

1 was having a great time with the [REDACTED] Group, and others. I had to
2 quit every one of those groups because of smart meter installation.

3 There is another group I belong to that meets in the winter and spring. I just realized that I
4 am not going to be able to attend that group anymore. I am not going to be able to go to the
5 annual Christmas party for the spiritual center I was a part of until the installation of smart
6 meters made it impossible for me to attend functions at the center.

7 You know, I shop at a co-op, and I used to eat there, hang out there, work on my computer
8 there. It's a social hub in Ann Arbor. I can be certain that I'll see someone I know at least
9 every other time I go there. I can chat. Have a conversation. Catch up with people I wouldn't
10 otherwise see. All that's over. I have to get in and get out, or I pay for it by not sleeping for
11 the next one or two days.

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

15 Yes. I love going to the library, especially browsing the book sale. I was so grateful that I was
16 still able to go to the library. Then, one day a couple months ago or so, I walked into the
17 library and knew it had been smart metered. The cognitive dysfunction, the weird feelings
18 in my body, incipient headaches. It wasn't quite as bad in the basement, where the book
19 sales are held, but the last time I went there, it was really, really bad in the basement.

20 So now, I get in and get out. I can't browse. And libraries are for browsing.

21 If I wish to speak to my city council on any issue, including the smart meter issue, I have to
22 weigh the ill effects on my health vs the possibility that my words will have an influence. I
23 have attended council and environmental and Washtenaw County Commission meetings
24 several times in the last year on a variety of issues, but if I do now, I will wind up not
25 sleeping for one to two nights and experience the cognitive dysfunction, etc. I have already
26 discussed..

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

29 Yes. There are several places in Ann Arbor that I cannot tolerate being because of the
30 incredibly high RF in those areas. This includes parts of Washington and Liberty Streets,
31 where marches often take place.

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

34 **A.** They have utterly affected it. I can no longer attend talks or services at the center I once went
35 to. I want to explore several other religious/spiritual communities in Ann Arbor, and also
36 attend talks, but now I cannot. If a friend dies, how will I attend their funeral? One friend died
37 in April of this year. At least there were no smart meters then, and I could attend his wake.

1 The monthly spiritual group I am a part of can now meet only at my home or the home of
2 one woman whose home has not yet been installed. Soon we will be able to meet only at my
3 home. It was important to people to rotate the gatherings, but we will no longer be able to
4 do that unless I drop out.

5 My spiritual life is very important to me, and an integral part of the work I do as a therapist.
6 Yet one more avenue of self-realization, community, and education has been cut off from me
7 due to smart meter installation.

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

10 A. Yes. I told you about my experience at my doctor's. Recently, I needed to see my doctor
11 again. I called the clinic and explained that I could *not* be in their building and wanted a
12 referral to the specialist I needed to see. They refused, and said I had to come in. I waited
13 out in my car, freezing, for one hour before they called me for my appointment (they were
14 an hour late). Then, I had to be in that doctor's office, which is one of the worst buildings I
15 have been in, for one hour for my appointment. I have pre-cancerous lesions on my face,
16 hands, and legs. I had a choice: ignore them and potentially have them turn cancerous (I
17 grew up in Arizona, and my sister has already had a malignant growth removed from her
18 neck), or deal with the effects of the smart meters on my health.

19 I have visits to [REDACTED]'s Hospital in [REDACTED] once every three weeks for my Ehlers-
20 Danlos. Once that building is smart metered, I don't know what I will do!

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

25 A. Yes.

26 Caring for myself. Going to the grocery store. Buying necessary clothing. Banking—once
27 smart meters were installed at my bank (and I could feel it the moment I walked into the
28 bank), I got an ATM card. I prefer to do all my banking with a person, not a machine, and
29 had not had an ATM card for years, but got one the day I walked into the bank and could feel
30 the smart meters. Getting my hair cut. Buying necessary materials for remodeling and
31 maintaining my home.

32 Browsing a store.

33 Learning—both because I cannot attend the educational functions I need to and because of
34 the cognitive dysfunction that inevitably occurs when exposed to smart meters for
35 whatever reason. Furthermore, once I am exhausted and have insomnia because of smart
36 meter exposure, I cannot think or learn.

37 Thinking—as described above.

1 Sleeping—as described above.

2 Interacting with others—as described above.

3 Reading—when exhausted, I cannot.

4 Concentrating—as described above.

5 **Q. DTE has asked the Commission for approval of a plan that would not allow anyone to**
6 **keep their analog meter. Instead, those choosing to opt out of smart meter**
7 **installation, if an opt-out is instituted, will be forced to take a nontransmitting digital**
8 **meter on their house. Have you had experience with the nontransmitting digital**
9 **meter?**

10 A. Yes.

11 **Q. What was that experience like?**

12 A. The nontransmitting digital meter makes me feel *horrible*! I was hopeful that when I went
13 over to someone's house who had a digital meter that I would not be affected. I thought I
14 *might* be, but I certainly did not expect what I encountered. I stepped over her threshold
15 and my ears began ringing immediately. That is the first time that had ever happened to me.
16 At that point, I had not experienced that with a smart meter. My body felt like it was
17 buzzing. I could not stand to be in her house. It was every bit as awful as the smart meter.
18 The only difference was, I did not feel those "empty rays." I left that house after about 7
19 minutes. I couldn't stand it.

20 I was over there briefly one other time. I felt the same awful sensations in my body.

21 I experience many of the same physiological changes (anxiety sensations, which are due to
22 cortisol, etc.) as with a smart meter. I cannot say whether they digital meter will cause me
23 insomnia because I have never stayed in a house with a nontransmitting digital meter long
24 enough to know whether that's a problem.

25 Several weeks after my experience with the digital meter the first time, I was at that same
26 home a second time, again briefly, and experienced the same sensations as well as a
27 pressure through my body.

28 **Q. In your experience, will the nontransmitting digital meter solve the health problems**
29 **you experience with smart meters?**

30 A. No.

31 **Q. Are the nontransmitting digital meters an acceptable alternative to the smart meter?**

32 A. No, because they will not solve the health problems I and others experience. It is very clear
33 to me from my personal experience that smart meters and digital meters—at least the new,
34 nontransmitting digital meters—cause many of the same health effects. I had no idea of this

1 when I began investigating smart meters. I thought the problems with smart meters were
2 solely because of the RF (radiofrequency) radiation. It was months before I came across
3 information about switched-mode power supplies and how they might also harm health.
4 Switched mode power supplies step the 240 volts coming off the power line down to 4–10
5 volts to run the switched-mode power supply (SMPS). Analog meters don't need SMPS
6 because analog meters don't need electricity to run.

7 The site I came across said *nothing* about how horrible the digital meters make you feel. They just
8 cautioned that they might be harmful to health. It made you think about it in the same way
9 you think about other things that we are cautioned are harmful to our health—you think,
10 “Well, maybe it's a little bit harmful, but what isn't in this day in age?”

11 My experience in the house with the nontransmitting digital meter made it very clear to me that
12 there is a lot of similarity between the smart meters and the new digital meter and that a
13 huge portion of what I and others experience is due (at least in part, if not solely) to the
14 voltage transients generated by the switched-mode power supplies.

15 I also want to emphasize very strongly that I have been in a house with an *old* digital meter, a digital
16 meter that can't be converted to a smart meter. It was put on the house about 4 years ago.
17 Being in that house is no different than being in my own home. The old digital meter is
18 nothing like the new one. It is an entirely different experience!

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

21 Nothing except to say that smart meters have basically ruined my life. I have to live like a hermit,
22 even though I am living in a city. I can't do any pleasurable thing anymore that involves
23 anything outside of my home other than walking through the woods.

24 Moreover, with the near completion of smart meter installation in Ann Arbor in the last month—
25 and therefore my inability to have a respite in any grocery store—I seem to have become
26 more sensitive to every sort of electrical field. I am very afraid that I am going to become
27 like that college student who came to see me—unable to use any sort of electrical product.
28 At least he was still able to socialize with friends at their homes, a restaurant, a bar, go to
29 church, spend time at the library. I can't even do that!

