education, but the value also depends on how these are used in numerous respects. As wired internet connections do not pose radiation risk, are readily available, are faster and more secure than WiFi, and are now even available for certain tablets, I highly recommend you factor the risks I have described into your technology planning. At the same time, I would urge you to take the complaints of your students very seriously, and potentially involve the school nurse and teachers in helping to assess the extent of the electrosensitivity problem among students at the school.

An excellent reference on the EMF and electrosensitivity science is "Electrosensitivity and Electrohypersensitivity—A Summary" (2013) authored by M.J. Bevington and available through Electrosensitivity-U.K. (www.es-uk.info/)

If I can be of further help, please do not hesitate to call.

Yours sincerely,



David O. Carpenter, M.D.
Director, Institute for Health and the Environment
University at Albany

Enclosures

Martin Blank, PhD
Department of Physiology and Cellular Biophysics
Columbia University
New York, NY 10032

July 25, 2014

Mr. Thomas McKean, President, Board of Trustees
Mr. James Shay, President-Elect, Board of Trustees
Fay School
48 Main Street
Southborough, MA01772

To the Board of Trustees,

It has been brought to my attention that school children have become symptomatic at your school after installation of WiFi. I am writing to express my concern and to encourage you to review the independent science on this matter.

I can say with conviction, in light of the science, and in particular in light of the cellular and DNA science, which has been my focus at Columbia University for several decades, putting radiating antennas in schools (and in close proximity to developing children) is an uninformed choice. Assurances that the antennas are within 'FCC guidelines' is meaningless today, given that it is now widely understood that the methodology used to assess exposure levels only accounts for one type of risk from antennas, the thermal effect from the power, not the other known risks, such as non-thermal frequencies, pulsing, signal characteristics, etc. They fail also to consider multiple simultaneous exposures from a variety of sources in the environment, and cumulative exposures over a lifetime. Compliance with FCC guidelines, thus, unfortunately, is not in any way an assurance of safety today, as the guidelines are fundamentally flawed. Until the guidelines and advisories in the U.S. are updated, the intelligent thing for your Board of Trustees to do is to exercise the Precautionary Principle and hard wire all internet connections.

I know this might be disappointing to hear, as I understand you have invested in the WiFi. But there is no amount of money that could justify the added physiological stress from wireless antenna radiation and its many consequences, most in particular for children. Our research has shown that the cellular stress response, a protective reaction that is indicative of cellular damage, occurs at levels that are deemed 'safe'. Many other harmful reactions have been reported, such as the impairment of DNA processes that can account for the observed increased risk of cancer, as well as the potential cognitive decline, and sleep effects that may be due to impairment of the blood brain barrier. The DNA effects are of particular concern for future generations, an area of research that is just beginning to raise alarms. As with other environmental toxic exposures, children are far more vulnerable than adults, and they will have longer lifetimes of exposure.

The science showing reasons for concern about the microwave radiation emitted by antennas is abundant and there will be a day of reckoning. As I explain in my recent book,

Overpowered, The Precautionary Principle instructs us that in the face of serious threats, a lack of scientific 'certainty' never justifies inaction. The changes occurring at the molecular level, and known associations with many diseases, are sufficient at this time to give us pause and to recommend minimizing exposures to these fields, in our homes, schools, neighborhoods and workplaces. There is significant potential for risk, and to very large numbers of people, and the effects are occurring nonetheless whether or not we are noticing them.

I recommend you hardwire the internet connections at your school, and also encourage students to use hard wired connections at home for internet access, as well as for all computer equipment connections and voice communications.

Sincerely yours,



Martin Blank, PhD
mb32@columbia.edu,



Martin Blank, PhD, Special Lecturer and (ret.) Associate Professor, Columbia University, Department of Physiology and Cellular Biophysics. Dr. Blank is a leading expert in the effects of electromagnetic fields on DNA and biology, and Past President of the Bioelectromagnetics Society. He holds two PhDs, in physical chemistry and in colloid science, an interdisciplinary field involving chemistry, physics and nanoscience. Dr. Blank was author of the BioInitiative Report's section on the impact of electromagnetic fields on Stress Proteins; Editor of the journal *Pathophysiology's* special issue on Electromagnetic Fields (2009); and co-author of "Electromagnetic fields and health: DNA based dosimetry" (2012), which recommends a new way of assessing the biological impact of electromagnetic fields across the spectrum, using DNA. Dr. Blank's book, *"Overpowered—What Science Tells Us About the Dangers of Cell Phones and Other WiFi-Age Devices"*, was published in 2014.



STEPHEN T. SINATRA M.D., F.A.C.C.

F.A.C.N., C.N.S., C.B.T.,

Integrative Metabolic Cardiology

July 16, 2014

Chairman and Trustees
Fay School
48 Main Street
Southborough, MA 01772

RE: Wi-Fi in Schools

Dear Chairman and Trustees:

I am writing this letter on behalf of concerned parents of children who are attending schools with Wi-Fi technology. I'm a cardiologist and co-founder of Doctors for Safer Schools, an organization dedicated to informing teachers, parents and superintendents about the uncertainty and possible environmental health hazards of Wi-Fi technologies.

The heart is a delicate and complex electromagnetic organ that can be adversely affected by exogenous signals from wireless technology and microwave radiation. For this reason it is unwise to expose students and teachers to Wi-Fi radiation for internet access, especially when safer alternative wired options are available. Children are particularly vulnerable to this radiation and the incidents of cardiovascular events including sudden cardiac arrest, seems to be increasing, especially among young athletes (up to the age of 19). In some cases this is due to undetected heart defects, blunt trauma to the heart in contact sports, and heat stress during strenuous exercise, but in instances these irregularities may be exacerbated by or due to microwave signals interfering with the autonomic nervous system that regulates the heart.

I know this because I am a board certified cardiologist and have been a Fellow of the American College of Cardiology since 1977. At the Manchester Memorial Hospital in Connecticut, I served in several roles, including Chief of Cardiology, Director of Cardiac Rehabilitation, and Director of Medical Education.

In both Canada and the United States a large number of students are complaining that they feel unwell in classrooms that have Wi-Fi technology. These complaints have been investigated and what emerges is the following:

1. Symptoms common among these students include headaches, dizziness, nausea, feeling faint, pulsing sensations or pressure in the head, chest pain or pressure, difficulty

concentrating, weakness, fatigue, and a racing or irregular heart accompanied by feelings of anxiety. These symptoms may seem diverse but they indicate autonomic dystonia or dysfunction of the autonomic nervous system.

2. Symptoms do not appear in parts of the school that do not have this technology (Wi-Fi-free portables) and they do not appear in homes that do not have wireless technology.

3. We know that the heart is sensitive to and can be adversely affected by the same frequency used for Wi-Fi (2.4 GHz) at levels a fraction of federal guidelines (less than 1%) and at levels that have been recorded in two Ontario schools with Wi-Fi technology.

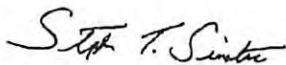
4. The incidence of sudden cardiac arrests (SCA) among young athletes is increasing and doctors don't know why. In one small Ontario community, the number of students experiencing SCA is disturbingly high. Whether WiFi and nearby cell phone antennas exacerbate SCA needs to be investigated further before students are subjected to these fields.

In conclusion it is unwise to install wireless technology (WiFi) in schools. We do not know what the long-term effects of low-level microwave radiation are on students and teachers. The safety of this technology on children has not been tested and I would advise that you follow the precautionary principle that states the following:

"In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation."
(Rio Conference 1992).

The principle implies that we have a social responsibility to protect the public from exposure to harm, when scientific investigations have found a plausible risk. That "plausible risk" exists for microwave radiation at very low levels. These protections can be relaxed only if further scientific findings emerge that provide sound evidence that no harm will result. In some legal systems the application of the precautionary principle has been made a statutory requirement.

Sincerely,



Stephen T. Sinatra, M.D., F.A.C.C., F.A.C.N., C.N.S



Karolinska Institutet
Department of Neuroscience
Experimental Dermatology Unit

Stockholm, July 24, 2014

Mr. Thomas McKean, President, Board of Trustees
Mr. James Shay, President-Elect, Board of Trustees
Fay School
48 Main Street
Southborough, MA 01772

Ladies and Gentlemen,

It has been brought to my attention that children in your school are physically being impacted by radiation from WiFi antennas, and that some of the student's reactions have been severe. I was concerned to learn this. It is unwise to chronically expose children to this type of radiation, as their bodies are more sensitive than adults and the radiation has been shown to impair not just physiological functioning but cognitive function and learning.

Radiation of the kind emitted by WiFi transmitters impacts attention, memory, perception, learning capacity, energy, emotions and social skills. There is also diminished reaction time, decreased motor function, increased distraction, hyperactivity, and inability to focus on complex and long-term tasks. In some situations, children experience cardiac difficulties. In one Canadian school district, incidence of cardiac arrest in children was 40x the expected rate, and defibrillators have had to be placed at each school. Online time, particularly multi-tasking in young children, has been linked with a chronically distracted view of the world preventing learning critical social, emotional and relational skills. There is a physiological as well as psychological addiction taking place. I am sure, that as stewards of the lives of the children in your charge, you would not wish any of these outcomes.

Given the large and growing body of science indicating biological and health effects from the radiation emitted by antennas, it would be most imprudent at this time to permit wireless antennas on—or inside—your property. Understand the FCC exposure guidelines only protect against the acute power density, or acute thermal, effects, and they do nothing to protect against the other aspects of the radiation's risk, such the frequencies, amplitude, pulsing, intensity, polarity and biologically disruptive information content. Thus, until the FCC establishes guidelines for the non-thermal effects, any reliance by your school on current FCC guidelines, based solely on *thermal effects* would necessarily be incomplete. I urge a school of your caliber to be a leader on this issue, and appreciate that two wrongs do not make a right.

I enclose for your review the transcript of the Seletun Scientific Statement laying out the key concerns on this topic. If I can be of further help, please, do not hesitate to be in touch.

Yours truly,

Olle Johansson, Associate Professor
The Experimental Dermatology Unit,
Department of Neuroscience,
Karolinska Institute, 171 77 Stockholm, Sweden

Mailing address
Experimental Dermatology Unit
Department of Neuroscience
Karolinska Institutet
171 77 Stockholm
Sweden

Visiting address
Retziuslaboratoriet
Retzius väg 8
Solna

	Telephone
Direct	468-52 48 70 58
Switchboard	468-52 48 64 00
Fax	468-30 39 04
Fax (KI)	468-31 11 01

EXHIBIT B

JEANNE T. HUBBUCH, M.D.

124 WATERTOWN STREET, SUITE 2F
WATERTOWN, MASSACHUSETTS 02472
TELEPHONE (617) 744-0401
FAX (617) 744-5346

August 7, 2014

Mr. Alan Clarence
Director of Operations
Fay School
48 Main Street
Southborough, MA 01772

RE: [REDACTED]
DOB: [REDACTED]

To Whom It May Concern:

[REDACTED] is an 11 year old boy who has attended the Fay School in Southboro, MA since 2009 (Grades 1-5). He was in good health with no unusual complaints or absences until the Spring of 2013. Between 3/28/13 and 5/23/13, he had four absences and 1 early release due to complaints of headaches or stomach aches. He had no unusual complaints over the Summer. He returned to school and attended full time in The Root Building beginning fall of 2013.

The Fay School has had WIFI since 2009 in the general school areas. In February 2013, The Root Building where he attended during 2013-2014 school year upgraded the WIFI from 2.5 to 5 GHZ.

[REDACTED] has had a pattern of symptoms occurring beginning in September where he was released early after seeing the nurse or absent. His complaints were headache, chest pressure, dizziness, nausea, tinnitus, eye pressure. When he went home he immediately felt better. He had no complaints on weekends or school breaks and has had no similar complaints since out of school this Spring. The following are the dates of [REDACTED] releases/absences:

2013-2014 School Year

- 9/9/13 - Home Early at 1:15pm
- 9/23/13 - Home Early at 11:15am
- 10/24/13 - Home Early at 12:00pm
- 10/28/13 - Home Early at 1:30pm
- 11/20/13 - Absent

Page 2 - G [REDACTED]

- 4/11/14 - Home Early at 11:45am
- 4/15/14 - Home Early at 2:40pm
- 4/18/14 - Absent
- 5/1/14 - Home Early at 2:35pm
- 5/14/14 - Absent
- 5/27/14 - Absent
- 5/28/14 - Absent

2012-2013 School Year

- 3/28/13 - Absent
- 3/29/13 - Absent
- 4/1/13 - Home Early at 12:00pm
- 5/22/13 - Absent
- 5/23/13 - Absent

Of note, he also complained of milder headache and dizziness at other times but not so severe as when he went to the nurse or was released.

It is significant to know that [REDACTED] is a good student who does well in school, likes attending school and has good friends at school. He participates in sports. Thus there is no secondary reason for his complaints. Also of significance is that his parents removed all WIFI and cordless phones in their home over two years ago because of their concern with possible health effects. [REDACTED] does not have a cell phone.

Evaluation by [REDACTED] pediatrician has not revealed any significant problems. He has a history of seasonal allergies and immediate IgE reactions to tree nuts and peanuts. He has [REDACTED]. None of these conditions explains his current symptom pattern.

It is known that exposure to WIFI can have cellular effects. The complete extent of these effects on people is still unknown. But it is clear that children and pregnant women are at the highest risk. This is due to the brain tissue being more absorbent, their skulls are thinner and their relative size is small. There are no studies that show that exposure to these two vulnerable groups is safe. We do not know the long term effects of microwave radiation on students and teachers. According to reports from the nurse at The Fay School, there has been an increase over the last year of students complaining of similar symptoms, i.e. headaches, dizziness, nausea and chest pressure. A good reference for this is website of Environmental Health Trust (www.ehtrust.org).

It is my opinion, based on my medical training and experience, especially my training in Environmental Medicine that [REDACTED] is being adversely affected by prolonged exposure to WIFI at school. Due to biochemical individuality some people are more susceptible to these effects than others. This should be considered seriously since subtle changes are occurring for all even if it is apparent in only a few.

Page 3 - [REDACTED]

I agree that the precautionary principle should apply here. Many countries have adopted this principle when approaching young children and have adopted stricter regulations to reduce exposure to wireless radiation.

If [REDACTED] continues to be exposed on a regular basis to WIFI, it is possible that his intermittent symptoms will become more constant and interfere with his school performance.

Sincerely,



Jeanne Hubbuch, MD

JH/ma

cc: [REDACTED] (mother)
Susan Ruskowski (School Nurse)

JA 10004

JEANNE T. HUBBUCH, M.D.

124 WATERTOWN STREET, SUITE 2F
WATERTOWN, MASSACHUSETTS 02472
TELEPHONE (617) 744-0401
FAX (617) 744-5346

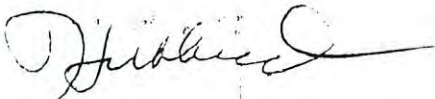
April 14, 2015

RE: [REDACTED]
DOB: [REDACTED]

To Whom It May Concern:

[REDACTED] has been diagnosed with Electromagnetic Hypersensitivity. The ICD-10 code is T78.8 (Idiopathic Environmental Intolerance).

Sincerely,



Jeanne Hubbuch, MD

JH/ma

cc: [REDACTED] (mother)

JEANNE T. HUBBUCH, M.D.

124 WATERTOWN STREET, SUITE 2F
WATERTOWN, MASSACHUSETTS 02472
TELEPHONE (617) 744-0401
FAX (617) 744-5346

March 31, 2015

RE: [REDACTED]
DOB: [REDACTED]

To Whom It May Concern:

[REDACTED] is being following for complaints of headaches, nausea, and dizziness. These complaints were initially intermittent, ie. 4-5 school days per week, until late February when he began having daily headaches, which would come on during the day at school and last into the evening. His headaches now are interfering with his ability to do homework in the evening. The persistent symptoms are also interfering with his ability to focus on his schoolwork, which is affecting his ability to learn without impairment.

[REDACTED] had school vacation recently and noted no headaches, nausea or dizziness, except one day when he was ill with bronchitis and had a fever. On return to school, the debilitating headaches again recurred on a daily basis and lasted into the evening. [REDACTED] has been dismissed from school for symptoms resulting from his hypersensitivity on numerous occasions.

It is my opinion that [REDACTED] has Electromagnetic Fields (EMF) hypersensitivity and should be accommodated in a reduced environment.

Sincerely,



Jeanne Hubbuch, MD

cc: [REDACTED] (mother)

EXHIBIT C



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 16 2002

OFFICE OF
AIR AND RADIATION

Ms. Janet Newton
President
The EMR Network
P.O. Box 221
Marshfield, VT 05658

Dear Ms. Newton:

This is in reply to your letter of January 31, 2002, to the Environmental Protection Agency (EPA) Administrator Whitman, in which you express your concerns about the adequacy of the Federal Communications Commission's (FCC) radiofrequency (RF) radiation exposure guidelines and nonthermal effects of radiofrequency radiation. Another issue that you raise in your letter is the FCC's claim that EPA shares responsibility for recommending RF radiation protection guidelines to the FCC. I hope that my reply will clarify EPA's position with regard to these concerns. I believe that it is correct to say that there is uncertainty about whether or not current guidelines adequately treat nonthermal, prolonged exposures (exposures that may continue on an intermittent basis for many years). The explanation that follows is basically a summary of statements that have been made in other EPA documents and correspondence.

The guidelines currently used by the FCC were adopted by the FCC in 1996. The guidelines were recommended by EPA, with certain reservations, in a letter to Thomas P. Stanley, Chief Engineer, Office of Engineering and Technology, Federal Communications Commission, November 9, 1993, in response to the FCC's request for comments on their Notice of Proposed Rulemaking (NPRM), Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation (enclosed).

The FCC's current exposure guidelines, as well as those of the Institute of Electrical and Electronics Engineers (IEEE) and the International Commission on Non-ionizing Radiation Protection, are thermally based, and do not apply to chronic, nonthermal exposure situations. They are believed to protect against injury that may be caused by acute exposures that result in tissue heating or electric shock and burn. The hazard level (for frequencies generally at or greater than 3 MHz) is based on a specific absorption dose-rate, SAR, associated with an effect

that results from an increase in body temperature. The FCC's exposure guideline is considered protective of effects arising from a thermal mechanism but not from all possible mechanisms. Therefore, the generalization by many that the guidelines protect human beings from harm by any or all mechanisms is not justified.

These guidelines are based on findings of an adverse effect level of 4 watts per kilogram (W/kg) body weight. This SAR was observed in laboratory research involving acute exposures that elevated the body temperature of animals, including nonhuman primates. The exposure guidelines did not consider information that addresses nonthermal, prolonged exposures, i.e., from research showing effects with implications for possible adversity in situations involving chronic/prolonged, low-level (nonthermal) exposures. Relatively few chronic, low-level exposure studies of laboratory animals and epidemiological studies of human populations have been reported and the majority of these studies do not show obvious adverse health effects. However, there are reports that suggest that potentially adverse health effects, such as cancer, may occur. Since EPA's comments were submitted to the FCC in 1993, the number of studies reporting effects associated with both acute and chronic low-level exposure to RF radiation has increased.

While there is general, although not unanimous, agreement that the database on low-level, long-term exposures is not sufficient to provide a basis for standards development, some contemporary guidelines state explicitly that their adverse-effect level is based on an increase in body temperature and do not claim that the exposure limits protect against both thermal and nonthermal effects. The FCC does not claim that their exposure guidelines provide protection for exposures to which the 4 W/kg SAR basis does not apply, i.e., exposures below the 4 W/kg threshold level that are chronic/prolonged and nonthermal. However, exposures that comply with the FCC's guidelines generally have been represented as "safe" by many of the RF system operators and service providers who must comply with them, even though there is uncertainty about possible risk from nonthermal, intermittent exposures that may continue for years.

The 4 W/kg SAR, a whole-body average, time-average dose-rate, is used to derive dose-rate and exposure limits for situations involving RF radiation exposure of a person's entire body from a relatively remote radiating source. Most people's greatest exposures result from the use of personal communications devices that expose the head. In summary, the current exposure guidelines used by the FCC are based on the effects resulting from whole-body heating, not exposure of and effect on critical organs including the brain and the eyes. In addition, the maximum permitted local SAR limit of 1.6 W/kg for critical organs of the body is related directly to the permitted whole body average SAR (0.08 W/kg), with no explanation given other than to limit heating.

I also have enclosed a letter written in June of 1999 to Mr. Richard Tell, Chair, IEEE SCC28 (SC4) Risk Assessment Work Group, in which the members of the Radiofrequency Interagency Work Group (RFIAWG) identified certain issues that they had determined needed to be addressed in order to provide a strong and credible rationale to support RF exposure guidelines.

Federal health and safety agencies have not yet developed policies concerning possible risk from long-term, nonthermal exposures. When developing exposure standards for other physical agents such as toxic substances, health risk uncertainties, with emphasis given to sensitive populations, are often considered. Incorporating information on exposure scenarios involving repeated short duration/nonthermal exposures that may continue over very long periods of time (years), with an exposed population that includes children, the elderly, and people with various debilitating physical and medical conditions, could be beneficial in delineating appropriate protective exposure guidelines.

I appreciate the opportunity to be of service and trust that the information provided is helpful. If you have further questions, my phone number is (202) 564-9235 and e-mail address is hankin.norbert@epa.gov.

Sincerely,



Norbert Hankin
Center for Science and Risk Assessment
Radiation Protection Division

Enclosures:

- 1) letter to Thomas P. Stanley, Chief Engineer, Office of Engineering and Technology, Federal Communications Commission, November 9, 1993, in response to the FCC's request for comments on their Notice of Proposed Rulemaking (NPRM), Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation
- 2) June 1999 letter to Mr. Richard Tell, Chair, IEEE SCC28 (SC4) Risk Assessment Work Group from the Radiofrequency Radiation Interagency Work Group

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. (SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)

I. (a) PLAINTIFFS

Child ■, Mother, and Father

(b) County of Residence of First Listed Plaintiff Worcester
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys (Firm Name, Address, and Telephone Number)
John J.E. Markham, II, Markham & Read
One Commercial Wharf West, Boston, MA 02110
617-523-6329

DEFENDANTS

The Fay School, by and through its Board of Trustees, and Robert Gustavson

County of Residence of First Listed Defendant Worcester
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.

Attorneys (If Known)
Sara Goldsmith Schwartz, Schwartz & Hannum PC
11 Chestnut Street, Andover, MA 01810
(978) 623-0900

II. BASIS OF JURISDICTION (Place an "X" in One Box Only)

- ☐ 1 U.S. Government Plaintiff
- ☒ 3 Federal Question (U.S. Government Not a Party)
- ☐ 2 U.S. Government Defendant
- ☐ 4 Diversity (Indicate Citizenship of Parties in Item III)

III. CITIZENSHIP OF PRINCIPAL PARTIES (Place an "X" in One Box for Plaintiff and One Box for Defendant)

	PTF	DEF		PTF	DEF
Citizen of This State	<input type="checkbox"/> 1	<input type="checkbox"/> 1	Incorporated or Principal Place of Business In This State	<input type="checkbox"/> 4	<input type="checkbox"/> 4
Citizen of Another State	<input type="checkbox"/> 2	<input type="checkbox"/> 2	Incorporated and Principal Place of Business In Another State	<input type="checkbox"/> 5	<input type="checkbox"/> 5
Citizen or Subject of a Foreign Country	<input type="checkbox"/> 3	<input type="checkbox"/> 3	Foreign Nation	<input type="checkbox"/> 6	<input type="checkbox"/> 6

IV. NATURE OF SUIT (Place an "X" in One Box Only)

CONTRACT	TORTS		FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES
<input type="checkbox"/> 110 Insurance <input type="checkbox"/> 120 Marine <input type="checkbox"/> 130 Miller Act <input type="checkbox"/> 140 Negotiable Instrument <input type="checkbox"/> 150 Recovery of Overpayment & Enforcement of Judgment <input type="checkbox"/> 151 Medicare Act <input type="checkbox"/> 152 Recovery of Defaulted Student Loans (Excludes Veterans) <input type="checkbox"/> 153 Recovery of Overpayment of Veteran's Benefits <input type="checkbox"/> 160 Stockholders' Suits <input type="checkbox"/> 190 Other Contract <input type="checkbox"/> 195 Contract Product Liability <input type="checkbox"/> 196 Franchise	PERSONAL INJURY <input type="checkbox"/> 310 Airplane <input type="checkbox"/> 315 Airplane Product Liability <input type="checkbox"/> 320 Assault, Libel & Slander <input type="checkbox"/> 330 Federal Employers' Liability <input type="checkbox"/> 340 Marine <input type="checkbox"/> 345 Marine Product Liability <input type="checkbox"/> 350 Motor Vehicle <input type="checkbox"/> 355 Motor Vehicle Product Liability <input type="checkbox"/> 360 Other Personal Injury <input type="checkbox"/> 362 Personal Injury - Medical Malpractice	PERSONAL INJURY <input type="checkbox"/> 365 Personal Injury - Product Liability <input type="checkbox"/> 367 Health Care/Pharmaceutical Personal Injury Product Liability <input type="checkbox"/> 368 Asbestos Personal Injury Product Liability PERSONAL PROPERTY <input type="checkbox"/> 370 Other Fraud <input type="checkbox"/> 371 Truth in Lending <input type="checkbox"/> 380 Other Personal Property Damage <input type="checkbox"/> 385 Property Damage Product Liability	<input type="checkbox"/> 625 Drug Related Seizure of Property 21 USC 881 <input type="checkbox"/> 690 Other LABOR <input type="checkbox"/> 710 Fair Labor Standards Act <input type="checkbox"/> 720 Labor/Management Relations <input type="checkbox"/> 740 Railway Labor Act <input type="checkbox"/> 751 Family and Medical Leave Act <input type="checkbox"/> 790 Other Labor Litigation <input type="checkbox"/> 791 Employee Retirement Income Security Act IMMIGRATION <input type="checkbox"/> 462 Naturalization Application <input type="checkbox"/> 465 Other Immigration Actions	<input type="checkbox"/> 422 Appeal 28 USC 158 <input type="checkbox"/> 423 Withdrawal 28 USC 157 PROPERTY RIGHTS <input type="checkbox"/> 820 Copyrights <input type="checkbox"/> 830 Patent <input type="checkbox"/> 840 Trademark SOCIAL SECURITY <input type="checkbox"/> 861 HIA (1395ff) <input type="checkbox"/> 862 Black Lung (923) <input type="checkbox"/> 863 DIWC/DIWW (405(g)) <input type="checkbox"/> 864 SSID Title XVI <input type="checkbox"/> 865 RSI (405(g)) FEDERAL TAX SUITS <input type="checkbox"/> 870 Taxes (U.S. Plaintiff or Defendant) <input type="checkbox"/> 871 IRS—Third Party 26 USC 7609	<input type="checkbox"/> 375 False Claims Act <input type="checkbox"/> 400 State Reapportionment <input type="checkbox"/> 410 Antitrust <input type="checkbox"/> 430 Banks and Banking <input type="checkbox"/> 450 Commerce <input type="checkbox"/> 460 Deportation <input type="checkbox"/> 470 Racketeer Influenced and Corrupt Organizations <input type="checkbox"/> 480 Consumer Credit <input type="checkbox"/> 490 Cable/Sat TV <input type="checkbox"/> 850 Securities/Commodities/Exchange <input type="checkbox"/> 890 Other Statutory Actions <input type="checkbox"/> 891 Agricultural Acts <input type="checkbox"/> 893 Environmental Matters <input type="checkbox"/> 895 Freedom of Information Act <input type="checkbox"/> 896 Arbitration <input type="checkbox"/> 899 Administrative Procedure Act/Review or Appeal of Agency Decision <input type="checkbox"/> 950 Constitutionality of State Statutes
REAL PROPERTY <input type="checkbox"/> 210 Land Condemnation <input type="checkbox"/> 220 Foreclosure <input type="checkbox"/> 230 Rent Lease & Ejectment <input type="checkbox"/> 240 Torts to Land <input type="checkbox"/> 245 Tort Product Liability <input type="checkbox"/> 290 All Other Real Property	CIVIL RIGHTS <input type="checkbox"/> 440 Other Civil Rights <input type="checkbox"/> 441 Voting <input type="checkbox"/> 442 Employment <input type="checkbox"/> 443 Housing/Accommodations <input type="checkbox"/> 445 Amer. w/Disabilities - Employment <input checked="" type="checkbox"/> 446 Amer. w/Disabilities - Other <input type="checkbox"/> 448 Education	PRISONER PETITIONS Habeas Corpus: <input type="checkbox"/> 463 Alien Detainee <input type="checkbox"/> 510 Motions to Vacate Sentence <input type="checkbox"/> 530 General <input type="checkbox"/> 535 Death Penalty Other: <input type="checkbox"/> 540 Mandamus & Other <input type="checkbox"/> 550 Civil Rights <input type="checkbox"/> 555 Prison Condition <input type="checkbox"/> 560 Civil Detainee - Conditions of Confinement			

V. ORIGIN (Place an "X" in One Box Only)

- ☒ 1 Original Proceeding
- ☐ 2 Removed from State Court
- ☐ 3 Remanded from Appellate Court
- ☐ 4 Reinstated or Reopened
- ☐ 5 Transferred from Another District (specify)
- ☐ 6 Multidistrict Litigation

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing (Do not cite jurisdictional statutes unless diversity):
Title 42 U.S.C. §12182(a)

Brief description of cause:

Defendants continue to violate plaintiff's rights under ADA by failing to provide reasonable accommodations.

VII. REQUESTED IN COMPLAINT:

☐ CHECK IF THIS IS A CLASS ACTION UNDER RULE 23, F.R.Cv.P.

DEMAND \$ 250,000

CHECK YES only if demanded in complaint:
JURY DEMAND: ☒ Yes ☐ No

VIII. RELATED CASE(S) IF ANY

(See instructions):

JUDGE

DOCKET NUMBER

DATE

8/12/2015

SIGNATURE OF ATTORNEY OF RECORD

/s/ John J.E. Markham, II

FOR OFFICE USE ONLY

RECEIPT #

AMOUNT

APPLYING IFP

JUDGE

MAG. JUDGE

JA 10011

1. Title of case (name of first party on each side only) _____

2. Category in which the case belongs based upon the numbered nature of suit code listed on the civil cover sheet. (See local rule 40.1(a)(1)).

- ___ I. 410, 441, 470, 535, 830*, 891, 893, 895, R.23, REGARDLESS OF NATURE OF SUIT.
- ___ II. 110, 130, 140, 160, 190, 196, 230, 240, 290, 320, 362, 370, 371, 380, 430, 440, 442, 443, 445, 446, 448, 710, 720, 740, 790, 820*, 840*, 850, 870, 871.
- ___ III. 120, 150, 151, 152, 153, 195, 210, 220, 245, 310, 315, 330, 340, 345, 350, 355, 360, 365, 367, 368, 375, 385, 400, 422, 423, 450, 460, 462, 463, 465, 480, 490, 510, 530, 540, 550, 555, 625, 690, 751, 791, 861-865, 890, 896, 899, 950.

*Also complete AO 120 or AO 121. for patent, trademark or copyright cases.

3. Title and number, if any, of related cases. (See local rule 40.1(g)). If more than one prior related case has been filed in this district please indicate the title and number of the first filed case in this court.

