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10 EMF INJURY SMART METER - COMMENTS TO FCC

For assistance with using ECFS, please contact the ECFS Help Desk at 202-418-0193 or via email at ECFSHelp@fcc.gov.

Federal Communications Commission

445 12th Street SW, Washington, DC 20554

Phone: 1-888-225-5322

TTY: 1-888-835-5322

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

Q. Please state your name and address.

A. [redacted]

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

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

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

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

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

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

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

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

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

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

We are watching the situation closely [redacted]

Dated this 17 day of January, 2013.

STATE OF MAINE
YORK, ss: January 17, 2013

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

Constance Y. Brine
Notary Public/Attorney-at-Law
CONSTANCE Y. Brine
Name Typed or Printed
My Commission Expires: Feb 29, 2016

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

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

Q. Please state your name, address and occupation.

A. [redacted]

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

AND I can only use it for a total of 60 minutes a day and never after 6:30 at night. I turn the computer on usually once a week for an hour. I wrote most of this letter out long hand and had a friend type it for me.

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

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

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

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

1 Q. **If you had a smart meter for a period of time and experienced or observed**
2 **symptoms or adverse reactions, did those symptoms or adverse reactions**
3 **cease when the smart meter was removed? Describe the circumstances.**
4 A. Meter was never removed, but if I went away from the home for extended period
5 of time to an area without Smart Meters my symptoms lessened.
6 Q. **Has your experience with smart meters caused any disruptions in your daily**
7 **living? Please describe the circumstances?**
8 A. My experience has been devastating. Almost every aspect of my life has been
9 affected. I had to abandon my home and move to a new community 45 minutes
10 away. I had to find a new school for my son, my marriage fell apart. I am
11 disabled now. Simple everyday functions like preparing a meal are complicated
12 and medically risky for me now. I cannot be near our electric range and have to
13 cook using the circuit breaker. I am so intolerant to natural gas that using a gas
14 range is not an option for me. I cannot go to the library, the grocery store, or my
15 friend's houses in Charleston because they have AMR meters on their homes. I
16 cannot even go into my child's elementary classroom because his school has wi-fi,
17 which I believe to be a very ill-considered decision on the part of the headmaster
18 now that I have been forced to learn about long term health effects of wireless and
19 EMF radiation. Electrical Sensitivity which my doctor has stated I acquired
20 secondary to exposure to the AMR devices put on my home without my
21 knowledge or consent has had a devastating impact on my life. It is not medically

1 known how much recovery will be possible for me. I must try to avoid exposure

2 to EMF radiation.which is becoming more and more difficult in this country.

3 Q. **Please tell us anything else that you want us or the Public Utilities**

4 **Commission to know about your experiences and circumstances.**

5 A. These devices are not safe. They have not been tested. Children, babies in utero,

6 pregnant women, the elderly, those with inflammatory, immune system and

7 genetic disorders are all particularly at risk. As a group this is a large segment of

8 our population.

Dated this 29th day of January, 2013.

[redacted]

STATE OF SOUTH CAROLINA
CHARLESTON, ss:

January 29, 2013

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

Notary Public/Attorney-at-Law

James M Entwistle

Name Typed or Printed

My Commission Expires: 3/31/2014

[redacted]

EXHIBIT A

[redacted], M.D., DR. P.H.

Occupational and Environmental Medicine

[redacted]

NAME [redacted] AGE _____

ADDRESS _____ DATE 8-21-12

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

It is medically necessary for her to have removal of EMF sources, including "Smart (AMR) Meters", and other essential reasonable accomodations to minimize exposures to VOC's, respiratory irritants, particles residues and other toxins and pollutants. Please contact me for questions.

LABEL The above is within reasonable medical certainty.

REFILL 0 - 1 - 2 - 3 - 4 - PRN [redacted] M.D.

GENERIC SUBSTITUTION YES_____ NO_____

[redacted]

EXHIBIT B

FAX COVER SHEET

[redacted]

FAXED 8-21-12

Send To: SCE&G/ SCANA	**From:** [redacted] M.D., Dr. P.H.
Attn: David Kibler	**Date:** 8-21-12
Office Location:	**Office Location:** [redacted]
Fax No. 803-933-7633	**Re:** [redacted]

☒ *Urgent* ☐ *Reply ASAP* ☐ *Please Comment* ☐ *Please Review* ☐ *For Your Information*

Total Pages (including cover page): ____

[redacted]

Attn- David Kibler

[redacted] **M.D., DR. P.H.** 803-933-7633

Occupational and Environmental Medicine

[redacted]

NAME [redacted] AGE _____

ADDRESS _____ DATE 8-21-12

℞ Dx toxic encephalopathy (349.8) and neurologic-EMF related encephalopathy (348.30, E926.0).

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

LABEL Please call for questions. [redacted]

REFILL 0 - 1 - 2 - 3 - 4 - PRN _____ M.D.