30 **Q. What do you feel is a reasonable accommodation to allow you to perform major**
31 **activities of daily living?**

32 **A.** Well, it's very obvious. Smart meters must be banned, as must the digital meters that create
33 these horrific voltage transients. It is amazing to me that all around the country,
34 municipalities have been spending millions of dollars making every sidewalk in their
35 jurisdiction conform to ADA requirements, *whether or not* any person with a mobility
36 disability lives in that neighborhood. I am all for making things accessible. But the
37 deployment of smart meters has made *every place—every building, every social setting, every*
38 *home, some streets, every educational facility, every religious institution—inaccessible to me.*

1 Every person in a wheelchair can go to city hall, can get a special cart at the grocery store,
2 can have a sign language interpreter present if need be, but I and others who are
3 immediately and deeply impacted by the electromagnetic fields created by the installation
4 of smart meters in every building in Michigan, are *barred* from every public space unless we
5 make the choice to risk, in a very deep and real way, our health.

6 If they could find a way to do what they believe they need to do without impacting my health and
7 that of millions of others, I would have no protest. I do not believe that smart meters are
8 going to reduce energy consumption. Enough studies have shown that they've had no
9 impact. But you know what, the government and private corporations misspend my money
10 in numerous ways. I don't go to court over it; I don't spend every waking moment of my life
11 fighting it. It's money. C'est la vie. But my health, my ability to sleep, to function, to earn a
12 living, let alone visit with friends—that I must fight for. Because if a smart meter or a
13 nontransmitting digital meter is installed on my home, I will—maybe quickly, maybe over
14 the course of a year or two—die because of lack of sleep and the depression that results
15 from such extreme fatigue.

16 The bare minimum that DTE and the MPSC must do is allow those of us who are so severely and
17 immediately affected by smart and digital meters is to keep our analog meters so that we
18 have at least some period of time in our lives where we are not surrounded by this
19 electromagnetic funnel that so damages us. We must at least have some sort of haven in our
20 homes.

21 The only way I am surviving right now is because my home does not have smart or nontransmitting
22 digital meter on it.

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

25 A. Yes. Mitochondrial dysfunction (chronic fatigue), hyperthyroidism, and Ehlers-
26 Danlos Type III hypermobility disorder. EDS is genetic (affects the connective tissue),
27 hyperthyroidism was diagnosed around 2000 but was probably present years before, and
28 mitochondrial dysfunction was definitively diagnosed in 2009 but has certainly been
29 present since my later years in high school.

30 **Q. If you had health problems prior to smart meter installation, have those conditions**
31 **worsened, lessened, or stayed the same since installation?**

32 A. If I am not exposed to smart meters, then there is no change. If I am exposed to smart
33 meters, the fatigue is worse because I can't sleep. I do not know whether there has been a
34 change in thyroid function as I have not had a thyroid test since installation.

35 I do not have a smart meter, nor a digital meter of any kind, on my home. If I did, I would
36 likely be dead at this point, and I am not exaggerating when I say that. The sleeplessness
37 and fatigue I experience when around smart meters for long render me incapable of doing
38 anything. The depression that results from fatigue makes life seem meaningless—one has

no energy for life, no zest. The heart palpitations I experience would surely damage my heart so badly I would slowly die. The fatigue and cognitive dysfunction would make me incapable of earning any type of living, let alone taking care of myself and my home.

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

A. Yes. My heart feels weird a lot of the time now. I do not have smart or digital meter on my home, yet ever since that exposure in June at my doctor's, my heart has felt weird off and on. No matter where I go now, I am in the RF field from smart meters. Short of hiring someone or begging someone to do all my shopping, etc., I must be exposed to some extent to these meters.

The installation of these meters has devastated my social life. It is unbelievable and unconscionable that something that hurts so many people—I am not the only one—so tremendously has been allowed to be deployed in our society.

And I want to say that the digital meters DTE proposes to replace the smart meters affect me and others as badly in nearly every way as the smart meters. If that digital meter is put on my home, I will be as dead as I will be if a smart meter is installed.

DTE has its own reasons for installing these meters. What I astounds me is that their ignorance, myopia, greed, denial, or whatever it is, is apparently causing them to be *so* rigid, *so* uncompassionate, *so* unbending, and *so* uncaring that they would force people to put on their homes something that, quite literally, is going to kill some of us very quickly. Their grid is going to work whether or not a meter is installed on my home. It's working now, and at least 12 other people in my neighborhood have refused to let them install the smart meter. They've already ruined my life in many ways. The State of Michigan needs to ensure that even if I am forced to live like a hermit, I can still *live* in my own home rather than slowly die from fatigue and heart problems.

You know, after all the work I have done so far on this case, I want to go out on Friday and unwind with some friends. But I can't! Because there is a smart meter on every restaurant in the area! Don't you people get it! You have forced me, and others, to live like hermits. None of us wants to live this way! Until a couple months ago, I *didn't* live this way.

Lastly, I want to say that I know how to live with pain. I have to get injections in to my joints every three weeks for my Ehlers-Danlos Syndrome. I have done this with no anesthesia for years. My doctor has never, ever seen anyone else do it without medication. I can take pain. I can take hardship. I am not here because I am imagining something. I am not here because of fear. I am here because my body will not survive a smart or digital meter on my home. I am here because of the reality of what these meters do to my body.

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

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

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

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

6 **A. Yes, February 18th, 2011**

7 **Q. If a smart meter has not been installed, or if one was installed but removed**
8 **and replaced by an analog meter at your request, please describe the**
9 **circumstances of your request or complaint to CMP and their response.**

10 **A. I am currently in the process of requesting to opt out and have an older version**
11 **analog meter installed. I called CMP Smart Meter office to request removal, they**
12 **very nicely indicated they would do so, but they told me I should consider the low**
13 **RF transmission as short bursts for less than a total of 1 minute in a 24hr period. (I**
14 **found this hard to believe given the immense amount of scientific data indicating**
15 **otherwise due to the long term health risks). They referred me to their web site for**
16 **more detailed information on smart meters. They also advised that if I opted out, a**
17 **\$40 fee plus \$12.00 monthly fee would be added to the bill each month.**

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

19 **A. My health concerns are based upon both physical and medical conditions that I**
20 **have. Since the meter has been installed, I have experienced a significant decline**

1 in health.

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

6 A. Yes. I have headaches, fatigue and ringing in the ears if within a few feet of the
7 smart meter for a duration of time, i.e. sitting in living room where meter is
8 installed. Sensitivity to all wi-fi devices has developed since the smart meter was
9 installed. At first in July in 2011, fibromyalgia, weakness and fatigue occurred,
10 then in October and November 2011 face numbness, tingling occurred, followed
11 by more advanced to acute reactions of burning of the head and face in April and
12 May of 2012. The symptoms have continued to increase to headaches, anxiety,
13 dizziness, nausea, weakness, muscle pain (widespread), joint pain and acute and
14 sudden face, neck and chest burning along with the headaches when exposed to
15 EMF conditions. Ringing in ears and aching teeth are more recent symptoms.

16 I am now at a hypersensitive condition and unable to work and make an income.

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

20 A. Yes. I have sought out and located a few doctors knowledgeable in this area. All
21 have diagnosed me with EMF Hypersensitivity, allergic reactions to
22 electromagnetic radiation. And have recommended omitting the smart meter and

1 avoidance of wireless devices and EMF sources in the home. I am currently
2 engaged in a medical treatment protocol for EMF patients.

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

6 **A.** Remove smart meter. Avoid and discontinue use of all wireless phones and
7 devices. Avoid EMF sources in the home as much as possible.

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

10 **A.** My life has been profoundly impacted, I cannot work, need to avoid certain areas
11 of my home, including where the smart meter is installed and the kitchen making
12 meal preparation difficult. I cannot go to friends' homes with smart meters and
13 wireless devices. I have to avoid rooms and situations with crowds where many
14 cell phones may be present.