4. Has a prior action between the same parties and based on the same claim ever been filed in this court?

YES ☐ NO ☐

5. Does the complaint in this case question the constitutionality of an act of congress affecting the public interest? (See 28 USC §2403)

YES ☐ NO ☐

If so, is the U.S.A. or an officer, agent or employee of the U.S. a party?

YES ☐ NO ☐

6. Is this case required to be heard and determined by a district court of three judges pursuant to title 28 USC §2284?

YES ☐ NO ☐

7. Do all of the parties in this action, excluding governmental agencies of the United States and the Commonwealth of Massachusetts ("governmental agencies"), residing in Massachusetts reside in the same division? - (See Local Rule 40.1(d)).

YES ☐ NO ☐

A. If yes, in which division do all of the non-governmental parties reside?

Eastern Division ☐ Central Division ☐ Western Division ☐

B. If no, in which division do the majority of the plaintiffs or the only parties, excluding governmental agencies, residing in Massachusetts reside?

Eastern Division ☐ Central Division ☐ Western Division ☐

8. If filing a Notice of Removal - are there any motions pending in the state court requiring the attention of this Court? (If yes, submit a separate sheet identifying the motions)

YES ☐ NO ☐

(PLEASE TYPE OR PRINT)

ATTORNEY'S NAME _____

ADDRESS _____

TELEPHONE NO. _____

(CategoryForm9-2014.wpd)

ADA/FHA; Organizations; American Academy
of Environmental Medicine, Letter
to the FCC, Aug. 30, 2013



American Academy of Environmental Medicine

6505 E Central • Ste 296 • Wichita, KS 67206

Tel: (316) 684-5500 • Fax: (316) 684-5709

www.aaemonline.org

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August 30, 2013

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Ann Arbor, MI 48103

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Liberty, MO 64068

Assistant-Chair

Wm. Alan Ingram, M.D.
18015 Oak St Ste B
Omaha, NE 68130

Office of the Secretary
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: ET Docket No. 13-84

Dear Federal Communications Commission Commissioners:

The American Academy of Environmental Medicine is writing to request that the FCC review radiofrequency (RF) exposure limits (reference is made to the FCC's NOI sections 48, 51, 52, 53, 56, 60, 65 and 69), recognize non-thermal effects of RF exposure (NOI sections 66 and 69), and lower limits of RF exposure to protect the public from the adverse health effects of radiofrequency emissions (NOI sections 48, 52, 54, 65 and 71).

Founded in 1965 as a non-profit medical association, the AAEM is an international association of physicians and scientists who study and treat the effects of the environment on human health. With an elite membership of highly trained physicians and clinicians, AAEM is committed to education, public awareness and research regarding Environmental Medicine.

It became clear to AAEM physicians that by the mid 1990's patients were experiencing adverse health reactions and disease as a result of exposure to electromagnetic fields. In the last five years with the advent of wireless devices, there has been an exponential increase in the number of patients with radiofrequency induced disease and hypersensitivity.

Numerous peer reviewed, published studies correlate radiofrequency exposure with a wide range of health conditions and diseases. (NOI sections 54, 59, 60 and 65) These include neurological and neurodegenerative diseases such as Parkinson's Disease, ALS, paresthesias, dizziness, headaches and sleep disruption as well as cardiac, gastrointestinal and immune disease, cancer, developmental and reproductive disorders, and electromagnetic sensitivity. The World Health Organization has classified RF emissions as a group 2 B carcinogen. This research is reviewed and cited in the following attached documents: *AAEM Electromagnetic and Radiofrequency Fields Effect on Human Health* and *AAEM Recommendations Regarding Electromagnetic and Radiofrequency Exposure*.

The scientific literature proves that non-thermal adverse effects of RF exposure exist and negatively impact health and physiology. New guidelines based on measurements of non-thermal effects and lowering limits of exposure are needed and critical to protect public health.

Page 2 FCC

In fact, electromagnetic sensitivity and the health effects of low level RF exposure have already been acknowledged by the federal government. In 2002, the Architectural and Transportation Barriers Compliance Board stated:

“The Board recognizes...electromagnetic sensitivities may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions on an individual that it substantially limits one or more of the individual’s major life activities”

Additionally, in 2005, the National Institute of Building Sciences, an organization established by the U.S. Congress in 1974, issued an Indoor Environmental Quality Report which concluded:

“For people who are electromagnetically sensitive, the presence of cell phones and towers, portable telephones, computers,... wireless devices, security and scanning equipment, microwave ovens, electric ranges and numerous other electrical appliances can make a building inaccessible.”

By recognizing electromagnetic sensitivity, the federal government and affiliated organizations are clearly acknowledging the existence of non-thermal effects. The AAEM urges the FCC to recognize that non-thermal effects of RF exposure exist and cause symptoms and disease. (NOI sections 66 and 69) The AAEM also requests that the FCC base guidelines of RF exposure on measurements of non-thermal effects and lower the limits of RF exposure to protect the health of the public. (NOI sections 48, 52, 54, 65 and 71)

Sincerely ,

A handwritten signature in black ink, appearing to read "Amy L. Dean DO.", with a stylized flourish at the end.

Amy L. Dean, DO, FAAEM, DABEM, DAOBIM
President

ADA/FHA; Rachel Nummer Comments, Feb. 5, 2013

Please consider the needs of people who suffer from electromagnetic hypersensitivity (EHS) and do not place wifi everywhere in major cities. It will be impossible for people with this condition to function. They have rights too and the Americans with Disabilities Act recognizes EHS as a disability. Legally you cannot make public buildings, let alone cities inaccessible to a disabled population. Please consider the following:

Recognition of the Electromagnetic Sensitivity as a Disability Under the ADA

The Architectural and Transportation Barriers Compliance Board (Access Board) is the Federal agency devoted to the accessibility for people with disabilities. The Access Board is responsible for developing and maintaining accessibility guidelines to ensure that newly constructed and altered buildings and facilities covered by the Americans with Disabilities Act and the Architectural Barriers Act are accessible to and usable by people with disabilities. In November 1999, the Access Board issued a proposed rule to revise and update its accessibility guidelines. During the public comment period on the proposed rule, the Access Board received approximately 600 comments from individuals with multiple chemical sensitivities (MCS) and electromagnetic sensitivities (EMS).

The Board has taken the commentary very seriously and acted upon it. As stated in the Background for its Final Rule Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Recreation Facilities that was published in September 2002:

“The Board recognizes that multiple chemical sensitivities and electromagnetic sensitivities may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual’s major life activities. The Board plans to closely examine the needs of this population, and undertake activities that address accessibility issues for these individuals”.

Following its recognition of electro sensitivity and its declaration of commitment to attend to the needs of the electromagnetic sensitive, the Access Board contracted the National Institute of Building Sciences (NIBS) to examine how to accommodate the needs of the electro sensitive in federally funded buildings. In 2005 the NIBS issued a report.

The link for the report: http://web.archive.org/web/20060714175343/ieq.nibs.org/ieq_project.pdf

From Report (page 11):

Electromagnetic Fields

For people who are electromagnetically sensitive, the presence of cell phones and towers, portable telephones, computers, fluorescent lighting, unshielded transformers and wiring, battery re-chargers, wireless devices, security and scanning equipment, microwave ovens, electric ranges and numerous other electrical appliances can make a building inaccessible.

The National Institute for Occupational Safety and Health (NIOSH) notes that scientific studies have raised questions about the possible health effects of EMF's. NIOSH recommends the following measures for those wanting to reduce EMF exposure – informing workers and employers about possible hazards of magnetic fields, increasing workers' distance from EMF sources, using low-EMF designs wherever possible (e.g., for layout of office power supplies), and reducing EMF exposure times (11)

See Also

<http://www.disabled-world.com/disability/accessibility/homes/sensitivities.php#ixzz22STmV85B>

Thank you for taking the time to consider this information. I hope it will influence you to incorporate the needs of people suffering from EHS in your standards.

Sincerely,

Rachel Nummer

ADA/FHA; Southern Californians for a Wired Solution
to Smart Meters Comments, Feb. 6, 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)	
)	
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, DC 20554

Public Comment Filed by: Barbara Schnier,

Southern Californians for a Wired Solution to Smart Meters (SCWSSM)

PO Box 501
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February 6, 2013

**AFFIDAVIT OF Barbara Schnier, Southern Californians for a Wired Solution to
Smart Meters (SCWSSM)
Apple Valley, CA**

State of California

San Diego County

I, Barbara Schnier, attest that my statements are true to the best of my knowledge.

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

1. My name is Barbara Schnier . My address is PO Box 501, Warner Springs, CA 92086.
2. I am the Director of *Southern Californians for a Wired Solution to Smart Meters* (SCWSSM), a non-profit association registered with the California Secretary of State that advocates for those who are disabled or have medical conditions adversely effected by non-ionizing radiation (wireless technology).
3. 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.
4. A legal brief was filed in the California Public Utility Commission (CPUC) Proceeding A.011-03-014 et. al. on July, 2012 regarding the obligations of the CPUC, not to discriminate intentionally or unintentionally against this class of people, in promulgating and applying its policies, practices and procedures. (See Exhibit 1, with Attachments 1 & 2, a true and correct copy of SCWSSM's legal brief. and two attachments, filed with the CPUC and incorporated by reference as though fully set forth herein.)
5. The arguments and federal laws, set forth in the attached legal brief, require the CPUC not to discriminate against the disabled in the application of its policies, practices, and

procedures; ARE identical and equally apply to the FCC 's policies, practices, and procedures.

6. The Federal Communications Commission is similarly bound by the ADA and other federal precedents cited in the attached brief, as is the CPUC. The arguments are the same and the federal laws that apply to the FCC are the same.

7. The FCC is bound to abide by the ADA, U.S. Constitution, and various other applicable laws to make sure its policies, practices, and procedures do not violate the rights of the disabled.

8. SCWSSM supports and reiterates the COMMENTS OF CINDY SAGE AND ASSOCIATES AND THE CENTER FOR ELECTROSMOG PREVENTION FILED IN THIS PROCEEDING.

9. SCWSSM will not duplicate the extensive comments in the interest of brevity and duplication of information.

10. SCWSSM requests this commission to institute the suggestions to create new guidelines consistent with those set forth by Sage and Associates and Center for Electrosmog Prevention.

11. Additionally SCWSSM respectfully requests the Commission to set guidelines and modifications to its policie, practices, and procedures to respect the rights of those disabled by much lower levels of non-ionizing radiation as follows:

a. Regulation and registry of all sources of non-ionizing radiation including that generated by telecommunications industries, utilities, businesses, governmental entities and individuals, by location. This would include but not be limited to: all telecommunications equipment, Internet and other satellite dishes, ham radio antennas, and Wi-Fi. Therefore individuals could insert an address and receive full information regarding sources of EMF/RF at that location.

b. Each source registered should be required in the registration of its use to designate the frequency and power emitted from the source.

(1.) This allows the public to protect themselves so proper shielding of homes and businesses can be accomplished.

(2.) This also gives the FCC information to allow regulation of sources as multiple sources overlapping may violate FCC guidelines (hopefully new guidelines will be instituted that shall better protect public safety).

(3.) FCC should require a zone of safety in every County in America with a 15 mile radius for refuge for disabled.

Respectfully submitted by

Barbara Schneir

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PO Box 501
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February 6, 2013

ADA/FHA; Opening Brief of Southern Californians
for Wired Solutions to Smart Meters, Application 11-03-014 (July 19, 2012)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company for approval of Modifications to its Smart Meter™ Program and Increased Revenue Requirements to Recover the Costs of the Modifications (U39M).

Application 11-03-014

(Filed March 24, 2011)

And Related Matters.

Application 11-03-015

Application 11-07-020

OPENING BRIEF OF SOUTHERN CALIFORNIANS FOR WIRED SOLUTIONS TO SMART METERS (“SCWSSM”) (LFB) [with 2 Attachments]

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Submitted: July 19, 2012

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2.) *County of Santa Cruz Health Services Report*, Poky Stewart Nanking,

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3.) NIBS IEG Final Report dated 7/14/05, *a project of the National Institute of Building Sciences with funding support from The Architectural and Transportation Barriers Compliance Board* http://web.archive.org/web/20060714175343/ieq.nibs.org/ieq_project.pdf (Old Attachment 5)....23,24,27,28

4.) Department of Energy Website: <http://energy.gov/downloads/recovery-act-recipient-data>

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OPENING BRIEF OF SOUTHERN CALIFORNIANS FOR WIRED SOLUTIONS TO SMART METERS (“SCWSSM”) (LFB) [with 2 Attachments]

I.

INTRODUCTION

Pursuant to Rule 13.11 of the California Public Utilities Commission (‘Commission’) Rules of Practice and Procedure, the SOUTHERN CALIFORNIANS FOR WIRED SOLUTIONS TO SMART METERS (“SCWSSM”) is filing this opening brief pursuant to the schedule set by Assigned Commissioner’s “Ruling Amending Scope of Proceeding to Add a Second Phase” issued on June 8, 2012 as amended. The consolidated proceeding involves customers of Pacific Gas & Electric (“PG&E”), San Diego Gas & Electric (“SDG&E”) and Southern California Edison (“SCE”).

The Commission requested legal briefs regarding the Americans with Disabilities Act, 42 U.S.C. section 12101 et.seq. (ADA) and California Public Utilities Code section 453(b), (“section 453(b)”) as it pertains to the Commission and the utilities charging opt out fees on all customers including those who must opt out because of a

disability ('qualified disabled customer') and/or medical condition. ('medical condition customer')

SCWSSM will limit its briefing to questions 1 & 2 applied to the Commission only.¹ [Assigned Commoner's Ruling Amending Scope of Proceedings to Add a Second Phase issues June 8, 2012 at page 5&6]:

"1. Does an opt-out fee, which is assessed on every residential customer who elects to not have a wireless smart meter installed in his/her location, violate the Americans with Disabilities Act or section 453(b)

2. Do the Americans with Disabilities Act or section 453(b) limit the Commission's ability to adopt opt-out fees for those residential customers who elect to have an analog meter for medical reasons?"

While the Commission limited its request for analysis of the ADA and section 453(b), it should be noted that numerous other constitutional, federal and state provisions also apply to the Commission's supervisory and regulatory responsibilities. The Commission must act consistent with its constitutional and statutory mandate to ensure the delivery of safe and reasonable utility services. Pub. Util. Code section 451, SDG&E v. Superior Court (1996) 13 Cal.4th 893

II.

FACTUAL BACKGROUND

The Commission is a state agency and indisputably receives California state funds causing Government Code section 11135 to apply which prohibits discrimination. Also the Commission was awarded federal funds by the Department of Energy ('DOE') from the *State Assistance on Energy Policy* in the amount of \$1,686,869 thereby bringing its actions under the federal Rehabilitation Act of 1973 section 504 which also prohibits discrimination by recipients of federal funds. Similarly, PG&E, SDG&E and SCE

¹ Title II, III Rehab. Act of 1973 section 504, Government Code section 11135, Civil Code sections 51 et. seq. 54 et seq. and other Constitutional, federal and state laws also apply to conduct of the utilities.

(“utilities”) have been awarded federal funds by the DOE under the Smart Grid Reg. and Energy Storage Demonstration Project [EISA 1304] and Smart Grid Investment Grant Program [EISA 1306]. The total awards of federal grants to all three California utilities total well over one hundred million dollars (\$100,000,000). SCWSSM asks the Commission to take judicial notice of this data published on the DOE government website: <http://energy.gov/downloads/recovery-act-recipient-data>

The records in the underlying proceedings reveal that no CEQA study was performed, notwithstanding requests for the Commission to authorize such a study regarding environmental impacts of the smart meter program. The Commission denied EMF Safety Network’s and Wilner and Associate’s request for a hearing on health impacts of smart meters in proceeding A.11-03-014. The Commission also denied SCWSSM’s Motion for a Health Investigation by The California Department of Health Services, regarding the smart meter program in both proceedings A.11-03-015 & A.11-07-020. SCWSSM requests the Commission to take judicial notice of NETWORK’s, Wilner & Associates and SCWSSM’s filings for health hearings and investigations filed in above referenced proceedings.

The Commission and all utilities received hundreds of smart meter health complaints from the public, many with physicians’ letters attached requesting accommodation. SCWSSM asks the Commission to take judicial notice of the business records of smart meter health complaints on file with the Commission and the documents admitting health complaints by the utilities in both transcripts and documents filed in these consolidated actions prior to consolidation. [i.e. A-11-03-014, A-11-03-015 and A-11-07-020].

Numerous utility customers became ill, sent physician’s letters to the utilities requesting the smart meter to be removed from their home and/or removing meters around their home (‘zone of safety’ *see footnote 8 infra*). In most instances the utilities refused to remove the meters.

On February 1, 2012 the Commission issued Decision D. 12-02-014, modifying PG&E's smart meter program to include an opt out provision, applying to all residential customers. On April 19, 2012 the Commission issued similar decisions for San Diego Gas & Electric Company (SDG&E) in D.12-04-019 and Southern California Edison (SCE) in D.12- 04-018. The Commission's decisions also authorized charges to all customers opting out of the gas and electric smart meter programs.

On April 24, 2012 the assigned ALJ issued a ruling that consolidated Applications of all three utilities as referenced above.

On May 16, 2012 a pre conference hearing was held. Parties renewed requests for health studies and modifications to accommodate 'qualified disabled customers' and 'medical condition customer'.

On June 8, 2012 the assigned Commissioner issued an Amended Ruling, to consider, including but not limited to, whether opt-out options should be extended to communities, such as local governments and residents of apartment buildings or condominium complexes. The Commissioner requests five questions to be briefed.

SCWSSM will respond to questions 1 &2 to the extent they relate to the Commission's duties under the law in relationship to 'qualified disabled customers' under Title II, and 'medical condition customers' under CPUC section 453(b). *(for purposes of this brief each category 'qualified disabled customer and "medical conditions customer is separated into Class 1 (medical conditions) and Class 2(radiation illness) disabled individuals: see definitions at footnote 5 infra.)*

SCWSSM is informed and believes that the Commission and utilities are subject to the Rehabilitations Act of 1973 section 504 and California Government Code 11135 because both are recipients of federal and state funds for operations and/or for services programs that are the subject of this proceeding.

The Commission did not request briefing of constitutional provisions or state and federal laws that are applicable to these facts. This does not relieve the Commission or

the utilities of duties under the law. Recipients of federal funds waive immunity for any conduct that is discriminatory toward, including but not limited to, the disabled.²

III.

JURISDICTION

The Commission is a state agency of constitutional origin with far reaching duties functions and powers. California. Constitution., Art XII section 1-6. The Commissions powers are not restricted to those expressly mentioned in the Constitution.³ The legislature has plenary power, unlimited by the other provisions of this Constitution but consistent with this article, to confer additional authority and jurisdiction on the Commission. Cal Const. Art. XII section 5; SDG&E v. Superior Court, 13 Cal.4th 893 at 914 et. seq.

Pursuant to this constitutional provision the legislature enacted the Public Utilities Act (sections 201 et. Seq.). That law vests the Commission with broad authority to “supervise and regulate every public utility in the State” (section 701) and grants the Commission numerous specific powers for the purpose. SDG&E v. Superior Court at pg. 915, supra.

The Commission’s broad authority extends to whether services or equipment of any public utility poses any danger to the health or the safety of the public, and if so

² Quote from DOE Application for Recovery Act Funds, signed by SDG&E, Judicial Notice requested as available on the DOE website: “In accordance with the above laws and regulations issued pursuant thereto, the Applicant agrees to assure that no person in the United States shall, on the ground of race, color, national origin, sex, age, or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity in which the Applicant receives Federal assistance from the Department of Energy. Civil Rights Act of 1964 (Public Law 88-352); Section 16 of the Federal Energy Admin Act of 1974 (Pub.L. 93-275); Section 401 of the Energy Reorganization Act of 1974 (Pub. L 93-438); Title IX of the Educational Amendments of 1972, as amended PL 92-318; PL 93-568; PL 94-482; Section 504 of the Rehabilitation Act of 1973 (PL 93-112), the Age Discrimination Act of 1975 (PL 94-135); Title VIII of the Civil Rights Act of 1968 (PL 90-284); the Dept of Energy Organization Act of 1977 (PL 95-91); and the Energy Conservation and Production Act of 1976, as amended (PL 94-385); Title 10 of Code of Federal Regulations Part 1040.

³ There are also U.S. Constitutional corresponding responsibilities, 5th and 11th and 14th amendments..
Page | 10 SCWSSM OPENING BRIEF(LFB) [WITH 2 ATTACHMENTS] - A.11-03-014 and related matters

prescribe corrective measures and order them into effect. section 451, SDG&E v. Superior Court, 13 Cal.4th 893

Persons with disabilities are part of the “public” therefore the Commission must also consider, not just the danger to health and safety of the general healthy public, but also the dangers to health and safety of qualified persons with disabilities and those with medical conditions.(*see footnote 5 infra*)

The Commission and the utilities are bound to comply with all federal and state laws pertaining to ‘qualified disabled customers’ and ‘medical condition customers’. SDG&E v. Superior Court supra.

The Commission must refrain from violating these laws in its supervisory and regulatory role and in implementing its policies practices and procedures which includes rulings and decisions.⁴

The Commission’s authority extends to determining whether services or equipment of any public utility poses a danger or threat to the health and safety of the public and if so, prescribe corrective measures and order them into effect. section 451, SDG&E v. Superior Court supra.

The Commission’s Rulings violate laws pertaining to commercial ratepayers and their customers, which prohibit barriers to access of services and programs to ‘qualified disabled customers’ and ‘medical condition customers’ as described under federal and state constitutions and laws, including but not limited to, section 453(b), Civil Code 51,

⁴ Section 2106 of Utilities Act; authorizes a private remedy for damages brought by injured party in superior court or municipal court against a public utility that does an act prohibited, or omits to do an act required by the Constitution, any law of this State, or any order of decision of the commission (cite 2106) The Commission’s only duties are to avoid discriminatory policies, practices and procedures in it Rulings, Decisions and order in regulating and supervising utilities.

Not within the scope of this briefing but important to not violating the law includes modifications and accommodations that prohibit of all wireless tech related to the smart meter mesh network in the designated “zone of safety ” around the homes of qualified person with disabilities and those with covered ‘medical conditions as well as implement modification and accommodation for commercial ratepayers and their customers who are qualified individuals with disabilities and have covered ‘medical conditions’],

54, Government Code 11135 and the ADA Rehabilitation Act of 1973 section 504, and other applicable constitutional provisions and laws.

SCWWWM requests the Commission to take judicial notice of each Attachment 1 and 2 as proper subject for judicial notice. These are true and correct copies of what they are represented to be with the exception of Attachment 1 had a color picture deleted.

IV.

RULINGS ALTHOUGH FACIALLY NEUTRAL HAVE A DISPARATE IMPACT ON ‘QUALIFIED DISABLED CUSTOMERS’ UNDER THE ADA TITLE II AND ‘MEDICAL CONDITION CUSTOMERS’ UNDER CPUC SECTION 453(b) THUS VIOLATE BOTH TITLE II OF THE ADA AND CALIFORNIA CPUC SECTION 453(b)

The Commission’s Ruling entered on February 2, 2012 and April 19, 2012, [‘Rulings’] while facially neutral, discriminate as applied causing a disparate impact on those ‘qualified disabled customers’ as defined under the ADA and section 452(b).⁵

Title II of the ADA prohibits formal policies and actions which although neutral on their face, have a more burdensome effect upon persons with disabilities than upon

^{5***} ‘QUALIFIED DISABLED CUSTOMER’ under the ADA and ‘MEDICAL CONDITIONS CUSTOMER’ under California CPUC 453(b) refers to two classes of disabled customers BOTH under the ADA and CPUC 453(b):

CLASS 1. Those customers that have a qualified disability resulting from a medical condition such as listed in California Government Code section 12926 that is exacerbated or triggered by EMF/RF given off by the smart meters and mesh network and

CLASS 2. Those customers who experience radiation illness resulting from exposure to the mesh network and those who already had radiation illness and whose condition is exacerbated from the smart meter and mesh network emissions.

Also a class 1 or 2 customer may have a disability newly result from exposure to the smart meter mesh network or an existing condition exacerbated by the EMF/RF emitted by the mesh network. It also should be noted Class 2 customer’s condition results in conditions listed in both the ADA and Govt. Code 12926 such as autonomic nervous system, neurological, pulmonary, arrhythmias, cognitive or emotional difficulties etc.

The analysis is the same in both classes of customers relating to legal arguments as to discrimination set forth in the federal ADA section of this brief and the California CPCUC 453(b) section of this brief.

others. 42 U.S.C. section 12112(b) (3) (Supp.III 1992).

This is true even though the Commission has no intention to discriminate, as can be seen by the ADA's legislative history which shows that Congress intended Title II to prohibit more than intentional discrimination. The House Education and Labor Committee said that this statutory language “incorporates a disparate impact standard . . . consistent with the interpretation of section 504 by the U.S. Supreme Court in . . . Choate . . .” House Report Part II at 61, reprinted in 1990 U.S.C.C.A.N. at 343. Clearly then, Congress both believed that Alexander v. Choate 469 U.S. 287, 301 (1985) prohibits, under section 504, policies, practices, and procedures that have a disparate impact upon persons with disabilities, and intended section 202 of the ADA to prohibit such policies, practices, and procedures as well.

Although the language of the Commission’s Rulings do not appear to discriminate on their face, because the language applies to all residential customers, the effect of the Rulings to ‘qualified disabled customers’ and ‘medical conditions customers is to ⁶ cause a barrier to access of their electric service because the EMF/RF emitted by the mesh network either 1.) exacerbates an existing medical condition or 2.) makes them ill, (see footnote 5 supra) and in many cases requires the ‘qualified disabled customer’ to abandon their home, in which case they are among other things, denied the benefit of their electric service. If removing the smart meter resolves the problem for the ‘qualified disabled customer(s)’, they still have pay opt out fees in order gain the benefit of electric services where a healthy customer does not. This violates Title II of the ADA⁷ by putting the ‘qualified disabled customers’ in the position of having no choice BUT to pay ordered fees to prevent harm.

Moreover ‘qualified disabled customers’ whom are adversely affected by the EMF/RF emitted from the mesh network are discriminated against by the Commission’s failure to make modifications to its policies, practices and procedures, to allow an

⁶ (and those with medical conditions under California law)

⁷ (and section 504 of Rehab Act 1973)

accommodation without charge and/or to allow a “zone of safety”⁸ around the ‘qualified disabled customer’s’ home. (*see footnote 8 for definition of “zone of safety”*)

Many qualified disabled customers have not been able to access their electric service or their home because of the severe medical effects of the smart meter mesh network around their home. This is also true of situations where there are banks of meter on condos or multi-family dwellings next to a residence or a qualified disabled customer that lives in a condo or multifamily property.⁹ [www.aaemonline.org/AAEMEMFmedicalconditions.pdf at pages 1 & 2 of AAEM guidelines for those disabled by emissions from smart meters as more fully set forth in Section VI. *Infra.*]

There is no choice for a qualified disabled customer in these situations and the consequences are to abandon one’s home, go without electricity and/or pay a fee to be in the same position as a healthy customer.¹⁰

The more severely impacted qualified disabled customers, who are not accommodated by simply removing the smart meter from their home, and need a “zone of safety” around their home, have an even narrower choices. Even if they pay to have the meter removed from their home, without a “zone of safety” they either suffer physical and emotional injury or are denied access to their home and electric services.

The discrimination resulting, from the Commission’s failure to address the unique needs of qualified disabled customers in the smart meter opt-out Rulings, is by reason of their disabilities. Because of the Commission’s failure to make modifications in its Rulings (policy, practice and procedures) qualified disabled customers and medical conditions customers are burdened “in a manner different and greater than it burdens others.” Crowder v. Kitagawa 81 F.3d 1480, (1996) at 1484.

⁸ ‘zone of safety’ refers to removal of smart meters and wireless pole technology related to the smart meter mesh network from an area around a ‘qualified disabled customers’ home, sufficient to relieve the ill effects to the customers disability or medical condition. The details of such a policy modification would have to be determined on a case by case basis.

⁹ Applicable to questions 3 page 6 of amended scoping ruling.

¹⁰ These arguments also apply to those with covered Class 1 and Class 2 ‘medical conditions’ under California laws.

For example although the Commission provided an opt-out, it requires payment for such accommodation to give the qualified disabled customer the benefit of having electric service. The Commission also fails to consider a ‘zone of safety’¹¹ or other accommodations to qualified disabled customers who will still not be able to benefit from their electric service because of inaccessibility to their home, the entire neighborhood, and commercial properties such as grocery stores, doctors offices etc., due to the mesh network in the neighborhood.

The Title II regulation Section 35.130 of the regulation lists several forms of conduct which constitute unlawful discrimination under title II. Among them is use of criteria or methods of administration "[t]hat have the effect of subjecting qualified individuals with disabilities to discrimination on the basis of disability."¹² 28 C.F.R. section 35.130(b) (3) (i) (1993). The regulation's preamble explains that

“[t]he phrase 'criteria or methods of administration' refers to official written policies of the public entity and to the actual practices of the public entity. This paragraph prohibits both blatantly exclusionary policies or practices and nonessential policies and practices that are neutral on their face, but deny individuals with disabilities an effective opportunity to participate”. [28 C.F.R. App. A (1993).]

The Commission violates Title II of the ADA, (and Rehab. Act of 1973 section 504) by not making modifications in its Rulings to accommodate qualified disabled

¹¹ “Zone of Safety” includes removing smart meters and taking wireless technology off poles within a specified distance from a qualified disabled customer’s home.

¹² Elsewhere in the same regulation specific forms of conduct are prohibited because they have a discriminatory effect upon individuals with disabilities. The use of criteria or methods of administration which "have the purpose or effect of defeating or substantially impairing accomplishment of the objectives of the public entity's program with respect to individuals with disabilities" is prohibited. 28 C.F.R. section 35.130(b) (3) (ii) (1993). A public entity's selection of a site for its services, programs, or activities cannot "have the effect of" excluding individuals with disabilities from participation, denying them benefits, or otherwise subjecting them to discrimination, and cannot have the "purpose or effect" of defeating or substantially impairing the accomplishment of the objectives of the services, program, or activity, with respect to persons with disabilities. 28 C.F.R. section 35.130(b) (4) (i) and (ii) (1993). Finally, subsection 8 of the regulation says that a public entity "shall not impose eligibility criteria that screen out or tend to screen out an individual with a disability or any class of individuals with disabilities from fully and equally enjoying any service, program, or activity" unless the criteria are necessary for provision of the service, program, or activity. 28 C.F.R. section 35.130(b) (8) (1993).

customers by, including but not limited to, removing smart meters at no cost and providing a “zone of safety” around a disabled persons home at no cost.

V.

**IT IS AN ADA VIOLATION FOR THE COMMISSION’S RULINGS TO
AUTHORIZE THE UTILITIES TO CHARGE ‘QUALIFIED DISABLED
CUSTOMERS’ OPT OUT FEES FOR AN ACCOMMODATION**

**A. THE COMMISSION IS SUBJECT TO ADA TITLE II AND THE
REHABILITATION ACT OF 1973 SECTION 504.**

As a state administrative agency created by the California Constitution to regulate public utilities (Cal. Const. art. XII), the Public Utilities Commission (Commission) is a public entity which pursuant to 42 U.S.C. section 12131, provides that Title II entities include “any department, agency, . . . of a state” 42 U.S.C. section 12131. As a public entity, the Commission is subject to Title II and the implementing regulations. The Rehabilitation Act of 1973 section 504 (“section 504”) states that a violation of the ADA is a violation of section 504. The only additional requirement is receipt of federal funds. As noted in section II. Supra. at page 7, according to the DOE government website, the Commission was awarded federal funds under *State Assistance on Energy Policy*, therefore is subject to section 504.