GENERIC SUBSTITUTION YES_____ NO_____

This medical information in this FAX message is confidential and protected by both State and Federal Law. It is unlawful for authorized persons to review, copy, disclose, or disseminate confidential medical information. If the reader of this warning is not the intended FAX recipient or the intended recipient's agent, you are hereby notified that you have received this FAX message in error and that review or further disclosure of the information contained in this FAX is strictly prohibited. If you have received this FAX in error, please notify us immediately at the telephone number indicated above and either destroy these documents or return the originals to us by mail.

TRANSMISSION VERIFICATION REPORT

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

DATE,TIME	08/21 16:33
FAX NO./NAME	18039337633
DURATION	00:00:27
PAGE(S)	01
RESULT	OK
MODE	STANDARD ECM

[redacted]

EXHIBIT C

[redacted]MPH*, Dr. P.H.**
Occupational and Environmental Health
[redacted]

*Johns Hopkins
**Harvard

CERTIFIED LETTER RETURN RECEIPT

September 17, 2012

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

Dear Mr. Kissam:

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

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

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

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

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

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

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

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

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

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

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

Sincerely,

[redacted]

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

About Dr.

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

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

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

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

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

Q. Please state your name and address.

A. [redacted]

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

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

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

A. Yes

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

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

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

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

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

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

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

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

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

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

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

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

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

A. Diagnosed by:
[redacted] Associates – [redacted]
[redacted] Therapy Associates – [redacted]
[redacted] CN – [redacted]
Diagnosis: EM & RF Sensitive

See Attached Exhibits A and B.

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

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

[redacted] Associates – Acupuncture for radiation/electromagnetic detox. Monthly radiation-detox baths.

[redacted] Therapy Associates – Supplements + drink hemp milk as an antidote.

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

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

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

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

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

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

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

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

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

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

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

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

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

Dated this ____ day of January, 2013.

[redacted] _____

STATE OF MAINE
CUMBERLAND, ss: January ___, 2013

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

_____
Notary Public/Attorney-at-Law

_____
Name Typed or Printed
My Commission Expires: _____

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

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

Dated this 9th day of January, 2013.

[redacted]

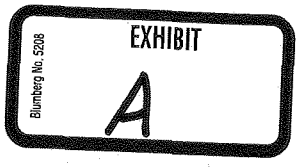
STATE OF MAINE
CUMBERLAND, ss: January 9th, 2013

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

Notary Public/Attorney-at-Law

Christy Soucy
Name Typed or Printed
My Commission Expires: _____

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



November 10, 2012

RE: [redacted]

To whom it may concern;

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

Sincerely,

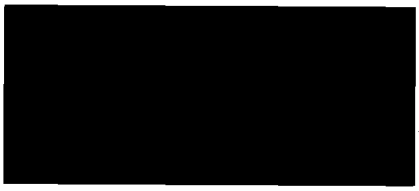


EXHIBIT
B
Blumberg No. 5208

[redacted]

11/9/2012

To Whom It May Concern:

Re: Client, [redacted]

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

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

[redacted] is a client of mine. Over the years, she had created a healthy home environment, free of toxic chemicals and a diet of nutritious organic foods. When [redacted] started experiencing bone and joint pain, I suggested she remove all wireless technology from her home. The results were astonishing. Her joint/bone discomfort went away. In the fall of 2010, I received a phone call from [redacted] saying she was experiencing some joint pain in her hip, intermittent heart palpitations, nausea, interrupted sleep, eye pressure, hormonal changes and sudden headaches. **The change?** Unbeknown to [redacted], smart meters were being installed all over her neighborhood.

[redacted] has become extremely sensitive to Electro-Magnetic Fields (EMF) and Microwave radio-frequency(RF) radiation.
I have put her on a protocol of supplements that is regulated and altered as needed quarterly. In addition to the removal of all wireless technology in her home, I recommended testing her house with a Stetzerizer system, suggested implementing a radiation detoxification bath, and adjusted dietary considerations. These recommendations have helped with the frequency of significant occurrences that we identified as sensitivity to RF and EMF in 2011.

The utilization of Wireless/Smart Meters everywhere, is clearly becoming a debilitating health issue for many people, including [redacted] [redacted] exposure to RF radiation, in particular, continues to be a burden to her body and poses great concern to her overall health and well-being both physically and emotionally.

Sincerely,

[redacted]

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

Q. Please state your name, address and occupation.

A. [redacted] but because of EHS I have been unable to work.

Q. Was a smart meter installed at your residence?

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

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

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

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

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

Specific symptoms by type of exposure:

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

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

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

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

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

Q. Have your symptoms been diagnosed?

A. I have 2 medical conditions:

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

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

Both conditions have been diagnosed by medical professionals.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Dated this 19 day of January, 2013. [redacted]

STATE OF NEW YORK
GREENE, ss: January ___, 2013

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

Kelly S Latta
Notary Public/Attorney-at-Law
Kelly S. Latta
Name Typed or Printed

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

EXHIBIT A
Testimony of [redacted]
Summary of EHS experience

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

My life now

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

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

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

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

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

Is it Real?