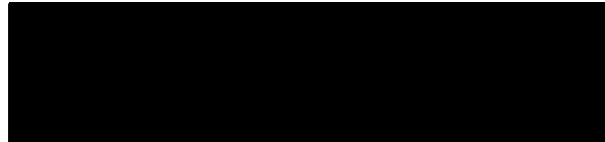
15 I cannot use a cell phone, be within a few feet of others using cell phones, a
16 computer, cordless phone etc. No wireless routers have been installed at home, nor
17 do I plan to install one. This has affected my income, my ability to pay for medical
18 expenses and has created an uncertain future as to if we can remain in our home.

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

21 **A.** The use of smart meters and the harmful exposure to residents needs to be
22 seriously reconsidered. Peoples' lives are being altered, their health at significant

- 1 risk. There has been enough research here in the U.S. and the health risks are well
2 known and documented throughout Europe, to prove this is a problem.

Dated this 31 day of January, 2013.



STATE OF MAINE
CUMBERLAND, ss:

January 31, 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,

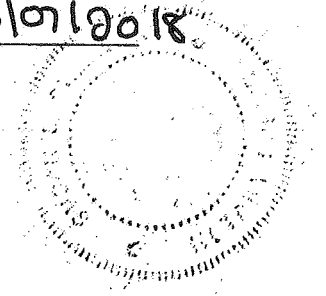
A handwritten signature in cursive script, reading "Susan L. Swanson".

Notary Public/~~Attorney-at Law~~

Susan L Swanson

Name Typed or Printed

My Commission Expires: 10/07/2018



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

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

2 A. [REDACTED] (I am a tenant at this
3 address;

4 [REDACTED] (I lived here for a year as owner
5 and now am the landlord)

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

8 A. I moved to this rental on September 1, 2012. The smart meters were
9 already installed. The meters are outside by living room, and are linked to my
10 house and my landlord's house.

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

14 A. When I lived in [REDACTED], a smart meter was installed. I did not
15 immediately notice an impact, but, slowly, over time. I realized I was feeling
16 dizzy and more tired. I asked that the smart meter be removed. It wasn't clear to
17 me when the smart meter would be removed. One day I walked into my home and
18 I knew that was the day that CMP removed the meter. I could immediately feel
19 more clarity and less restriction. I then went to look at the meter and confirmed
20 that I was given an analog meter.

1Q. If you do not currently have a smart meter, are you paying the opt-out fees?

2 A. I am paying the opt-out fees at my [REDACTED] property, but I am strongly
3 opposed to these fees because I had a medical condition (head injury). Why
4 should I pay for an accommodation?

5Q. Please describe why you do not want a smart meter at your residence.

6 Identify any health concerns you may have about smart meters and whether
7 these concerns are based upon any specific physical or medical conditions
8 that you or any of your family members may have.

9 A. I have a diagnosed brain injury and had to retire early because of this
10 injury. I am very sensitive to EMF's, chemicals and other environmental factors.
11 I cannot wear hats or sunglasses because they impact my cognitive focus and
12 endurance. EMF has the same impact. I minimize environmental and chemical
13 exposure because of my brain injury.

14Q. Do you experience electromagnetic sensitivity symptoms in proximity to radio
15 frequency devices, such as Wi-Fi, microwave ovens, cell phones, cordless
16 phones, smart meters or other devices?

17 A. EMF creates cognitive fatigue, dizziness, physical fatigue, and inability to
18 focus. Smart meters seem to impact my sleep and level of exhaustion more than a
19 wireless device does. I can't explain why.

20Q. If you have physical or medical conditions, including sensitivity to
21 electromagnetic radiation, have these conditions been diagnosed? Identify
22 the diagnosis or description of the condition.

1 A. Cognitive disorder NOS is official psych diagnosis. Toxic encephalitis is
2 also a diagnosis.

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

7 A. I have not sought medical support for this. I know what makes me sick. I
8 am sure my neuropsychologist will provide a letter if needed.

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

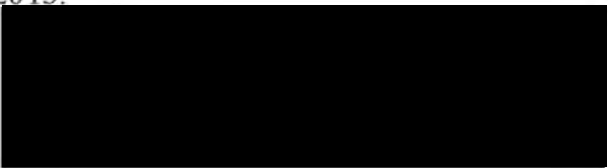
11 A. CMP representatives have been rude, uncaring, and inflexible. They have
12 been giving the company line and are blaming the PUC.

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

15 A. The rental house I live in has two smart meters. I want them removed, but I
16 would have to pay for both to be removed and then I have to pay the monthly opt-
17 out fee for both meters. Given my medical condition, that I am on a fixed income,
18 that I have a disability, I find it shameful that CMP is requiring me to pay for all
19 these extra fees in order for them to make an accommodation. I have gotten into
20 several discussions with CMP about this. They say this is the PUC's decision. I
21 argued, unsuccessfully, that CMP had their own authority to waive the opt-out fee.
22 They would not budge. I argued that for me to pay the extra fees associated with

1 the analog meter is like charging a person in a wheelchair to access a ramp to all
2 public buildings. Why is it that CMP does not provide accommodations for
3 people with medical conditions clearly impacted by the smart meters? This is
4 about discrimination, arrogance and profit and not about what is doing right. I am
5 living with a known impact, with two smart meters on my house, because I can't
6 afford to pay all the extra fees. And how much profit is CMP making every year?

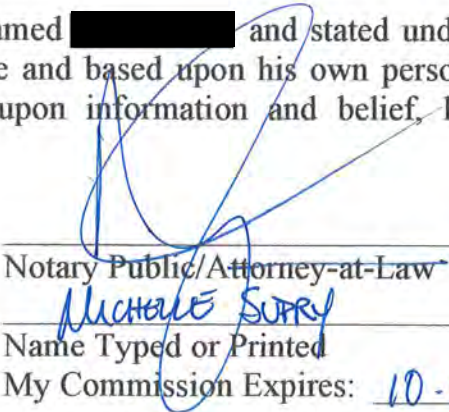
Dated this 11 day of January, 2013.



STATE OF MAINE
CUMBERLAND, ss:

January 11, 2013

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



Notary Public/Attorney-at-Law

Name Typed or Printed

My Commission Expires: 10-02-2018

**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 smart meter installed at your home?**

5 A. Yes, four smart meters were supposedly installed in our 4-unit Victorian
6 building sometime in July while we were traveling. We returned home on
7 August 15, 2011, after two months of work and travel in Austria/Europe. We did
8 not become aware of them until September 1, 2011.

9 **Q. What was the make and model of the meters?**

10 A. Landis+Gyr PG&E Smart Meter, Type: Focus AXR-SD

11 **Q. At what frequency did the meters transmit?**

12 A. 902-928 MHz ISM Band

13 **Q. Did you experience any unusual symptoms after the meters were installed?**

14 A. Immediately after our return on August 15, my wife and I started to
15 experience headaches, disturbed sleep, fatigue, and tinnitus - I had a difficult time
16 concentrating at work due to headaches and lack of sleep.

17 **Q. Had you experienced these symptoms before the meter was installed?**

18 A. I had never experienced these symptoms before in my life. Before
19 August 15, 2011, I was in perfect health with no awareness or knowledge of
20 electro-hypersensitivity (EHS) and/or radio-frequency sickness. We had no idea
21 that electro-magnetic radiation (EMR) was so harmful to health or that Europe and
22 Russia had much stricter regulations on EMR because of their past experience and
23 science based standards. We lived a normal life with use of technology that is
24 befitting of two accomplished professionals at 35 years of age (I have a master's
25 degree in Civil & Environmental Engineering and work as a manager at a large
26 Bay Area firm. My wife, [REDACTED] is a medical doctor). After receiving a

mailing earlier in the year from PG&E, we had put our [REDACTED] apartment on the smart meter delay list because we had heard negative reports (billing errors/privacy issues) from relatives, media and other California citizens with regard to this program, but we were not aware of the health issues.

Q. Do you believe your symptoms are caused by exposure to the smart meter?

A. Yes, there is no other explanation. Many physicians, scientists and biologists are increasingly stating that smart meters, the smart grid and wireless communications technology are a serious health concern (See Exhibits A and D). Not only is a growing portion of the population experiencing acute electro-hypersensitivity symptoms, there are hundreds of peer-reviewed studies showing significant long-term effects including cell damage, DNA chain breaks, immune and neurological system impairment, infertility and damage to the blood brain barrier (See Exhibit A-2).