Congress enacted the ADA “to remedy widespread discrimination against disabled individuals.” PGA Tour, Inc. v. Martin 532 U.S. 661, 674 (2001). Title II of the ADA, in particular, prohibits discrimination against individuals with disabilities in the provision of services, programs, or activities by public entities, stating at pertinent part that: “no qualified individual with a disability shall, because of the disability, be excluded from participating in or denied the benefits of services, programs or activities of a public entity or be subject to discrimination by such an entity.” 42 U.S.C. section 12132.

Issuing Rulings that authorize the charging of an opt-out fee to a customer who opts out as a result of a disability is disability discrimination in violation of the ADA Title II and section 504 of Rehab. Act as described supra.¹³

B. TITLE II OF THE ADA PROHIBITS DISCRIMINATION AGAINST ‘QUALIFIED INDIVIDUALS WITH DISABILITIES’ (‘QUALIFIED DISABLED CUSTOMERS’)

Title II prohibits discrimination against a “qualified individual with a disability” as defined in 42 U.S.C. section 12131, which states:

“The term ‘qualified individual with a disability’ means an individual with a disability who, with or without reasonable modifications to rules, policies, or practices, the removal of architectural, communication, or transportation barriers, or the provision of auxiliary aids and services, meets the essential eligibility requirements for the receipt of services or the participation and programs or activities provided by a public entity.”

42 U.S.C. section 12102 defines **disability as a physical or mental impairment**¹⁴ that substantially limits at least one **major life activity**, or has a record or is regarded as having such impairment such¹⁵ as caring for oneself, performing manual tasks, seeing, hearing, reading, concentrating, thinking, communicating and working. **Major life activity also includes operation of major bodily function** such as immune system, normal cell growth, digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions”.

Medical literature establishes that EMF/RF such as that emitted by the smart meter and its mesh network, affect certain physical and mental disabilities by impacting, among other things, the immune system, normal cell growth, digestive, neurological, brain, respiratory, reproductive function. The American Academy of Medicine has recently released recommendations regarding electromagnetic and radio frequency effects on specific mental and physical disabilities and medical conditions, which include,

¹³ The analysis of section 504 is the same as a Title II ADA analysis except for the additional element of receipt of federal funds.

¹⁴ California law at Govt. Code Section 12926 also includes: social activity

¹⁵ California law expands this to “limits” (*rather than*, “*substantially limits*” as in ADA) or makes major life activity difficult. Government Code section 12926.

neurological, brain, respiratory, reproductive functions. (See www.aaemonline.org/AAEMEMFmedicalconditions.pdf and Attachment 1, Carpenter M.D., to this brief)

A “qualified individual with a disability” under the ADA, would be a “qualified disabled customer” in the present case, entitled to accommodation in the services, activities and programs of the Commission including its regulation of the delivery of electrical service, if accommodation is necessary for the qualified disabled customer to obtain the benefits of the electric services, regulated and supervised by the Commission. If the EMF/RF emitted by the smart meter and or mesh network causes a barrier to access to one’s home and electric service it is discrimination for the Commission to fail to modify its practice policies and procedures to accommodate these qualified disabled customers at no charge.

C. ‘QUALIFIED DISABLED CUSTOMERS’ ADVERSLEY AFFECTED BY THE EMF/RF EMITTED FROM THE MESH NETWORK ARE ENTITLED TO THE ACCOMODATION OF AN ANALOG METER AND ‘ZONE OF SAFETY’ WITHOUT OPT OUT FEES.

1. THE COMMISSION MUST AFFORD EQUAL BENEFITS OF SERVICE TO ‘QUALIFIED DISABLED CUSTOMERS’

The regulations adopted by the U.S. Department of Justice to implement Title II of the ADA are contained in 28 C.F.R. parts 35. Imposing an opt-out fee on a person who opts-out on the basis of a qualifying condition and/or disability violates numerous provisions of the implementing regulations. Under the regulations, a public entity may not:

- (1.) Afford a qualified individual with a disability an opportunity to participate in and benefit from a service that is not equal to that afforded others. 28 C.F.R. §35.130(b) (1) (ii); and
- (2.) Provide a qualified individual with a disability a service that is not as effective in affording equal opportunity to obtain the same result, gain the same benefits or reach the same level of achievement as that provided to others. 28 c.f.r. section 35.130(b) (1) (iii).

An able bodied customer receiving electrical service by way of a Smart meter is afforded the full benefits of the electrical service and is afforded the same benefit of such service provided to all others. On the other hand, a ‘qualified disabled customer’ who is adversely affected by the EMF/RF emitted by the smart meter/mesh network is not afforded the same benefit of such electric service provided to all others because the service exacerbates disabilities of a customer as described in footnote 5 supra.. The mesh network can worsen physical conditions of qualified disabled customers, to the point they have to abandon their home and consequently the electric service. [Please see section VI. infra which provides additional details]¹⁶

To require a ‘qualified disabled customer’ to pay an the opt-out fee to remove the smart meter or additional smart meters surrounding their home, when the reason they are required to opt out is their disability, denies them electric service equal to that afforded others and requires an additional payment in order to gain the same benefit.

For the Commission to make Rulings that authorize such a fee constitutes discrimination since the Commission as a public entity would, through its regulatory activities, treat ‘qualified disabled customer’ differently than able bodied customer because they would have to pay extra to receive the same electric service.

2. THE COMMISSION’S FAILURE TO MAKE REASONABLE MODIFICATIONS TO ITS POLICIES PRACTICES AND PROCEDURES CONSTITUTES DISCRIMINATION UNDER TITLE II OF THE ADA

The prohibition against discrimination contained in the implementing regulations also requires a public entity to make reasonable modifications when the modifications are necessary in order to avoid discrimination on the basis of disability. This requirement is contained in 28 C.F.R. 35.130(b) (7) which provides:

¹⁶ “Because smart meters produce radiofrequency emissions, it is recommended that patients with the above conditions and disabilities be accommodated to protect their health. The AAEM recommends that no Smart Meters be on these patients’ homes, that Smart Meters be removed within a reasonable distance of patients’ homes....and that no collection meters be placed near patients’ homes....”: pg. 2 of the AAEM *Recommendations Regarding Electromagnetic and Radio Frequency Exposure-Released July 12, 2012* www.aaemonline.org/AAEMEMFmedicalconditions.pdf

“A public entity shall make reasonable modifications in policies, practices, or procedures when the modifications are necessary to avoid discrimination on the basis of disability, unless the public entity can demonstrate that making the modifications would fundamentally alter the nature of the service, program or activity.”

A ‘qualified disabled customer’ whose medical condition is exacerbated by the installation and operation of a Smart Meter and/or its mesh network, who requests a reasonable modification, by the installation of an analog meter and/or a “zone of safety” would be requesting a reasonable modification to the policies, practices and procedures of the Commission in its regulation of the transmission and delivery of electrical service. For the Commission to fail to accommodate these reasonable modifications in the form of a request for an analog meter and/or “zone of safety”, based on a person’s disability, would violate section 35.130(b)(7).

In this circumstance, the reasonable modification, by providing the analog meter and/or “zone of safety”, rather than a Smart meter, is necessary to avoid discrimination.¹⁷

3. THE COMMISSION’S RULINGS AUTHORIZING THE UTILITIES TO CHARGE A SEPARATE FEE TO OPT OUT FOR QUALIFIED DISABLED CUSTOMER IS DISCRIMINATION

The regulations also provide that a surcharge or fee cannot be charged to a particular individual with a disability or group of individuals with a disability to cover cost measures such as providing alternative program accessibility when required to provide an individual or group with a non-discriminatory treatment required by the ADA or the implementing regulations. This prohibition is found in 28 C.F.R. §35.130(f) which provides. “The imposition of any surcharge on an individual with a disability or a group

¹⁷ .or under California law, covered ‘medical condition’ Government Code section 12926

of individuals with a disability to cover the costs of alternative means to provide accessibility to electrical service violates this provision.”

The Commission cannot impose an opt-out fee on a qualified disabled customer to cover the cost of providing electromechanical analog meter and/or a ‘zone of safety’, when providing this accommodation is required in order to provide the safe delivery of electrical service in a non-discriminatory manner.

VI.

THE COMMISSION’S RULINGS AUTHORIZING THE UTILITIES TO CHARGE ‘MEDICAL CONDITION CUSTOMERS’, AN OPT OUT FEE IS A VIOLATION OF CPUC SECTION 453(b)

California’s disability definition is broader than the ADA and the California Legislature requires that if the federal ADA provides more protection, it should be followed. Government Code section 12926(m). Therefore, Title II found at 42 U.S.C. section 12112 (b) (3) (Supp. III 1992), which prohibits policies and actions which although neutral on their face, have a more burdensome effect upon persons with disabilities than upon other, also applies under California disability law. [See section IV. *supra*]

Many of the California statutes dealing with disability rights include the same general description or definition of disability as found in Government Code section 12926. For example section 453(b) is such a statute.

Charging a fee as a result of a person’s ‘medical condition’ is discriminatory and prohibited by section 453(b). Section 453(b) states:

“ No public utility shall prejudice, disadvantage, or require different rates or deposit amounts from a person because of . . . , medical condition, or any characteristic listed or defined in Section 11135 of the Government Code”

Government Codes section 11135 states at (c) (1)

“As used in this section, "disability" means any mental or physical disability, as defined in Government Code section 12926.”¹⁸

Therefore in the present case, section 453(b) applies to both classes of ‘medical condition customers’.¹⁹ (*see footnote 5 for full definitions Class 1 and 2*) Class 1 medical conditions customer, with existing medical condition, such as pregnancy, heart, respiratory or brain that are adversely affected, or class 2 medical conditions customers, with newly sustained or exacerbated radiation illness adversely effected. It should be

¹⁸ The California Legislature further broadened the definition of disability at Government Code section 12926.1 (c) where it includes in the definition of physical and mental disabilities “**chronic or episodic** conditions, hepatitis, epilepsy, seizure disorder, diabetes, **clinical depression**, bipolar disorder, multiple Sclerosis, and **heart disease**.”

Additionally California requires a “limitation” of a major life activity and **does not require**, as does the federal ADA, a “**substantial**” limitation. The distinction is meant to result in broader coverage in California law.

¹⁹ “Disability” includes but is not limited to, “any mental or physical disability as defined in Government Code section 12926(l).”

This statute defines “physical disability” including but not limited to, physiological disease, disorder, condition...that affects at least one “body system such as **neurological**, immunological, **musculoskeletal**, special sense organs, **respiratory**, ...**cardiovascular**, **reproductive**, **digestive**, **genitourinary**, hemi and **lymphatic**, **skin** and endocrine, that limits a “major life activity” (without regard for mitigating measures such as medication.....) **or makes the major life activity “difficult” to achieve**, which is not found in the federal ADA.

“Major life activity” is broadly construed to include in addition to the physical and mental as found in the ADA but also “social activities and working” Government Code section 12926 (B) (iii)

Government Code 12926 also includes not only having a **disease, disorder or condition** but having a “**record or history**” or “**regarded as having**” such impairment which is known to . . .”other entity covered by this part” **that makes “achievement of major life activity difficult.”**

“Mental Disability” is having any mental or psychological disorder or condition such as ...**organic brain syndrome, specific learning disabilities** or emotional or mental illness that limits a major life activity. This is without mitigating factors applied like physical disabilities above. It is limiting a major life activity if the condition makes **achievement of the major life activity difficult**. This includes limitations on **social** activities and working as well as physical and mental function. Government Code section 12926(1)(A)(B)(C) **Even if a mental or psychological disorder or condition has no present disabling effect, but that may become a mental disability as described, it is covered.**

Government Code section 12926 (k) states that “discrimination based on physical disability, mental disability, **medical condition**, genetic information.....are enumerated in this part.

noted that Class 2 ‘medical conditions customers’, with radiation illness, may have similar symptoms to Class 1 ‘medical conditions customers’ [See; AAEM Recommendations, at page 1 &2 at www.aemonline.org/AAEMEMFmedicalconditions.pdf]

The AAEM Recommendations assist in seeing how Government Code section 12926 applies to the both Class 1 and Class 2, ‘medical conditions customers’ because it lists the medical conditions apart from radiation illness that are also affected adversely by the smart meter and its mesh network. SCWSSM requests the Commission to take judicial notice of this business record on AAEM Recommendations which is displayed at: www.aemonline.org/AAEMEMFmedicalconditions.pdf

The Commission’s Rulings, which authorize fees charged to ‘medical condition customers’, so they can benefit and receive electric service is discriminatory, because they require different rates or deposit amounts, thus, but for, the medical condition the customer could keep the smart meter, not need a ‘zone of safety’ (defined at footnote 8 supra at page 14.) and not incur the proposed fees for opting out etc.

A. THE COMMISSION RULINGS AUTHORIZING OPT-OUT FEES FOR CUSTOMERS THAT ELECT TO HAVE AN ANALOG METER FOR MEDICAL REASONS VIOLATES CPUC 453(b)

The list of ‘medical conditions’ that are recognized as protected from discrimination in California, under Government Code section 12926 are the same medical conditions that the medical profession recognizes as adversely affected by EMF/RF emissions.²⁰ ‘Medical conditions customers’ from class 1, do not have radiation illness,

²⁰ AAEM recommendations dated July 12, 2012 at

www.aemonline.org/AAEMEMFmedicalconditions.pdf,

County of Santa Cruz Health Services Report, Poky Stewart Nanking, M.D. M.P.H Health Officer;

www.santacruzhealth.org/resources/categories/3health_statistics_and_reporting.htm#reports

IEQ Indoor Environmental Quality Project of National Institute of Building Sciences (NIBS) with funding from the Access Board; *American Medical Association*

Attachment-1: *Smart Meter: Correcting the Gross Misinformation* , David O. Carpenter M.D.;

Attachment-2: CCST technical comment, by Rick Kreutzer M.D., California Department Public Health;

yet they are still adversely impacted by EMF/RF with conditions such as heart arrhythmias, headache, difficulty sleeping, fatigue etc. . . . As for Class 2 customers who have radiation illness, their condition is also covered under the definition of ‘medical condition’ set forth in Government Code 12926. Class 2 ‘medical condition customers’ also experience physical and mental symptoms as a result of their underlying radiation illness, such as heart arrhythmia, neurological deficit, autonomic nervous system disorders, sleep disturbance, respiratory difficulties etc. (*See footnote 20 supra and Attachments 1 & 2*)

The medical conditions exacerbated by the EMF/RF emitted by the smart meter and the mesh network, cause a customer to experience physical or mental limitations, and to have difficulty achieving one or more major life activities, for example, seizures, cancer, impaired immune function, breathing, cardiac arrhythmia, joint pain, muscle weakness, socializing. (Class 2 ‘medical conditions customers, with radiation illness, often exhibit the same symptoms as Class 1 customers.)

1. THE COMMISSION’S RULINGS CANNOT AUTHORIZE A FEE BE CHARGED TO ‘MEDICAL CONDITION CUSTOMERS’ WHO OPT-OUT FOR MEDICAL REASONS IF THEIR MEDIAL CONDITION IS COVERED UNDER GOVERNMENT CODE 12926.

All that is necessary under section 453(b) is a medical condition that makes one or more “major life activities” “difficult to achieve”. ‘Medical conditions customers’ that have ‘medical conditions’ adversely affected by EMF/RF emission from the mesh network, are also delineated in Government Code section 12926 and it is a violation of section 453(b) to enter a rulings that discriminates against these customers.²¹

²¹ *County of Santa Cruz Health Services Report*, Poky Stewart Nanking, M.D. M.P.H Health Officer, www.santacruzhealth.org/resources/categories/3health_statistics_and_reporting.htm#reports ; *Smart Meter: Correcting the Gross Misinformation* , David O. Carpenter M.D. Attachment 1; CCST technical comment, by Rick Kreutzer M.D., California Department Public Health- Attachment 2; http://web.archive.org/web/20060714175343/ieq.nibs.org/ieq_project.pdf ; -IEQ Indoor Environmental Quality Project of National Institute of Building Sciences (NIBS) with funding from the Access Board.

Many of the ‘medical conditions’ found in the AAEM Recommendations are identical to those set forth in Government Code section 12926 as covered ‘medical conditions’. Many medical experts have identified ‘medical conditions’ adversely affected by EMF/RF such as that emitted by the mesh network. For example:

The American Academy of Environmental Medicine (“AAEM”) recently published Recommendations ...delineating those patients that are at higher risk of harm or exacerbation of their physical and mental disease or condition by exposure to electromagnetic fields and/ radio frequency such as that given off by smart meters and its mesh network.[www.aemonline.org/AAEMEMFmedicalconditions.pdf] As you can see below, the AAEM references what are termed in this brief, “Class 1 and Class 2” ‘medical conditions customers’.

For example AAEM states:

“Physicians of the American Academy of Environmental Medicine recognize that patients are being adversely impacted by electromagnetic frequency(EMF) and radiofrequency(RF) fields and are becoming more electromagnetically sensitive.” ... Based on double-blinded, placebo controlled research in humans, medical conditions and disabilities that would more than likely benefit from avoiding electromagnetic and radiofrequency exposure include *but are not limited to: Neurological conditions, Musculoskeletal effects, Heart disease and vascular effects, arrhythmias, Pulmonary conditions, gastrointestinal conditions, autonomic nervous system dysfunction..genetic defects, pregnancy, attention deficit disorder, anxiety and depression, headaches, sleep disruption, fatigue, visual disruption, liver disease....*”[Page one of AAEM Recommendations www.aemonline.org/AAEMEMFmedicalconditions.pdf]

Moreover, AAEM states at page 2 of its Recommendations that:

“Because smart meters produce radiofrequency emissions, it is recommended that patients with the above conditions and disabilities be accommodated to protect their health. The AAEM recommends that no Smart Meters be on these patients’ homes, that Smart Meters be removed within a reasonable distance of patients’ homes....and that no collection meters be placed near patients’ homes....” AAEM *Recommendations Regarding Electromagnetic and Radio Frequency Exposure- Released July 12, 2012* [www.aemonline.org/AAEMEMFmedicalconditions.pdf,]

Other medical and scientific opinions have confirmed that those with a wide variety of medical conditions such as those listed in section 12926, are at higher risk of harm and/or harmed by EMF/RF such as emitted by the smart meter and its mesh network.

County of Santa Cruz Health Services Agency on January 12, 2012, published “Health risks associated with Smart Meters” (www.santacruzhealth.org/resources/categories/3health_statistics_and_reporting.htm#reports attachment B to the County Santa Cruz Report) stating at pertinent part that:

“There is a large body of research on the health risks of EMFs. ... much data is concentrated on cell phone usage and as Smart Meters occupy the same energy spectrum as cell phones and ... can exceed the whole body radiation exposure of cell phones.... all available peer-reviewed, scientific research data can be extrapolated to apply to SmartMeters taking into consideration the magnitude and the intensity for the exposure.” “...The research carried out by independent, non governmental or non-industry affiliated researchers, suggests potentially serious effects from many non ionizing radiation exposures...naming cancer, DNA breakage, brain glucose metabolism alterations, increased risk of brain cancer, acoustic neuroma, salivary gland tumors, eye cancer etc.”

The Santa Cruz County Health Services went on to say at attachment B page 5 that:

“Meeting the current FCC guidelines only assures that one should not have heat damage from SmartMeter exposure....It says nothing about safety from the risk of many chronic diseases ...such as cancer, miscarriage, birth defects, semen quality, autoimmune diseases, etc..Therefore when it comes to non thermal effects of RF, FCC guidelines are irrelevant and cannot be used for any claims of SmartMeter safety unless heat damage is involved..... metal and medical implants..can be effected by localized heating and electromagnetic interference for medical wired implanted devices (EMI)” [See: full copy at government website, www.santacruzhealth.org/resources/categories/3health_statistics_and_reporting.htm#reports at page 4,5 of Attachment B of the Santa Cruz County Health Department Report] [Also see FCC website at www.fcc.gov/consumer warning of risks to persons with implanted medical devices from radiofrequency and EMF’s] SCWSSM requests the commission to take judicial notice of both these government websites and incorporate by reference full copy of these documents.

Another medical opinion was published in a widely circulated news publication on July 11, 2012²², David O. Carpenter, former founding dean of the University at Albany (NY)'s School of Public Health, commented on a letter that claimed smart meters pose no risk to public health, published in the Montreal daily, *Le Devoir* on May 24, 2012. It is noteworthy that some forty (40) international experts contributed to the rebuttal quoted below and while not a peer reviewed publication, many peer reviewed publications are cited as references to this article. [see Attachment 1 to this brief.] At page 3 paragraph 1 states:

“...more than a thousand studies done on low intensity, high frequency, non ionizing radiation, going back at least fifty years, show that some biological mechanisms of effect do not involve heat... This radiation sends signals to living tissue that stimulate biochemical changes, which can generate various symptoms and may lead to diseases such as cancer”

The article goes on to state at page 4:

“Wireless smart meters typically produce atypical relatively potent ...pulsed RF/microwaves.....a peak level emission two and a half times higher than the stated safety signal, as the California Utility Pacific Gas & Electric recognized before the State's Public Utilities Commission. Thus people in proximity to a smart meter are at risk of significantly greater aggregate exposure than with a cell phone, not to mention the cumulative levels of RF/microwaves that people living near several meters are exposed to....With smart meters, the entire body is exposed to the microwaves, which increases the risk of overexposure to many organs.”[Attachment 3, Montreal daily *Le Devoir* July 11, 2012, *Smart Meters: Correcting the Gross Misinformation*, by David O. Carpenter M.D. citing articles on DNA damage, Effects on the Blood Brain Barrier et.al.-Attachment 1]

Another credible medical opinion by Rick Krietzer M.D commented to the CCST report January 11, 2011 states:

²² SCWSSM represents that this is a true and correct copy of what it is represented to be that except a color picture was deleted for ease of reducing size to e-mail, that this is accurate, published in a recognized widely circulated newspaper and proper subject for judicial notice and SCWSSM requests the Commission to take judicial notice of this Attachment to this brief.

“The representation of Smart Meter emissions is based upon controlled conditions and not real world conditions. The Commission should consider doing an independent review of the deployment of smart meters to determine if they are installed and operating consistent with the information provided to the consumer.” [Rick Kreutzer M.D. Department of Health in California Technical comment on CCST report Health Impacts of Radio Frequency from Smart Meters, released January 11, 2011, Attachment 2]

The U.S. government funded publication stated in the Final Report, dated July 14, 2005, *a project of the National Institute of Building Sciences with funding support from the Architectural and Transportation Barriers Compliance Board (Access Board)* many key facts relevant to “medical conditions” that can be impaired further by electromagnetic and radiofrequency fields, such as those found with smart meters and its mesh network. [see at page 8 where it states:

“The presence of electromagnetic fields from office equipment and other sources is a barrier for those with electromagnetic sensitivities. Noise and vibration can adversely affect some people with chemical and/or electromagnetic sensitivities and trigger seizures in susceptible individual”

The Final Report goes on to say at page 11 that:

“ For people who are electromagnetically sensitive, the presence of cell phones and towers, portable telephones, computers, fluorescent lighting, unshielded transformers and wiring, battery re-chargers, wireless devices, security and scanning equipment, microwave ovens, electric ranges and numerous other electrical appliances can make a building inaccessible(emphasis added)...

Also the National Institute for Occupational Safety and Health (NIOSH) notes that, in the report, scientific studies have raised questions about the possible health effects of EMF's. NIOSH recommends the following measures for those wanting to reduce EMF exposure—informing workers and employers about possible hazards of magnetic fields, increasing workers' distance from EMF sources, using low-EMF designs wherever possible (e.g. layout of office power supplies), and reducing EMF exposure times. [NIBS IEG Final Report dated 7/14/05, *a project of the National Institute of Building Sciences with funding support from The Architectural and Transportation*

Barriers Compliance Board-http://web.archive.org/web/20060714175343/ieq.nibs.org/ieq_project.pdf

On a similar scientific note, the American Medical Association (AMA) released a position paper June 2012 showing that body systems can be disrupted with something seemingly as innocent as blue light from the LED computer screen. The policy statement recognized that certain aspects of extended use of various electronic media, and blue light from screens:

“...can disrupt sleep or exacerbates sleep disorders, especially in children and adolescents.” [American Medical Association Policy Release June 2012]

Also, this month the Women’s College Hospital, a major Toronto hospital, reports it is treating more patients for electromagnetic radiation poisoning from overexposure to wireless sources such as smart phones, cell phone towers, wireless Internet routers, **smart meters**, cordless phones and power lines of all sorts have all been recognized as possible contributors to an environmental health condition called electromagnetic hypersensitivity (EMS) caused by significant exposure. The hospital’s Environmental Health Clinic is also holding educational workshops on the subject of wireless radiation exposure for doctors. It’s partly in the hopes also to develop more awareness among treating agents and better care programs for those suffering from exposure to wireless radiation. The hospital reports that patients can complain of disrupted sleep, headaches, nausea, dizziness, heart palpitations, memory problems, and skin rashes. [www.womenscollegehospital.ca/assets/legacy/wch/pdfs/.pdf]

As attested to above by both scientist and medical experts, both Classes of ‘medical conditions customers’ have conditions that are created or exacerbated by EMF/RF, and are persons with “medical conditions” as defined in Government Code section 12926.²³ Major life activities are affected and made more difficult because of

²³ ‘Some of the medical conditions covered in Government Code section 12926, that are identical to those listed by the AAEM [www.aaemonline.org/AAEMEMFmedicalconditions.pdf,] Conditions such as
Page | 29 SCWSSM OPENING BRIEF(LFB) [WITH 2 ATTACHMENTS] - A.11-03-014 and related matters

their medical condition . Often both physical, mental, social activities are compromised. Therefore the Commission's Rulings, charging fees for an analog meter replacement or a failing to designate a 'zone of safety' at no charge to accommodate these customers is a violation of CPUC section 453(b) and other federal and state laws.

Therefore customers suffering as a result of the EMF/RF emissions from the smart meter and its mesh network are disabled and have covered medical conditions as defined under CPUC 453(b) and it is discriminatory for the Commission to enter these Rulings that treat these 'medical condition customer' prejudicially, disadvantageously or charge fees that are, a result of their disability.

2. THE COMMISSION'S RULINGS CANNOT AUTHORIZE OPT-OUT FEES THAT PREJUDICE, DISADVANTAGE OR CHARGE DIFFERENT RATES TO CUSTOMERS BECAUSE OF A MEDICAL CONDITION WITHOUT VIOLATING CPUC 453(b).

The Commission's Rulings that assess opt-out fees on all customers, including those with Class 1 and Class 2 medical conditions, has a discriminatory impact by placing a disproportionate burden on those with disabilities and medical conditions. This is because 'medical conditions customers' haven no choice but to 'opt out' and be charged a fee, because the consequences of not doing so, are exacerbated disabilities and health conditions or complete loss of use of home (or business premise) and receiving no ability to benefit from receiving electric services. This constitutes prejudice and disadvantage because they are impacted and consequently treated differently than other customers because of their 'medical condition.' (ie. charged for access to electric services).²⁴

cancer, heart disease, musculoskeletal, neurological, autonomic nervous system, respiratory, cardiovascular, reproductive, digestive, genitourinary and skin, to name a few. These are 'medical conditions' that limit or make more difficult one or more major life activity as defined in Government Code section 12926, 11135 and apply to section 453(b).

²⁴ such as: *Genetic defect, Cancer, Neurological conditions such as paresthesias, somnolence, cephalgia, dizziness, unconsciousness, depression, Musculoskeletal effects including pain, muscle tightness, spasm, fibrillation, Heart disease and vascular effects including arrhythmia, tachycardia, flushing, edema , Pulmonary conditions including chest tightness, dyspnea, decreased pulmonary function, Gastrointestinal*
Page | 30 SCWSSM OPENING BRIEF(LFB) [WITH 2 ATTACHMENTS] - A.11-03-014 and related matters

3. SUGGESTIONS TO THE COMMISSION TO MAKE REASONABLE MODIFICATIONS TO ITS POLICIES, PRACTICES AND PROCEDURES TO MAKE ACCOMMODATIONS FOR CUSTOMERS WITH COVERED ‘MEDICAL CONDITIONS’

Recommend that the Commission make modifications in its policies, practices and procedures and order utilities to:

a.) Remove smart meter from home of person with covered medical conditions and replace with an electromechanical analog meter with no communication capabilities, at no charge.

b.) Remove smart meters in area surrounding home of person with medical condition and replace with electromechanically analog meters with no communication capabilities, at no charge to the customers. (distance around home to be determined by customers’ perceptions and symptoms)

c.) Remove all wireless technology related to smart meters and smart grid within same circumference of home of person with covered medical condition

d.) Removal of any collector meter surrounding home of person with medical condition similar distance to b.) And c.) above.

e.) Notify all customers of possible adverse affects from EMF/RF from the smart

conditions including nausea, Autonomic nervous system consensus by forty (40) scientists and physicians rebutting misinformation put out by the *dysfunction (dysautonomia)*. [See www.aeemonline.org/AAEMEMFmedicalconditions.pdf, and Attachment 1 to this brief] .

meters and its mesh network in personal letter apprising them of accommodations available to those customers with ‘medical conditions’ covered under Government Code section 12926.

f.) Utility pay for shielding of customers with a covered’ medical condition’ per independent environmental consultant’s recommendations.

g.) The AAEM recommends in its guidelines to physicians that certain accommodations are afforded customers with the aforementioned disabilities, physical conditions and mental conditions.

These recommendations include but are not limited to: “Because Smart Meters produce Radiofrequency emissions, it is recommended that patients with the above conditions and disabilities be accommodated to protect their health. The AAEM recommends: that no Smart Meters be on these patients’ homes, that Smart Meters be removed within a reasonable distance of patients’ homes depending on the patients’ perception and/or symptoms, and that no collection meters be placed near patients’ homes depending on patients’ perception and/or symptoms.” [www.aaemonline.org/AAEMEMFmedicalconditions.pdf,]

SCWSSM also suggests that reasonable modifications to the Commission policies, practices and procedures be instituted to accomplish these accommodations.

VII.

OTHER VIOLATIONS OF CALIFORNIA LAW.

While we were not asked to brief other California Constitutional or statutory violations the Commission and/or the utilities have violated by charging fees to persons with medical conditions, it is noteworthy to look to by way of example but not complete list:

A. California Civil Code Section 51 et. seq., the Unruh Act, which states a violation of the ADA is a violation of this Act;

B. California Government Code 11135-- Section 11135 prohibits any program or activity receiving financial assistance from the state from denying “full and equal” access to or discriminating against individuals with disabilities. This section is identical to the Rehabilitation Act except that the entity must receive State financial assistance rather than Federal financial assistance. D.K. v. Solano County Office of Educ, 667 F. Supp. 2d 1184, 1190-91 (E.D. Cal. 2009) It is undisputed that the CPUC receives state funding for its administrative agency. By its policies practices and procedures in ordering the Utilities to charge fees to qualified persons with disabilities to prevent harm is a violation.

