



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: 714-870-3153
anthony.medina@sce.com

Anthony Medina
Revenue Protection



My replacement meter



Smart Meter on porch



Edison Trojan Meter

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 28 day of January, 2013 by: [REDACTED]

Name [REDACTED]

Street Address [REDACTED]

City/State/Zip [REDACTED]

Telephone [REDACTED]

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

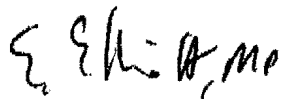
TO WHOM IT MAY CONCERN:

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_mcglade_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), DAfE. 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 Afectad@s 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.
- Il 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 MASSACHUSETTS
(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 classrooms with 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

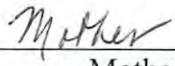
Respectfully submitted,
/s/ John J.E. Markham, II
John J.E. Markham, II
(BBO No. 638579)
MARKHAM & READ
One Commercial Wharf West
Boston, Massachusetts 02110
Tel: (617) 523-6329
Fax: (617) 742-8604
jmarkham@markhamread.com
Attorney for the Plaintiffs

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



WHO Collaborating Center
in Environmental Health

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.

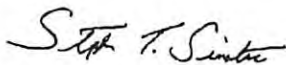
4. The incidence of sudden cardiac arrests (SCA) among young athletes is increasing and doctors don't know why. In one small Ontario community, the number of students experiencing SCA is disturbingly high. Whether WiFi and nearby cell phone antennas exacerbate SCA needs to be investigated further before 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

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Solna

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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

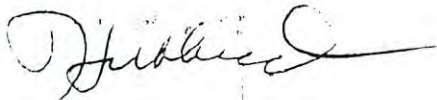
April 14, 2015

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 | ☐ 1 | ☐ 1 | Incorporated or Principal Place of Business In This State | ☐ 4 | ☐ 4 |
| Citizen of Another State | ☐ 2 | ☐ 2 | Incorporated and Principal Place of Business In Another State | ☐ 5 | ☐ 5 |
| Citizen or Subject of a Foreign Country | ☐ 3 | ☐ 3 | Foreign Nation | ☐ 6 | ☐ 6 |

IV. NATURE OF SUIT (Place an "X" in One Box Only)

CONTRACT	TORTS		FORFEITURE/PENALTY	BANKRUPTCY	OTHER STATUTES
☐ 110 Insurance ☐ 120 Marine ☐ 130 Miller Act ☐ 140 Negotiable Instrument ☐ 150 Recovery of Overpayment & Enforcement of Judgment ☐ 151 Medicare Act ☐ 152 Recovery of Defaulted Student Loans (Excludes Veterans) ☐ 153 Recovery of Overpayment of Veteran's Benefits ☐ 160 Stockholders' Suits ☐ 190 Other Contract ☐ 195 Contract Product Liability ☐ 196 Franchise	PERSONAL INJURY ☐ 310 Airplane ☐ 315 Airplane Product Liability ☐ 320 Assault, Libel & Slander ☐ 330 Federal Employers' Liability ☐ 340 Marine ☐ 345 Marine Product Liability ☐ 350 Motor Vehicle ☐ 355 Motor Vehicle Product Liability ☐ 360 Other Personal Injury ☐ 362 Personal Injury - Medical Malpractice	PERSONAL INJURY ☐ 365 Personal Injury - Product Liability ☐ 367 Health Care/Pharmaceutical Personal Injury Product Liability ☐ 368 Asbestos Personal Injury Product Liability PERSONAL PROPERTY ☐ 370 Other Fraud ☐ 371 Truth in Lending ☐ 380 Other Personal Property Damage ☐ 385 Property Damage Product Liability	☐ 625 Drug Related Seizure of Property 21 USC 881 ☐ 690 Other LABOR ☐ 710 Fair Labor Standards Act ☐ 720 Labor/Management Relations ☐ 740 Railway Labor Act ☐ 751 Family and Medical Leave Act ☐ 790 Other Labor Litigation ☐ 791 Employee Retirement Income Security Act IMMIGRATION ☐ 462 Naturalization Application ☐ 465 Other Immigration Actions	☐ 422 Appeal 28 USC 158 ☐ 423 Withdrawal 28 USC 157 PROPERTY RIGHTS ☐ 820 Copyrights ☐ 830 Patent ☐ 840 Trademark SOCIAL SECURITY ☐ 861 HIA (1395ff) ☐ 862 Black Lung (923) ☐ 863 DIWC/DIWW (405(g)) ☐ 864 SSID Title XVI ☐ 865 RSI (405(g)) FEDERAL TAX SUITS ☐ 870 Taxes (U.S. Plaintiff or Defendant) ☐ 871 IRS—Third Party 26 USC 7609	☐ 375 False Claims Act ☐ 400 State Reapportionment ☐ 410 Antitrust ☐ 430 Banks and Banking ☐ 450 Commerce ☐ 460 Deportation ☐ 470 Racketeer Influenced and Corrupt Organizations ☐ 480 Consumer Credit ☐ 490 Cable/Sat TV ☐ 850 Securities/Commodities/Exchange ☐ 890 Other Statutory Actions ☐ 891 Agricultural Acts ☐ 893 Environmental Matters ☐ 895 Freedom of Information Act ☐ 896 Arbitration ☐ 899 Administrative Procedure Act/Review or Appeal of Agency Decision ☐ 950 Constitutionality of State Statutes
REAL PROPERTY ☐ 210 Land Condemnation ☐ 220 Foreclosure ☐ 230 Rent Lease & Ejectment ☐ 240 Torts to Land ☐ 245 Tort Product Liability ☐ 290 All Other Real Property	CIVIL RIGHTS ☐ 440 Other Civil Rights ☐ 441 Voting ☐ 442 Employment ☐ 443 Housing/Accommodations ☐ 445 Amer. w/Disabilities - Employment ☒ 446 Amer. w/Disabilities - Other ☐ 448 Education	PRISONER PETITIONS Habeas Corpus: ☐ 463 Alien Detainee ☐ 510 Motions to Vacate Sentence ☐ 530 General ☐ 535 Death Penalty Other: ☐ 540 Mandamus & Other ☐ 550 Civil Rights ☐ 555 Prison Condition ☐ 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) Child X v. The Fay School
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.
- N/A
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 John J.E. Markham, II