Q. When did you first associate your symptoms to the meters and why do you believe they are caused by the meter?

A. I will answer these questions by summarizing the timeline of events as they occurred.

September 1, 2011: This was when we realized that smart meters had been installed in our building - a co-located bank of 4 smart meters were installed 10 feet directly below our bedroom. This was the only change to our living environment and our home that we had lived in for five years.

September 10, 2011: I spent 1-2 hours painting around the downstairs area in close proximity to where the smart meters were located. We did not realize that the pulsed electro-magnetic radiation emissions from the meters were so high (as we later learned from having them measured and filmed by a professional). There were no warning signs on any of the wireless smart meters. PG&E had stated that the meters only communicate wirelessly for 45 seconds each day. They did not say it was through high-intensity millisecond pulses that the smart meter bank produced every 2 - 8 seconds (essentially pulsing continuously). PG&E later admitted that their wireless smart meters transmit between 10,000 and 190,000 times per day (See Exhibit A-4).

September 10 - 30, 2011: The symptoms got considerably worse for both of us. The headaches, heart palpitations/arrhythmia, insomnia, fatigue and extreme tinnitus all increased in intensity. During this time we began to research smart

61 meters and realized that thousands of people across California were having the
62 exact same symptoms. I also checked with our neighbors and some of them were
63 having similar symptoms. We had nearly one dozen close friends in the San
64 Francisco Bay Area who were experiencing the exact same health impacts - all
65 since smart meters were installed at their homes.

66 Once we realized how dangerous these devices were, we immediately and
67 repeatedly contacted PG&E to have them removed. They would not listen to us.
68 They treated us very poorly. They even sent out people to test carbon-monoxide
69 levels to see if that was the problem and a PG&E representative told one of our
70 neighbors that pulsed electro-magnetic radiation is actually good for her brain (she
71 slept 5 feet from the bank of smart meters, was pregnant at the time and quickly
72 moved back to Sydney, Australia). After over one dozen calls from us, our
73 neighbors and our landlord, PG&E essentially told us to go away and stopped
74 returning our calls.

75 **Q. Has your experience with smart meters caused disruptions in your daily**
76 **living?**

77 A. Yes. Work became difficult to do. Sleep was brought down from eight
78 hours to three intermittent hours per night. Our marriage became strained because
79 of the tension we were feeling in our own home. We started to feel hopeless and
80 depressed - after having an incredibly positive and creative time in Austria and
81 normally being very positive and productive people. We even put aside two
82 businesses that we had started over the summer because of our health condition. It
83 was as though a switch had been flipped. (A recent study explains the mechanism
84 for this - see Exhibit E).

85 The symptoms got progressively worse. We gave notice on our apartment where
86 we had lived for 5 years and had rent control (a substantial benefit in a booming
87 [REDACTED] rental market where a comparable flat had almost doubled in price).
88 We simply could not live in our home without experiencing debilitating health
89 effects. Our safety was at stake both in our home and while driving – [REDACTED]
90 noted that her memory and concentration while driving was not nearly what it had
91 been two months prior and had deteriorated to the point where she did not feel
92 safe. The effects of the smart meters were getting worse, so we started to look for
93 a place outside of San Francisco. We looked in Mill Valley, CA and found a
94 home near downtown. However, they had a smart meter and I realized for the first
95 time that I got headaches when near a cell phone tower (there is one in downtown
96 Mill Valley – just one block from the home). I had now become electro-
97 hypersensitive and could not be near wireless communication equipment (Cell
98 towers, smart phones, Wi-Fi and SmartMetersTM). We realized that we had to

99 move to Fairfax, CA because it was one of the only communities without smart
100 meters in our area. This was a burden, however, because it is over 2 hours by car
101 from my place of employment in Silicon Valley. We had no choice as we had to
102 give our bodies a chance to recover. Again, we were completely healthy just 2
103 months prior and the only new thing in our lives was the co-located bank of smart
104 meters 10 feet from our bed.

105 From October 15 until November 22, 2011, we sublet a home in Fairfax. We had
106 to keep our [REDACTED] apartment because we realized that finding a new rental
107 in this market would take a long time (typically 3-4 months). We paid for two
108 places at one time. While living in Fairfax our symptoms eased. We could sleep
109 again. The heart palpitations decreased and the tension/anxiety/fatigue went away.
110 However, the headaches continued. Any time I went downtown to Fairfax, the
111 cell tower and wi-fi exacerbated the headaches. Every time I went into San
112 Francisco or drove near a cell phone tower, the headaches would worsen. Using a
113 cell phone became nearly impossible. I could only text, and sparingly at that. I
114 would later meet other people experiencing the exact same phenomenon.

115 We experienced considerable stress while in Fairfax as well. We had essentially
116 been uprooted by PG&E's smart meter program and were forced to seek refuge in
117 a town that was not our home. In addition, it was very hard to find housing.
118 Because of the housing/financial crisis, there are many more renters than there are
119 places available. We did not know where we would live next. We were smart
120 meter refugees. We met others who were also moving to Fairfax because they too
121 were having health effects that they had attributed to smart meter installations.

122 Without a new place to live in Fairfax and our sublet ending, we were again under
123 considerable stress. We tried to go back to our [REDACTED] home, but after only
124 15 minutes there our symptoms would reoccur. [REDACTED] would sit in the kitchen
125 and watch her pulse go from 60 to 120 beats per minute spontaneously, which is a
126 common symptom of electro-hypersensitivity (See Exhibit C-3). We could not
127 even consider spending one night in our home. We had no idea where we would
128 go next. Luckily, the day we had to leave Fairfax, a friend from San Francisco
129 offered to sublet his home for a month while he traveled. He had a smart meter,
130 but it was on the other side of the home. We could sleep at this home, but being
131 back in San Francisco was not easy. Our electro-hypersensitivity (EHS) symptoms
132 were worse in San Francisco. We learned that we had to unplug all Wi-Fi and
133 cordless phones and we had to keep any cell phones around us on "airplane" mode
134 or off. We felt like refugees and did not know where we would live next. We
135 really felt hopeless as PG&E was not admitting that there was a problem. We also
136 realized through research that thousands (possibly tens of thousands) of people
137 throughout California were experiencing the exact same thing. Some were living
138 in their cars in nature to seek relief. Many had abandoned their homes and careers

139 and now live off-the-grid in places like Big Sur or other states. Others had left the
140 country. Lives were being destroyed and no help was on the way.

141 **Q. Have you sought medical attention for your symptoms?**

142 A. Between October 15 and November 22, 2011, we began to seek considerable
143 health treatments. [REDACTED] is already a medical doctor and holistic physician.
144 However, we needed the help of others and sought various therapies to help reduce
145 our electro-hypersensitivity. We spent thousands of dollars during this month on
146 alternative therapies because allopathic medicine does not know how to treat this
147 condition, other than medicating the symptoms away, which actually makes things
148 worse over time. These therapies provided some relief, but it was never long-
149 lasting. We did feel like we were getting stronger while living in Fairfax. It
150 seems the only known way to reduce electro-hypersensitivity once it occurs is
151 avoidance of all wireless technology and high electrical fields. This is
152 increasingly difficult in our world – especially now that utility companies want to
153 put smart meters in every community in the state.

154 We contacted our Kaiser Permanente physician about our condition. He had heard
155 from other Kaiser doctors that other patients were experiencing the same thing
156 since smart meters were installed. He provided a letter for each of us to give to
157 PG&E and the CPUC to have the smart meter bank removed from our building
158 (Exhibit B).

159 **Q. Did PG&E eventually remove the smart meter?**

160 A. When we ran out of safe places to stay, we sent a package to the top
161 executives at PG&E and each of the CPUC Commissioners demanding that they
162 take the bank of smart meters out of our building within five days or we would
163 hire a certified electrician to do this for us. Within 48 hours of the executives
164 receiving this package, the smart meters were out of our building and safe analog
165 meters were installed. The PG&E customer relations manager that called, Mark
166 Torez, was very cordial and helpful. He called six or seven times within 24 hours
167 of our initial conversation. I wondered why someone had not contacted us months
168 prior when we contacted PG&E so many times about our issues with the smart
169 meters. Mark and his superiors authorized the installation of the safe analog
170 meters at our building, but would not admit that people were getting sick because
171 of the smart meters (for obvious liability reasons). He stated that people go
172 through phases in life and that apparently my wife and I were going through our
173 “electro-sensitivity phase”. The next day the smart meters came out.