C. California Civil Code section 54 et. seq. Disabled Persons Act which provides:” “individuals with disabilities shall be entitled to full and equal access, as other members of the general public, to accommodations, advantages, and facilities” Cal. Civ. Code section 54.1. A violation of the ADA also constitutes a violation of the CDPA, See Cal. Civ. Code Section 54(c); see also Hubbard v. SoBreck, 554 F.3d 742, 745 (9th Cir. 2009).

VIII.

CONCLUSION

For all the aforementioned reasons, SCWSSM respectfully requests the Commission to modify its policies, practices and procedures to accommodate those customers that are qualified persons with a disability under the ADA and those who have ‘covered medical conditions’ that are adversely affected by the EMF/RF emissions of the smart meter and its mesh network, pursuant to CPUC section 453(b) as set forth in Government Code section 12926.

Date: July 19, 2012

Submitted By: _____/s/_____Barbara Schnier
Barbara E. Schnier
irector SCWSSM

ADA/FHA; Barbara Li Santi Comments, Jul. 13, 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.

September 2, 2013

Please consider the following documents as evidence of the need to lower standards for exposure to radio frequency radiation. My first attempt at submitting all of these files failed. I then managed to get this file and files 1 through 4 below into one submission. This time I will attempt this file and files 10 through 12.

File 1: May 20, 2013 Journal of Cell and Molecular Medicine, Volume XX, Number X, pages 1-9: "Electromagnetic fields act via activation of voltage-gated calcium channels to produce beneficial or adverse effects" by Martin Pall. This paper reviews 23 studies that show how VGCC activation can produce two well-documented responses to EMF exposure: stimulation of bone growth and the production of single stranded DNA breaks in EMF-exposed cells. Hence, it is time to give up the myth that low exposure levels are harmless.
(<http://onlinelibrary.wiley.com/doi/10.1111/jcmm.12088/pdf>)

File 2: A paper by Dr. Mae-Wan Ho describing the history of research on the biological effects of electromagnetic radiation. Dr. Ho writes that electromagnetic fields too weak to heat up the body have been linked to cancer and other illnesses since the 1960s. The current 'safety' limits are still inadequate to protect workers and the public from these effects.
(http://www.hese-project.org/de/emf/WissenschaftForschung/Ho_Dr._Mae-Wan/showDoc.php?lang=it&header=Dr.%20Ho&file=Non-Thermalbiological%20Effects.html&back=../showAuthor.php?target=Ho_Dr._Mae-Wan)

File 3: May 10, 2013 News Release from Bournemouth University in the UK: "Brain diseases affecting more people and starting earlier than ever before." Professor Colin Pritchard: "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... Considering the changes over the last 30 years – 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. There is no one factor rather the likely interaction between all these environmental triggers, reflecting changes in other conditions. It is clear that current FCC standards are too high and helping to increase neurological deaths.
(<http://www.alphagalileo.org/ViewItem.aspx?ItemId=131020&CultureCode=en>)
Source: Pritchard C, Mayers, A, Baldwin D (2013) Changing patterns of

neurological mortality in the 10 major developed countries 1979-2010. Public Health.

<http://www.publichealthjrnal.com/article/S0033-3506%2812%2900467-2/fulltext>

File 4: June 11, 2013 by Ronald M. Powell, Ph. D.

Biological Effects from RF Radiation at Low-Intensity Exposure, based on the BioInitiative 2012 Report, and the Implications for Smart Meters and Smart Appliances (<http://www.scribd.com/doc/146337041/Biological-Effects-From-RF-Radiation-and-Implications-for-Smart-Meters-June-5-2013>)

File 5: June 26, 2013 by Dr. Elizabeth Evans, Dr. Andrew Tresidder, and Dr. Erica Blythe

Open letter by UK medical doctors: Health and safety of Wi-Fi and mobile phones (<http://memoryholeblog.com/2013/06/29/open-letter-by-uk-doctors-on-health-and-safety-of-wi-fi-mobile-phones>)

File 6 (referenced by File 5): IARC CLASSIFIES RADIOFREQUENCY ELECTROMAGNETIC FIELDS AS POSSIBLY CARCINOGENIC TO HUMANS (http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf)

File 7 (referenced by File 5): Resolution 1815 (2011) Parliamentary Assembly of the Council of Europe (<http://assembly.coe.int/mainf.asp?link=/documents/adoptedtext/ta11/eres1815.htm>)

File 8 (referenced by File 5): Conclusions from the BioInitiative Report 2012 (<http://www.bioinitiative.org/conclusions>)

File 9 (referenced by File 5): Electromagnetic and Radiofrequency Field Effect on Human Health by the American Academy of Environmental Medicine (http://aaemonline.org/emf_rf_position.html)

File 10 (referenced by File 5): ISDE, IDEA: Statement on Electromagnetic [radio frequency] Radiation [EMR] and Health Risks (<http://www.env-health.org/news/members-news/article/isde-idea-statement-on>)

File 11 (referenced by File 5): Safe Schools 2012: Medical and Scientific Experts Call for Safe Technologies in Schools (<http://WiFiinschools.org.uk/resources/safeschools2012.pdf>)

File 12: June 29, 2013 European Citizens' Initiative "Electromagnetic Radiation." Groups from Spain, France, Sweden, Portugal, Italy, and Belgium have agreed on this foundation document for an initiative to be registered with the European

Parliament. The initiative demands a reduction in and controls of the exposure to electromagnetic fields in all of Europe and requires that the governments of the union adopt the measures of Resolution 1815 of the Council of Europe. This is the beginning of a campaign to collect one million signatures.

(http://www.peccem.org/DocumentacionDescarga/Campanas/ICE2013/ENG_EUROPEAN_MANIFESTO_IN_SUPPORT_THE_ECI.pdf)

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Madrid June 29, 2013



European Citizens' Initiative

"Electromagnetic Radiation"

EUROPEAN MANIFESTO IN SUPPORT THE ECI

1. APPLICATION OF THE PRECAUTIONARY PRINCIPLE AND THE ALARA (As Low As Reasonably Achievable) AND ALATA (As Low As Technically Achievable) PRINCIPLES FOR EMF EXPOSITION (INMISSION), in accordance with the European Environment Agency (1) and items 5, 8.1.2 and 8.4.3 of Resolution 1815 (2011), of the Parliamentary Assembly of the Council of Europe -PACE- (2), and with its constant update on the basis of the latest knowledge on biological effects.

2. REVISION AND MINIMIZATION OF EMF EXPOSURE (INMISSION) LIMITS (3), WITH MONITORING FOR ITS COMPLIANCE, on the basis of existing knowledge about biological and adverse health effects (thermal and non-thermal), as requested by items 8.1.1 and 8.1.2 of the PACE Resolution 1815 (2), and the various declarations of the European Environment Agency (1) on the basis of the Bioinitiative Report (4) and 2010 ICEMS Monograph on non-thermal effects of electromagnetic fields (5), and by the ICEMS resolutions since 2002 (6).

RADIO-FREQUENCY ELECTROMAGNETIC FIELDS (RF-EMF):

– **Starting** with the maximum exposure limit for the sum of RF-EMF exposures, on the basis of bio-effects and adverse effects listed in the Bioinitiative Report 2007, which reviews over 2000 studies:

Indoors , recommended in item 8.2.1 of the 1815 PACE Resolution 2011 (1):		
0.01 $\mu\text{W}/\text{cm}^2$	0.1 milliwatt/m²	$\cong 0.2 \text{ V/m}$
... And outdoor equivalent :		
0.1 $\mu\text{W}/\text{cm}^2$	1 milliwatt/m²	$\cong 0.6 \text{ V/m}$

– **Real-time comprehensive monitoring** of compliance with the exposure limit through continuous monitoring areas with public information in real time over the Internet covered by some regulations (7), in accordance with item 8.4.3 of the PACE Resolution 1815 (2), item 9 of the European Parliament resolution P6_TA (2009) 0216 (8) and Article 5 of the Aarhus Convention (9).

EXTREMELY LOW-FREQUENCY ELECTROMAGNETIC FIELDS (ELF-EMF):

– **1 milligauss (0.1 μT -microtesla-) in living areas as a maximum exposure limit for the ELF/CEM of the power grid (power lines, substations, transformers, ...)**, that is secured by a urban planning a safe distance from inhabited areas of 1 m for each Kilovolt rated voltage covered by some regulations (10), in accordance with items 8.4.1 and 8.4.2 of the PACE Resolution 1815 (2), and items 8 and 26 of the European Parliament resolution P6_TA (2009) 0216 (8) ("to minimize the exposure of residents in the case of extension of a network of high-voltage power lines"), based on scientific bibliography supported by the EEA for the PACE in 2011 (1, 4 and 5) and the recommendation of the Seletun Scientific Panel 2009 (11). These exposures limits must be considered a minimum agreement since has been reported about bioeffects in limits lower than 1 mg (4 and 5).

PROGRESSIVE REVIEW/UPDATE OF THOSE LIMITS, on the basis of the latest scientific studies and publications on bio-effects as already included in the BioInitiative 2012 Report updates, review of more than 1,800 new studies (4), and raised at the Potenza Picena Resolution 2013 (12), and the future studies.

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3. INFORMATION AND EDUCATION:

– **Information campaigns, with the participation of organizations of concerned citizens in accordance with the Convention of Aarhus** (9), to raise public awareness on the basis of the European Parliament resolutions 2008 and 2009 (3 and 8) **-to minimizing exposure to EMF-**, of the item 8.2.4 of PACE Resolution 1815 (2) **-reporting of potential risks-**, recommended by various resolutions European health agencies, professional associations and scientific (13). Recommend the promoting wired instead of wireless connections and teaching to recognize. Minimize the risks involved in the use of cell phones and other wireless devices (reduce the time in use, Increase the distance between wireless devices and the head and the body in general, avoid the moments of maximum exposure, use of the cable phones for long calls, ...), especially for higher risk populations (14), as well as the risks of using wireless devices to access data networks (15). These awareness campaigns should also include health risks associated with household appliances (and how to minimize them), as requested in item 18 European Parliament resolution P6_TA (2009) 0216 (8), and the lamps (CFL).

Report the effects described in medical bibliography (4, and 5) **on active or passive exposure (as in the case of tobacco) to EMF short to medium term** [headache, insomnia, anxiety; altered cognition, memory and learning, behavior, reaction time, attention and concentration, brain activity (altered EEG), ...] **and long term** [EHS, chronic fatigue, fertility problems, vascular disease, degenerative and oncological (16),]

– **Schools as Healthy Zones EMF-FREE**, in the same category as the existing “Smoke-Free Zones”:

Protection and education for children and young people given their special vulnerability (higher risk) in their growing years (crucial time for the acquisition of habits), **ensuring the internet wiring** (neither Wi-Fi nor the other wireless devices), as requested in item 8.3.2 the PACE Resolution 1815 (2).

Health education for education related agents about the risks of radiation from wireless devices, given the higher vulnerability of children and young people to EMF exposure and the peer and advertising pressures (addictive behaviors), urging a delay of the start-up age in children and adolescents. **Establish and strengthen health and environmental education programs on specific risks of EMF**. As requested in item 8.3.1 the PACE Resolution 1815 (2), item 17 of the European Parliament P6_TA(2009)0216 (8) and numerous recommendations of health agencies, professional and scientific associations (13). And on another, the participation of stakeholders is contemplated by the Aarhus Convention (9).

4. RECOGNITION OF EHS, PROTECTION OF EHS PEOPLE AND ZONES PROTECTED FROM EMFS

– **Official recognition of the existence of the "electro-hypersensitivity" syndrome as an environmental disease and – as it is done in Sweden- as a Functional Disability** (functional disorders and their resultant disabilities), including both adaptation of the work environment and work disability compensation. Within the meaning of item 8.1.4 of the PACE Resolution 1815 (2), and item 28 of the European Parliament P6_TA(2009)0216 (8).

– **Establishing health screening and intervention protocols, already made by institutions such as the College of Physicians of Austria** (17). Educating health professionals about the existence of this syndrome and promoting their learning about environmental diseases.

– **Public places as WHITE ZONES, EMF-FREE:** schools and kindergartens, hospitals and health care facilities in general, governmental buildings and others (such as post-offices, libraries, etc) attending the public, public transport, community centers and residences for the aged, shopping centers, ...; in compliance with the general principles of **International Convention on the Rights of Persons with Disabilities**, of non-discrimination, full and effective participation and inclusion in society, equality of opportunity, accessibility, ... (18)

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- **Ensuring livable housing for EHS people:** establishment of WHITE ZONES in towns and cities, as an emergency measure for people at increased risk, and the granting of state aid for the protection of their homes. All this in the line with item 8.1.4 of the PACE Resolution 1815 (2) and in compliance the International Convention on the Rights of Persons with Disabilities (18)

5. MEASURES FOR INDUSTRY AND PUBLIC AUTHORITIES:

- **Public participation in the process of implementation and monitoring of mobile phone base stations and terminals and high-voltage lines**, as requested in 8 of the European Parliament resolution P6_TA (2009) 0216 (8), item 8.4.4 of the PACE Resolution 1815 (2) and Article 6 of the Aarhus Convention (9).
- **Regulation of advertising promoting microwave emitting devices**. Prohibition of advertising promoting an excessive use of wireless devices and prohibition of advertising of these devices aimed specifically at children and adolescents (most vulnerable), as denounced in Item 23 of the European Parliament Resolution P6_TA(2009)0216 (8). This regulation follows the footsteps of the European Directive on publicity of tobacco 2003 (19)
- **Mandatory labeling of wireless devices**, in accordance with the item 8.2.3 of the PACE Resolution 1815 (2) and Following the steps of the measures labeling applied by the European Directive 2001 on tobacco products (20). Print an alert of potentially “**injurious to health**” next to the classification as **carcinogenic, category 2b** by IARC/WHO (16), with the disclosure of health potential risks associated with their use and tips to minimize those risks. Mandatory information on SAR printed on the packages of cell-phones and on their selling outlets.
- **Withdrawal from the market of cell phones and wireless devices specifically intended for children**, which are in contradiction with items 8.1.1 and 8.3 of the PACE Resolution 1815 (2), **well as the withdrawal of ordinary DECT cordless phones** –which should be replaced with wired phones or lower emission ZERO DECT phones: Eco-DECT Plus and Eco-Full (21). On the line specified in item 8.1.5 (promoting “technologies which are just as efficient but whose effects are less negative on the environment and health” -or that do not have them-) of Resolution 1815 of the PACE (2).
- **Installation of warning devices the conversation after 3 minutes**, in prevention of the increased incidence of brain tumors, as recommended by the Russian National Committee on Non-Ionizing Radiation Protection (22), on the line specified in item 8.1.1 of Resolution 1815 of the PACE (2). See note and classification of IARC / WHO (16)
- **Health standards of living** to discourage talk on the cellphone about pregnant women, children and adolescents and anyone who requires their right not to become passive user, in compliance with the International Convention on the Rights of Persons with Disabilities. (18) and in according to protection standards of passive smokers of tobacco smoke (especially in childhood and maternity) listed in the WHO Framework Convention on Tobacco Control, 2003 (23).
- **Withdrawal from the market of incubators whose engines expose infants to the ELF-EMF**, enhancing the design of incubators with the engine away from the baby or using suitable ELF-EMF absorbing panels to protect your body (like Mu-metal) (24), within the meaning of item 8.1.5 of Resolution 1815 of the PACE (2) of promoting technologies which are just as efficient but whose effects are less negative on the environment and health.
- **Moratorium** on the use and deployment of "Smart Meters" (25) and 4G networks, on the line specified in item 8.1.1 (“take all reasonable measures to reduce exposure to electromagnetic fields”) and item 8.1.5 (promoting “technologies which are just as efficient but whose effects are less negative on the environment and health” -or that do not have them-) of Resolution 1815 of the PACE (2).
- **Mandatory liability insurance covering also health damages** for the cell-phone and other wireless devices industry, whose absence is evidenced in item 26 of the European Parliament resolution P6_TA (2009) 0216 (8).

- **Promotion of independent research and studies**, as requested in items 8.5.4-8.5.7 of Resolution 1815 of the PACE (2). Increased public funding, independent commissions for the allocation of public funds, mandatory transparency in lobbying, incompatibility of participation and funding from foundations supported by the telecommunications and energy sectors in public agencies (26) with the obligation to report the source of funding of the studies included in the risk assessments of these bodies.
- **Ensure transparency, impartiality and plurality of expert assessments** on health risks of non-ionizing electromagnetic fields (EMF), within the meaning of item 7 Resolution 1815 of the PACE (2), at all levels of decision including the appointment of experts, the presentation of alternative scientific interpretations, the inclusion of the "views" of citizenship with the presence of the relevant groups in this area in implementation of the Aarhus Convention (9), ...
- **Replacement of wireless networks by wired connections wherever possible**. Establishment of a European network of coaxial / optical fiber cable (27), on the line specified in item 8.1.1 ("take all reasonable measures to reduce exposure to electromagnetic fields") and item 8.1.5 (promoting "technologies which are just as efficient but whose effects are less negative on the environment and health" -or that do not have them-) of Resolution 1815 of the PACE (2).
- **Promotion of technologies and techniques biocompatible and sustainable future** from the point of view of environmental and human health, within the meaning of item 8.1.5 of Resolution 1815 of the PACE (2) and item 7 of the European Parliament resolution P6_TA (2009) 0216 (8).

NOTES:

1.- See communications from the European Environment Agency (EEA) in support Bioinitiative Report in 2007 (<http://www.eea.europa.eu/highlights/radiation-risk-from-everyday-devices-assessed>), in 2008-2009 (in the Committee on the Environment, Public Health and Food Safety of the European Parliament) in 2011 (Speech of Director of the EEA: http://latelessons.eea.europa.eu/fof572324/statements/Benefits_of_mobile_phones_and_potential_hazards_of_EMF.doc/download_d), and their participation in the Committee on the Environment, Agriculture and Local and Regional Affairs of the Parliamentary Assembly of the Council of Europe - see section B, point 4.21 of document 12608: <http://www.assembly.coe.int/ASP/Doc/XrefViewPDF.asp?FileID=13137&Language=EN>) and in 2013 ("late lessons from early warnings" Volume 2: <http://www.eea.europa.eu/publications/late-lessons-2>)

2.- Resolution 1815 of the Parliamentary Assembly of the Council of Europe (PACE) on potential hazards of electromagnetic fields and their effects on the environment (27.05.2011): <http://assembly.coe.int/Mainf.asp?link=/Documents/AdoptedText/ta11/eRES1815.htm>

3.- The limits set by the ICNIR are INSUFFICIENT and IRRELEVANT: never have protected the biological effects and chronic exposure to long-term, only have been based on the thermal effects of short term exposure -6 minutes exposure-(<http://www.icnirp.de/documents/emfgdl.pdf>), along the lines set in paragraphs 21, 22 and 23 of the European Parliament Resolution of September 2008 on Mid Term Review of Environment and Health Action Plan (2004-2010): <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP/TEXT+TA+P6-TA-2008-0410+0+DOC+XML+V0//EN>, and item 8.1.2 of the PACE Resolution 1815.

4.- Bioinitiative Report 2007/2012. August 2007 Edition: review of over 2,000 studies. Update December 2012: a review of more than 1,800 new studies.

BioInitiative Working Group, Cindy Sage and David O. Carpenter, Editors. BioInitiative Report: A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Radiation at www.bioinitiative.org, December 31, 2012.

BioInitiative Working Group, Cindy Sage and David O. Carpenter, Editors. BioInitiative Report: A Rationale for a Biologically-based Public Exposure Standard for Electromagnetic Fields (ELF and RF) at www.bioinitiative.org, August 31, 2007.

5.- The ICEMS Monograph, "Non-Thermal Effects and Mechanisms of Interaction Between Electromagnetic Fields and Living Matter", edited by Livio Giuliani and Morando Soffritti for the "European Journal of Oncology" - Library Vol. 5 of the National Institute for the Study and Control of Cancer and Environmental Diseases "Bernardo Ramazzini", Bologna, Italy, 2010, Part I and Part II: <http://www.icems.eu/papers.htm>, http://www.icems.eu/papers/ramazzini_library5_part1.pdf, http://www.icems.eu/papers/ramazzini_library5_part2.pdf

6.- www.icems.eu/

7.- Real-time monitoring detects the instantaneous peak values (based on the existence of non-thermal effects), unlike the means (based only on the thermal effects). In Spain, a Municipal Ordinance of Leganés (temporarily suspended by court order) involves the development of these control systems that focus on the real exposure (the sum of emissions from various Wireless transmitters in different parts of town): http://oa.upm.es/13170/1/INVE_MEM_2011_109836.pdf

8.- European Parliament resolution of 2 April 2009 on health concerns associated with electromagnetic fields (P6_TA(2009)0216: <http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP/TEXT+TA+P6-TA-2009-0216+0+DOC+XML+V0//EN>

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- 9.- Aarhus Convention, of the Economic Commission for Europe United Nations (1998), on access to Information, public participation in decision-making and access to justice in environmental matters: <http://www.unece.org/environmental-policy/treaties/public-participation/aarhus-convention.html>
- 10.- See Article 52 of the General Municipal Management Plan of the Jumilla Council (Spain): <http://www.borm.es/borm/documento?obj=bol&id=11833>
- 11.- The Seletun Scientific Panel 2009, on electromagnetic fields health risks: consensus points, recommendations and rationales: <http://emfsafetynetwork.org/wp-content/uploads/2011/02/Scientific-panel-on-EMF-Health-Risks.pdf>
- 12.- The Potenza Picena Resolution 2013. <https://www.dropbox.com/s/koiij5i6al3uy72/POTENZA%20PICENA%20SCIENTIFIC%20RESOLUTION%202013.pdf>
- 13.- In line with the numerous recommendations against immoderate use of mobile phone and / or protection of wireless technologies in children and young people, from the public administrations (in particular the health administrations) and / or the health professional associations (in states such as Germany, Austria, Belgium, Canada, Spain, USA, Finland, France, India, Israel, Italy, Ireland, Russia, Switzerland, ...) or internationally (e.g. the International Commission for Electromagnetic Safety, ICEMS). In Russia, the health standard SanPiN-2003 (2.1.8/2.2.4.1190-03, item 6.9) recommended to restrict mobile phone use in children under 18 years: <http://www.icems.eu/docs/Russian%20statement.RNIRP.MAR09.pdf>
- 14.- fetus, Pregnant women, children and youth, holders of electronic implants, ...
- 15.- Continuous connection = continuous radiation.
- 16.- The WHO/International Agency for Research on Cancer (IARC) has classified radiofrequency electromagnetic fields as possibly carcinogenic to humans (Group 2B), based on an increased risk for glioma, a malignant type of brain cancer, associated with wireless phone use: http://www.iarc.fr/en/media-centre/pr/2011/pdfs/pr208_E.pdf, <http://monographs.iarc.fr/ENG/Monographs/vol102/index.php>
- 17.- As in Austria: Guidelines of the College of Physicians of Austria for the diagnosis and treatment of EMF syndrome. EMf Working Group, March 2012: <http://www.magdahavas.com/wordpress/wp-content/uploads/2012/06/Austrian-EMF-Guidelines-2012.pdf>
- 18.- Convention on the Rights of Persons with Disabilities 2006: <https://www.un.org/disabilities/default.asp?id=150>
- 19.- DIRECTIVE 2003/33/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 26 May 2003 on the approximation of the laws, regulations and administrative provisions of the Member States relating to the advertising and sponsorship of tobacco products. <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:152:0016:0019:EN:PDF>
- 20.- DIRECTIVE 2001/37/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 June 2001 on the approximation of the laws, regulations and administrative provisions of the Member States concerning the manufacture, presentation and sale of tobacco products: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2001:194:0026:0034:EN:PDF>
- 21.- Since constant exposure to a small base station of a DECT cordless phone at home can be hundreds of times greater than that received by the mobile phone masts outside EMF.
- 22.- The Russian National Committee of Non-Ionizing Radiation Protection (RNCNIRP) in its recommendations about the use of mobile phones in September 2001 and advises "The duration of phone calls should be limited to a maximum of three minutes, and after make a, you should wait at least 15 minutes before making another ": <http://www.vrednost.ru/docrnk.php>, <http://www.vrednost.ru/docvip.php>, <http://www.zakairan.com/CosmicCookies/HealthCookies/EMR%20Russian%20Report.pdf>.
- 23.- WHO Framework Convention on Tobacco Control: http://www.who.int/fctc/text_download/en/index.html
- 24.- Bellieni CV et al 2008. Electromagnetic fields produced by incubators influence heart rate variability in newborns. Arch Dis Child Fetal Neonatal Ed 93(4):F298 - 301 PMID: 18450804: <http://www.avaate.org/IMG/pdf/incuvadorafn132738.pdf>. See also: http://www.biointiative.org/report/wp-content/uploads/pdfs/sec19_2012_Fetal_neonatal_effects_EMF.pdf, http://www.biointiative.org/report/wp-content/uploads/pdfs/sec16_2012_Plausible_Genetic_Metabolic_Mechanisms.pdf, <http://www.avaate.org/IMG/pdf/incuvadorafn132738.pdf>
- 25.- Moratorium requested, among others, by the Austrian Medical Chamber: <http://www.apdr.info/electrocontaminacion/Documentos/Artigos/OAK20120118.pdf>
- 26.- Public agencies such as the Executive Agency for Health and Consumers (EAHC), The Committee on Environment, Public Health and Food Safety (ENVI), Scientific Committee on Emerging and Newly Identified Health Risks (SCHENIR), etc.
- 27.- The wired connections would entail no emissions of electromagnetic radiation and would permit a high speed Internet connection, improving as well the health of the whole population.

ADA/FHA; Kit T. Weaver Reply Comments, Oct. 23, 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 (FCC), Washington, DC 20554

As officially presented in the Federal Register/ Vol. 78, No. 107 / Tuesday, June 4, 2013 / Proposed Rules. Federal Communications Commission, 47 CFR Parts 1, 2, 15, 24, 25, 27, 73, 90, 95, 97, and 101 [ET Docket Nos. 03-137 and 13-84; FCC 13-39], Reassessment of Exposure to Radiofrequency Electromagnetic Fields Limits and Policies, Federal Communications Commission

Reply Comments Filed by: Kit T. Weaver
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October 23, 2013

JA 10068

Reply Comments of Kit T. Weaver
Submitted October 23, 2013

Introduction

1. Kit T. Weaver submits these “reply” comments in response to the publication of FCC 13-39, First Report and Order, Further Notice of Proposed Rule Making and Notice of Inquiry (ET Docket No. 13-84 and ET Docket No. 03-137) released March 29, 2013, by the FCC and published in the Federal Register on June 4, 2013.
2. Mr. Weaver previously submitted comments on August 31, 2013, which are available at the following FCC website link:
<http://apps.fcc.gov/ecfs/comment/view;jsessionid=Ym4QSnCY6nBJpn1VDXx2P312wySS2LGHhfyJwgbKMY2160hHGMn4!153728702!-1613185479?id=6017465341>.

A brief synopsis of the comments previously provided can be summarized as follows:

- With the mounting evidence of adverse biological effects occurring at levels of radiofrequency exposure below the current FCC guidelines, the FCC’s stated confidence in its current guidelines is unfounded. Evidence was then given to support this assertion.
- The FCC should begin development of new biologically based public safety limits in concert with other qualified governmental agencies and professional organizations which would include representation from the medical community.
- Until new biologically based limits can be finalized, the FCC should fully endorse a **precautionary approach** to implement common sense

measures that will help slow the exponential growth of RF exposure to our population caused by the increasing number of wireless devices present in our society. Such measures would focus on educating the public on the voluntary nature of using personal wireless devices and how members of the public can use simple methods such as “time and distance” to reduce overall exposure.

- Inherent with the concept of the voluntary nature of wireless devices used in the home, the FCC should stipulate that no utility, government, or other entity can require installation of a RF emitting device upon one’s property without consent.
 - Specifically for wireless smart meters, the FCC should revise/ issue equipment authorizations to clearly stipulate that installation of such devices on individual homes requires the property owner’s consent.
 - For smart appliances, the FCC should mandate that all smart appliances containing an RF transmitter for communication with wireless smart meters or wireless routers be provided with a clear mechanism for the consumer to ensure that any RF transmitters contained within the device are deactivated.
3. These supplemental “reply” comments are primarily intended to provide additional information pertinent to the highlighted item above recommending that the FCC “fully endorse a ***precautionary approach***” to help slow the exponential growth of RF exposure to our population caused by the increasing number of wireless devices present in our society. In addition, these “reply” comments will also address an additional issue related to accommodation of under the American Disabilities Act.

Utilize a Precautionary Approach to Reduce Future RF Exposures

1. As noted in prior comments, in April 2010, the “President’s Cancer Panel” issued a report entitled, *Reducing Environmental Cancer Risk*. One particular quote from the report is as follows: “When credible evidence exists that there may be a hazard, a precautionary approach should be adopted and alternatives should be sought to remove the potential hazard and still achieve the same social benefit.”
2. It would seem that the FCC is reluctant to utilize a precautionary approach in light of certain statements made in the Notice of Inquiry, where in paragraph 69 the FCC made the curious statement that “adoption of extra precautionary measures may have the unintended consequence of ‘opposition to progress and the refusal of innovation, ever greater bureaucracy,... [and] increased anxiety in the population.’”
3. There has been a recent significant development relevant to the consideration by the FCC of a precautionary approach for limiting RF emissions. On October 15, 2013, the French health agency, ANSES, published results of its assessment of risks related to exposure to radiofrequencies based upon a review of the international scientific literature. The actual introductory statement for the ANSES press release was as follows:

“Faced with the rapid development of wireless technologies, ANSES issues recommendations for limiting exposure to radiofrequencies, especially for the most vulnerable populations.”

The above statement essentially endorses a ***precautionary approach*** similar to that outlined in my prior comments submitted to the FCC on August 31, 2013.

Continuing with additional information from the French governmental agency announcement:

“Limited levels of evidence do point to different biological effects in humans or animals. In addition, some publications suggest a possible increased risk of brain tumour, over the long term, for heavy users of mobile phones. Given this information, and against a background of rapid development of technologies and practices, ANSES recommends limiting the population’s exposure to radiofrequencies – in particular from mobile phones – especially for children and intensive users, and controlling the overall exposure that results from relay antennas. It will also be further developing its work on electro-sensitive individuals, specifically by examining all the available French and international data on this topic that merits closer attention.”

The following additional statement is contained within the French agency announcement:

“The findings of the risk assessment have not brought to light any proven health effects.” [emphasis added]

The word proven is generally interpreted to mean: “Having been demonstrated or verified without doubt.” Well, almost nothing can be “verified without doubt” in science or medicine. So although the French announcement includes the statement that health effects have not been “proven,” the French “expert appraisal” should be considered a major development where a governmental agency of a major Western country appears to be turning in favor of prudent avoidance of RF emissions in the interests of protecting public health and safety.