ADDRESS One Commercial Wharf West, Boston, MA 02110

TELEPHONE NO. 617-523-6329

(CategoryForm9-2014.wpd)

JA 10012

ADA/FHA; Organizations; American Academy
of Environmental Medicine, Letter
to the FCC, Aug. 30, 2013



American Academy of Environmental Medicine

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www.aaemonline.org

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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
Warner Springs, CA 92086
info.scwssm@gmail.com

February 6 , 2013

**AFFIDAVIT OF Barbara Schneir, 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

Barbara Schnier
PO Box 501
Warner Springs, CA 92086

info.scwssm@gmail.com
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]

Barbara Schnier
Southern Californians For Wired
Solutions to Smart Meters (SCWSSM)
14575 Flathead Rd.
Apple Valley, CA
(760)519-2196
Info.scwssm@gmail.com

Submitted: July 19, 2012

TABLE OF CONTENTS

Table of Contents.....	2
Table of Authorities.....	4
Recommendations to Commission for Accommodation..... (see section VI.A.3. of this brief)	30
I. INTRODUCTION.....	6
II. FACTUAL BACKGROUND.....	7
III. JURISDICTION.....	10
IV. RULINGS ALTHOUGH FACIALLY NEUTRAL HAVE A DISPARATE IMPACT ON ‘QUALIFIED DISABLED CUSTOMERS’ UNDER THE ADA AND ‘MEDICAL CONDITION CUSTOMERS’ UNDER CPUC SECTION 453(b) THUS VIOLATE BOTH TITLE II OF THE ADA AND CALIFORNIA CPUC SECTION 453(b)	12
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.....	16
A. THE COMMISSION IS SUBJECT TO ADA TITLE II REHABILITATION ACT OF 1973 SECTION 504.....	16
B. TITLE II OF THE ADA PROHIBITS DISCRIMINATION AGAINST QUALIFIED DISABLED CUSTOMERS.....	17
C. QUALIFIED DISABLED CUSTOMERS ADVERSELY AFFECTED BY SMART METER AND ITS MESH NETWORK EMISSION ARE ENTITLED TO THE ACCOMMODATION OF AN ANALOG METER AND ‘ZONE OF SAFETY’ WITHOUT OPT OUT FEES.....	18
1. THE COMMISSION MUST AFFORD EQUAL BENEFITS OF SERVICE TO QUALIFIED DISABLED CUSTOMERS.....	18