174 **Q. Did your symptoms subside after the meter was removed?**

175 A. The effect of having the smart meters taken out was noticeable almost
176 immediately. The home felt completely different. For the first time in 3 months,
177 we were able to live and sleep in our own home. With the bank of four smart
178 meters directly below our bedroom, this was not possible. Our tinnitus decreased
179 somewhat and the heart palpitations/arrhythmia were not as frequent. The nervous
180 system overload that we had been experiencing slowly started to diminish.

181 The damage had been done however. I am now electro-hypersensitive; a
182 condition that I did not even know existed a few months prior (See Exhibits C and
183 D-4).

184 **Q. What are your current circumstances?**

185 A. The electro-hypersensitivity issues persist. Being around wireless
186 communications technology brings about headaches, fatigue and a lack of
187 concentration and memory. I experience a tremendous pressure in my head that is
188 very painful. It takes hours, sometimes days, for this head tension to decrease
189 after I am exposed to wireless communication technology, strong electro-magnetic
190 fields or a home or neighborhood with dirty electricity. Being sensitive to dirty
191 electricity is a huge problem, as experts have shown it has increased on the power
192 grid and on the wiring of homes with the deployment of smart meter/smart grid
193 technology. We now use electricity sparingly in our apartment because it causes
194 headaches. We only run our refrigerator when we are not at home and have to
195 turn off the circuit breakers to our home at night.

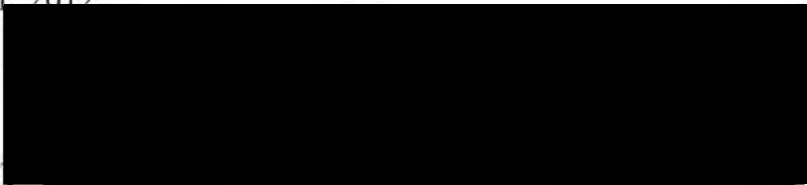
196 My wife has moved back to Europe for now as she just did not feel well here. Her
197 symptoms have reduced since leaving California, but moving has forced her to
198 give up her practice in the Bay Area. My own condition has worsened. It is
199 difficult for me to be in urban environments, in a normal office environment or
200 even on certain computers because of the electro-hypersensitivity (wireless
201 devices and computers are now very difficult to be around, which was not the case
202 just one year ago). I have persistent headaches that only diminish when I am away
203 from wireless technology and other electro-magnetic fields. This will likely affect
204 my ability to earn income, the places that I can live and may completely change
205 my life, as it has for many other affected people. I question whether these costs
206 are factored into any smart meter program.

207 When I spend time in nature, away from all wireless communications equipment
208 and electro-magnetic fields, my EHS symptoms, including headaches, completely
209 disappear within 24-48 hours. However, they reappear almost immediately once I
210 return to a populated area. I have also inadvertently done dozens of experiments

211 of my own where I would feel a microwave radiation source before seeing it. My
212 personal experience, along with similar testimonials of many other affected people
213 and a growing body of scientific evidence of biological harm from non-thermal
214 microwave radiation is how I know that we are harming people with smart meter/
215 smart grid technology. The past 12 months have been extremely difficult for my
216 wife and I. We have spent periods of time at approximately 15 different locations
217 the past year, mostly searching for safe places to live. This has been very
218 disruptive to our lives. We are currently living on separate continents, but are
219 searching for a safe place to be together where we can both live and work.

220 I will add that it has been a considerable stress to us the past few months with
221 regard to the opt-out process and fees. We have been in contact with our
222 neighbors and the owner of our building. None of the residents are able to afford
223 the opt-out fees (\$75 plus \$10/month), even though they are all supportive of not
224 having smart meters in our building.

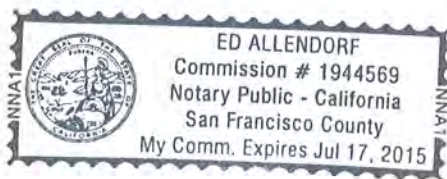
Dated this 3rd day of November, 2012



STATE OF CALIFORNIA
SAN FRANCISCO, ss:

November 3, 2012

Personally appeared the above-named , 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,



Ed Allendorf
Notary Public/~~Attorney-at-Law~~
Ed Allendorf
Name Typed or Printed
My Commission Expires: July 17, 2015



EXHIBIT A

STATEMENT FROM 52 PHYSICIANS AND SCIENTISTS
CORRECTING MISINFORMATION RELATED TO
SMARTMETER™ PROGRAM

Smart Meters: Correcting the Gross Misinformation

[11 juin 2012]

<http://maisonsaine.ca/smart-meters-correcting-the-gross-misinformation/>

Quebec-based magazine *La Maison du 21e siecle* asked physician David O. Carpenter, former founding dean of the University at Albany (NY)'s School of Public Health, to comment an open letter published in the Montreal daily *Le Devoir* last May 24. This letter claimed wireless smart meters pose no risk to public health. More than fifty international experts contributed to the following rebuttal.

We, the undersigned are a group of scientists and health professionals who together have coauthored hundreds of peer-reviewed studies on the health effects of electromagnetic fields (EMFs). We wish to correct some of the gross misinformation found in the letter regarding wireless "smart" meters that was published in the Montreal daily *Le Devoir* on May 24. Submitted by a group Quebec engineers, physicists and chemists, the letter in question reflects an obvious lack of understanding of the science behind the health impacts of the radiofrequency (RF)/microwave EMFs emitted by these meters.

The statement that « Thousands of studies, both epidemiological and experimental in humans, show no increase in cancer cases as a result of exposure to radio waves of low intensity... » is false (1). In fact, only a few such studies — two dozen case-control studies of mobile phone use, certainly not thousands, have reported no elevations of cancer, and most were funded by the wireless industry. In addition, these reassuring studies contained significant experimental design flaws, mainly the fact that the populations followed were too small and were followed for a too short period of time.

Non industry-funded studies have clearly demonstrated a significant increase in cancer cases among individuals who have suffered from prolonged exposure to low-level microwaves, transmitted notably by radio antennas. The effects were best documented in meta-analyses that have been published and that include grouped results from several different studies: these analyses consistently showed an increased risk of brain cancer among regular users of a cell phone who have been exposed to microwaves for at least ten years.

Brain Cancer Rates

Furthermore, the argument that brain cancer rates do not indicate an overall increase in incidence is not evidence that cell phones are safe: the latency for brain cancer in adults after environmental exposure can be long, up to 20-30 years. Most North Americans haven't used cell phones extensively for that long. The evidence of the link between long-term cell phone use and brain cancer comes primarily from Northern Europe, where cell phones have been commonly used since the 1990s. Nevertheless, the most recent collection of primary brain tumors mined from pathology units in Australia showed brain cancer incidence rose by about 35% between 2000 and 2008 in the Australian Capital Territory and New South Wales (total population : more than 7 million).

Children are especially at risk. In May 2012, the U.K.'s Office of National Statistics reported a 50 percent increase in incidence of frontal and temporal lobe tumors in children between 1999 and 2009. This statistic is especially disturbing since in May 2011, after reviewing the published scientific literature regarding cancers affecting cell phone users, the International Agency for

Research on Cancer (IARC) classified radiofrequency radiation as a 2B, possible human carcinogen. Despite the absence of scientific consensus, the evidence is sufficiently compelling for any cautious parent to want to reduce their loved one's exposure to RF/microwave emissions as much as possible, as recommended by various countries such as Austria, Belgium, Germany, Russia and the United Kingdom.

Electrosensitivity

Public fears about wireless smart meters are well-founded. They are backed by various medical authorities such as those of the Santa Cruz County(California) Public Health Department. These authorities are worried about the growing number of citizens who say they have developed electrohypersensitivity (EHS), especially since for many of them, the symptoms developed after the installation of such meters (it takes some time for most people to link the two events).