The French health agency announcement continues:

“The findings of this expert appraisal are therefore consistent with the classification of radiofrequencies proposed by the World Health Organization’s International Agency for Research on Cancer (IARC) as ‘*possibly carcinogenic*’ for heavy users of mobile phones. In addition, the expert appraisal nevertheless shows, with limited levels of evidence, different biological effects in humans or animals, ... these can affect ***sleep, male fertility or cognitive performance.***” [emphasis added]

To limit exposure to radiofrequencies, especially in the most vulnerable population groups, the ANSES recommends:

- “For intensive adult mobile phone users (in talk mode): use of hands-free kits and more generally, for all users, favouring the purchase of phones with the lowest SAR values;
- Reducing the exposure of children by encouraging only moderate use of mobile phones;
- Continuing to improve characterisation of population exposure in outdoor and indoor environments through the use of measurement campaigns;
- That the development of new mobile phone network infrastructures be subject to prior studies concerning the characterisation of exposures, and an in-depth study be conducted of the consequences of possibly multiplying the number of relay antennas in order to reduce levels of environmental exposure;
- Documenting the conditions pertaining at those existing installations causing the highest exposure of the public and investigating in what measure these exposures can be reduced by technical means;
- That all common devices emitting electromagnetic fields intended for use near the body (DECT telephones, tablet computers, baby monitors, etc.) display the maximum level of exposure generated (SAR, for example), as is already the case for mobile phones.”

To review the entire English version the ANSES press release, refer to the following link:

<http://skyvisionsolutions.files.wordpress.com/2013/10/french-agency-press-kit.pdf>.

The entire expert appraisal is printed in French and consists of a PDF file which is 461 pages in length. It is hoped that the FCC will review this document in evaluating a strategy whereby the FCC would fully endorse a precautionary approach at limiting the exponential growth of RF exposure to our population caused by the increasing number of wireless devices present in our society. The full French “**Update of the ‘Radiofrequencies and health’ expert appraisal**” should be available at the following link for at least a period of one calendar year:

<http://skyvisionsolutions.files.wordpress.com/2013/10/french-rf-expert-review.pdf>.

4. What is disheartening, however, is the public relations “spin” placed upon the French report by telecommunications-related organizations. The clear headline for the report is that an agency of the French government is recommending a ***precautionary approach*** to complement the limits based system that exists for limiting RF exposure within France. This is the news. Accordingly, the British [The Telegraph](#) headline for the story was “**Children’s exposure to mobile phones should be limited**,” and “*French safety watchdog recommends limiting exposure to radiofrequencies for children and intensive users.*” However, according to a telecommunications industry group, [GSMA](#), the appropriate headline was that “**French government finds mobile phones have no proven health effect and keeps existing safety standards.**” It is like people are living in different worlds and the one for the telecommunications world is clearly biased. Let us hope that the FCC is not similarly inclined to misinterpret or dismiss the French agency report.

Accommodation for Individuals with Wireless Smart Meters and Smart Appliances

1. As mentioned in prior comments and due to the concept of the voluntary nature of wireless devices used in the home, the FCC should stipulate that no utility, government, or other entity can require installation of an RF emitting device upon one's property without consent. Such stipulation by the FCC would apply to devices such as wireless smart meters and would also extend to smart appliances to the extent that consumers are provided with a clear mechanism to ensure that any RF transmitters contained within smart appliances are deactivated.
2. By taking actions as described above, the FCC would facilitate compliance with provisions of the American Disabilities Act by utility organizations, appliance manufacturers, and corporations involved with the smart grid or smart home industry.
3. Whether the FCC, the telecommunications industry, and some bureaucratic scientific bodies want to acknowledge it or not, it is a fact that qualified medical professionals diagnose conditions related to Electromagnetic Hypersensitivity (EHS) or sensitivity related illnesses that involve adverse clinical states elicited by exposure to low-dose diverse environmental triggers, including electrical stimuli such as radiofrequency radiation. For example, a published article of interest is entitled, "Sensitivity to Electricity – Temporal Changes in Austria," written by Joerg Schröttner and Norbert Leitgeb, 2008, and published online at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2562386/>. As stated in the article, "An overwhelming percentage of general practitioners (96%) to at least some degree believed in the effects of environmental electromagnetic fields on health, and only 39% have never associated health symptoms with electromagnetic pollution. A similar discrepancy between physician's opinions and established scientific assessment was shown in an inquiry study including 342 interviews of physicians in Switzerland."

For background information on sensitivity related illnesses, refer to “Sensitivity-related Illness: the escalating pandemic of allergy, food intolerance and chemical sensitivity,” available at the following link:

<http://www.ncbi.nlm.nih.gov/pubmed/20920818>. Although not indicative from the title or abstract, the article provides an explanation on how impaired tolerance and hypersensitivity can cause multi-system clinical symptoms and individual impairment based upon triggers and associated reactions originating from multiple sources including direct chemical exposure, inhalants, foodstuffs, biological triggers such as molds, and electromagnetic radiation.

4. As noted in [comments](#) provided to the FCC by the American Academy of Environmental Medicine (AAEM), “electromagnetic sensitivity and the health effects of low level RF exposure have already been acknowledged by the federal government.” Specifically,
 - The United States Access Board, an independent Federal agency devoted to accessibility for people with disabilities, has stated, “The Board recognizes that multiple chemical sensitivities and **electromagnetic sensitivities** [emphasis added] may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual's major life activities.” Reference: Federal Register, Vol. 67, No. 170, Tuesday, September 3, 2002, page 56353, “Architectural and Transportation Barriers Compliance Board.”
 - The United States Access Board sponsored the IEQ Indoor Environmental Quality Project, and the final project report includes the following statement, “For people who are **electromagnetically sensitive** [emphasis added], the presence of cell phones and towers, portable telephones, computers, fluorescent lighting, unshielded transformers and wiring, battery re-chargers, wireless devices, security and scanning equipment, microwave ovens, electric ranges and numerous other electrical appliances can make

a building inaccessible.” Reference: “IEQ Indoor Environmental Quality,” NIBS IEQ Final Report, 7/14/05. Note: “NIBS” is an acronym for National Institute of Building Sciences.

5. In a U.S. Supreme Court case, *Memphis Light, Gas & Water Div. v. Craft*, 436 U.S. 1 (1978), it was stated that “Utility service is a necessity of modern life; indeed, the discontinuance of water or heating for even short periods of time may threaten health and safety.” It then follows that if a wireless smart meter, for example, cannot be tolerated by a customer for medical reasons, then use of such a meter would prevent the customer from receiving electrical services. In such a situation, Title III of the ADA requires the utility to accommodate the customer with a disability by modifying its standard practice of installing a wireless smart meter, so that the customer can continue to access necessary electrical service without burden.
6. Electrically sensitive individuals have generally been able to limit or eliminate the number of wireless devices in the home. They live without Wi-Fi, use traditional wired telephones, etc. However, if there reaches a point where only so-called smart appliances are manufactured that all contain wireless transmitters, then there reaches a point where electrically sensitive individuals may not be to perform basic household activities such as doing the laundry or may not longer be able to own a refrigerator. Such a situation would clearly be unacceptable in our society. Such devices must clearly be manufactured in a way that any wireless transmitters can be fully deactivated such that they are no longer transmitting a RF signal.
7. In summary, on the topic of wireless smart meters and smart appliances, it is incumbent upon the FCC to issue regulations that protect electrically sensitive individuals in a way that ensures accommodation and compliance with provisions of the American Disabilities Act.

ADA/FHA; Sandra Schmidt Comments, Mar. 3, 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)	
(2003)	)	ET Docket No. 03-137
)	
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, DC 20554

_Reply filed by:

Sandra Schmidt
2900 Fourth Ave., Ste. 202
San Diego, CA 92103
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619-531-0780

March 4, 2013

AFFIDAVIT OF SANDRA SCHMIDT

State of California]

San Diego County]

I, Sandra Schmidt, attest that my statements are true to the best of my knowledge and belief.

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

1. My name is Sandra Schmidt. My business address is 2900 Fourth Ave., Ste. 202, San Diego, CA 92103.

2. I am an attorney licensed to practice law in the State of California.

3. In the interest of protection of the public health as the highest priority, I submit this Reply Comment.

4. I support biologically-based guidelines for radiofrequency radiation, for the following reasons.

5. US citizens and tax payers deserve radiofrequency radiation safety limits based on biology, not physics. In order for the FCC to fulfill its Congressional mandate to protect the public health and safety from harm from radiofrequency radiation it must update its RF safety regulations based on a robust body of independent biological research. "In the Telecom Act of 1996 Congress directed the FCC to set its own RF safety regulations for emissions from Personal Wireless Services Facilities (PWSF). The House Committee on Commerce said it was the Commission's responsibility to adopt uniform RF regulations "with adequate safeguards of the public health and safety." (H.R. Report No. 104-204, p. 94) This directive has not yet been followed, nearly 20 years later, with dire impacts already seen in the public health as a result.

6. There is now a serious public health crisis as a result of the FCC not following the directive to provide adequate safeguards of the public health and safety pertaining to 3 its handling of radio frequencies and RF guidelines. Independent researchers and physician associations point to a broad range of medical conditions that may be associated with exposures to RF radiation, including cancer, autism, Alzheimers (dementia), learning disabilities, behavioral disorders, attention deficit disorder (ADD, ADHD), immune system, neurological system, and other disorders.

7. Children and even babies are now exposed to high levels of rf radiation on a regular basis, with devices specifically marketed to these populations, such as cell phones and cell phone applications ("apps"), notebooks, reading devices, and baby monitors. Most Americans communicate throughout the day on cell phones, as well as using them as computers, radios, televisions, and to watch movies and videos, increasing exposure exponentially. One has only to look at what Americans are doing - many are using cell phones and other wireless technologies on a near continuous basis, following heavy industry marketing without regard for safety.

8. Wi-Fi is being installed in most of our nation's schools, medical facilities, senior care centers, public libraries, and other public places, including entire towns and cities, without regard for the dangers of continuous exposure to biologically-based hazardous levels of rf radiation, often equivalent to that of cell towers.

9. "Smart" utility meters are being forced on the general public in their residences and in every business setting, providing continuous 24/7 biologically-based hazardous pulsed rf exposures, often at close range.

10. It must be noted that there is no safe range established for pulsed rf radiation.

11. The current FCC OET-65 guideline is 3,333,333 times higher than biologically-based guidelines (as derived from BioInitiative Report 2012).

Various radiofrequency (RF) radiation guideline recommendations (given as

$\mu\text{W}/\text{m}^2$ *):

10 000 000 $\mu\text{W}/\text{m}^2$ – FCC (USA) OET-65, recommendation

9 000 000 $\mu\text{W}/\text{m}^2$ – ICNIRP 1998; WHO, recommendation

100 000 $\mu\text{W}/\text{m}^2$ – Russia and Italy, recommendation **

1 000 $\mu\text{W}/\text{m}^2$ – the Bioinitiative Report 2007, recommendation

170 $\mu\text{W}/\text{m}^2$ – the Seletun Statement 2010, recommendation

3 $\mu\text{W}/\text{m}^2$ – the Bioinitiative Report 2012, revised recommendation (Precautionary ceiling (top) level for 2013, may be revised at a later date)

0.1 $\mu\text{W}/\text{m}^2$ – contribution from the sun at daytime during big solar storms 4

0.0 001 – 0.000 000 000 01 $\mu\text{W}/\text{m}^2$ – this is the natural background during normal cosmic activities; proposed by Olle Johansson, Karolinska Institutet (1997), as a genuine hygienic safety value. Above this level we could say electrosmog pollution is present, unless in the midst of a large solar storm.

*microwatts per meter squared

** EMF World Standards Database World Map (World Health Organization)

Please note: The range 0.000001 – 0.000000000001 $\mu\text{W}/\text{m}^2$ is the true natural background level during normal cosmic activities, which is what we have evolved to tolerate, according to Dr. Olle Johansson. In developed nations, according to Dr. Johansson, these levels might only be seen in a cave or specially designed military installation. However, it is instructive to see the great distance between what we evolved to tolerate and the suggested guidelines above. In the USA, the FCC guidelines make it currently legal to allow RF radiation levels at 10 000 000 $\mu\text{W}/\text{m}^2$, which is 10,000,000,000,000 (ten trillion) times higher than the upper natural background levels we evolved to tolerate! Is it any wonder that bioeffects and health impacts would be observed under these alarming conditions?

12. Specifically, I request that the FCC changes its RF safety guidelines to provide a biologically-based precautionary RF safety guideline in conformance with the recommendations of the BioInitiative Report 2012 [www.bioinitiative.org], which suggests a limit of 3 microwatts per meter squared [3 $\mu\text{W}/\text{m}^2$; equivalent to 0.3 nanowatts per square centimeter or 0.0003 $\mu\text{W}/\text{cm}^2$ - 0.0003 microwatts per

centimeter squared] for sensitive populations [which include but are not limited to children, infants, fetuses, pregnant women, seniors, disabled, medically ill, and electrosensitive persons]2.

13. Insofar as these populations cannot be separated from the general population, I believe it would be prudent to use this guideline for all.

14. Insofar as the above suggested BioInitiative-biologically-based guideline is derived from findings from 1800 recent studies on RF/EMF, in addition to approximately 20,000 in the literature over the past 40 years, it may be necessary to change it

a:

<http://www.electrosmogprevention.org/smart-meter-resources-links/safety-guidelines-for-rf-exposure/>

b:

Conclusions Table 1-1, p. 14, BioInitiative Report, 20125

downward in the near future, based on additional independent scientific and epidemiological evidence.

15. In addition to adopting a BioInitiative-biologically-based guideline, FCC should recognize that some individuals and groups will be more sensitive than the above suggested guideline provides protection for, and FCC must specify that accommodations to lower levels must be made available for these individuals and groups.

16. "Public safety standards are 1,000 – 10,000 or more times higher than levels now commonly reported in mobile phone base station studies to cause bioeffects."(<http://www.bioinitiative.org/conclusions/>)

17. The Fenton Reaction, which is partially responsible for the carcinogenic nature of exposure to low levels of ionizing radiation, also occurs with exposure to radiofrequency radiation. See 2012 BioInitiative Report.

18. I request that FCC provide this protection for total exposures based on anticipated and actual co-locations of technologies, rather than on the output of individual devices or technologies.

19. I request that FCC cease and desist from releasing additional frequencies from the electromagnetic spectrum to industry, as there is no possible way to know that these are safe. Past FCC performance in this area has been reckless and irresponsible, leading to extensive hazardous electrosmog exposures based on industry-based input alone, with a complete lack of scientific rigor, and zero independent safety research.

20. I request that FCC removes its approval for all technologies that do not meet the above suggested guidelines, individually, and as part of anticipated background levels.

21. I request that FCC cease from allowing self-monitoring by industry, and instead, require licensees to be under a program whereby emissions may be routinely checked by FCC and members of the public and reported to FCC, whereupon violations will cause licensing to be immediately suspended or revoked.

22. I request that FCC severely limit use of all frequencies that may endanger the public, such as those in the extremely low frequency (ELF) range, microwave and higher RF frequency ranges.

23. I request that FCC be required to continually review its guidelines, formally, at least yearly, and more often, when independent scientific evidence warrants it or at the request of independent watchdog organizations representing the general public.

24. I request that FCC must obtain and utilize only extensive independent, international scientific research and expert input, in developing its guidelines and must not utilize industry-based research or from sources with any industry-based conflicts of interest.

25. I request that FCC obtain and utilize informed US EPA and CDC input, based on current independent scientific research, in developing its guidelines.

26. I request that FCC develop and review its guidelines on a fast-track, taking no more than 3 months, with extensive solicitation of public and independent research comments and input.

27. I request that FCC include, give strong consideration to, and act upon nonindustry-based Public Comments, which should be provided in a continuous, easily submitted, transparent and efficient manner.

28. I assert that wireless technologies should be replaced by fiberoptics and safe wired solutions in order to protect the public health. This does not include sending signals along electric power lines, which I am informed and believe produces additional RF and EMF exposures along wiring both indoors and outdoors.

29. Although I am not a scientist, I assert on information and belief based upon the above references that there are serious documented health risks associated with electrosmog exposure. It is important that the FCC fulfill its obligation to protect the public health by addressing the health concerns raised herein and by considering the independent, non-industry related, scientific research cited herein in formulating future regulations.

30. While I realize that budgets are tight at this time, the protection of the public health must be a top priority of the FCC. The fertility and health of millions of Americans could be negatively effected by a failure to update FCC regulations to take into account health risks of modern wireless technologies. I respectfully request that the Agency act before there is an increase in mortality and/or birth defects.

31. It would be ironic indeed if “smart grids” and “smart meters” touted as “green” by many environmentalist are ultimately determined to be toxic to public health. These concerns should be addressed before further expansion of the technologies is allowed.

Respectfully submitted by

A handwritten signature in black ink, appearing to read 'Sandra Schmidt', with a long horizontal line extending to the right.

Sandra Schmidt

2900 Fourth Ave., Ste. 202

San Diego, CA 92103

619-531-0780

March 4, 2013

ADA/FHA; Antoinette Stein Comments, Feb. 4, 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)	
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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, DC 20554

Comment Filed by: Antoinette Stein, 892 Arlington Ave, Berkeley, CA 94707

February 4, 2013

AFFIDAVIT OF Antoinette Stein

I, Antoinette Stein attest that my statements are true to the best of my knowledge.

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

1. My name is Antoinette Stein.
2. My mailing address and contact info is 892 Arlington Ave, Berkeley, CA 94707, 650-823-7662, tweil@igc.org.

3. FCC must remediate the known "harmful interference"

Although there is skyrocketing demand for speed, capacity, and ubiquity of the nation's wireless networks, it is critical that the FCC not hastily jump or move forward and permit the Spectrum Act's auctions for the ten megahertz of spectrum for flexible use in the Advanced Wireless Services (A WS) H Block without first remediating the known "harmful interference". It is essential that the FCC must create needed updates to the technical requirements to address the known "harmful interferences" that the docket record indicates are anticipate. FCC should not gloss over this critical issue.

4. Do NOT use the existing definition of "harmful interference"

It is critical to note that the Spectrum Act **does not define the term "harmful interference"** The FCC should properly hold public rulemaking on this definition. FCC should NOT use the existing definition of "harmful interference" in the Commission's rules because it fails to properly address disabled persons and the overlapping issues with the ADA. Under the Commission's rules harmful interference fails to encompass the issues affecting persons with disabilities that should not be discounted. FCC must be respectful and full recognize the harmful interference issues that involve disabled persons that include persons that are hard of hearing, have heart disease and wear pace makers or other medical devices with electronic devices' as well as persons with Multiple Schlerosis MS such as myself, and children with PANDAS, EHS and CHS individuals all of which EMF radiation exposures impact and affect. FCC should not adopt the limited definition of "harmful interference" to mean "[i]nterference which endangers the functioning of a radio navigation service or of other safety services or seriously degrades, obstructs, or repeatedly interrupts a radio communication service operating in accordance with [the

International Telecommunications Union] Radio Regulations." FCC must study carefully the health impacts of the transmitting exposures on the disabled and the human populations and must carefully redefine the term "harmful interference". For example for EHS individuals that are hyper sensitive to RF the FCC must provide accommodations for them to live. FCC in its technical rules must revisit and update its labeling rules to protect and accommodate properly persons with disabilities.

5. **The FCC needs to include funding allocation for RF Safety from the Public Safety Trust Fund**

The FCC in this rule making should articulate in rule that funding from the band bidding that is deposited into the Public Safety Trust Fund shall be used for education and outreach on RF Safety to PCS and A WS users and businesses for purposes of educating the public on RF Safety for public safety in addition to the FCC's disclosed build out of the Public Safety Broadband Network by the First Responder Network Authority. *The FCC in this rule making should ensure that adequate funding in the Public Safety Trust Fund be allocated for comprehensive outreach and education to on RF Safety to the public PCS and A WS users, workers, and residents in the economic regions.* There currently is no federal funding to educate the Public on RF Safety while there is a clear cut expected rise in wireless broadband to consumers. This imbalance should be remediated in this rulemaking process. Because there is expected economic growth, job creation, and global competitiveness the FCC is obligated to apply a portion of the profits to educate the public on RF Safety including educating on the RF Standards, guidelines and best practices and guidance to reduce possible adverse exposures.

6. **The Commission shall comport with the statutory mandates of section 303(y)**

The FCC shall comply with the Communications Act and section 6401 of the Spectrum Act. In particular the FCC must sustain actions that are in the Public interest and that are consistent with international agreements to which the United States is a party. Because the US is a member of the World Health Organization the FCC is required by law to uphold the constitution of the WHO which the US has formally signed on to www.who.int/governance/eb/whoconstitutionen.pdf. And because the WHO in 2011 classified EMF as a possible carcinogen the FCC is allowed by law only to permit use of the H Blocks with adequate RF Safety measures that sufficiently address the possible carcinogenic emission exposures from the transmitters that will be permitted in this rule.

The FCC must therefore before permitting any auction bids the FCC must update its RF Safety standards to address the WHO's toxic classification since the US is a member of the WHO and because Dr N. Daulaire, Director, Office of Global Affairs, Department of Health and Human Services, Washington, DC is Executive Board Member of the WHO. I write today to remind the FCC Commission that they must comply with Section 303(y) and shall not violate the agreement that the US has signed with the WHO. The WHO writes in its constitution, "Governments have a responsibility for the health of their peoples which can be fulfilled *only by the provision of adequate health and social measures.* "

7. FCC must update its TECHNICAL RULES to stop harmful interference

Importantly the FCC must enact critically needed updated technical rules to stop harmful interference including to legacy PCS devices from potential Lower H Block fixed and mobile transmissions. Development of these critically needed rules should be initiated in a fast track and should be conducted within the public process for which specific comments may be submitted on these needed technical rules. The current Notice of Proposed Rulemaking bundles way too many technical topics together to properly serve as the public process for the critically needed update to the technical rules. FCC should formally reissue a 2013 Notice of Proposed Rulemaking for the RF Safety Standards since in this FCC NPRM the FCC does not properly notice Rulemaking for these technical standards. They are buried in this rule making notice within a footnote (footnote number 95) on page 19 and they were not properly included in this NPRM Table of Contents.

8. FCC should update its RF Safety Standards as part of this rule making process.

In May 31, 2011, the World Health Organization's International Agency for Research on Cancer (IARC) classified radiofrequency fields as a 2B "possible carcinogen." The FCC's standards do not adequately address biological impacts and need to be updated as many. The FCC according to more current biological models. Current standards are obsolete, based solely on thermal effects. Nor do the present standards - or the standards issued by the International Council on Non-Ionizing Radiation Protection (ICNIRP) -- address the current state of the peer-reviewed science that EMF emissions are biologically toxic and carcinogenic.

9. **The FCC shall to adopt and update new more protective standards and use and enforce them as technical requirements for all transmitters within the FCC's radio frequency jurisdiction.**

The FCC shall protect human and children's health in step with the economic benefits. FCC shall not fail to acknowledge the current scientific findings of health impacts and shall therefore update the FCC RF Safety standard and shall in this rule making begin the needed rule making for the update of the FCC RF Safety standard. I have been a member of the Technical Electronic Product Radiation Safety Standards Committee of the FDA Roster of the Technical Electronic Product Radiation Safety <http://www.fda.gov/AdvisoryCommittees/CommitteesMeetingMaterials/RadiationEmittingProducts/TechnicalElectronicProductRadiationSafetyStandardsCommittee/ucm124738.htm>

There is great need for the FCC and the FDA and the Federal Governments multi agency EMF Working Group to convene to work on updating the RF EMF Standards. The attached report includes the excessive costs of treating brain cancer.

10. **The Lower H Band power density should not be increased.**

The Lower H band, 1915-1920 MHz band allocated for fixed services should absolutely not be permitted to employ a higher power level than mobiles operating in that band without the inclusion and stipulation of critical technical rules that do not currently exist. FCC should not permit higher power levels without first instituting proper public rule making that includes concrete and specific provisions for RF Safety. FCC should not be permitted to rely on wishful thinking that new fixed station antennas will be located at some distance above ground level without setting technical requirements if there is to be any increased power that could increase human exposures and could possibly adversely impact the population. FCC needs to revise both its RF Safety standards and its height and distance technical requirements if there is to be any increase in power levels permitted.

11. **FCC should integrate EPP into its bidding process.**

Regarding the competitive bidding that the FCC has asked about in this NPRM. The FCC should evoke and include Environmentally Preferable Purchasing (EPP) competitive bidding rules. **In** particular the FCC should work in collaboration with the US EPA and the GSA to enact bidding for products and services that have a lesser or reduced effect on

human health and the environment when compared to other products and services that serve the same purpose, a.k.a environmentally preferable purchasing. FCC should include in its rulemaking restrictions consistent with FAR 23.703 that requires agencies to implement cost-effective green contracting preference programs, employ sustainable acquisition strategies. Executive Orders: EO 13514 [PDF - 113K] , EO 13423 that requires agencies to acquire and use EPP products and services.

12. Background information on Commenter Antoinette Stein

I am Antoinette Stein and I am qualified to make comments on FCC 12-357 and 03-137 because of all of the following reasons:

A. My Educational training:

- a. I have a PhD in an Environmental Engineer specializing in Air Quality Control from the University of Cincinnati, 2001. My PhD research was funded by the Electric Power Research Institute. My research focused on environmental emissions including the chemical reaction pathways and mechanisms in Electric Power Generation.
- b. I possess a Master's in Science in Engineering from Milwaukee School of Engineering (MSOE) specializing in Manufacturing Processes and Systems, 1988.
- c. I also possess a Bachelors of Science in Engineering Mechanics from the University of Wisconsin-Madison 1983.
- d. I have also completed a Post Doctoral Research term at the University of California, Davis and Irvine, in the Materials and Chemical Engineering Department, and the Department of Environmental Analysis and Design, School of Social Ecology. My research focused on study of the complete life cycle of electronic equipment including the environmental, public health, and economic impacts of various alternative policy options for electronic solder materials. I co-author the paper "Extending Producer Responsibility: An Evaluation Framework for Product Take-Back Policies", <http://www.hbs.edu/research/pdf/09-026.pdf> .

B. My Work Experience:

- a. I currently work for the State of California since 2005. I currently work for the Department of General Services, Procurement Division in Environmentally Preferable Purchasing Unit as an Associate Procurement Engineer. I am the Principle author of the State of California's Indoor Environmental Quality (IEQ) criteria Specification within California's [open office panel furniture](#) (Section 4.7) contract reducing the products toxic emissions. I've authored other environmental procurement specifications protective of the environment and public health including specifications for IT electronic devices including printers/Multi Functional Devices, servers, office supplies, paper products, and auto parts, bio-diesel, and disposable food containers.
- b. I also participated in the IEEE development of the [EPEAT standard update](#) for two electronic devices; multi-functional imaging devices and televisions. I helped develop the technical criteria for Corporate Performance including Disclosures for GHGs, waste, water and toxic emissions as well as the development of Indoor Air Quality criteria.
- c. At the State of California I worked in the Department of Public Health in the Indoor Air Quality Program from 2005-2008 with a focus on toxics and the protection of children in schools. I initiated and participated in the update of California's IAQ Standard for VOCs, called, [Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers Version 1.1 \(2010\)](#)—"01350 Standard Practice".

- d. I worked at General Electric Corporation for 7 plus years from 1985-1993 including at GE AIRCRAFT ENGINES, Engineering Materials Technology Laboratory and in GE MEDICAL SYSTEMS in their Research and Development Laboratory in Coatings Technology where I authored several US Patents for high emissivity radiation coatings.

C. I am also an Environmental Advocate and Volunteer

- a. I am the Co-moderator of the Collaborative for Health and the Environment's EMF Workgroup with Michael Lerner <http://www.healthandenvironment.org/initiatives/emf> 2012-present. The CHE-EMF has hosted several relevant EMF science teleconferences with expert scientists including:
- b. Joint call [CHE Fertility and Reproductive Health and CHE EMF](#)-- May 21, 2012 with speakers:
 - i. **Ashok Agarwal, PhD, HCLD**
 - 1. Slides: [EMF and Reproductive Health Risks](#)
 - 2. Articles: [Cell Phones and Male Infertility: A Review of Recent Innovations in Technology and Consequences](#)
 - 3. [Pathophysiology of cell phone radiation: oxidative stress and carcinogenesis with focus on male reproductive system](#)
 - 4. [Effect of cell phone usage on semen analysis in men attending infertility clinic: an observational study](#)
 - 5. [Effects of radiofrequency electromagnetic waves \(RF-EMW\) from cellular phones on human ejaculated semen: an in vitro pilot study](#)
 - 6. [Epigenetics and its role in male infertility](#)
 - ii. **De-Kun Li, MD, PhD, MPH**
 - 1. Slides: [Effect of Exposure to Magnetic Fields on Pregnancy Outcomes, Health of Offspring, and Male Fertility](#)

2. Articles: [A Population-Based Prospective Cohort Study of Personal Exposure to Magnetic Fields During Pregnancy and the Risk of Miscarriage](#)
3. [Exposure to magnetic fields and the risk of poor sperm quality](#)
4. [Maternal Exposure to Magnetic Fields During Pregnancy in Relation to the Risk of Asthma in Offspring](#)

iii. **Carlo V. Bellieni, MD & Iole Pinto, PhD**

1. Slides: [Physical Hazards in Fetuses and Newborns: Electromagnetic Fields](#)
2. Articles: [Exposure to Electromagnetic Fields From Laptop Use of "Laptop" Computers](#)
3. [Reduction of exposure of newborns and caregivers to very high electromagnetic fields produced by incubators](#)
4. [Electromagnetic fields produced by incubators influence heart rate variability in newborns](#)

c. [Cell Antennas and Health: The State of the Science](#), Oct 18, 2012
Speaker presentation slides:

i. [Henry Lai, PhD](#)- [download slides](#) (PDF)

ii. [B. Blake Levitt](#),

1. Biological effect from exposure to electromagnetic radiation emitted by cell tower base stations and other antenna arrays
B. Blake Levitt and Henry Lai
[Download the PDF](#)
2. Cell Towers: Wireless Convenience? or Environmental Hazard? Proceedings of the "Cell Towers Forum" State of the Science/State of the Law
B. Blake Levitt
[Read more](#)
3. Cell Towers: Wireless Convenience? or Environmental Hazard? (excerpt from the book: Biological Effects of Radiofrequency Radiations from Wireless Transmission Towers)
[Download the excerpt](#) (PDF)

4. Additional publications on cell towers (plus abstracts)
[Download the list](#) (PDF)
5. Public health implications of wireless technologies
Cindy Sage and David Carpenter
[Download the PDF](#)
6. BioInitiative Report: A Rationale for a Biologically-based Public Exposure Standard for Electromagnetic Fields (ELF and RF)
[Read more](#)

D. I am a volunteer for the Environmental Health Trust (EHT), West Coast Project Leader, working on policy development and reviewing the state of the science. I co-host for the EHT and CHE-EMF National Press Club [Experts Speak on Cell Phone Radiation, Pregnancy and Sperm](#) speakers:

a. **Süleyman Kaplan, MD**

- i. Slides: [Effects of prenatal and adult EMF exposure on brain development](#)
- ii. [Effects of prenatal exposure to a 900 MHz electromagnetic field on the dentate gyrus of rats: a stereological and histopathological study](#). Odaci, et al

b. **Nesrin Seyhan, PhD**

- i. Slides: [Gazi non-ionizing radiation protection center and Gazi biophysics department](#)
- ii. [The effect of radiofrequency radiation on DNA and lipid damage in female and male infant rabbits](#). Guler, et al

c. **Devra Davis, PhD, MPH**

- i. Slides: [Cellphone toxicology, exposure assessment and epidemiology--an update](#)
- ii. Slides: [Expert forum: Cellphone radiation risk to pregnancy and sperm](#)
- iii. [Cell phone safety: The right to know about gray matters](#), Devra Davis

- iv. [Doctors' advice to patients and their families: Cell phones and Health: Simple precautions make sense](#), Environmental Health Trust

d. **Igor Belyaev, PhD**

- i. Slides: [Exposure to microwaves from mobile communication, DNA repair and cancer risk](#)
- ii. [Role of physical and biological variables in bioeffects of non-thermal microwaves](#), Igor Belyaev
- iii. [Microwaves from mobile phones inhibit 53BP1 focus formation in human stem cells more strongly than in differentiated cells: Possible mechanistic link to cancer risk](#). Markova, et al

e. **Hugh Taylor, MD, PhD**

- i. Slides: [Fetal cellphone exposure affects behavior](#)
- ii. [Fetal radiofrequency radiation exposure from 800-1900 Mhz-rated cellular telephones affects neurodevelopment and behavior in mice](#). Aldad, et al
- iii. EHHI report: [The cell phone problem](#), February 2012
EHHI cell phone report [summary](#)

f. **Ronald Herberman**

- i. Slides: [Cellphone radiation risks--the case for precaution](#)
- ii. [Exposure limits: The underestimation of absorbed cell phone radiation, especially in children](#). Gandhi, et al

g. **Additional resources Dr. De-Kun Li, MD, PhD** Senior Research Scientist, Division of Research, Kaiser Foundation Research Institute

- i. [A prospective study of in-utero exposure to magnetic fields and the risk of childhood obesity](#). Li, et al

E. Volunteer for the [California Brain Tumor Association](#) working on children's health protection.

- F. Volunteer Technical Advisor for [Informed Green Solutions](#)
- G. Volunteer Chair of the Indoor Environmental Quality sub-committee for the [Collaborative for High Performance Schools\(CHPS\)](#) 2006-present.