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

EXHIBIT
B

[redacted]

DOCUMENTATION OF DISABILITY
BY MEDICAL OR OTHER PROFESSIONAL AUTHORITY

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

Petitioner's Name [redacted]
(Please Print)

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

I last examined the petitioner on 4/22/2010

Petitioner's Subjective Complaints: Electromagnetic Field sensitivity

Treatment or testing consisted of Observation under exposure conditions

Examiner's Objective Findings (Attach separate sheet indicating specific tests performed and the petitioner's results, where applicable. Please be as specific as possible to facilitate a review of your findings by the Board's consultant): Changes in physical condition & vital signs observed in presence of blinded exposure.

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

Prognosis: No Known cure at this time except avoidance.

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

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

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

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

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

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

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

Executed on 4/22/2010 by [redacted]
(Date) (Signature)

Give extra time as mentation will be slowed.

Name: [redacted]

Position: [redacted]

Professional License Number: [redacted]

Address: [redacted]

Address: [redacted]

Telephone: [redacted]

משרד הבריאות
לחיים בריאים יותר

סגן שר הבריאות
Deputy Minister of Health

www.health.gov.il

נתקבל
21-08-2012
מיכאל בן דשות
משרד עורכי דין ונוטריון
רח' רמבם 2, תל אביב 64239
טל: 03-6932633

בס"ד

אי באלול, התשע"ב
19 אוגוסט 2012
מספרנו: 41299612
(במעגל, ציין מספרנו)
תיק - שר (50) סנייג ישראל

לכבוד
מפקדי המגלה
חיים גיאון שגיב
שר לחיבור

שלום רב,

קיבלתי את העתק ממכתבו של עו"ד מיכאל בן, ובו הוא מפרט על הסיכונים הבריאותיים שיש בקידום הסמעת האינטרנט האלחוטי בבתי הספר.

אני מזדהה עמוקות עם מכתבו. עסקתי במושא זה רבות, למרות שאינני איש מקצוע, אולם אני חושש שיגיע יום ונבכה כולנו על הנזקים הבלתי הפיכים שאנו מזמן לדורנו הצעיר.

לפני כל התקדמות במושא, יש להקפיא את המחלך מידית ולהביאו לחשיבה מרוחשת ומקיפה.

בברכה רבה,

הרב יעקב ליצמן, ח"כ
סגן שר הבריאות

Deputy Minister of Health
Ministry of Health
P.O.B 1176 Jerusalem 91010
Ser@moh.health.gov.il
Tel: 972-2-6787626, 972-2-6705811 Fax: 972-2-6787662

סגן שר הבריאות
משרד הבריאות
ת.ד. 1176 ירושלים 91010
Ser@moh.health.gov.il
טל: 02-6787626, 02-6705811 פקס: 02-6787662

EXHIBIT
Chumbers No. 5208

TRANSLATION:

THE LETTER OF THE ISRAELI DEPUTY HEALTH MINISTER (ACTING MINISTER)

Ministry of Health

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

August 19th, 2012

To my Esteemed & Honorable,

MP Gidon Saar,

The Minister of Education.

Hello and greetings.

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

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

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

With Respect,

Rabi Yaakov Litzman, Deputy Minister of Health.

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

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

A. [redacted]

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

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

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

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

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

A. Yes.

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

A. Yes.

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

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

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

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

[redacted]

STATE OF MICHIGAN
WASHTENAW, ss

January 24, 2013

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

Lynda J Willis
Notary Public

Lynda J Willis
Name Typed or Printed

My Commission Expires: 9-1-18

LYNDA J WILLIS
Notary Public - Michigan
Wayne County
My Commission Expires Sep 1, 2018
Acting in the County of Washtenaw

[redacted]

EXHIBIT A

1 STATE OF MICHIGAN

2

3 BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

4

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

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17 QUALIFICATIONS AND DIRECT TESTIMONY OF
18 [redacted]

19
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QUALIFICATIONS OF [redacted]

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

3 A. I do.

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

5 A. [redacted]

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

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

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

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

DIRECT TESTIMONY OF [redacted]

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

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

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

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

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

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

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

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

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

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

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

31

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

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

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

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

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

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

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

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

35 A. Yes.

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

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

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

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

.