Since the turn of the millennium, people are increasingly affected by ambient microwaves due to the growing popularity of wireless devices such as cell phones and Wi-Fi Internet. Therefore, the mass deployment of smart grids could expose large chunks of the general population to alarming risk scenarios without their consent. According to seven surveys done in six European countries between 2002 and 2004, about 10% of Europeans have become electrosensitive. The most famous person to publicly reveal her electrosensitivity is Gro Harlem Brundtland, formerly Prime Minister of Norway and retired Director of the World Health Organization (WHO).

While there is no consensus on the origins and mechanisms of EHS, many physicians and other specialists around the world have become aware that EHS symptoms (neurological dermatological, acoustical, etc.) seem to be triggered by exposure to EMF levels well below current international exposure limits, which are established solely on short-term thermal effects (2). Organizations such as the Austrian Medical Association and the American Academy of Environmental Medicine have recognized that the ideal way to treat of EHS is to reduce EMF exposure.

Therefore, caution is warranted because the growing variety of RF/microwave emissions produced by many wireless devices such as smart meters have never been tested for their potential biological effects.

Well-known bioeffects

While the specific pathways to cancer are not fully understood, it is scientifically unacceptable to deny the weight of the evidence regarding the increase in cancer cases in humans that are exposed to high levels of RF/microwave radiation.

The statement that « there is no established mechanism by which a radio wave could induce an adverse effect on human tissue other than by heating » is incorrect, and reflects a lack of awareness and understanding of the scientific literature on the subject. In fact, more than a thousand studies done on low intensity, high frequency, non-ionizing radiation, going back at least fifty years, show that some biological mechanisms of effect do not involve heat. This radiation sends signals to living tissue that stimulate biochemical changes, which can generate various symptoms and may lead to diseases such as cancer.

Even though RF/microwaves don't have the energy to directly break chemical bonds, unlike ionizing radiation such as X-rays, there is scientific evidence that this energy can cause DNA damage indirectly leading to cancer by a combination of biological effects. Recent publications have documented the generation of free radicals, increased permeability of the blood brain barrier allowing potentially toxic chemicals to enter the brain, induction of genes, as well as altered electrical and metabolic activity in human brains upon application of cell phone RF/microwaves similar to those produced by smart meters.

These effects are cumulative and depend on many factors including RF/microwave levels, frequency, waveform, exposure time, biovariability between individuals and combination with other toxic agents. Clear evidence that these microwaves are indeed bioactive has been shown by the fact that low-intensity EMFs have proven clinically useful in some circumstances. Pulsed EMFs have long been used to successfully treat bone fractures that are resistant to other forms of therapy. More recently, frequency-specific, amplitude-modulated EMFs have been found useful to treat advanced carcinoma and chronic pain.

High frequency EMFs such as the microwaves used in cell phones, smart meters, Wi-Fi and cordless "DECT" phones, appear to be the most damaging when used commonly. Most of their biological effects, including symptoms of electrohypersensitivity, can be seen in the damage done to cellular membranes by the loss of structurally-important calcium ions. Prolonged exposure to these high frequencies may eventually lead to cellular malfunction and death.

Furthermore, malfunction of the parathyroid gland, located in the neck just inches from where one holds a cell phone, may actually cause electrohypersensitivity in some people by reducing the background level of calcium ions in the blood. RF/microwave radiation is also known to decrease the production of melatonin, which protects against cancer, and to promote the growth of existing cancer cells.

Early warning scientists attacked

In recommending that the Precautionary Principle be applied in EMF matters, the European Environment Agency's Director Jacqueline McGlade wrote in 2009: "We have noted from previous health hazard histories such as that of lead in petrol, and methyl mercury, that 'early warning' scientists frequently suffer from discrimination, from loss of research funds, and from unduly personal attacks on their scientific integrity. It would be surprising if this is not already a feature of the present EMF controversy... » Such unfortunate consequences have indeed occurred.

The statement in the *Le Devoir* letter that « if we consider that a debate should take place, it should focus exclusively on the effects of cell phones on health » is basically an acknowledgement that there is at least some reason to be concerned about cell phones. However, while the immediate exposure from a cell phone is of much greater intensity than the exposure from smart meters, cell phone use is temporary.

Smart meters

As Australian Associate Professor of neurosurgery Vini G. Khurana reports, adverse neurological effects have been reported in people who sustain close proximity to wireless meters, especially under 10 feet (3 metres).

A wireless smart meter produces radiofrequency microwave radiation with two antennas in approximately the same frequency range (900 MHz to 2.4 GHz) as a typical cell tower. But, depending on how close it is to occupied space within a home, a smart meter can cause much higher RF exposures than cell towers commonly do. If a smart meter is located on a common wall with a bedroom or kitchen rather than a garage wall, for example, the RF exposure can be the same as being within 200 to 600 feet distance of a cell tower with multiple carriers. With both cell towers and smart meters, the entire body is immersed by microwaves that go out in all directions, which increases the risk of overexposure to many sensitive organs such as the eyes and testicles. With a cell phone, people are exposed to microwaves primarily in the head and neck (unless using speaker mode), and only when they use their device.

Wireless smart meters typically produce atypical, relatively potent and very short pulsed RF/microwaves whose biological effects have never been fully tested. They emit these

millisecond-long RF bursts on average 9,600 times a day with a maximum of 190,000 daily transmissions and a peak level emission two and a half times higher than the stated safety signal, as the California utility Pacific Gas & Electric recognized before that State's Public Utilities Commission. Thus people in proximity to a smart meter are at risk of significantly greater aggregate of RF/microwave exposure than with a cell phone, not to mention the cumulative exposure received by people living near multiple meters mounted together, pole-mounted routers or utility collector meters using a third antenna to relay RF signals from 500 to 5,000 homes.

A technical study performed by Sage Associates in California indicates that RF levels from various scenarios depicting normal smart meter installation and operation may violate even the out-of-date US public safety standards which only consider acute thermal effects. This can happen when a person stands close to the meter to read the power consumption, or touches it, or shades the meter face with a hand to better read it. Emissions are also increased by reflective materials, such as stainless steel, other metals and mirrors, which can re-radiate stronger than the otherwise unaltered background. Microwaves are absorbed and dissipated by partially conductive materials, such as cement and special RF shielding paints and fabrics.

In addition to the erratic bursts of modulated microwaves emitted by wireless smart meters transferring usage data to electric, gas and water utilities, wireless as well as wired smart (powerline communication) meters are also a major source of "dirty electricity" (electrical interference of high frequency voltage transients typically of kilohertz frequencies). Some scientists, such as American epidemiologist Sam Milham, believe that many of the health complaints about smart meters may also be caused by dirty electricity generated by the « switching » power supply activating all smart meters. Since the installation of filters to reduce dirty electricity circulating on house wiring has been found to relieve symptoms of EHS in some people, this method should be considered among the priorities aimed at reducing potential adverse impacts. Indeed, the Salzburg State (Austria) Public Health Department confirms its concern about the potential public health risk when in coming years almost every electric wire and device will emit such transient electric fields in the kilohertz-range due to wired smart meters.

Rather be safe than sorry

The apparent adverse health effects noted with smart meter exposure are likely to be further exacerbated if smart appliances that use wireless communications become the norm and further increase unwarranted exposure.

To date, there have been few independent studies of the health effects of such sources of more continuous but lower intensity microwaves. However, we know after decades of studies of hazardous chemical substances, that chronic exposure to low concentrations of microwaves can cause equal or even greater harm than an acute exposure to high concentrations of the same microwaves.

This is why so many scientists and medical experts urgently recommend that measures following the Precautionary Principle be applied immediately — such as using wired meters — to reduce biologically inappropriate microwave exposure. We are not advocating the abolishment of RF technologies, only the use of common sense and the development and implementation of best practices in using these technologies in order to reduce exposure and risk of health hazards.