2.	THE COMMISSION’S FAILURE TO MAKE REASONABLE MODIFICATIONS TO ITS POLICIES PRACTICES AND PROCEDURES CONSTITUTES DISCRIMINATION UNDER TITLE II OF THE ADA.....	19
3.	THE COMMISSION’S RULINGS AUTHORIZING THE UTILITIES TO CHARGE A SEPARATE FEE TO OPT-OUT FOR QUALIFIED DISABLED CUSTOMERS IS DISCRIMINATION.....	20
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).....	21
A.	THE COMMISSION’S RULINGS AUTHORIZING OPT-OUT FEES FOR CUSTOMERS THAT ELECT TO HAVE AN ANALOG METER AND/OR ‘ZONE OF SAFETY’ FOR MEDICAL REASONS VIOLATES CPUC SECTION 453(b).....	23
1.	THE COMMISSION’S RULINGS CANNOT AUTHORIZE A FEE BE CHARGED TO ‘MEDICAL CONDITIONS CUSTOMERS’ WHO OPT-OUT FOR MEDICAL REASONS IF THEIR MEDICAL CONDITION IS COVERED UNDER <u>GOVERNMENT CODE</u> SECTION 12926.....	24
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 SECTION 453(b).....	30
3.	SUGGESTIONS TO THE COMMISSION TO MAKE REASONABLE MODIFICATIONS TO ITS POLICIES PRACTICES AND PROCEDURE TO MAKE ACCOMMODATIONS FOR CUSTOMERS WITH COVERED MEDICAL CONDITIONS.....	31
VII.	OTHER VIOLATIONS OF CALIFORNIA LAW.....	32
VIII.	CONCLUSION.....	33

TABLE OF AUTHORITIES

Federal Cases

<u>Alexander v. Choate</u> 469 U.S. 287, 301 (1985)	13
<u>Crowder v. Kitagawa</u> 81 F.3d 1480, (1996) at 1484.	14
<u>D.K. v. Solano County Office of Educ.</u> , 667 F. Supp. 2d 1184, 1190-91 (E.D. Cal. 2009).32	
<u>Hubbard v. SoBreck</u> , 554 F.3d 742, 745 (9 th Cir. 2009).	33
<u>PGA Tour, Inc. v. Martin</u> 532 U.S. 661, 674 (2001).	16

Federal Statutes

Rehabilitations Act of 1973 section 504.....	7,11,12,13,15,16
42 U.S.C. section 12101et.seq.).....	6,7,15
42 U.S.C. section 12102.....	17
42 U.S.C. section 12112(b)(3) (Supp. III 1992).	13,20,21
42 U.S.C. section 12131.....	16,17
42 U.S.C. section 12132.....	16
29 U.S.C. section 794(a).	13
House Report Part II at 61, <u>reprinted in</u> 1990 U.S.C.C.A.N. at 343.	13
28 C.F.R. section 35.130 (b)(l)(ii).....	15,17,18
28 C.F.R. section 35.130 (b)(l)(iii).....	18
28 C.F.R. section 35.130(b)(3)(i) (1993).	15
28 C.F.R. section 35.130(b)(3)(ii) (1993).	15
28 C.F.R. section 35.130(b)(4)(i) and (ii) (1993).....	15
28 C.F.R. section 35.130(b)(7)	19,20
28 C.F.R. section 35.130(b)(8)	15
28 C.F.R. section 35.130(f).....	20

California Cases

<u>SDG&E v. Superior Court</u> 13 Cal.4 th 893 (1996).....	7,10,11
---	---------

California. Constitution

Art XII section 1-6.....10,16

Art. XII section 5.....16

Public Utilities Act.

section 201 et. Seq 10

section 451.....7,10,11

section 453(b) 6,7,11,12,21,24,,33

section 701.....10

section 2106 11

California Civil Code

section 51.....7,10,20,32

section 54 7,10,20,33

section 54.1.....20,32

section 54 (c).....20,32

Government Code

Section 11135.....7,9,11,12,21,32

Section 12926.....19,20,21,22,23,24,29,33

Government and Medical references:

1.) AAEM RECOMMENDATIONS July 12, 2012:

www.aaemonline.org/AAEMEMFmedical conditions.pdf

(old Attachment 1).....14,17,19,22,23,25,30,32

2.) *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 (Old Attachment 2).....23,24,25,26

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>

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of Pacific Gas and Electric Company for approval of Modifications to its SmartMeter™ 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]

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 to⁶ 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.aaemonline.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.aaemonline.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.aaemonline.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.womenscollegethospita.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.aemonline.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/m ²	$\cong 0.2 \text{ V/m}$
... And outdoor equivalent:		
0.1 $\mu\text{W}/\text{cm}^2$	1 milliwatt/m ²	$\cong 0.6 \text{ V/m}$

– **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.

Madrid June 29, 2013

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)

Madrid June 29, 2013

- **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), 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>

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

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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 able 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:

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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 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	)	
	)	
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 (AWS) 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 anticipated. 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 fully 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 Sclerosis 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
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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 Luliis is one of the researchers whose study demonstrated DNA damage to sperm from cell phones. De Luliis 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.)