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

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

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

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

Q. What do you experience when at work?

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

Q. What did you do about your work situation?

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

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

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

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

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

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

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

27 **Q. What happened next?**

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

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

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

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

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

Q. Have you been in houses with smart meters?

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

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

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

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

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

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

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

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

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

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

A. See above.

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

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

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

A. Same.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EXHIBIT B

Patient [redacted]

Date	Service Rendered	X-Ray Ref. No.
1-13-12	neck & ↑ back c̄ PT	
		1) Cont. ~~Cont.~~ Curcumin + Celery Seed Extract
	O/ Alert Amiable	
	No pain over SS	
	(+) pain in (b) Glut M/M.	
	(+) pain over (b) ITBs	2) PT for bilat. hip pain X10
	& Int. rotation of both hips & hamstrings c̄ ext.	
	(−) scoliosis (+) winging of scapulae	3) Consider CS
	A/ (B) hip pain	
	Improved TMJ	
	neck & ↑ back myofascitis	4) Cont. exercise
	Food allergies [signature]	
	(L) shoulder pain	
	2 wks	
5-11-12	WT 136 BP 100/60 (T) 97.0 P 62 R 18 RF 0	
Cap 54	Pt Hung Fore (1) Electro magnetic sensitivity (GR 1) (PR 1)	
	A/A Believes EMF is causing her voice + neck problems	
	Certain churches/computers bother her more. Turning off wifi in home helped head + neck pains + voice reacts to many environments	1) Discussed avoidance of Chems.
	~~[illegible]~~	2) Avoid food allergies
	O/ Alert Amiable	3) Rink Book
	Pt seen by lantern due to sensitivity to fluorescents.	
		4) Purchase EMF detector

Patient [redacted]

Date	Service Rendered	X-Ray Ref. No.
5-18-12	A/ Food allergies EMF sensitivity Vit A def	5) Reviewed lab + meds
	~~[illegible]~~ AP [illegible]	6) Vit A D.B. CBC CMP
		7) Creating a Safe Harbor
		8) Rec Work release
		9) 20 mins [illegible]
		10) Wave shield gold.
5-22-12	WT 135 BP 100/60 (-) 973 P 60 R 18 RF Ø on	
age 54	Discuss LDA A/A Has many ?'s about LDA Is on 100 mg of Levothyroxine a day. Taking hormones despite being menopausal 2° to joint + muscle pain. Primary sys EMF + chemical sensitivity + neck pains Had Black mold in Attic	1) Discussed error of using est patches 2) Avoid food allergies

Patient [redacted]

Date	Service Rendered	X-Ray Ref. No.
5-22-12		3) 1) Discussed LDA
		4) DC Levothyroxine
	A/ Allergy inh + food EMF sens Hypothyroidism Menopause Chem. sens $200	2) Start Armour Bomb #60 Tbrd 1 RF Lab in 2 Sets
		1) Orientation for LDA 2) 25 mg 2 pt
7-23-12		
8-30-12	Consult Jackie Kilborn 2° to allergies	

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

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

2 A. [redacted]

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

5 A. Yes, March 2012

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

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

1 supposed to. My partner finally called CMP and the woman with whom she
2 spoke was very friendly and informed her that we did have a smart meter. My
3 partner immediately requested that it be removed and this was agreed to with the
4 attempt to charge us for the change. My partner successfully argued that she
5 would not pay for a meter that we did not want to begin with. A few days later
6 my partner and I awoke and both of us stated how well we had slept. In addition
7 the dog had slept and had not gotten us up in the night which had become a new
8 routine. I suddenly asked my partner if the smart meter had been replaced and
9 she stated that it had been done yesterday. We both realized that it was the smart
10 meter that had been seriously disturbing our sleep patterns.
11 **Q. Are you paying the opt-out fees?**
12 A. My partner pays the electric bill and she is paying for the opt-out fees out of fear
13 of losing our service.
14 **Q. Please describe why you do not want a smart meter at your residence.**
15 A. We are both aware of the potential negative health effects of electromagnetic
16 radiation. We also learned that smart meters were banned in Europe. It was a
17 no-brainer to opt out of a program that very likely would negatively impact our
18 health. We also experienced first-hand that the smart meter caused both of us and
19 our dog to have poor sleep and this condition appeared to worsen over time.
20 **Q. Do you or any of your family members experience electromagnetic sensitivity**
21 **symptoms in proximity to radio frequency devices, such as Wi-Fi, microwave**

1 **ovens, cell phones, cordless phones, smart meters or other devices? Please**
2 **describe the symptoms and the circumstances when they occur.**
3 A. To date only the smart meter has negatively impacted our health. We have not
4 sensed such effects from other devices.
5 **Q. If you have physical or medical conditions, including sensitivity to**
6 **electromagnetic radiation, have these conditions been diagnosed?**
7 A. The condition of disrupted sleep was personally experienced by us, our dog and
8 our neighbor and her dog and cat. We did not need anyone to formally diagnose
9 the problem.
10 **Q. Has your physician or other medical care provider made any**
11 **recommendations about exposure to electromagnetic devices, including smart**
12 **meters?**
13 A. Our health care provider was never notified because there was no reason to do so.
14 Furthermore, we probably know more about the health effects of EMFs than does
15 our health care provider.
16 **Q. Have you observed any pets exhibiting adverse reactions to smart meter**
17 **transmissions? Describe the circumstances.**
18 A. Yes. Our dog's sleep patterns were seriously impacted resulting in restless sleep
19 and getting up 1 to 2 times in the night to go to the bathroom. This same pattern
20 was experienced by our neighbor with her dog and cat.