- David O. Carpenter, MD, Director, Institute for Health & the Environment, University at Albany, USA
- Franz Adlkofer, M.D., Chairman of the Pandora Foundation, Coordinator of the European Reflex Report on DNA-damage by cellphone radiation, Neuendorf, Germany
- M. S. H. Al Salameh, PhD, Professor of Electrical Engineering, University of Science & Technology, Irbid, Jordan
- Jennifer Armstrong, MD, Past President, American Society for Environmental Medicine, Founder, Ottawa Environmental Health Clinic, Ontario, Canada
- Pierre L. Auger, MD, Occupational medicine, Multiclinique des accidentés 1464, Montreal, Quebec, Canada
- Igor Beliaev, PhD, Head research scientist, Cancer Research Institute, Slovak Academy of Sciences, Bratislava, Slovak republic
- Fiorella Belpoggi, PhD, Director Cesare Maltoni Cancer Research Center, Ramazzini Institute, Bologna, Italy
- Dominique Belpomme, MD, Director of the European Cancer and Environment Research Institute, Brussels, Belgium
- Martin Blank, PhD, former President, Bioelectromagnetics Society, Special Lecturer, Department of Physiology and Cellular Biophysics, Columbia University Medical Center, New York, USA
- Barry Breger, MD, Centre d'intégration somatosopique (orthomolecular medicine), Montreal, Quebec
- Simona Carrubba, PhD, Prof. Biophysics, Daemen College, Amherst, NY, Associate Researcher, Neurology, Buffalo General Hospital, Buffalo, NY
- John Cline, MD, Professor, Institute for Functional Medicine, Federal Way, WA, USA, Medical Director, Cline Medical Centre, Nanaimo, BC, Canada
- Alvaro Augusto de Salles, PhD, Professor of Electrical Engineering, Federal University of Rio Grande do Sul, Porto Alegre, Brazil
- Christos Georgiou, Prof. Biochemistry, Biology Department, University of Patras, Greece
- Andrew Goldsworthy, PhD, Honorary lecturer in Biology, Imperial College, London, UK
- Claudio Gómez-Perretta, MD, Director, Centro de Investigación, Hospital Universitario LA Fe, Valencia, Spain
- Livio Giuliani, PhD, Senior Researcher, National Insurance Institute (INAIL), Chief of Radiation and Ultrasounds Research Unit, Rome, Italy
- Yury Grigoriev, PhD, Chair Russian National Committee on Non-Ionizing Radiation Protection, Moscow, Russia
- Settimio Grimaldi, PhD, Director, Institute of Translational Pharmacology (Neurobiology and molecular medicine), National Research Council, Rome, Italy
- Magda Havas, PhD, Centre for Health Studies, Trent University, Canada
- Lennart Hardell, MD, Professor of Oncology, University Hospital, Örebro, Sweden
- Denis L. Henshaw, PhD, Professor of Physics, Head of The Human Radiation Effects Group, University of Bristol, UK
- Ronald B. Herberman, MD, Chairman of Board, Environmental Health Trust, and Founding Director emeritus, University of Pittsburgh Cancer Institute, USA
- Donald Hillman, PhD, Dairy Science, Professor Emeritus, Department of Animal Science, Michigan State University, USA
- Isaac Jamieson, PhD, Environmental Science (electromagnetic phenomena in the built environment), independent architect, scientist and environmental consultant, Hertfordshire, UK
- Olle Johansson, PhD, Professor of Neuroscience (Experimental Dermatology Unit), Karolinska Institute, Stockholm, Sweden
- Yury Kronn, PhD, Soviet authority on physics of nonlinear vibrations and high frequency electromagnetic vibrations, founder of Energy Tools International, Oregon, USA

- Vini G. Khurana, MBBS, Associate of Professor of Neurosurgery, Australian National University, Australia
- Henry Lai, PhD, Professor of Bioengineering, University of Washington School of Medicine, Seattle, WA, USA
- Abraham R. Liboff, PhD, Professor Emeritus, Department of Physics, Oakland University, Rochester, Michigan, USA
- Don Maisch, PhD, Researcher on radiation exposure standards for telecommunications frequency, EMFacts Consultancy, Tasmania, Australia
- Erica Mallery-Blythe, MD, Emergency Medicine Physician, England
- Andrew A. Marino, MD, Professor of Neurology, LSU Health Sciences Center, Shreveport, LA, USA
- Karl Maret, MD, President, Dove Health Alliance, Aptos, CA, USA
- Fiorenzo Marinelli, PhD, Researcher on biological effects of EMFs, Institute of Molecular Genetics, National Research Council, Bologna, Italy
- Andrew Michrowski, PhD, Director, Planetary Association for Clean Energy, Ottawa, Canada
- Sam Milham, MD, former chief epidemiologist, Washington State Department of Health, USA
- Joel M. Moskowitz, PhD, Director, Center for Family and Community Health, School of Public Health, University of California, Berkeley
- Gerd Oberfeld, MD, Public Health Department, Salzburg State Government, Austria
- Mike O'Carroll, PhD, Professor Emeritus (Applied Mathematics), University of Sunderland, UK
- Jerry L. Phillips, PhD, Director, Center for Excellence in Science, Department of Chemistry and Biochemistry, University of Colorado, USA
- John Podd, PhD, Professor of Psychology (experimental neuropsychology), Massey University, New-Zeland
- William J. Rea, MD, thoracic and cardiovascular surgeon, founder of the Environmental Health Center, Dallas, Tx, USA
- Elihu D. Richter, MD, Professor, Hebrew University-Hadassah School of Public Health and Community Medicine, Jerusalem, Israel
- Leif G. Salford, MD, Senior Professor of Neurosurgery, Lund University, Sweden
- Nesrin Seyhan, MD, Founder and Chair of Biophysics, Medical Faculty of Gazi University, Turkey
- Cyril W. Smith, PhD, lead author of "Electromagnetic Man", retired from Electronic and Electrical Engineering, University of Salford, UK
- Morando Soffritti, MD, Scientific Director of the European Foundation for Oncology and Environmental Sciences "B. Ramazzini" in Bologna, Italy
- Carlos Sosa, MD, surgeon affected by the Microwave syndrome, Medellin, Columbia
- Antoinette "Toni" Stein, PhD, Collaborative on Health and the Environment (CHE-EMF Working Group), Co-Coordinator, Berkeley, CA, USA
- Stanislaw Szmigielski, MD, PhD Professor of Pathophysiology, Consulting Expert, former director of Microwave Safety, Military Institute of Hygiene and Epidemiology, Warsaw, Poland
- Lauraine Vivian, PhD, Senior Lecturer, Primary Health Care Directorate, Faculty of Health Sciences, University of Cape Town, South Africa.
- Bradford S. Weeks, MD, Director, The Weeks Clinic, Clinton, WA, USA
- Stelios A. Zinelis, MD, Vice-President, Hellenic Cancer Society, Cefallonia, Greece



EXHIBIT B

LETTERS FROM PHYSICIANS

[REDACTED]

November 27, 2011

[REDACTED]

Dear Pacific Gas & Electric Company and California Public Utilities Commission:

My patient, [REDACTED], began suffering symptoms shortly after the installation of the wireless transmitting smart meters at his [REDACTED] residence.

The symptoms include headaches, insomnia, heart palpitations, tinnitus and an inability to concentrate fully. Prior to the installation of the wireless smart meters, [REDACTED] was a perfectly healthy 35-year-old individual. Over the past several months, his quality of life has deteriorated significantly and he reports that the only way to reduce his symptoms is to seek temporary residence in communities that have not implemented the smart meter technology. This has put considerable stress on [REDACTED] and his wife as they may be forced from their home, community and places of employment.

As the symptoms occurred soon after [REDACTED] was exposed to two banks of smart meters (approximately 10 devices) that are within 15 feet of his bedroom and the fact that many other California citizens are reporting similar conditions after the installation of their smart meters, I am of the opinion that smart meter technology cannot be ruled out as a potential cause for [REDACTED]'s health.

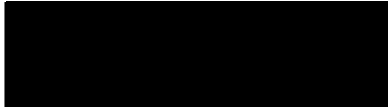
Because of this, if possible, I do not think it is unreasonable to honor this patient's request to remove the above mentioned smart meters and replace them with the non-transmitting analog meters to see if the patient symptomatically feels better.