Respectfully submitted by



Antoinette "Toni" Stein PhD
892 Arlington Ave
Berkeley, CA 94707
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tweil@igc.org

February 4, 2013

ADA/FHA; David Morrison Comments, Feb. 5, 2013

I, David Morrison, have personal knowledge of all fact set forth in this declaration and am competent to testify thereto if called upon to testify in a court of law.

My Name is David Morrison and I live at 5546 SE Taylor, Portland OR 97215

I am President of the non-profit, Wireless Education Action, 602 NE Prescott, Portland OR 97211, established Sept. 11, 2012

My email address is wirelesswatch@yahoo.com

The current FCC standards for human exposure to radio frequency radiation has no basis within the field of biological reality as there have been many thousands of studies over the last 60 years that have confirmed over and over that low level exposures, millions of times lower than allowed by the FCC, have biological effects to all living things not just to humans.

We are now in a public health emergency with people all over the world reporting devastating effects from exposure to wireless devices that were deployed and marketed with no pre market safety testing of any kind. Reports of electrosensitivity as well as epidemiological studies of brain cancer and many other cancers are no longer speculation but hard science.

The recent Bioinitiative Report issued in December of 2012 (<http://www.bioinitiative.org/>) reports that 29 international scientists, MD's and PhD's have reviewed 1800 related studies since 2007 and have found that the situation with exposure to radiation from wireless sources is not only carcinogenic but genotoxic and neurotoxic.

Some people are forced to leave their homes where smart meters are installed or where they are in close proximity to a neighbors' wi fi router. Children are leaving schools with wi fi and many countries in Europe have begun removing wi fi from their schools and libraries for these reasons. The examples of health effects are broad and numerous with virtually every system within the body affected by Information Carrying Radio Waves.

The FCC Guidelines should be changed to accommodate human populations and should do what they should be doing in putting human life before corporate profits. The current guidelines were adopted within a historic context of corruption and fraud as detailed in The **Procustean Approach** by Don Maisch, a 300 page history of the corruption between the FCC and industry (<http://www.emfacts.com/the-procrustean-approach/>). Current standards were adopted by a jury taken primarily from the military and industry. There was dissention within the FCC by scientists that were aware of scientific studies that showed harm from the levels that the FCC later adopted. The FCC refused to acknowledge studies on so called, "non-ionizing" radiation so they were never considered. There was a vast body of evidence provided by Russian scientists that was not considered. The industry and military interests had totally corrupted the process of standard setting and now millions of people will suffer disease and death because of greed and corruption. This is a disgrace.

Norbert Hankin, chief of the EPA's Radiation Protection Division, has stated that the FCC's exposure guidelines are protective only against effects arising from a thermal (flash burn) mechanism. He concedes that, "the

generalization by many, that these guidelines protect human beings from harm by any and all mechanisms, is not justified." Hankin went on to say that chronic long term exposures were not considered in the current safety standards and do not protect against them..

Thus, public microwave exposure levels tolerated by the FCC and its industry-loaded advisory committees are a national health disaster. Yet, for pragmatic and lucrative reasons, federal exposure limits have been deliberately set so high that no matter how much additional wireless radiation is added to the national burden, it will always be "within standards."

The FCC regulatory mess comes into focus with the Likely Mountain case. Jasso says that when she and Garcia contacted the FCC regarding their radiation injuries, they were met with an appalling lack of expertise and concern. "FCC has no answers," Jasso says. "Their exposure guidelines are convoluted and nonsensical. They refuse to address problems of multiple antennas, field expansion, human body coupling and blood reversal because they want to avoid regulatory problems at telecommunication sites." She adds, "FCC will fine a licensee thousands of dollars for not having a light installed on top of a telecommunications tower, but they have not issued even a warning letter to their licensees for the injuries that occurred on Likely Mountain. They say injury cannot occur because their licensees are regulated."

Due to the installation of wi fi in virtually all of the schools in the country there will be devastating effects on a large percentage of the children who will have had 14 years of chronic constant exposure to this radiation while attending school. The responsibility will be with the government agencies, the school boards and ultimately with the FCC for the continuance of their obsolete standards. Our health care facilities will be broken from the number of casualties and the government will be the beneficiary of the debt incurred in paying for this.

Many of the scientific studies that have been used to justify current standards were funded by the telecommunications industry. On it's face this is not acceptable. Was the tobacco industry in charge of funding the studies that finally led to the declarations of its health effects? The telecommunications industry will be responsible for far more death and human destruction than the tobacco industry with 5 billion cell phones and wi fi in every school. Where is oversight? Who is responsible for this? When the bodies begin to pile up who will face the firing squad?

The current spread of the so called "smart" grid is exposing people to levels of RF higher than the FCC limits. This has been documented by Cindy Sage and others (<http://sagereports.com/smart-meter-rf/>) who have measured emissions higher than the ridiculous and out dated FCC levels. I have personally met people who have had to move from one room to the other or into different neighborhoods to accommodate their sensitivity to smart meter proximity and emissions. This is unacceptable.

In summary, the FCC has the responsibility to the human, animal and plant community to revise its standards downward and close to the recommendations of the Bioinitiative Report of 2012 which recommends 3 mw/m2. The threat to all living systems on this planet is not acceptable while the only factors in consideration are the needs of the military and the profits of the 4 trillion dollar telecom industry. There will be a time when this will indeed be necessary if we are to survive. The current public health emergency that we are seeing should be seen as a critical national security issue.

Additional information and sources concerning the above may be found at <http://www.wirelesswatchblog.org>

I declare under penalty of perjury under the laws of the State of Oregon that the facts set forth above are true and correct to the best of my knowledge. This declaration was executed this 5th day of February, 2013 at Portland, Oregon.

David Morrison

M.K. Hickox, Reply Comments, Apr. 17, 2014

ET Docket No. 13-84

April 16, 2014

Federal Communications Commission

Washington, D.C. 20554

RE: Reply to Comments Regarding Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies, Proceeding 13-84

To whom it may concern:

Many thanks for taking late comments and replies to public comments and reconsidering the current FCC limits for microwave radiation, aka 'radiofrequency radiation' (RFR). Once more I have come across new information, new articles, and a reply from one of the scientific researchers that need to be included in the FCC's discussion for reconsidering the current existing FCC's RFR transmission standards as stated in Proceeding 13-84.

The purpose of this late reply to comment is to include some additional presentations that have not been uploaded for the FCC's Proceeding 13-84. I understand how important it is that everyone at the FCC and the FCC's OET office are ready to bend over backwards in order to keep critical industries such as Big Wireless and Big Utilities happy and to keep the Big Profits rolling in, regardless if lots of people get sick, prematurely age and end up dying as a result of all the invisible wireless radiation going through them.

Please prove me wrong that the FCC is not just an extension of Big Wireless and Big Utilities looking to make a killing, both financially and physically, by pushing smartmeters and the vulnerable to hacking smartgrid into the homes of customers without any concern whatsoever for long term health effects. Please prove me wrong that smartmeters are designed to not only spy on customers but also fry them by irradiating them. Please prove me wrong that Big Industry does not care about its customers, and that those who suffer from electromagnetic sensitivity are not just "collateral damage" in the pursuit of Big Profits.

Otherwise the new motto for Big Utilities will be: **First we spy on you, then we fry you with unsafe microwave radiation comparable to that of a cell tower 200 feet away (see Paul Dart's 6/12 presentation to Eugene, OR Water Board), and then we make sure you die painfully if you complain!** (and just to make sure enough harm hasn't been done by us, (Big Utilities) we make sure your children grow up to be sterile and/or die of cancer as young adults) Folks this is no joke, this is where we're all headed if the FCC continues with its insane and criminal thermal based standards without any recognition whatsoever for biological based standards.

For the most recent casualty to die from RFR exposure, please read the latest quarterly issue (April 2014) of the (Electro-magnetic Sensitive) ES-UK pdf newsletter (from the United Kingdom). It is 32 pages long, and contains the heartbreaking story (see page 10) about a little boy 10 years old, who died from tumors as a result from his WiFi exposure in less than 2 years which I have copied and pasted here:

‘WiFi killed our son’

The New York Daily News on 26th December 2013 had an article with the heading: “New Zealand parents: WiFi killed our son”, and The Business Standard reported on 29th December, under the heading “New Zealand parents believe WiFi killed their son”, that two brain tumours killed Ethan Wyman, a 10-year-old boy, 11 months after they were diagnosed. Damon Wyman said his son was diagnosed with the tumours 3 months after he was given a WiFi-connected iPod and doctors said the tumours appeared to be about 4 months old. His parents later discovered that he slept with it under his pillow, where even on standby it still emitted bursts of radiation trying to connect to the router (Yahoo News New Zealand, 19th December, ibnlive 29th, Dominion Post 30th). [This appears to be the first case clearly linking WiFi and brain tumours. In 2011 the World Health Organisation’s IARC classified radiation like WiFi as a 2B cancer agent based on the link between such radiation and brain cancers – Ed.]

There is a lot of new information and news articles about how folks who are suffering serious health problems caused by exposure to EMF/RF/dirty electricity, so please read this latest April 2014 newsletter which I have uploaded as a pdf and is unavailable via the ES-UK website.

Based on recently reviewing Dr. Andrew Goldsworthy’s papers (which I have uploaded) about the biological effects of weak electromagnetic fields on I have also included a one page layperson’s overview of his latest 2012 paper about how weak electromagnetic fields result in the loss of calcium in cells which in turn causes the cell membranes to develop holes which in turn causes a whole lot of other health problems.

Thank you for reading them all.

Thank you again for taking public comments, and then allowing for a period of follow up replies to comments as well. Please lower transmission standards asap for radiofrequency/microwave radiation, please recognize that biological effects from wireless radiation are real before more people get sick from RFR.

I understand that the wireless industry is extremely important to the US economy, but there are better and safer ways of providing access to the internet (can we reintroduce the concept of network cabled connections that use CAT5 or CAT6 cabling) so that we don't suffer so much. As it is, we are killing ourselves from illnesses caused by RFR exposure which may not only lead to sterility but also result in passing on permanent genetic birth defects onto the next generation, all for the sake of wireless convenience, without knowing the tragic health consequences until it is too late.

Thank you for your consideration of this latest reply to comment along with uploaded attachments and of course your concern for people's health. Please seek out the guidelines from the 2012 BioInitiative Report of which four sections have been recently updated in March and April 2014; the FCC should study the recently updated 2012 BioInitiative Report in addition to considering the recommendations from the industry sponsored/supported IEEE and INCIRP committees which do not recognize biological health effects from wireless microwave radiation despite thousands of peer reviewed papers, studies.

We are all witnesses to one of the greatest health disasters as a result of the insane push for profits by unregulated wireless products without regards to human health. Please do your job and safeguard and protect public health, stop promoting the introduction of more RFR in the name of "convenience" and "innovation". I love wireless devices, we all love the convenience of them, but when one finds out what price we pay in terms of health problems and serious illnesses that lead to death, is this convenience and innovation really worth the steep cost in personal and public health? Do you want to age prematurely, die of cancer or from some other serious illness, do you want your children to grow up to be infertile and pass on genetic health effects just because Big Wireless in conjunction with Big Utilities and Big Government (really Big Military/Intelligence) can turn up the EMF/RF microwave radiation and blast customers with this radiation because they can?

Again, thanks for your time and for considering what I have written along with documents uploaded for those that have read all the way to the end of this reply to comment!

Regards,

MK Hickox
PO Box 31038
San Francisco, CA 94131

ADA/FHA; Annemarie Weibel Comments, Sep. 4, 2013

To whom it may concern,

Please revise your standards for human exposure to radio frequency radiation. Exposure limits should be be more restrictive.

See:

Largest Teacher's Union in Canada Declares Cell Phones, WiFi Radiation Hazards; Supreme Court of India Orders Cell Towers Removed From Schools, Hospitals; Missouri Judge Says Cell Tower Law Violates State Constitution; Israeli Supreme Court Orders Count of Children with EHS; Class Action Lawsuits Filed in the U.S. and Canada; ADA Lawsuit to be Argued in Santa Fe; and the list continues.

Again, please revise your standards for human exposure to radio frequency radiation. Exposure limits should be be more restrictive.

Sincerely,

Annemarie Weibel

Individual Rights; Dr. Omer Abid MD. MPH Comments, Sep. 3, 2013

Dear Chairwoman Clyburn, Commissioner Rosenworcel, Commissioner Pai,

Thank you for trying to understand and connect with all concerns of adverse health effects from cell phones.

I am a physician board certified in preventive medicine. I did my preventive medicine residency at the University of Michigan and then I did an EIS (Epidemic Intelligence Service) fellowship at the National Center for Chronic Diseases and Health Promotion from 2003-2005.

Currently I am working as an epidemiologist dealing with chronic diseases at the Ministry of Health of the Kingdom of Saudi Arabia.

As a born American citizen and as a physician and epidemiologist, I plead with your hearts and minds to greatly increase standards for health safety for adults and even more for the health of children who are now using cell phones in the hundreds of millions all over the world.

I assume that many comments expressed concern over the excess risk for different types of cancers and also other adverse health effects. I also share those concerns for adults and populations that need special attention with regard to health risks of mobile phone use are children and youth, as these populations are increasingly using cell phones and are more vulnerable to the radiation. But I would like to comment on two areas that are not given enough attention?

I am referring to the adverse effect on fertility of males and females and potentially birth defects to sperms from cell phones kept in pant pockets and also potential birth defects from pregnant women using a cell phone and especially if they keep the cell phone close to their abdomen or pelvis.

As one attached review of such papers says in its abstract:

?The suggested use of hands-free kits lowers the exposure to the brain, but it might theoretically increase exposure to the reproductive organs.?

Sperm have been identified to be particularly susceptible to damage from microwave radiation in multiple studies. The studies on human sperm and mobile phones consistently demonstrate adverse effects on sperm leading to fertility problems and may portend potential birth defects (through DNA damage in sperm).

In terms of public health, the latter effects are most troublesome, as the population gene pool could be damaged which can have serious and irreversible adverse effects on future generations. There are also (animal) studies showing damage to ovarian DNA and egg follicles in ovaries and increased growth retardation and death rate in animal embryos.

In general, it is hard to deliver more than one simple public health message to the public at large. The concern about the association of cell phones with cancer has been in the news for many years and received top headlines in May of 2011. So public health messages need to be designed to make the public aware of the risks of mobile phone use for fertility and the fetus.

This particular vulnerability of sperms is not surprising because sperm cells have far less ability to protect against deleterious effects.

Sperm are cells in which the usual cell contents have been stripped away in order to allow the sperm the ability to travel fast to their destination. However, the removed cell contents include measures to protect against damage such as anti-oxidative mechanisms. Although the body has some measures to minimize damage to DNA, the 3% risk of minor and major birth defects demonstrates that substantial risk remains.

The studies on human sperm and mobile phones demonstrate adverse effects on sperm leading to fertility problems and most ominously suggest that the DNA damage to sperms can lead to at least some of these sperms being the ones that cause fertilization and that can lead to birth defects.

According to Dr. Joel Moskowitz, the director of the Center for Family and Community Health in the School of Public Health at the University of California at Berkeley, 8 original studies which have looked at least at one of four outcomes sperm count, motility, viability or morphology, detected significant abnormalities.

Another review done by the Environmental Working Group on 10 available studies remarked that these studies found "statistically significant correlations between cell phone radiation and sperm health, and many found that the adverse changes increased with the amount of radiation exposure.?"

The reviews will show that there are also some studies which did not detect the same abnormalities.

A very recent study done at Qassim University in Saudi Arabia looked at testicular architecture enzymatic activity. Just 60 minutes or less of mobile phone use had a negative impact on testicular architecture and enzymatic activity. The adverse effects on testicular architecture can be seen clearly in the pathology slides by the naked eye.

In terms of public health, DNA damage in sperm possibly leading to birth defects is most troublesome. This is because population growth throughout most of human history has been exponential and hence DNA damage in sperm may translate to an exponential number of offspring sharing the DNA defect which might lead to birth defects. DNA defects are irreversible and hence

damage the population gene pool and can have serious adverse effects in every future generation.

This concerns for the future human gene pool is all possible or probable (given the billions of men, pregnant women, and children using cell phones, but not absolutely certain that it will happen...however what is certain is that we will be in anguish regret if this concern turns out to have an impact on the human gene pool because if it happens, then it is irreversible damage for generations to come.

De Iuliis is one of the researchers whose study demonstrated DNA damage to sperm from cell phones. De Iuliis notes "These findings have clear implications for the safety of extensive mobile phone use by males of reproductive age, potentially affecting both their fertility and the health and wellbeing of their offspring."

"There may be more than one way in which cell phones adversely affect sperm. Many researchers conclude that the phone's RF-EMR radiation penetrates tissue and interferes with the body's own electromagnetic frequency at a cellular level, resulting in abnormal sperm.

Many men who talk on a cell phone using a Bluetooth device or other headset keep the phone in a pants pocket or clipped to a holster. This exposes their testes to excessive cell phone radiation.

"Children, adolescents, young adults, and especially pregnant women should take precaution and avoid keeping the cell phone close to their reproductive organs, in addition to their head," Moskowitz said. "These are the parts of our body that are highly sensitive to cell phone radiation. This is a wake-up call for those who tend to leave cell phones in their front pocket."

Several recent articles suggested that cell phone radiation might be harmful to the developing fetus. For example, a 2009 study in Turkey found that after pregnant rats were exposed to cell phone radiation for 15 minutes twice a day during the entire gestation period, their female pups had fewer ovarian follicles (Gul 2009).

A 2010 study demonstrated adverse neurologic effects. Specifically in cell phone exposed cases, a significant decrease was found in the number of Purkinje cells along with a tendency for granule cells to increase in cerebellum (Ragbetli 2010).

A 2012 study by researchers at the Yale University School of Medicine found that mice exposed to cell phone radiation during gestation were hyperactive and had impaired memory (Aldad 2012).

As mentioned by Dr. Devra Davis, a leading expert on cell phones and adverse health effects, "a growing body of experimental and human studies reveals that such radiation damages both exposed mothers and the brain, liver and eye of their offspring."

Most disconcerting are findings from Prof. Nesrin Seyhan, the NATO-supported founding chairman of the Biophysics Department at Gazi University in Ankara, Turkey, who reports that prenatally exposed rats and rabbits have fewer brain cells -- and those that survive sustain more damage.??There have been similar findings in two human studies. UCLA researchers reported that cell phone exposure during pregnancy and after birth was associated with behavioral problems in young children (Divan 2008; Divan 2012).

Since children and future offspring are by definition innocent of the offending behavior, there is an ethical imperative to ensure that we change our FCC standards to protect our health and to honor the universal and principle of "First do no harm."

Thank you for hearing my concerns.

I did spend some time to gather and read this articles.

However, I did not do an exhaustive search for articles. I am sure that there are more articles in respected peer review journals showing damage from cell phone to human sperms and to animal (and thus likely human) fetuses.

Please see below for some of the references....Unfortunately, I did not have time to provide all the references I used...but some are below and others can be located by google when copying and pasting the author's name and some text from the article that I had referenced.

Please greatly increase the FCC standard for cell phones to become safer. There are many technologic improvements that are essential. For just one example cell phones can be made so that there is not 360 degree transmission of the radiation....the phone can be designed such that the part that will be touching or close to head can be made to not send radiation.

* Please have biologically based RF/MW exposure guidelines that protect from non thermal health effects.

[Current guidelines only allege to protect for thermal heating. FCC's power density value should be lowered from 1,000 uW/cm² to 0.0003 uW/cm². Ref. THE BIOINITIATIVE REPORT 2012 A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF) - <http://www.biointiative.org/>]

* Please stop using SAR and use only electric field based power density values for the RF/MW

exposure standard.

[Currently two values are used. One for near field (holding a phone to your head or lap top on your lap) and one for far field (all other exposure). Near field value is Specific Absorption Rate (SAR) which uses a probe in dead animal tissue to measure for a heating effect. Far field value is a power density unit which is calculated from the actual electric field values. The FCC wants to move to SAR only. This is absolutely wrong as SAR has no relation to non thermal effects, cannot be verified by measurements in the field and does not take into account additional transmitters that may be present in real life conditions. Ref. - Evaluation of Specific Absorption Rate as a Dosimetric Quantity for Electromagnetic Fields Bioeffects]

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0062663>

* Safety standards for sensitive populations need to be set at lower levels than for healthy adult populations.

[Sensitive populations include the developing fetus, the infant, children, the elderly, those with pre-existing chronic diseases, and those with developed electrical sensitivity (EHS). A child's brain has double the permittivity of an adult's brain. [Ref. THE BIOINITIATIVE REPORT 2012 A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF) -

<http://www.bioinitiative.org/> and <http://www.plosone.org/article/info%3Adoi>

[%2F10.1371%2Fjournal.pone.0062663](http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0062663)Evaluation of Specific Absorption Rate as a Dosimetric Quantity for Electromagnetic Fields Bioeffects]

* How you or your loved ones have been harmed from RF/MW exposure. * That this proceeding requires a NEPA evaluation.

[Ref. - <http://www.ca6.uscourts.gov/opinions.pdf/10a0374p-06.pdf> Per No. 09-5761 Heartwood, Inc., et al. v. Agpaoa, et al. there is standing to challenge the current exposure guidelines because you have suffered an 'injury in fact' that is concrete and particularized; is actual or imminent; is traceable to wireless exposure; and that it is likely that this injury will be redressed by lower exposure guidelines.]

* Please re-fund the EPA's non ionizing radiation protection research program for developing safe RF/MW exposure guidelines because the FCC cannot both promote wireless technologies and regulate RF/MW radiation and as is not a health agency it does not have the expertise to evaluate the science on RF/MW exposure.

?Please stop facilitating, encouraging, and supporting the reckless expansion of WiFi and other wireless exposures resulting in the involuntary exposure to RF/MW of our population, which is inherently biologically harmful to humans and other living beings.

Thanks much.

Sincerely,

Omer Abid, MD, MPH phone 00966 5 567 35 830 Again, please see below for some relevant papers...the order is random.

1. The Open Reproductive Science Journal, 2011, 5, 125-137 125

Open Access

Cell Phones and their Impact on Male Fertility: Fact or Fiction

Alaa J. Hamada, Aspinder Singh and Ashok Agarwal*

Center for Reproductive Medicine, Cleveland Clinic, Cleveland, Ohio, USA

2. Journal of Andrology, Vol. 33, No. 3, May/June 2012

Effects of the Exposure to Mobile Phones on Male Reproduction: A Review of the Literature

SANDRO LA VIGNERA, ROSITA A. CONDORELLI, ENZO VICARI, ROSARIO D'AGATA, AND
ALDO E. CALOGERO

From the Section of Endocrinology, Andrology, and Internal Medicine and Master in Andrological, Human Reproduction, and Biotechnology Sciences, Department of Internal Medicine and Systemic Diseases, University of Catania, Catania, Italy.

3. J Assist Reprod Genet

Challenging Cell phone Impact on Reproduction: a Review

Zaher Mehri

4. Reproductive Biology and Endocrinology

BioMed Central

Open Access

Review

Pathophysiology of cell phone radiation: oxidative stress and carcinogenesis with focus on male reproductive system Nisarg

R Desai^{1,2}, Kavindra K Kesari³ and Ashok Agarwal

5. Maternal cell phone and cordless phone use during pregnancy and behaviour problems in 5-year-old children

Mònica Guxens,¹ Manon van Eijsden,^{2,3} Roel Vermeulen,^{1,4} Eva Loomans,^{2,5} Tanja G M Vrijkotte,⁶ Hans Komhout,¹ Rob T van Strien,⁷ Anke Huss^{1,8}

Individual Rights; John & Pauline Holeyton Comments, Sep. 3, 2013

*John and Pauline Holeton
2392 Barclay Ave.
Shelby Township MI 48317*

September 3, 2013

**Reference; FCC Formal complaint and comment regarding
ET Docket No. 03-137 and ET Docket No. 13-84**

**Subject; World Health Organization – The Precautionary Principle and EMF regarding
Prudent Avoidance in exposure of consumers to unknown quantities of EMF or in the case
before the FCC, Radio Frequency radiation. Request an investigation into the forced
exposure to Radio Frequency radiation by smart meters and the cumulative effect of RF
radiation by other sources before a final deposition has been decided.**

Sir(s), regarding the proposed re-evaluation of exposure limits of thermal based radio frequency radiation, I am summing to the FCC that the agency can no longer neglect the cumulative effect of non-thermal radiation of non-occupational radiofrequency radiation on the general population especially the impact within the home where there can be numerous exposures from many different sources. Many of the exposures are by personal choice and many are not such as the smart meters being mandated by Detroit Edison here in Michigan, cell towers and other unknown sources.

The FCC must not continue to allow corporations to force more undocumented and unregulated exposure to Radio Frequency radiation on the public, more specifically in the homes of consumers where the cumulative effect could pose more serious harm.

The World Health Organization describes the complexity of the struggle of oversight and regulation with lack of scientific evidence and global acceptance of different standards and guidelines but refers all of this to the “cost” of regulation and oversight. It is unacceptable to put profits before the health of consumers and the general population.

The FCC must set safe exposure level by investigating the following;

1. Determine and document the safe levels of exposure of the different RF appliances and systems available to home owners.
2. Document the exposure level of corporate mandated Radio Frequency radiation appliances and devices such as smart meters.
3. Document and make available to consumers the cumulative exposure levels of the different appliances and a “Safe Level” of exposure within the home of Radio Frequency radiation. (Consumers must be able to make an educated informed decision on the issue.)

The W.H.O. documents “Prudent Avoidance” as an adequate precaution to cost effectiveness on the whole but “Preventable Exposure” applied to all available situations will have exponential savings with cost to corporations and consumers health and quality of life for communities.

The **precautionary principle** or precautionary approach states if an action or policy has a suspected risk of causing harm to the public or to the environment in the absence of scientific consensus that the action or policy is harmful, the burden of proof that it is *not* harmful falls on those taking an action.

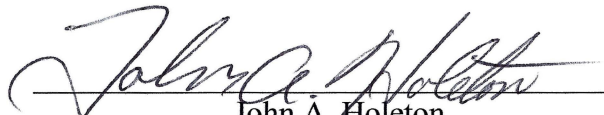
The principle is used by policy makers to justify discretionary decisions in situations where there is the possibility of harm from taking a particular course or making a certain decision when extensive scientific knowledge on the matter is lacking. The principle implies that there is a social responsibility to protect the public from exposure to harm, when scientific investigation

Please see the attachment “WHO The Precautionary Principle and EMF”.

Relief is requested.

Due to the fact there are no long term scientific studies on this new concept of “Cumulative Effect” for the “General Population” I ask the FCC to rescind the use of “Thermal Based Radiation” as a qualifying standard for corporations whom mandate consumers to be exposed to possible harm by their products or services.

Sincerely


John A. Holton

Individual Rights; Nancy Naylor Comments, Sep. 2, 2013

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

Submitted by Nancy Naylor 9/2/2013

nnaylor@rocketmail.com

Springboro, OH

I am writing to express my concern over the current exposure guidelines for radio frequency and microwave radiation. I am hopeful that these guidelines will soon change in favor of protecting the American population. I feel passionately about this because my daughter has autism. I was unaware of the effect that the RF/MW that was constantly around her could have. I have since found that many of the biological effects of wireless radiation are very similar to the biological markers found in people with autism. The table below outlines these similarities. The studies references are listed at the end of this letter.

Non-ionizing Microwave Radiation	Autism Spectrum Disorder
Leaking Calcium Ions Hypocalcemia (Goldsworthy 2007) [1]	Boys with autism and autism-spectrum-disorder (ASD) are at higher than normal risk for thinner, less dense bones when compared to a group of boys the same age who do not have autism. (NICHD 2008) [2] It has been speculated that this is due to the casein-free diet that many ASD children are put on; however, this has not been speculation at this point.
Weakened Blood-Brain-Barrier (Salford 2007) [3]	Peptide molecules, which come from the proteins of gluten and casein products, result in opioid activity in the brain because they pass into the brain via an opened blood-brain-barrier. (Shattock 1991) [4] This also may explain how the toxins in the

	environment (or injected into the blood stream) may pass through the blood-brain-barrier and affect the child's nervous system.
DNA damage – increase in the single- and double-strand breaks of DNA (Lai, 1994) [5]	DNA damage and genetic mutations carry a substantial susceptibility to autism. (Weiss, 2008) [6]
Impairment of the immune system (Johansson, 2009) [7]	Antibodies found in the blood of autistic children suggest an abnormal immune response is common. (Stern, 2005)[8]
Decrease in the production of melatonin (Arnetz, 2007)[9]	Biochemical analyses performed on blood platelets and/or cultured cells revealed a highly significant decrease in melatonin level ($P=3 \times 10^{-11}$) in individuals with ASD. (Melke, 2008) [10]
Increase in apoptosis (Joubert, 2008) [11]	Studies indicate that the autistic cerebellum may be vulnerable to pro-apoptotic stimuli and to neuronal atrophy as a consequence of decreased Bcl-2 levels. (Fatemi, 2003) [12]
Decrease in levels of glutathione (Mittur 2000) [13]	Studies have shown levels of the antioxidant glutathione are typically about

	50 percent lower in children with autism. (Kern 2006) [14]
Increased oxidative stress (Adey 1993) [15]	Convincing data demonstrate greater oxidative stress in groups of children with autism, as compared to controls. Oxidized biomolecules in blood (lipid peroxides in both red-cells and serum) and urine (isoprostanes) are significantly elevated in autism. The autistic brain has significantly increased levels of lipofuscin after age seven, and a more specific oxidative marker is found in cortical dendrites in even younger subjects. (McGinnis 2005) [16]
Mitochondria Dysfunction has been shown to be induced by exposure to microwave radiation. (Schmitz 2004) [17]	Biomarkers for mitochondrial dysfunction have been identified in many cases of autism and are believed to contribute to diagnostic symptoms including: cognitive impairment, language deficits, abnormal energy metabolism, and chronic gastrointestinal problems. (Rossignol, 2011) [18]
Electromagnetic fields – like those emitted by cell phones – have been shown to alter regional cerebral blood	In conditions like autism and chronic fatigue syndrome (CFS) it has been shown via SPECT (Single Photon Emission Computed

flow. (Huber 2005) [19]	Tomography) scans that there is a decreased flow of blood to the brain. (Gillberg, 1993) [20]
EMF produces pronounced changes in the molecular structure of hemoglobin and induced force acting on the charged particle of charge which may activate rouleau formation (an aggregation of red blood cells in a roll formation.) (Baieth 2008) [21]	Thrombophilia, a coagulation disorder, was found in 70% of the children with autism, and in many of the parents. (Bradstreet 2001) [22]
Reduced dopamine levels in PC12 cells exposed to low frequency electromagnetic fields (Opler 1997) [23]	Plasma and urine concentrations of homovanillic acid, a dopamine metabolite, have been reported abnormal in those with autism. (Ernst 1997) [24]
Wireless radiation leads to deaminization of amino-acids and thereby causes disturbance of ammonia utilization by the body. (Tamasidze 2007) [25]	Elevated ammonia is common in autism. A study of 65 children with autism found that 70% had levels above the reference range of the lab. (Bradstreet 2001) [22]
In an experiment on rats the concentration of serotonin was elevated in the hypothalamus of male rats after 1 month of EMF exposure. (Chance 1995)	Whole blood serotonin concentration were found to be significantly higher in drug-free autistics than in typical persons. (Anderson

[26]	2006) [27]
In a Russian study of workers exposed to HF and microwave range (3 and 10 cm) EMF, the incidence of gastrointestinal tract diseases significantly increased with the increase of EMR exposure duration. (Nikitina, 2000) [28]	There is a high prevalence of gastrointestinal symptoms in children with autistic spectrum disorder. (Horvath 2002) [29]

We do not know with certainty if RF/MW exposure is the cause of her autism, but with a growing incidence of autism in children and no answers as to why it is growing so quickly, we should be proceeding with caution. The next generation depends on us. There is significant research here for us to be concerned. Implementing better guidelines will help us use modern technology while minimizing the effects on human health.