1 **Q. If you had a smart meter for a period of time and experienced or observed**

2 **symptoms or adverse reactions, did those symptoms or adverse reactions**

3 **cease when the smart meter was removed? Describe the circumstances.**

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

5 **Q. Has your experience with smart meters caused any disruptions in your daily**

6 **living? Please describe the circumstances?**

7 A. Yes. We were all tired and fatigued due to lack of sleep. This condition

8 negatively impacted our relationship and my ability to function efficiently at work.

9 **Q. Please tell us anything else that you want us or the Public Utilities**

10 **Commission to know about your experiences and circumstances.**

11 A. We will all be better off when corporate America actually cares and takes

12 responsibility for how it impacts peoples' lives.

Dated this 17th day of January, 2013.

STATE OF MAINE
WALDO, ss: January 17, 2013

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

Claudette Coyne
Notary Public/Attorney-at-Law

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

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

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

2 A. [redacted]
3

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Dated this 18 day of January, 2013.

STATE OF MAINE
OXFORD, ss: January 21, 2013

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

Patricia Jane Galloway
Notary Public/Attorney-at-Law
PATRICIA JANE GALLOWAY Justice of the Peace
My Commission Expires September 17, 2013
Name Typed or Printed
My Commission Expires: _____

EXHIBIT
Blumberg No. 5208
A

A Clear Call

America Unplugged - A Guide to the Wireless Issue

by B. Blake Levitt

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

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

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

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

This is a serious business. An estimated 100,000 new cellular towers utilizing the 800 to 900 MHz frequencies (the so-called "old" systems) are scheduled to go online across the country by the year 2000. An additional four new PCS carriers using the 1 to 3 GHz range were recently approved by the FCC for each area. That system will add many hundreds of thousands more. PCS antennas need to go every 2 to 8 miles apart. That's 2 to 8 miles apart, times the four carriers. The systems don't share frequencies so they all need their own antennas. By law, we have to site all four. That's a lot of antennas. Litchfield County cannot remain unscathed much longer, especially with our substantial population of weekenders who bring high discretionary incomes, and who already own cellular phones which do not work out here.

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

FCC Cheerleading Squad for Industry

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

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

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

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

The FCC, by its own admission, is a licensing and engineering agency which defers to other agencies for research and standards setting. It wisely turned down the preemption requests because to do otherwise would have been flagrantly outside their authority, not to mention against the 10th Amendment of the U.S. Constitution. Industry then went searching for a legislator to champion their cause at the legislative level and found one in Senator Klug from Wisconsin who introduced preemption clauses into the huge and complex telecommunications bill. Again, there was a mad scramble to educate concerned people and organizations about this new power-grab. Activists were frantically lobbying representatives and senators, who knew nothing about why these clauses were in there, or even what they meant. They certainly didn't know that there was a raging debate about the health effects of the radio-frequencies that had been going on for decades in scientific circles. A last ditch, bipartisan effort by Senator Diane Feinstein, a California Democrat, and Senator Kempthorn, an Idaho Republican, tried to removes the clauses, but that effort was defeated by a narrow 56 to 44 margin on the Senate floor. That will give you an idea of the kind of pressure that legislators have been under from their constituents to not allow this industry to have a clear, carte blanche shot at the country, as if there were no problems with this technology. But industry prevailed, due in large part to the pro-business, anti-environmental attitudes of the last Congress, a deal-making Clinton administration, and millions of dollars poured into re-election coffers by the telecommunications companies. Ask Senator Joseph Lieberman how he voted. And ask how much money the telecommunications companies donated to his campaign.

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

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

Local vs. Federal Control

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

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

Industry Moves to Ban Moratoriums

Among their most recent moves — which, again, most people are unaware of, and about which the press is asleep — include a request that the FCC ban local communities' ability to set temporary moratoriums; and a request that the FCC declare it illegal for communities to make the providers prove that they are in compliance with the RF emissions regulations. They are also trying to get the FCC to forbid discussion of the RF health effects at zoning hearings. But the most ominous move is going on as we speak. Industry has asked the Senate Commerce Committee to preempt all state and local siting authority again, to consider telecommunications as an interstate commerce issue. That committee does have the authority to override state's rights. There's a two-week comment period that will start ticking around Wednesday. Consumers have been banned from commenting at the hearings. Industry is heavily represented. It's difficult to get any information about it, but I urge people to write. And Reed Hundt may declare moratoriums illegal as soon as next week. Well over 300 towns across the country have moratoriums in place. Industry doesn't want us to study this situation. The FCC is happy to oblige. Hopefully, there will be a public outcry that will include the voices of the people in this room.

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

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

The Medical Issue

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

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

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

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

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

The earth itself is a giant dipole magnet (like those little bar magnets we all played with as kids) containing a north and a south pole. Micropulsations in the 10-hertz frequency range constantly emanate from the earth's core. Scientists used to think these micropulsations were an interesting but meaningless phenomenon. Today they think all living things are in a complex relationship with it; entrained by it, in fact. Entrainment phenomenon can be thought of as what occurs when a mother and child sleep together and their breathing rates synchronize. Energy is what we respond to, like plants to light. Every living thing is in harmony with these subtle signals. It's been found to control our most basic circadian biorhythms, our sleeping/waking cycles, important hormone production such as melatonin, and some crucial aspects of cell division itself. Human brain waves, in

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PLANNING & ZONING INFO AVAILABLE

A "hands-on" Planning & Zoning Information Package is available from B. Blake Levitt that can be adapted to your community. The Information Package includes:

- An autographed copy of *Electromagnetic Fields, A Consumer's Guide to the Issues and How to Protect Ourselves* (Harcourt Brace, 1995).
- A sample of zoning by-laws from Massachusetts, Connecticut, New York and Washington. Includes liability indemnification clauses for your town; setback information, and how to write zoning regulations for FCC-defined "adequate" coverage, rather than the blanket coverage preferred by industry.
- An updated RF test protocol, with recommended equipment to measure the environment before a tower goes on-line, and afterward, as well as on a regular basis to make sure installations are in compliance with FCC regulations.
- FCC Fact Sheet.
- Sample moratorium language.
- The Stamford, Connecticut Health Department Ordinance — considered the best in the country when reviewing RF applications, together with an article from the *Johns Hopkins Applied Physics Laboratory Technical Digest* which discusses the ordinance.
- Connecticut Siting Council Guidelines on what to consider with tower applications.
- Miscellaneous articles from *The Washington Post, Computers & Technology* and *Radio Communications Report* among others.

Send your check or money order for $50.00 ($45.00 info pkg. & $5.00 shipping/handling) to:

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P.O. Box 2014
New Preston, CT 06777 USA

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

Not All Energy Is Alike

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

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

Light Bulb Theory Burnt Out

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

Not Safe At Any Level

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

Serious Nonthermal Effects

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

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

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

The Body Electric

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

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

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

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

Adey Research

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

Szmigielski Findings

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

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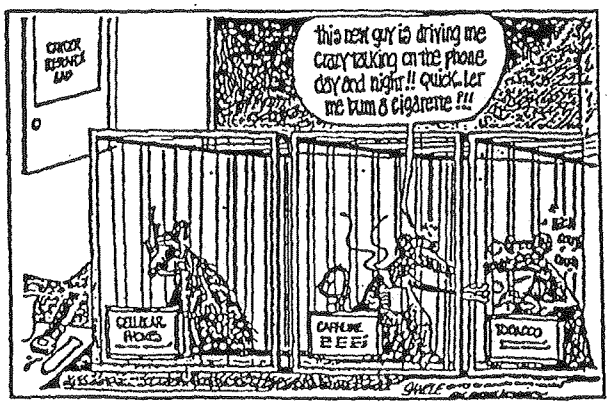
including lymphomas, melanomas, leukemias, and brain tumors – high blood pressure, headaches, memory loss, and brain damage. They also noted immune system abnormalities; first an over-stimulation, then later immune suppression after continued exposure to low levels of the microwave bands. That's an important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

Guy Examination

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

Lai Singh Investigation

In 1994, Drs. Henry Lai and N.P. Singh, at the University of Washington, Seattle, found both single and double-strand DNA breaks in test animals exposed to cellular and PCS-frequency pulsed microwaves. Double-strand DNA breaks are thought not to repair themselves and can lead to mutations. Dr. Lai just announced at an FDA workshop on this subject that in recent follow-ups, they noted that such breaks were blocked by the hormone melatonin. Melatonin, in several studies has been found to be suppressed in power line frequency exposures. Often, wireless technology is "modulated" with such ELF frequencies. There are complex synergistic relationships with many of the non-ionizing bands that fall well outside the range of thermal effects.



Repacholi Research

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

Kirschvink Findings

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

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

Bise Research

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

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

FCC Standards Inadequate

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

An amazing paradox keeps popping up in this research. It's something that is usually ignored, probably because we just don't know what to make of it. The paradox is this: It is often observed that the most profound bioeffects occur at the lowest intensities... Researchers call it a "non-linear effect." It's probably due, in part, to entrainment phenomenon, and our relationship with the earth's natural fields. In the past, when an environmental "pollutant" has been identified, we've surmised a theoretical safe level and tried to regulate it there. But if the energy modalities turn out to be more bio-reactive at the lowest levels, what does this do to our common regulatory wisdom? It turns it completely upside down.