Guidelines for power density values should be based on RF/MW exposure guidelines that protect from nonthermal health effects. Current guidelines only allege to protect for thermal heating. FCC's power density value should be lowered from 1,000 uW/cm² to 0.0003 uW/cm².

Ref. THE BIOINITIATIVE REPORT 2012 A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF) <http://www.bioinitiative.org/>

Regulations should use only electric field based power density values for the RF/MW exposure standards and stop using Specific Absorption Rate(SAR) which only measures heating effect.

Moreover, safety standards need to be more conservative for special populations, including pregnant women, children the elderly and people with illness or autoimmune conditions.

THE BIOINITIATIVE REPORT 2012 A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF)

<http://www.bioinitiative.org/>

and Evaluation of Specific Absorption Rate as a Dosimetric Quantity for Electromagnetic Fields Bioeffects <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0062663>

The EPA must continue its non ionizing radiation protection research program for developing safe RF/MW exposure guidelines. The FCC is charged with promoting wireless technologies. The FCC cannot be objective when setting regulation standards of RF/MW radiation. Furthermore, only a health agency (which the FCC is not) has the expertise to evaluate the science on RF/MW exposure.

It is irresponsible to encourage and facilitate the expansion of Wi-fi and other wireless radiation which results in the involuntary exposure to RF/MW. The research is showing us that there are health effects. People should not be required to be exposed for RF/MW just to get an education or live in a community. Our regulations should give weight to science and the precautionary principle.

Sincerely,

Nancy Naylor

References

[1] **Goldsworthy A.** (2007). "The Biological Effects of Weak Electromagnetic Fields: What the power and telecom companies would prefer us not to know." *Electromagnetic Fields*, 2007.

http://www.radiationresearch.org/pdfs/goldsworthy_bio_weak_em_07.pdf

[2] **National Institute of Child Health and Human Development (NICHD).** "Thin Bones Seen In Boys with Autism and Autism Spectrum Disorder."

http://www.nichd.nih.gov/news/releases/thin_bones_in_autism_012908.cfm

[3] **Salford LG, Nittby H, Brun A, Grafström G, Eberhardt JL, Malmgren L, Persson BRR.** Non-Thermal Effects of EMF upon the Mammalian Brain: the Lund Experience. *The Environmentalist*, 2007 pp. 493-500.

[4] **Shattock P, Lowdon G.** "Proteins, Peptides and Autism Part II: Implications for the Education and Care of People with Autism" *Brain Dysfunction*, (1991) 4:(6) pp. 323-334.

[5] **Lai, Henry; Singh, Narendra P.** Acute low-intensity microwave exposure increases DNA single-strand breaks in rat brain cells. *Bio-electromagnetics*. 1995. pp. 207 – 210.

[6] **Weiss LA; Shen Y; Korn JM; Arking DE; Miller DT; Fossdal R; Saemundsen E; Stefansson H; Ferreira MA; Green T; Platt OS; Ruderfer DM; Walsh CA; Altshuler D; Chakravarti A; Tanzi RE; Stefansson K; Santangelo SL; Gusella JF; Sklar P; Wu BL; Daly MJ** Association between microdeletion and microduplication at 16p11.2 and autism. *The New England Journal of Medicine*, 2008 pp.667-75.

[7] **Johansson, Olle.** Disturbance of the immune system by electromagnetic fields – A potentially underlying cause for cellular damage and tissue repair reduction which could lead to disease and impairment. *Pathophysiology*, 2009 pp. 621-642.

[8] Stern, L; Francoeur, MJ; Primeau, MN; Sommerville, W; Fombonne, E; Mazer, BD. Immune function in autistic children *Annals of allergy, asthma & immunology*, 2005 pp. 558-65.

[9] **Arnetz, B; Akerstedt, T; Hillert, L; Lowden, A; Kuster, N; Wiholm, C.** The Effects of 884 MHz GSM Wireless Communication Signals on Self-reported Symptom and Sleep (EEG)- An Experimental Provocation Study. *PIERS Online*, 2007 pp: 1148-1150.

- [10] **Melke, J; Botros, H.G; Chaste, P; Betancur, C; Nygren, Anckarsäter, GH; Rastam, M; Ståhlberg, O; Gillberg, IC; Delorme, R; Chabane, N; Mouren-Simeoni, M-C; Fauchereau, F; Durand, C M; Chevalier, F; Drouot, X; Collet, C; Launay, J-M; Leboyer, M; Gillberg, C; Bourgeron, T.** Abnormal melatonin synthesis in autism spectrum disorders. *Molecular Psychiatry*, (2008) 13, 90–98.
- [11] **Joubert, V; Bourthoumieu, S; Leveque, P; Yardin, C.** Apoptosis is Induced by Radiofrequency Fields through the Caspase-Independent Mitochondrial Pathway in Cortical Neurons. *Radiation Research*, 2008 pp. 38– 45.
- [12] **Fatemi, SH; Araghi-Niknam, M.** Levels of Bcl-2 and P53 are altered in superior frontal and cerebellar cortices of autistic subjects. *Cellular and Molecular Neurobiology*, 2003 Dec;23(6) pp. 945-52.
- [13] **Mittur, A V; Kaplowitz, N; Kempner, E S; Ookhtens, M.** Radiation inactivation studies of hepatic sinusoidal reduced glutathione transport system. *Biochimica et biophysica acta*, (2000) 5;1464 (2):207-18.
- [14] **Kern, JK; Jones, AM.** Evidence of toxicity, oxidative stress, and neuronal insult in autism. *Journal of Toxicology and Environmental Health*, 2006 (6):485-99.
- [15] **Adey, W. Ross.** Electromagnetics in Biology and Medicine. *Modern Radio Science* edited by Hiroshi Matsumoto, Published for the International Union of Radio Science by Oxford University Press, 1993 pp. 231-249.
- [16] **McGinnis, Woody R., MD.** Oxidative Stress in Autism: What Parents Should Know. *The ASA's 36th National Conference on Autism Spectrum Disorders*, (July 13-16, 2005)
- [17] **Schmitz, C; Keller, E; Freuding, T; Silny, J; Korr, H.** 50-Hz magnetic field exposure influences DNA repair and mitochondrial DNA synthesis of distinct cell types in brain and kidney of adult mice. *Acta Neuropathologica* (Berl), 2004; 107:(3), pp. 257 – 264.
- [18] **Rossignol, DA; Frye, R E.** Mitochondrial dysfunction in autism spectrum disorders: a systematic review and meta-analysis. *Molecular Psychiatry* Published on-line January 25th, 2011.
- [19] **Huber, R; Treyer, V.; Schuderer, J.; Berthold, T; Buck, A., Kuster, N. Landolt, H. P. and Achermann, P.** Exposure to pulse-modulated radio frequency electromagnetic fields affects regional cerebral blood flow. *European Journal of Neuroscience*, 2005 21 (4), pp. 1000 – 1006.
- [20] **Gillberg, Carina; Bjure, J; Uvebrant, P; Vestergren, E; Gillberg, C.** SPECT (Single Photon Emission Computed Tomography) in 31 children and adolescents with autism and autistic-like conditions. *European Child & Adolescent Psychiatry*, 1993 2:(1) pp.50-59.

- [21] **Baieth, H. E. Abdel.** Physical Parameters of Blood as a Non - Newtonian Fluid. *International Journal of Biomedical Science*, Dec 15, 2008 4(4) pp. 323-329.
- [22] **Bradstreet, J; Kartzinel, J.** Biological interventions in the treatment of autism and PDD. In: Rimland B, ed. *DAN! (Defeat Autism Now!) Fall 2001 Conference*. San Diego, CA: Autism Research Institute; 2001.
- [23] **Opler, Mark; Rukenstein, Adriana; Coté, Lucien ; Goodman Reba.** Reduced Dopamine Levels in PC12 Cells Exposed to Low Frequency Electromagnetic Fields. *Bioelectrochemistry and Bioenergetics*, May 1997;42(2) pp. 235-239
- [24] **Ernst, M; Zametkin, AJ; Matochik, JA; Pascualvaca, D; Cohen, RM.** Low medial prefrontal dopaminergic activity in autistic children. *The Lancet*, August 1997 350: 9078, p. 638.
- [25] **Tamasidze, AG; Nikolaishvili, MI.** Effect of high-frequency EMF on public health and its neuro-chemical investigations. *Georgian Med News*, 2007 Jan;(142):58-60. [Article in Russian]
- [26] **Chance, WT; Grossman, CJ; Newrock, R; Bovin, G; Yerian, S; Schmitt, G; Mendenhall, C.** Effects of electromagnetic fields and gender on neurotransmitters and amino acids in rats. *Physiology & Behavior*, 1995 Oct 58(4):743-8.
- [27] **Anderson, George M.; Freedman , Daniel X.; Cohen, Donald J. ; Volkmar, Fred R.; Hoder, E. Lawrence; McPhedran, Peter; Minderaa, Ruud B. ; Hansen, Carl R.; Young, J. Gerald.** Whole Blood Serotonin in Autistic and Normal Subjects. *Journal of Child Psychology and Psychiatry*, 2006 28:(6) pp. 885 – 900.
- [28] **Nikitina, V.N.** Proceedings from the international workshop: Clinical and physiological investigations of people highly exposed to electromagnetic fields. St. Petersburg, Russia, October 16-17, 2000.
- [29] **Horvath, K; Perman, JA.** Autistic disorder and gastrointestinal disease. *Current Opinion in Pediatrics*, 2002 14:(5) pp.583-7.

Individual Rights; Deborah M. Rubin Comments, Feb 2, 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)	
)	
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, DC 20554

Comment Filed by: Deborah M. Rubin
19160 Dove Creek Drive
Tampa, FL 33647
mamarubin@msn.com
813-866-9400

February 2, 2013

AFFIDAVIT OF Deborah M. Rubin

State of Florida]

Hillsborough County]

I, Deborah M. Rubin, attest that my statements are true to the best of my knowledge.

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

1. My name is Deborah M. Rubin. My address is 19160 Dove Creek Drive, Tampa, FL 33647.
2. My family and I are exposed to unnatural, manmade, microwave radiation against our wills in school, at work, in our home, and every place in between every single day. The FCC must review its policy and guidelines to protect our health.
3. **First and foremost, the FCC Guidelines must be revised because they are not only insufficient to protect the public from the adverse biological effects of low level microwave and radiowave exposure, but they are also realistically unenforceable and ineffective**—even with an alleged safety factor of 10.

3a. Real world personal exposures are unpredictable and may frequently exceed FCC guidelines undetected, as is demonstrated in Hondou, et al 2002:

<http://arxiv.org/ftp/physics/papers/0703/0703124.pdf>

"For a standard train carriage, with a carrying capacity of 151 people, Hondou's calculations show that it is possible to exceed ICNIRP exposure limits if 30 people, each with a mobile phone that emits radio waves at a power of 0.4 watts, all use their phones at the same time. The peak power a mobile phone is allowed to produce is two watts."

3b. Laboratory studies do not and can not simulate every possible real life exposure.

3c. The guidelines can not possibly account for every individual in every possible position he or she may occupy in relation to all microwave-emitting devices in his or her personal space.

3d. In our daily lives, we are exposed to the multiple personal wireless devices of numerous individuals simultaneously—in school, at work, on the train, on the bus, in the movie theater, etc.

3e. Along with those exposures, we are exposed to multiple infrastructural sources-- including, but not limited to the involuntary exposures from towers, smart meters, wifi routers, etc.

3f. Many towers already have collocated sets of antennae, further increasing the exposure level and complexity of the waveforms.

3g. As if that weren't hazardous enough, FCC is currently considering adding high-powered, Super WiFi to that infrastructural list-- even as they are allegedly now considering the revision of their guidelines for safety. Super WiFi is capable of easily penetrating concrete walls, etc.

What additional health impact will Super WiFi have on all living things, especially the young, the ill, the elderly and the electromagnetically hypersensitive people? EHS, electromagnetic hypersensitivity, is recognized by many pre-eminent researchers and the Cleveland Clinic. Whom shall we hold accountable for the loss of our good health?

3h. Various surfaces reflect radio and microwaves, which can amplify the exposure in unique and unpredictable ways. Again FCC allows this hazardous

physical agent to invade the walls of my home without my consent and against my will. They are serving the Industry before my Health. Current FCC guidelines do not protect the Public in the Real World.

4. The Public has not been fully informed that there are thousands of peer-reviewed studies showing adverse effects from microwave and radiowave exposure.

4a. The FCC has not responsibly informed the unsuspecting Public--whom FCC is obligated to serve--that as of May 31, 2011, radiowave electromagnetic fields are a Class 2B carcinogen per the International Agency for Research on Cancer (IARC) of the World Health Organization.

4b. FCC and Industry do not inform the public and furthermore deliberately misleads them.

For example, PG&E's website states:

<http://www.pge.com/myhome/edusafety/systemworks/rf/>

"The World Health Organization (WHO) advises: "A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. *To date, no adverse health effects have been established for mobile phone use.*" Really? That statement is in direct contradiction to the IARC position stated in 4a. And to numerous peer-reviewed studies.

According to FCC's site: <http://www.fcc.gov/guides/wireless-devices-and-health-concerns>

"According to the FDA and the World Health Organization (WHO), among other organizations, to date, the weight of scientific evidence has not effectively linked exposure to radio frequency energy from mobile devices with any known health problems."

Again a contradiction. An internal 1993 FDA memo states there is strong data

indicating harm:

<http://microwavenews.com/news/backissues/j-f03issue.pdf>

“In the spring of 1993 at the height of public concern over cell phone–brain tumour risks, Food and Drug Administration (FDA) biologists concluded that the available data ****strongly suggest**** that microwaves can ****accelerate the development of cancer**** This assessment is in an internal agency memo recently obtained by Microwave News under the Freedom of Information Act.”

EPA, besides the Hankins letter found here:

<http://www.emrpolicy.org/faq/five.htm>

Also see:

http://microondes.files.wordpress.com/2010/03/robert_c_kane_cellular_telephone_russian_roulette.pdf

“U.S. EPA released a draft copy of its report on the evaluation of the potential carcinogenicity of electromagnetic fields. The report, first of all, finds that in view of these laboratory studies, there is reason to believe that the findings of carcinogenicity in humans are biologically plausible. Of course, they were referring to laboratory studies that they had reviewed. This admission by the EPA means that the carcinogenic effects of electromagnetic energy are valid or likely....The EPA has concluded that the results of the occupational cancer studies are remarkably consistent [T]he consistency and specificity of the findings provide evidence that EM- field exposure in the workplace may pose a carcinogenic risk for adults . . .****** (see footnote 94). Radiofrequency energy exposure has moved into the everyday environment for most people. What was true for the relatively few individuals in the past is now, by the EPA’s own conclusions, the norm for the entire population.

“In summary form, the EPA’s report of five case control studies found that four of the five noted significantly elevated risks of cancer in the following categories of employment; (1) gliomas and astrocytomas in Maryland electricians, telephone servicemen, linemen, railroad and telecommunication workers, engineers as well as

electronic engineers;

(2) primary brain cancer in workers of Philadelphia, northern New Jersey, and south Louisiana involved with design, manufacture, repair, or installation of electrical and electronic equipment;

(3) brain cancer in East Texas male workers involved in highly exposed (EM fields) occupations in the transportation, communication, and the utilities industry;

(4) brain cancer in workers identified in a 16-state NCHS survey of industries and occupations" (see footnote 94). One common thread that runs through these four case studies is brain cancer.

"Realize now that the levels of electromagnetic energy to which those workers were typically exposed were much lower than the exposure to which a portable cellular telephone user is subjected with each telephone call. The EPA, in this report, concedes that "There is a link between exposure to EM fields and certain forms of site-specific cancer, namely leukemia, CNS, and lymphoma" (see footnote 94). Of course, in the instances when the exposure is directed at the head and brain of the human subject, as it is with portable cellular telephone use, we should expect that the predominant form of cancer would be central nervous system (brain) cancer."

FCC safety statements are misleading. Clearly. FCC Guidelines are not protective of Human or Environmental Health. We should not have to sacrifice either for Industry.

4c. The Public voluntarily uses numerous devices every day, for hours a day, and is involuntarily exposed, all day long in many cases, with no understanding of the health hazard. The Public relies on FCC to protect them. FCC is not a health agency and therefore is not qualified to set public health policy. The Telecom Act of 1996 prohibits the properly qualified Health agencies and Health experts from setting proper, science- based exposure limits that are truly protective of people and their environment. FCC should be transparent in all aspects of Guideline setting and

include independent scientists from all sides of the Health debate.

5. Exposure is shown to cause adverse biological effects in thousands of peer-reviewed, scientific studies. FCC's own website says:

http://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet56/oet56e4.pdf

"Several years ago publications began appearing in the scientific literature, largely overseas, reporting the observation of a wide range of low-level biological effects.....More recently, other scientific laboratories in North America, Europe and elsewhere have reported certain biological effects after exposure of animals ("in vivo") and animal tissue ("in vitro") to relatively low levels of RF radiation. **These reported effects have included certain changes in the immune system, neurological effects, behavioral effects, evidence for a link between microwave exposure and the action of certain drugs and compounds, a "calcium efflux" effect in brain tissue (exposed under very specific conditions), and effects on DNA....**In general, while the possibility of "non-thermal" biological effects may exist, whether or not such effects might indicate a human health hazard is not presently known. **[as if it could possibly be benign]** Further research is needed to determine the generality of such effects and their possible relevance, if any, to human health."

5a. As to the first part of that statement, reports of low-level adverse effects began appearing 40 years ago or more. For example:

Raines, 1981. ELECTROMAGNETIC FIELD INTERACTIONS WITH THE HUMAN BODY: OBSERVED EFFECTS AND THEORIES. NASA Purchase Order No. S-75151B . Report Prepared for: National Aeronautics and Space Administration Goddard Space Flight Center Greenbelt, Maryland 20771. April 9, 1981.

Adams and Williams. 1975. Biological Effects of electromagnetic radiation (radiowaves and microwaves)--Eurasian community countries. Prepared by U.S. Army Medical Intelligence and Information Agency Office of the Surgeon General.

Cleary, 1970. Biological Effects and Health Implications of Microwave Radiation, Symposium Proceedings. Richmond Virginia, September 17-19, 1969. Sponsored by Medical College of Virginia, Virginia Commonwealth University with the support of Bureau of Radiological Health, U.S. Department of Health, Education, and Welfare, Public Health Service, Environmental Health Service.

Bergman 1965. The Effect of Micro Waves on the Central Nervous System. Pub. Research and Scientific Laboratory of Ford Motor Company, 1965.

5b. Secondly, with that knowledge, FCC has somehow determined it is wise to blanket the entire country, including our schools, hospitals, communities, and even our homes by way of smart meters and cell towers with involuntary exposure to microwave radiation.

Is this a reasonable, science-based public health policy?

6. Our children are in danger. The Public has not been properly informed of the documented health hazards associated with exposures to wireless devices. FCC, other regulators and Industry are willfully blind to the documented health hazards. FCC is intentionally misleading the public into believing there are no risks associated with the use of wireless devices. FCC is allowing Industry to market microwave-emitting toys to the parents of infants and toddlers for use by infants and toddlers.

Once again, is it a reasonable public policy to expose our entire society and environment, including our youngest children to a form of radiation that the FCC admits “might indicate a human health hazard”? At best you have uninformed consent from voluntary users; at worst, from those of us who protest, you have exposed us to a health hazard against our wills.

6a. Children are demonstrated in the scientific, peer-reviewed literature to be more sensitive to the effects of microwave/radiowave radiation than adults because they are still maturing. Fetuses in the womb have been demonstrated to be affected.



Penetration of radiation on brain of an adult, a 10 year old and a 5 year old

Children are smaller, their bones are thinner, their nervous and immune systems are not fully developed, and they will have a longer exposure over their lifetimes. Microwave radiation penetrates more deeply into a child's body. Schools are increasingly going wireless with goals to be completely wireless by 2015.

<http://www.tampabay.com/news/education/k12/florida-looks-at-taking-school-textbooks-completely-digital-by-2015/1152138>

Our schools teach the scientific method and yet they and our government do not apply it to public health policy. How can such an initiative go forward with the IARC classification and thousands of studies showing adverse biological effects from exposure levels orders of magnitude lower than the current guidelines? Our children's health and lives are at stake.

Children are irradiated in school for 6 to 8 hours a day from age 5 and up when they are at their most vulnerable.

Sample of studies showing Children are more vulnerable than adults:

<http://informahealthcare.com/doi/abs/10.3109/15368378.2011.622827>

(with link to full study text)

Exposure Limits: The underestimation of absorbed cell phone radiation, especially in children

The existing cell phone certification process uses a plastic model of the head called the Specific Anthropomorphic Mannequin (SAM), representing the top 10% of U.S. military recruits in 1989 and greatly underestimating the Specific Absorption Rate (SAR) for typical mobile phone users, especially children. A superior computer simulation certification process has been approved by the Federal Communications Commission (FCC) but is not employed to certify cell phones. In the United States, the FCC determines maximum allowed exposures. Many countries, especially European Union members, use the “guidelines” of International Commission on Non-Ionizing Radiation Protection (ICNIRP), a non governmental agency. Radiofrequency (RF) exposure to a head smaller than SAM will absorb a relatively higher SAR. Also, SAM uses a fluid having the average electrical properties of the head that cannot indicate differential absorption of specific brain tissue, nor absorption in children or smaller adults. The SAR for a 10-year old is up to 153% higher than the SAR for the SAM model. When electrical properties are considered, a child's head's absorption can be over two times greater, and absorption of the skull's bone marrow can be ten times greater than adults. Therefore, a new certification process is needed that incorporates different modes of use, head sizes, and tissue properties. Anatomically based models should be employed in revising safety standards for these ubiquitous modern devices and standards should be set by accountable, independent groups.

<http://www.ncbi.nlm.nih.gov/pubmed/20463374?dopt=Abstract>

<http://www.ncbi.nlm.nih.gov/pubmed/20107250>

http://www.radiationresearch.org/images/RRT_articles/Buchner%20Eger%20Rimbach%20Study%202011%20ENG%20FINAL%20Revised%2029%20July%202011.pdf

<http://www.scribd.com/doc/75218005/Hormone-Effects-Eskander-Et-Al-2011>

<http://www.benthamscience.com/open/topedj/articles/V006/46TOPEDJ.pdf>

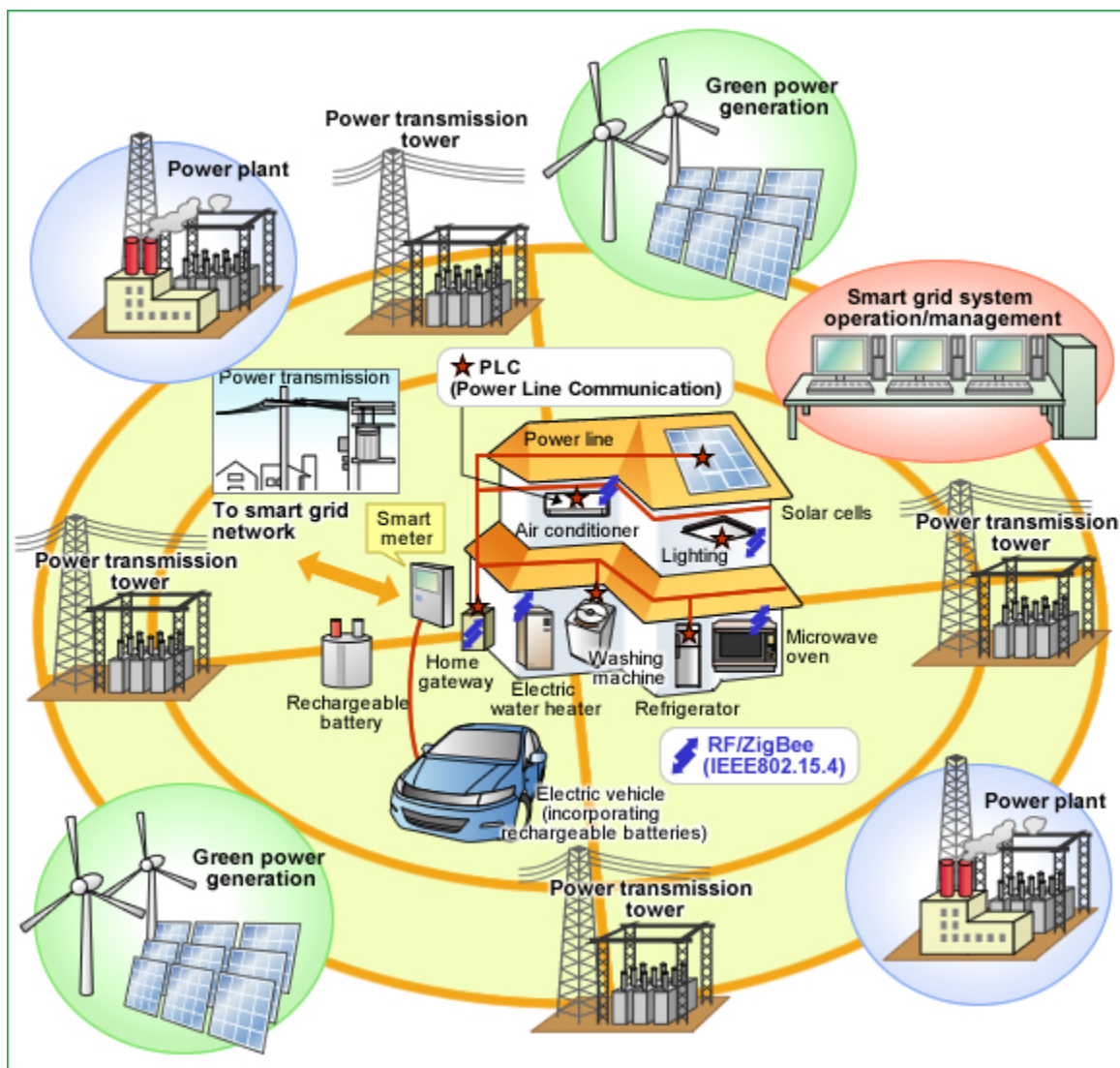
http://www.avaate.org/IMG/pdf/NINOS_Cell_phone_use_and_behavioural_problems_in_Iech.2010.115402.full.pdf

http://www.bioinitiative.org/report/wp-content/uploads/pdfs/sec12_2012_Evidence_%20Childhood_Cancers.pdf

7. Current FCC guidelines do not protect the Public from the synergistic effects of microwave/radiowave exposure and other hazards such as chemical toxins. Furthermore, the complex interactions of RF, ELF, Xray, gamma, and UV radiations have not been considered in the guidelines.

8. Another large scale microwave deploying initiative is currently underway, despite the aforementioned, long-standing body of peer-reviewed, scientific literature showing adverse outcomes from low-level microwave/radiowave exposure. The SmartGrid is forcing microwave-emitting utility meters onto nearly every single home in America. Additionally, the wireless Grid is increasing the number of towers that involuntarily irradiate every living thing every single day. And the home area network, the final component of the SmartGrid, will exponentially increase the radiation in our homes from the chips in the appliances, thermostats and their communication with the meters.

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What you don't see in this diagram are all the living people, plants, animals and other life forms that are being irradiated. Einstein said, **“Concern for man and his fate must always form the chief interest of all technical endeavors. Never forget this in the midst of your diagrams and equations.”** Let us not forget or fail to rigorously analyze the data set and to honestly consider the consequences of our actions. We must correct our mistakes based on what we know now.

Submitted by,

Deborah M. Rubin

19160 Dove Creek Drive

Tampa, FL 33647

February 3, 2013

Individual Rights; Kevin Mottus Comments, Aug. 30, 2013

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: (Kevin Mottus)
(11041 Santa Monica Blvd. #627
(Los Angeles, CA 90025)
(stopwirelessradiation@gmail.com)
(310-479-0299)

August 30 , 2013

JA 10145

AFFIDAVIT OF Kevin Mottus

State of CA]

LA_ County]

I, Kevin Mottus, attest that my statements are true to the best of my knowledge.

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

1. My name is Kevin Mottus. My address is 11041 Santa Monica Blvd. #627 Los Angeles, CA 90025.

2. I am a SOCIAL WORKER.

The FCC needs to stop denying the existence of non-thermal biological effects from Radio Frequency Radiation emitted and used by all wireless devices. This agent is inherently a harmful agent. FCC guideline need to be completely revised too reflect the inherently harmful nature of RF radiation emitted by all wireless devices. See the attached sworn declarations from experts David Carpenter MD, Lloyd Morgan, Magda Havas PhD, Barry Trower, Curtis Bennet from a recent Federal Court case in Portland, Oregon suing the Portland Unified School District to turn off their WiFi due to the inherently harmful nature of WiFi and to protect the health and well being of the child in question and all children in the district. Please see the sworn declarations attached and make them part of the official record.