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

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

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

What To Do Now

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

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

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

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

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

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

5. Make sure you have tower-sharing regulations in your zoning laws. Make every tower or new antenna array justify its placement. If existing towers are present, make newcomers lease space there, rather than establish new sites. Make them prove from an engineering study that existing sites won't work. Economic reasons are not good enough to justify new tower sites. Get independent engineering reviews and make the companies pay for them. In cases where development has encroached on existing installations, either move the transmitters, or buy out the residents.

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

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

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

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

Continued on next page...

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

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

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

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

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

15. And last but most importantly, lobby your legislators for a comprehensive government research program for the radio-frequencies. The only research being done today is by industry, which some liken to the fox guarding the chicken coop.

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

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

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

Cell Tower Siting Conference Tapes Available

Tapes of the Berkshire-Litchfield Environmental Council's Tower Siting Conference are available:

2-pack video cassettes - $15.00
Audio cassettes - $6.00

Send your check or money order to BLEC, Box 552, Lakeville, CT 06039. Phone/fax (860) 435-2004.

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MICRO WAVE NEWS

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Plus Ça Change: Why We're Running in Place

Stronger Evidence for an Alzheimer's–EMF Connection

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

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

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

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

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

(continued on p.6)

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

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

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

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

(continued on p.11)

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

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

"We think the *Ward* dismissal is a significant and important decision," said Motorola spokesperson Norman Sandler, "and we welcome the court's ruling." Sandler told *Microwave News* that the *Ward* ruling confirms the message of *Reynard*: "We now have two cases that have been dismissed because they failed to submit enough credible scientific evidence to even move forward to trial. This exposes the hollowness of the claims advanced by these cases and others like them."

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

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

New Focus on Broadcast Radiation *(continued from p.1)*

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

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

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

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

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

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

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

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

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

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

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

RF/MW Radiation and Cancer References

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

Ray Cartwright, "Cancer and TV Towers: Association but Not Causation," *Medical Journal of Australia, 165*, pp.599-600, December 1996.

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

Bruce Hocking et al., "Cancer Incidence and Mortality and Proximity to TV Towers," *Medical Journal of Australia, 165*, pp.601-605, December 1996.

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

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

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

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

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

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

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

U.K. Advisory Panels Discount Cancer Risk

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

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

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

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

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

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

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

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

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

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

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

"MICROWAVE NEWS" FLASHBACK

Years 15 Ago

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

Years 10 Ago

- Dr. Stanislaw Szmigielski of the Center for Radiobiology and Radioprotection in Warsaw, Poland, releases preliminary results of a five-year study indicating a link between RF/MW radiation and cancer—especially leukemia and lymphatic cancers.
- Maryland officials protest the U.S. Navy's decision to site the EMPRESS II on the Chesapeake Bay, contending that the electromagnetic pulse simulator could cause EMI to ships' electronics, forcing Baltimore's port to close for 20 days a year, and could also interfere with a nearby nuclear power plant.
- Writing in the *American Journal of Epidemiology*, Dr. Richard Stevens suggests that EMFs and/or light-at-night may be responsible for increased breast cancer rates in industrial countries.

Years 5 Ago

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

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

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

2 A. [redacted]

3

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

5 A. No. We opted out.

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

7 A. Both [redacted] and our daughter have an illness which affects their

8 immune systems and as a result they have become "electrically

9 sensitive." Symptoms from this sensitivity can include insomnia,

10 heart palpitations, extreme jitteriness, dizziness, and nausea as well as

11 serious digestive problems, all of which my wife has experienced at

12 one time or another from prolonged exposure to computers, cell

13 phones, speakers and the myriad of x-rays, CT scans and MRI's

14 which [redacted] has been subjected to. These symptoms are

15 debilitating and absolute hell to live with. [redacted] has managed

16 over the past ten years to control these symptoms by deciding what

17 she will expose herself to. With a smart meter there is no control.

18 The meter is attached to our home 24/7 – the one place that we

1 haven" – our sanctuary away from the plethora of modern technology
2 that affects [redacted]
3 **Q. Have you experienced symptoms when near other smart meters?**
4 A. [redacted]: Yes. My daughter lives in Tucson so my husband and I
5 decided to rent a house for the month of January 2011. I rented what
6 looked like the perfect dream house. I never once thought about
7 smart meters and never even thought of asking the rental agent if there
8 was one attached to the house. I assumed they didn't exist in this tiny
9 retirement community.
10 I immediately didn't feel right the first day I was in there. I
11 started experiencing stomach bloating and swelling around my rib
12 case, symptoms I've had in the past from electrical sensitivity. That
13 night I went to sleep in the bedroom which was on the other side of the
14 Smart Meter. I never fell asleep that whole night. I had symptoms
15 of jitteriness, heart palpitations, muscle twitching and chills. By
16 morning I was extremely ill. After a few hours of playing detective
17 and eliminating all possible causes, it dawned on me that just maybe
18 there might be a smart meter on the house and after checking, sure
19 enough it was there.
20 The following day my daughter asked to sleep over and, not
21 wanting to alarm her, I said nothing of the meter. That evening she
22 went to sleep in the same bedroom I had been in. About three hours

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

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

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

1 and sure enough I went outside and saw that the meters were being
2 installed and activated on my street.
3 I haven't been the same since. In fact my health continues in a
4 downward spiral. Since that first day, I started developing
5 debilitating fatigue and severe vertigo on a daily basis. About a
6 month after the installation, my physician tested me for Epstein-Barr
7 virus which is associated with CFS and found that it had been
8 reactivated (normal under 22 and mine was 400) with no known
9 cause. I then started acupuncture in desperation to try and control
10 my vertigo. Clearly my immune system had deteriorated. I also
11 started experiencing excruciating muscle stiffness in my neck for
12 which I see a D.O. on a weekly basis with no resolution. All of these
13 symptoms were nonexistent before the meters were deployed in my
14 neighborhood.
15 In addition, a neighbor who has MS experienced an increase in
16 her symptoms and subsequently had her meter removed which
17 brought her back to her baseline. I also have other neighbors who
18 have gone from feeling well to developing bizarre symptoms but are
19 unaware of the cause and cannot afford to opt out.
20 Because of my extreme sensitivities, opting out is not the
21 answer for me. I am surrounded by at least 50 homes with smart
22 meters and some within 75 feet of my home. Clearly, I need to be

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

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

7 A. [redacted] Not everyone will react this way to smart meters. Some,
8 like me, who are sensitive, will, and in a short time become ill.
9 Others will take longer and many others may not notice it for a long
10 time and then not be aware of what is making them ill. People like
11 myself are the "canaries in the mine," providing a warning to others.
12 Other countries have provided newer meters without "wireless
13 technology" making the health of their citizens a priority. There is
14 no reason this cannot be done in this country. I fear that if my
15 symptoms do not abate, or indeed worsen, we shall be forced from our
16 home.
17 [redacted] The smart meter issues we faced in Arizona resulted in a
18 simple choice. We cancelled our rental agreement and our daughter
19 never returned to visit us in that rental.
20 I, personally have a rare cancer treated by extensive radiation
21 therapy, tested with CAT scans and MRI's and ongoing x-rays, but I
22 choose those exposures for obvious reasons.

1 Over the years, consumers have had to deal with many failed
2 products. Whether it be medications, oil spills, river pollution, etc.,
3 etc., all supposedly regulated by a government agency at one level or
4 another and many of those products have resulted in harm to the
5 consumer. Many of these products were studied, tested and
6 approved only to be taken off the market after a period of time.
7 We are self conscious in our home to be aware of all the "low
8 dose" labels especially on any radiation-emitting products with a
9 simple "dot-connecting" awareness that many low doses add up to
10 more than the sum of its parts. I and my family can choose to invite
11 these products into our home. We are reasonable people who value
12 and diligently exercise those choices. The bottom line is that WE are
13 accountable for our bad choices if given all the tested facts – not a
14 regulatory agency.
15 [redacted] and my daughter are sick and it is my eternal
16 responsibility along with them to choose without regret.
17 I have read the science on both sides of this issue, short-lived
18 as it might be. Will the regulators down the road say that they didn't
19 have enough unbiased science on smart meters? This is my family
20 whom I love to my core and the choice to put a smart meter on the
21 white ranch at [redacted] in [redacted] should, must and will
22 be mine.

Dated this 12th day of January, 2013.

[redacted]

STATE OF MAINE
ANDROSCOGGIN, ss: January 12, 2013

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

Notary Public/Attorney-at-Law

Name Typed or Printed
My Commission Expires: _____

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

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

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

2 A. My name is [redacted]

3 [redacted]

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

5 A. Yes.

6 **Q. Did you offer to provide testimony in another proceeding about your**

7 **experience with smart meters?**

8 A. Yes. I have had serious health problems related to smart meters and I offered

9 testimony in a Michigan Public Service Commission hearing (Case No U-17053)

10 reviewing a proposed opt-out program for Detroit Edison Company's Advanced

11 Metering Infrastructure. Unfortunately, the Commission would not accept any

12 testimony about health and safety issues.

13 **Q. Is the attached document marked as Exhibit A a true and accurate copy of**

14 **the testimony that you offered to provide to the Michigan Public Service**

15 **Commission?**

16 A. Yes it is.

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

18 **accurate?**

19 A. Yes.

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

21 **Exhibit A?**