According to these sworn declarations, Dr. David Carpenter MD is quoted as stating that "Decades of scientific study have produced substantial evidence that EMF and RF/MW radiation may be considered neurotoxic, carcinogenic, and genotoxic" (item 17 page 5). Further when speaking of WiFi in the classroom specifically he states that "Human studies of comparable RF/MW radiation parameters show changes in brain function including memory loss, retarded learning, performance impairment in children, headaches and neurodegenerative conditions, melatonin suppression and sleep disorders, fatigue, hormonal imbalances, immune dysregulation such as allergic and inflammatory responses, cardiac and blood pressure problems, genotoxic effects like miscarriage, cancers such as childhood leukemia, childhood and adult brain tumors, and more" (item 14 page 4).

Due to the inherently carcinogenic and harmful nature of Radio Frequency radiation, the FCC needs to act immediately to ban completely all forms of WiFi and similar microwave emitting devices such as wireless internet routers, wireless video game consoles, and a myriad of other forms of microwave transmitters from all settings but

especially from schools, all workplaces, and homes. As it is now, people are being involuntarily exposed to this harmful agent in a most complete, comprehensive, and efficient manner against their will and without proper knowledge of the possible harmful effects or consent to this harmful exposure.

The FCC is allowing our population in mass to be exposed to a known World Health Organization Class 2B Carcinogen in the same class as lead. Our government certainly would not allow our homes, workplaces, and retail locations to be painted with lead paint much less be spraying that lead paint continuously all over its human occupants but that is what we are essentially doing by allowing WiFi and other forms of microtransmitters to continue to be used in our homes, schools, workplaces and retail locations.

It is unconscionable how the FCC continues to ignore long standing and established evidence that WiFi and the RF radiation it emits is a biologically harmful agent. Please consider as evidence available to the public on line and enter into the record all depositions given as part of the AHM and David Morrison vs Portland Public Schools Civil Action No. 3:11-cv-00739-MO. Please also consider as evidence and enter into the official record the History of Health Effects from RF and microwave radiation from the Archives of Zory Glaser documenting health effects of RF exposure seen by the Navy available at magdahavas.com on line.

It is even more unconscionable that the FCC is actively promoting the unhealthy exposure of all American to RF radiation by promoting the use and expanded use of WiFi in all settings of our life. We are literally being slowly microwaved 24 hours a day to the detriment of our health. This must stop immediately; the FCC must take corrective action to rid all Americans of this unhealthy exposure. Just because we cannot see, feel or taste this agent does not mean it is not harming us on a cellular level because it is.

The FCC guidelines governing RF exposure must reflect Radio Frequency radiation's inherently harmful nature and be lowered 1 million times to .0001uW/cm² as recommended and defended by the recent update of the BioInitiative Report to avoid known harmful biological effects above this level. Please see the entire BioInitiative Report at bioinitiative.org and enter it into the official record. FCC guidelines must immediately acknowledge and exposure levels of RF radiation permitted be reduced to take into account non-thermal biological effects of RF radiation. They need to be adjusted significantly downward to account for special populations such as children, pregnant women and the elderly. The exposure level of the guidelines must be additionally lowered to account for long term exposures inherent to cell tower admissions and other continuous exposures of our population to RF radiation.

The FCC needs to stop immediately facilitating, encouraging, and supporting the reckless, aggressive and pervasive expansion of WiFi and other wireless exposures due to the involuntary exposure of our population to RF radiation which is inherently biological harmful to humans. By exposing us to WiFi in our homes, workplaces, retail locations and in other forms like smart meters and whole communities with WiMax, you are making people sick with Electrosensitivity which has been recognized as a medical

condition by other countries. You are giving people cancer; see sworn declarations discussing the association between Leukemia and other cancers and EMF or RF radiation levels similar to that used by WiFi.

The FCC needs to immediately inform each and every Americans of the inherently harmful nature of RF radiation as a biotoxic agent so they can take corrective action to protect their health and the health of their families, coworkers and communities. People are getting electrosensitive and I can bring them to the FCC to testify. People are getting cancer due to heavy long term exposure to cell phones and other RF radiating devices. I can bring them and/or their surviving family members to the FCC to testify. Without adequate safety standards in place, we are the experiment-the research as you allow mass microwaving of our population with RF radiation. The FCC is currently allowing wireless companies and manufacturers of wireless devices to experiment with our health and our lives. People are getting sick. You are disabling our work force; you are killing our workforce with cancer.

The FCC needs to immediately post every scientific article ever published regarding the biological effects of all EMF's but especially RadioFrequency Radiation. The FCC needs to immediately make available on their website all of the warnings from every country in the world regarding the dangers of RF radiation to humans. Because almost every American is effected by RF radiation exposure and relatively few visit you site, you need to immediately warn each and every American of the science available showing non-thermal effects from RF radiation used by WiFi and all other wireless devices. Instead of actively expanding RF exposure, the FCC needs to actively reach out to the medical field and inform them of the symptoms of Electrosensitivity and cancers prone to be associated with RF radiation exposure, to aid with diagnosis and treatment of their patients and actively collect and synthesize information regarding observed health effects of RF radiation on our population. As it is now no one is actively communicating with our medical professionals or collecting necessary data to track Electrosensitivity in our population or track the increase in cancer amongst heavy wireless users (3-8 hours a day) and/or those highly RF radiation exposed. To ignore this responsibility or place it on others while actively promoting the spread and mass exposure of this harmful agent is irresponsible and willfully destructive to our population. Finally, the FCC guidelines governing RF radiation emissions need to immediately be lowered 1 million times to provide a protective exposure level that avoids known non-thermal biological effects as articulated, supported and defended in the Bioinitiative Report. For the FCC to continue to deny the evidence indicating the existence of non-thermal biological effects of RF is irresponsible, malicious and criminal due to the harm and death that it can cause.

Submitted by:

(Kevin Mottus)
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(310-479-0299)

August 30 , 2013

Individual Rights; Alexandra Ansell Comments, Aug. 30, 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: Alexandra Ansell
728 John Adams Lane
West Melbourne, Florida 32904

August 30, 2013

AFFIDAVIT OF Alexandra Ansell

State of Florida

Brevard County

I, Alexandra Ansell, 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

My name is Alexandra Ansell. My address is 728 John Adams Lane, West Melbourne, Florida 32904

I am a medical transcriptionist

We are in the midst of a growing health crisis resulting from the proliferation of radiofrequencies from wireless technology, including so-called smart meters and cell phones. The FCC has refused set a realistic safety standard that includes nonthermal biologic effects of microwave radiation. The EPA warned the FCC in 2002 that their 1996 standard does not apply to chronic, nonthermal exposures with an exposed population that includes children, the elderly and people with various debilitating physical and medial conditions. Having only a tissue heating standard is the giant loophole the telecommunications industry and the utilities have exploited to disregard the huge and growing body of evidence of negative biologic effects of the chronic, nonthermal exposures we are now subject to. Declared a class 2B carcinogen by the World Health Organization (in the same category with methylmercury, HIV infection and lead) radiofrequencies are the new cigarettes, but one can choose not to smoke. The FCC should act in the public interest and support the establishment of a biologically based safety standard for wireless devices.

4. It is not necessary to have “wireless everything” especially if this comes at a horrific cost in terms of public health. Once again, are we to act for the short term financial gain of telecommunications and utilities and ignore the long range consequences of our behavior? What sense does it make to produce an electric grid that is now less secure? See GAO report of January 2011 regarding increased vulnerabilities of the modernized electricity grid.

According to the American Academy of Environmental Medicine, there is a synergistic effect between chemicals and electromagnetics in the chemically and electrically sensitive population(s). The addition of an involuntary exposure to radiofrequencies may be the difference between functioning and not. There is a growing population of electrohypersensitive people who are being discriminated against in schools, hotels, government buildings, etc. due to wireless communications. Smart meters are omnipresent in most

communities. One cannot escape (even without a smart meter on one's own home) bombardment with radiofrequencies in the microwave spectrum.

Why has there never been an environmental impact study, despite the EPA's warning to the FCC that its thermal-only standard was inadequate and not protective of sensitive and vulnerable populations (see #3 above)? What about non human "populations" and vegetation? There is evidence in major cities that trees are now suffering from radiofrequency "diseases." What is happening to the human population, especially infants and children?

I am weary of this endless process of being ignored by my elected officials and being referred to "FCC standards" which have been demonstrated over and over again to be monumentally insufficient. It rests with you now to act. I am wondering how many living beings will be forever damaged before you respond with integrity to the responsibility of your office?

The BioInitiative report 2012 discusses peer reviewed scientific studies that have found negative biological effects of RF occurring outside the thermal-only model. (Please refer to the actual report for additional information and direct references to studies.) Since I have no longer have any confidence that you will refer directly to it for the purpose of getting the facts, I have included excerpts below.

The BioInitiative 2012 Report has been 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

BIOINITIATIVE 2012 – CONCLUSIONS

Overall, these 1800 or so new studies report abnormal gene transcription (Section 5); genotoxicity and single-and double-strand DNA damage (Section 6); stress proteins because of the fractal RF-antenna like nature of DNA (Section 7); chromatin condensation and loss of DNA repair capacity in human stem cells (Sections 6 and 15); reduction in free-radical scavengers – particularly melatonin (Sections 5, 9, 13, 14, 15, 16 and 17); neurotoxicity in humans and animals (Section 9), carcinogenicity in humans (Sections 11, 12, 13, 14, 15, 16 and 17); serious impacts on human and animal sperm morphology and function (Section 18); effects on offspring behavior (Section 18, 19 and 20); and effects on brain and cranial bone development in the offspring of animals that are exposed to cell phone radiation during pregnancy (Sections 5 and 18). This is only a snapshot of the evidence presented in the BioInitiative 2012 updated report.

BIOEFFECTS ARE CLEARLY ESTABLISHED

Bioeffects are clearly established and occur at very low levels of exposure to electromagnetic fields and radiofrequency radiation. Bioeffects can occur in the first few minutes at levels associated with cell and cordless phone use. Bioeffects can also occur from just minutes of exposure to mobile phone masts (cell towers), WI-FI, and wireless utility ‘smart’ meters that produce whole-body exposure. Chronic base station level exposures can result in illness.

BIOEFFECTS WITH CHRONIC EXPOSURES CAN REASONABLY BE PRESUMED TO RESULT IN ADVERSE HEALTH EFFECTS

Many of these bioeffects can reasonably be presumed to result in adverse health effects if the exposures are prolonged or chronic. This is because they interfere with normal body processes (disrupt homeostasis), prevent the body from healing damaged DNA, produce immune system imbalances, metabolic disruption and lower resilience to disease across multiple pathways. Essential body processes can eventually be disabled by incessant external stresses (from system-wide electrophysiological interference) and lead to pervasive impairment of metabolic and reproductive functions.

LOW EXPOSURE LEVELS ARE ASSOCIATED WITH BIOEFFECTS AND ADVERSE HEALTH EFFECTS AT CELL TOWER RFR EXPOSURE LEVELS

At least five new cell tower studies are reporting bioeffects in the range of 0.003 to 0.05 $\mu\text{W}/\text{cm}^2$ at lower levels than reported in 2007 (0.05 to 0.1 uW/cm^2 was the range below which, in 2007, effects were not observed). Researchers report headaches, concentration difficulties and behavioral problems in children and adolescents; and sleep disturbances, headaches and concentration problems in adults. Public safety standards are 1,000 – 10,000 or more times higher than levels now commonly reported in mobile phone base station studies to cause bioeffects.

EVIDENCE FOR FERTILITY AND REPRODUCTION EFFECTS: HUMAN SPERM AND THEIR DNA ARE DAMAGED

Human sperm are damaged by cell phone radiation at very low intensities in the low microwatt and nanowatt/cm² range (0.00034 – 0.07 uW/cm²). There is a veritable flood of new studies reporting sperm damage in humans and animals, leading to substantial concerns for fertility, reproduction and health of the offspring (unrepaired de novo mutations in sperm). Exposure levels are similar to those resulting from wearing a cell phone on the belt, or in the pants pocket, or using a wireless laptop computer on the lap. Sperm lack the ability to repair DNA damage.

Studies of human sperm show genetic (DNA) damage from cell phones on standby mode and wireless laptop use. Impaired sperm quality, motility and viability occur at exposures of 0.00034 uW/cm² to 0.07 uW/cm² with a resultant reduction in human male fertility. Sperm cannot repair DNA damage.

Several international laboratories have replicated studies showing adverse effects on sperm quality, motility and pathology in men who use and particularly those who wear a cell phone, PDA or pager on their belt or in a pocket (Agarwal et al, 2008; Agarwal et al, 2009; Wdowiak et al, 2007; De Iuliis et al, 2009; Fejes et al, 2005; Aitken et al, 2005; Kumar, 2012). Other studies conclude that usage of cell phones, exposure to cell phone radiation, or storage of a mobile phone close to the testes of human males affect sperm counts, motility, viability and structure (Aitken et al, 2004; Agarwal et al, 2007; Eroglu et al., 2006). Animal studies have demonstrated oxidative and DNA damage, pathological changes in the testes of animals, decreased sperm mobility and viability, and other measures of deleterious damage to the male germ line (Dasdag et al, 1999; Yan et al, 2007; Otitoloju et al, 2010; Salama et al, 2008; Behari et al, 2006; Kumar et al, 2012). There are fewer animal studies that have studied effects of cell phone radiation on female fertility parameters. Panagopoulous et al. 2012 report decreased ovarian development and size of ovaries, and premature cell death of ovarian follicles and nurse cells in *Drosophila melanogaster*. Gul et al (2009) report rats exposed to stand-by level RFR (phones on but not transmitting calls) caused decrease in the

number of ovarian follicles in pups born to these exposed dams. Magras and Xenos (1997) reported irreversible infertility in mice after five (5) generations of exposure to RFR at cell phone tower exposure levels of less than one microwatt per centimeter squared ($\mu\text{W}/\text{cm}^2$).

EVIDENCE THAT CHILDREN ARE MORE VULNERABLE

There is good evidence to suggest that many toxic exposures to the fetus and very young child have especially detrimental consequences depending on when they occur during critical phases of growth and development (time windows of critical development), where such exposures may lay the seeds of health harm that develops even decades later. Existing FCC and ICNIRP public safety limits seem to be not sufficiently protective of public health, in particular for the young (embryo, fetus, neonate, very young child).

The Presidential Cancer Panel (2010) found that children *‘are at special risk due to their smaller body mass and rapid physical development, both of which magnify their vulnerability to known carcinogens, including radiation.’*

The American Academy of Pediatrics, in a letter to Congressman Dennis Kucinich dated 12 December 2012 states “Children are disproportionately affected by environmental exposures, including cell phone radiation. The differences in bone density and the amount of fluid in a child’s brain compared to an adult’s brain could allow children to absorb greater quantities of RF energy deeper into their brains than adults. It is essential that any new standards for cell phones or other wireless devices be based on protecting the youngest and most vulnerable populations to ensure they are safeguarded through their lifetimes.”

How can the FCC fail to act in light of the facts?

Respectfully submitted by

Alexandra Ansell

728 John Adams Lane

West Melbourne, Florida 32904

August 30, 2013

Individual Rights; Steen Hviid Comments, Aug. 25, 2013

Federal Communications Commission
ET Docket No. 13-84
August 2013

**Comments on Notice of Inquiry regarding Reassessment of
Exposure to Radiofrequency Electromagnetic Fields
Limits and Policies**

Dear FCC,

The current limits on RF exposures are not protective of the public health, especially not for children and other vulnerable populations.

The existing limits were enacted in 1996. Much has changed since, which renders them obsolete. Children use wireless devices for many hours each day, some even sleep with their Smartphone under their pillow. Various types of wireless transmitters are ubiquitous, so the entire population is irradiated 24/7.

The Telecommunications Act of 1996 (section 704) expressly forbids communities from siting transmission towers based on health precautions. Telephone companies have started to remove their landlines in some areas, forcing people to use cell phones and wireless internet service. Many schools require wireless tablets in their classrooms. People no longer have a choice whether they wish to be irradiated or not.

The FCC will need to enact new limits for today's environment, limits that protect the most vulnerable populations and take into account that the irradiation is involuntary. Given the involuntary exposures, the limits must work for everybody and must be conservative enough to account for any doubt. The existing standards fail on all accounts.

Much research published in the past twenty years clearly suggests the current limits are based on an obsolete model, and are much too high.

The potential cost to society in terms of lost productivity, lost educational opportunity and direct health expenses is enormous.

Further delaying lowering the limits will also increase the cost of the technical measures needed, costs that may become so large that they must be borne by the public.

The FCC should not repeat the mistakes of the past, where special interests kept delaying regulatory action by lobbying efforts and fabricating doubt. Well known examples include tobacco, leaded gasoline and asbestos.

The health effects of asbestos were well known in the 1930s, but the industry was able to delay action until the 1970s. The cost of renovating all the buildings containing asbestos built during those decades was enormous — a cost borne by others than the asbestos industry, which saw no downside to their delaying tactics.

History will continue to repeat itself, unless the FCC frees itself from special interest influence, looks very skeptically at “research” funded by special interests, and lets any doubt benefit the public health.

Steen Hviid, M.S., engineer
5708 Martin Road
Snowflake, AZ 85937

Documentation of industry influence upon health effect research

Source of Funding and Results of Studies of Health Effects of Mobile Phone Use: Systematic Review of Experimental Studies, Anke Huss et al., Environmental Health Perspectives, January 2007.

Scope and Impact of Financial Conflicts of Interest in Biomedical Research, Justin Bekelman et al., Journal of the American Medical Association, January 22/29, 2008.

Mobile telephones and cancer: Is there really no evidence of an association?, Kjell Hansson Mild et al., International Journal of Molecular Medicine, 12, 2003.

Secret Ties to Industry and Conflicting Interests in Cancer Research, Lennart Hardell et al., American Journal of Industrial Medicine, 2006.

The Real Junk Science of EMFs: Stop Electric Field Cancer Research, Say Industry Scientists, Microwave News, November 2009.

IARC Drops Anders Ahlbom from RF-Cancer Panel, Microwave News, May 2011.

Disconnect, (book), Devra Davis, Penguin/Dutton, 2012.

Doubt is Their Product, (book), David Michaels, Oxford University Press, 2008.

Asbestos: Medical and Legal Aspects, (book), Barry L. Castleman, Aspen Law and Business, 1996.

Individual Rights; Molly Hauck Comments, Aug. 22, 2013

Aug. 22, 2013

Comments to the Federal Communications Commission (FCC) regarding exposure guidelines to Wireless Radiation Notice of Inquiry, ET Docket No. 13-84

- **Use “the precautionary principle”, widely used in Europe, rather than allowing unbridled growth of wi-fi.**

Don't allow any more wi-fi until you have done or read research about the negative health effects of Wi-fi. Don't make people and animals guinea pigs. Research, mostly done outside the U.S., shows many negative health effects. This should be used to regulate and limit the use of wi-fi in the U.S. Instead, industry is forging ahead to make a profit and the FCC and other government agencies are allowing it to happen. Even organizations like the American Cancer Society seem to be led by donations from industry, rather than by protecting citizens.

- * **I want biologically based RF/MW exposure guidelines that protect from non-thermal health effects.**

*Current guidelines only allege to protect for thermal heating. FCC's power density value should be lowered from 1,000 uW/cm² to 0.0003 uW/cm². Ref. **THE BIOINITIATIVE REPORT 2012 A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF)** - <http://www.bioinitiative.org/>*

- * **Stop using SAR. Start using only electric field based power density values for the RF/MW exposure standard.**

Currently two values are used. One for near field (holding a phone to your head or lap top on your lap) and one for far field (all other exposure). Near field value is Specific Absorption Rate (SAR) which uses a probe in dead animal tissue to measure for a heating effect. Far field value is a power density unit which is calculated from the actual electric field values. **The FCC wants to move to SAR only.** This is absolutely wrong as SAR has no relation to non thermal effects, cannot be verified by measurements in the field and does not take into account additional transmitters that may be present in real life conditions. Ref. - **Evaluation of Specific Absorption Rate as a Dosimetric Quantity for Electromagnetic Fields Bioeffects**

<http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0062663>

- * **Safety standards for sensitive populations need to be set at lower levels than for healthy adult populations.**

*Sensitive populations include the developing fetus, the infant, children, the elderly, those with pre-existing chronic diseases, and those with developed electrical sensitivity (EHS). A child's brain has double the permittivity of an adult's brain. [Ref. **THE BIOINITIATIVE REPORT 2012 A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF)** -*

*<http://www.bioinitiative.org/> and <http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0062663> **Evaluation of Specific Absorption Rate as a Dosimetric Quantity for Electromagnetic Fields Bioeffects**]*

*** How I have been harmed from RF/MW exposure.**

I have not been hurt because I wear an electro-magnetic field protector 24/7. There are hundreds of cell towers and antennae within a small radius from my house in Montgomery County, MD. I find them on Antenna Search.

*** This proceeding requires a NEPA evaluation.**

[Ref. - <http://www.ca6.uscourts.gov/opinions.pdf/10a0374p-06.pdf> Per No. 09-5761 **Heartwood, Inc., et al. v. Agpaoa**, et al. there is standing to challenge the current exposure guidelines because you have suffered an 'injury in fact' that is concrete and particularized; is actual or imminent; is traceable to wireless exposure; and that it is likely that this injury will be redressed by lower exposure guidelines.]

*** Re-fund the EPA's non-ionizing radiation protection research program for developing safe RF/MW exposure guidelines. The FCC cannot both promote wireless technologies and regulate RF/MW radiation. Since the FCC is not a health agency, it does not have the expertise to evaluate the science on RF/MW exposure.**

*** Stop facilitating, encouraging, and supporting the rapid expansion of WiFi and other wireless exposures. This results in involuntary exposure to RF/MW. Research shows that it is biologically harmful to humans and other living beings.**

Molly Hauck

4004 Dresden St.

Kensington, MD. 20895-3812

Individual Rights; Prof. Olle Johansson, PhD., Comments, Feb. 6, 2013

**Karolinska Institutet**Department of Neuroscience
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Stockholm, February 6, 2013

To whom it may concern

The possibility of any health consequences of chronic exposure to pulsed microwave exposure from wireless systems, including cellular phones, WiFi, Wimax, smart meters, TETRA, etc., is often denied. However, in the current field of science, the present state-of-the-art regarding this issue is not so simple.

Wireless communication is now being implemented in our daily life in a very fast way. At the same time, it is becoming more and more obvious that the exposure to electromagnetic fields not only may induce acute thermal effects to living organisms, but also non-thermal effects, the latter often after longer exposures. This has been demonstrated in a very large number of studies and includes cellular DNA-damage, disruptions and alterations of cellular functions like increases in intracellular stimulatory pathways and calcium handling, disruption of tissue structures like the blood-brain barrier, impact on vessel and immune functions, and loss of fertility. Whereas scientists can observe and reproduce these effects in controlled laboratory experiments, epidemiological and ecological data derived from long-term exposures reflect in well-designed case-control studies the link all the way from molecular and cellular effects to the living organism up to the induction and proliferation of diseases observed in humans. It should be noted that we are not the only species at jeopardy, practically all animals and plants may be at stake. Although epidemiological and ecological investigations as such never demonstrate causative effects, due to the vast number of confounders, they confirm the relevance of the controlled observations in the laboratories.

Because the effects are reproducibly observed and links to pathology cannot be excluded, the precautionary principle should be in force in the implementation of this new technology within the society. This will be the only method to support the sustainability of these innovative wireless communication technologies. The February 2, 2000 European Commission Communication on the Precautionary Principle notes: "The precautionary principle applies where scientific evidence is insufficient, inconclusive or uncertain and preliminary scientific evaluation indicates that there are reasonable grounds for concern that the potentially dangerous effects on the environment, human, animal or plant health may be inconsistent with the high level of protection chosen by the EU". *Therefore, policy makers immediately should strictly control exposure by defining biologically-based maximal exposure guidelines also taking into account long-term, non-thermal effects, and including especially vulnerable groups, such as the elderly, the ill, the genetically and/or immunologically challenged, children and fetuses, and persons with the functional impairment electrohypersensitivity.*

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In November, 2009, a Scientific Panel comprised of international experts on the biological effects of electromagnetic fields met in Seletun, Norway, for three days of intensive discussion on existing scientific evidence and public health implications of the unprecedented global exposures to artificial electromagnetic fields (EMF) from telecommunications and electric power technologies. This meeting was a direct consequence of on-going discussions already from the mid-nineties, when cellular communications infrastructure began to rapidly proliferate, and stretching through, among many, the Benevento (2006), Venice (2008) and London (2009) Resolutions from this decade, and involving important conclusions drawn from the 600-page Bioinitiative Report published August 31, 2007, which was a review of over 2,000 studies showing biological effects from electromagnetic radiation at non-thermal levels of exposure, which partly was published subsequently in the journal Pathophysiology (Volume 16, 2009). The Bioinitiative Report has, in addition, recently been updated (2012).

I have worked for many years trying to clarify the potential dangers of this 24/7, whole-body, artificial EMF irradiation. Along this struggle I have been proud to coauthor some of the most important compilations of the up-to-date knowledge, including (among many) most of the ones above.

The Seletun Scientific Statement (2011) recommends that lower limits be established for electromagnetic fields and wireless exposures, based on scientific studies reporting health impacts at much lower exposure levels. Many researchers now believe the existing safety limits are inadequate to protect public health because they do not consider prolonged exposure to lower emission levels that are now widespread.

The body of evidence on electromagnetic fields requires a new approach to protection of public health; the growth and development of the fetus, and of children; and argues for strong preventative actions. These conclusions are built upon prior scientific and public health reports documenting the following:

- 1) Low-intensity (non-thermal) bioeffects and adverse health effects are demonstrated at levels significantly below existing exposure standards.
- 2) ICNIRP/WHO and IEEE/FCC public safety limits are inadequate and obsolete with respect to prolonged, low-intensity exposures.
- 3) New, biologically-based public exposure standards are urgently needed to protect public health world-wide.
- 4) It is not in the public interest to wait.

• EMR exposures should be reduced now rather than waiting for proof of harm before acting. This is in keeping with traditional public health principles, and is justified now given abundant evidence that biological effects and adverse health effects are occurring at exposure levels hundreds to thousands of times below existing public safety standards around the world.

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- There is a need for mandatory pre-market assessments of emissions and risks before deployment of new wireless technologies. There should be convincing evidence that products do not cause health harm before marketing. Such decisions may have to be quickly revised given new evidence.

- The use of telephone lines (land-lines) or fiber optic cables for SmartGrid type energy conservation infrastructure is recommended. Utilities should choose options that do not create new, community-wide exposures from wireless components of SmartGrid-type projects. Future health risks from prolonged or repetitive wireless exposures of SmartGrid-type systems may be avoided by using fiber-optic cable. Energy conservation is endorsed but not at the risk of exposing millions of families in their homes to a new, involuntary source of wireless radiofrequency radiation, the effect of which on their health not yet known.

Furthermore, based on the available scientific data, the Seletun Scientific Panel states that:

- Sensitive populations (for example, the elderly, the ill, the genetically and/or immunologically challenged) and children and fetuses may be additionally vulnerable to health risks; their exposures are largely involuntary and they are less protected by existing public safety standards.

- It is well established that children are more vulnerable to health risks from environmental toxins in general.

- The Panel strongly recommends against the exposure from wireless systems of children of any age.

- The Panel strongly recommends against the exposure from wireless systems of pregnant women.

This is all in accordance with the intentions of the Precautionary Principle as summarized by Mats Dämvik and myself in our paper from 2010.

I encourage governments to adopt a framework of guidelines for public and occupational EMF exposure that reflect the Precautionary Principle. The Precautionary Principle states when there are indications of possible adverse effects, though they remain uncertain, the risks from doing nothing may be far greater than the risks of taking action to control these exposures. The Precautionary Principle shifts the burden of proof from those suspecting a risk to those who discount it — as some nations have already done. Precautionary strategies should be based on design and performance standards and may not necessarily define numerical thresholds because such thresholds may erroneously be interpreted as levels below which no adverse effect can occur.

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You often hear about "safe levels" of exposure and that there is "no proof of health effects", but my personal response to these seemingly reassuring statements is that it is very important to realize, from a consumer's point of view, that "no accepted proof for health effects" is not the same as "no risk". Too many times, 'experts' have claimed to be experts in fields where actually the only expert comment should have been: "I/we just do not know". Such fields were e.g. the DDT, X-ray, radioactivity, smoking, asbestos, BSE, heavy metal exposure, depleted uranium, etc., etc., etc., where the "no risk"-flag was raised before true knowledge came around. Later on, the same flag had to be quickly lowered, many times after enormous economic costs and suffering of many human beings. Along those lines, it is now (regarding "the protection from exposure to electromagnetic fields" issue) very important to clearly identify the background and employment (especially if they sit, at the same time, on the industry's chairs) of every 'expert' in different scientific committees, and likewise. It is, of course, very important (maybe even more important?) to also let 'whistleblowers' speak at conferences, to support them with equal amounts (or even more?) of economical funding as those scientists and other 'experts' who, already from the very beginning, have declared a certain source or type of irradiation, or a specified product, to be 100% safe – sometimes even before having properly examined them!

In the case of "protection from exposure to electromagnetic fields", it is thus of paramount importance to act from a prudence avoidance/precautionary principle point of view. Anything else would be highly hazardous! Total transparency of information is the key sentence here, I believe consumers are very tired of always having the complete truth years after a certain catastrophe already has taken place. For instance, it shall be noted, that today's recommendation values for wireless systems, the SAR-value, are just recommendations, and not safety levels. Since scientists observe biological effects at as low as 20 microWatts/kg, is it then really safe to irradiate humans with 2 W/kg (i.e., with 100,000 times stronger radiation!), which is the recommendation level for us? And, furthermore, it is very strange to see, over and over again, that highly relevant scientific information is suppressed or even left out in various official documents, as high up as at the governmental level of society. This is not something that the consumers will gain anything good from, and, still, the official declaration or explanation (from experts and politicians) very often is: "If we (=the experts) would let everything out in the open, people would be very scared and they would panic." Personally, I have never seen this happen, but instead I have frequently seen great disappointment from citizens who afterwards have realized they have been fooled by their own experts and their own politicians...

Another misunderstanding is the use of scientific publications (as the tobacco industry did for many years) as 'weights' to balance each other. But you can NEVER balance a report showing a negative health effect with one showing nothing! This is a misunderstanding which, unfortunately, is very often used both by the industrial representatives as well as official authorities. The general audience, naturally, easily is fooled by such an argumentation, but if you are bitten by a deadly poisonous snake, what good does it make for you that there are 100 million harmless snakes around?

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In many commentaries, debate articles and public lectures - for the last 20-30 years – I have urged that completely independent research projects must be inaugurated immediately to ensure our public health. These projects must be entirely independent of all types of commercial interests; public health cannot have a price-tag! It is also of paramount importance that scientists involved in such projects must be free of any carrier considerations and that the funding needed is covered to 100%, not 99% or less. This is the clear responsibility of the democratically elected body of every country.

Many wireless systems are close to beds, kitchens, playrooms, and similar locations. These wireless systems are never off, and the exposure is not voluntary. These wireless systems are being forced on citizens everywhere. Based on this, the inauguration of such wireless systems with grudging and involuntary exposure of millions to billions of human beings to pulsed microwave radiation should immediately be prohibited until 'the red flag' can be hauled down once and for all.

Your work is – to say the least – of the greatest importance. You may save lives, as well as protect the general health, for now and for the future. That is what counts.

It is a great honour to communicate with you and to have your expertise aboard the international arena! *GOOD LUCK!*

With my very best regards
Yours sincerely

Olle Johansson, assoc. professor

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