Sincerely,

[REDACTED]
MD



April 24, 2012



Dear Pacific Gas & Electric Company,

My patient, [REDACTED], has been complaining of electro-hypersensitivity symptoms since last September. The symptoms include headaches, trouble sleeping, heart palpitations, tinnitus and an inability to focus. He reports that the symptoms occurred shortly after the bank of smart meters were installed 10 feet from his bedroom in his San Francisco apartment building.

It is my understanding the smart meters were taken out of the building in January. Shortly after the meters were taken out, [REDACTED] and his wife were able to move back into their home and his symptoms began to subside. There was a noticeable reduction in headaches and he was again able to sleep adequately.

During the past three months [REDACTED] has had to spend time in different South Bay homes for work reasons. Each of these homes had smart meters and in all of the cases where the meter was located in the vicinity of his sleeping room, the headaches, tinnitus and sleep disturbances reoccurred. [REDACTED] reports that he has now become sensitive to wireless communication technology and can no longer use a cell phone, be near cell towers or use computer equipment that operate using wi-fi without getting a headache. Prior to September, 2011 he was able to use all of these technologies with no symptoms.

As my patient appears to be part of the 3-5% of Californians who have become sensitive to wireless technologies and the dirty electricity they create, I recommend that no smart meters be installed at his home. The analog meters are the safest technology for my patient.

Sincerely,



MD

October 16th, 2012

To Whom It May Concern,

My patient [REDACTED] D.O.B. [REDACTED] has Electromagnetic Hypersensitivity also known as EMF sensitivity. This causes him to get a headache and/or difficulties concentrating and heart palpitations when exposed to electromagnetic radiation. Approximately 3% of the population of California has this illness now and the numbers are rising quickly. In Sweden this is now considered a disability.

I am writing to you today to request that you make some reasonable accommodations for [REDACTED] so that he may continue to work in his office setting without discomfort. These accommodations are:

1. [REDACTED] should not sit under fluorescent lights.
2. His work cubicle should be located as far away from the wire-less router as possible.
3. Computers should be modified to limit radiation exposure to decrease the frequency and severity of his symptoms.
4. A wired phone rather than a cordless phone should be used.
5. Exposure to Smart Meters should be avoided.

For more information please see the website "Citizens for Safe Technology"

Sincerely,



EXHIBIT C

EVIDENCE FOR ELECTRO-HYPERSENSITIVITY

Int J Neurosci. 2011 Dec;121(12):670-6. Epub 2011 Sep 6.

Electromagnetic hypersensitivity: evidence for a novel neurological syndrome.

McCarty DE, Carrubba S, Chesson AL, Frilot C, Gonzalez-Toledo E, Marino AA.

Department of Neurology, LSU Health Sciences Center, Shreveport, Louisiana 71130-3932. USA.

Abstract

OBJECTIVE: We sought direct evidence that acute exposure to environmental-strength electromagnetic fields (EMFs) could induce somatic reactions (EMF hypersensitivity).

METHODS: The subject, a female physician self-diagnosed with EMF hypersensitivity, was exposed to an average (over the head) 60-Hz electric field of 300 V/m (comparable with typical environmental-strength EMFs) during controlled provocation and behavioral studies.

RESULTS: In a double-blinded EMF provocation procedure specifically designed to minimize unintentional sensory cues, the subject developed temporal pain, headache, muscle twitching, and skipped heartbeats within 100 s after initiation of EMF exposure ($p < .05$). The symptoms were caused primarily by field transitions (off-on, on-off) rather than the presence of the field, as assessed by comparing the frequency and severity of the effects of pulsed and continuous fields in relation to sham exposure. The subject had no conscious perception of the field as judged by her inability to report its presence more often than in the sham control.

DISCUSSION: The subject demonstrated statistically reliable somatic reactions in response to exposure to subliminal EMFs under conditions that reasonably excluded a causative role for psychological processes.

CONCLUSION: EMF hypersensitivity can occur as a bona fide environmentally inducible neurological syndrome.

Radiation from Cordless Phones Causes Heart Irregularities, According to New Research Published Today in the European Journal of Oncology

October 23, 2010. Boulder, CO. Cordless phones, which transmit a similar pulsed signal as Wi-Fi networks at 2.4 Gigahertz, have been shown to impact heart rate in new research published today in the *European Journal of Oncology*.

READ ABSTRACT

The double-blind, peer reviewed study validates the condition complained of by increasing numbers of people across the globe today called 'electrosensitivity', demonstrating immediate effects on heart rate, almost doubling the heart rate in some cases. The study, "Provocation Study using Heart Rate Variability Shows Radiation from 2.4 GHz Cordless Phone Affects Autonomic Nervous System" (Eur. J. Oncol. Library, vol. 5) was led by Prof. Magda Havas, PhD of the Environmental & Resources Studies Department at Trent University, Canada. Co-investigators included Jeffrey Marrongelle, Bernard Pollner, Elizabeth Kelley, Camilla R.G. Rees and Lisa Tully.

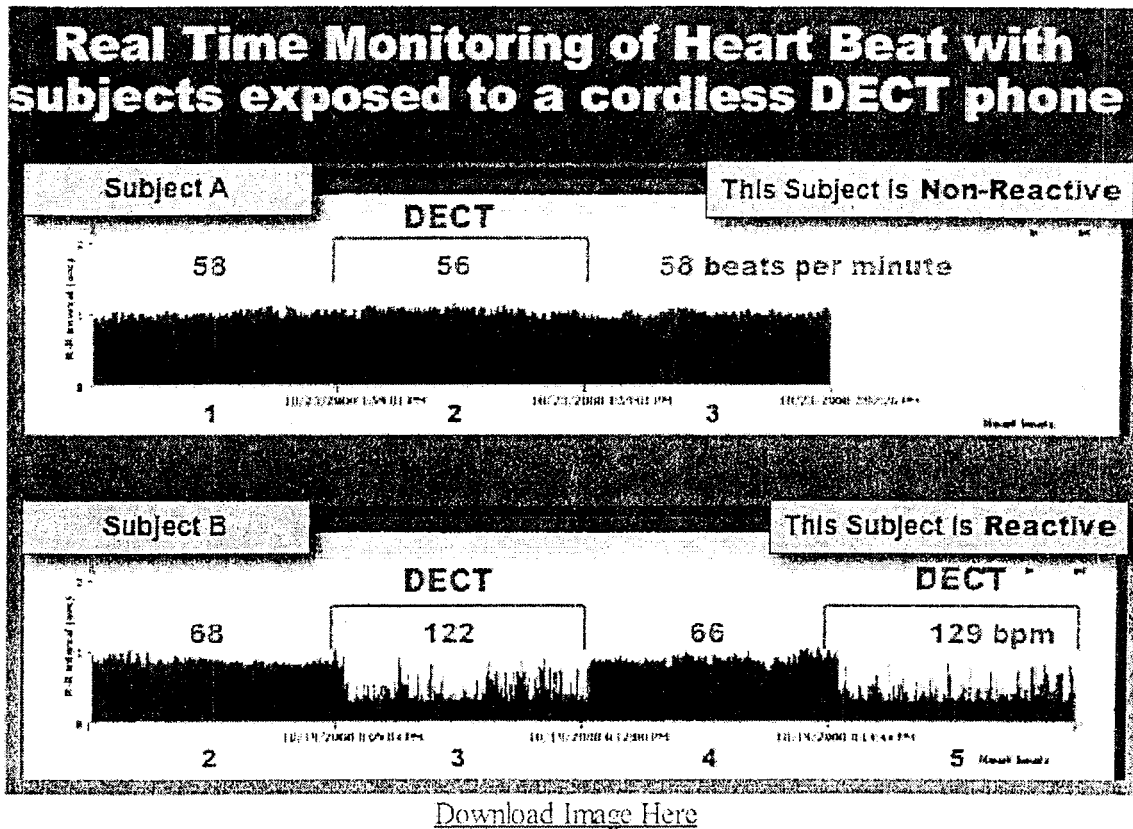
Patients today experiencing electrohypersensitivity symptoms are commonly put on drugs for other conditions with similar symptoms, instead of being taught how to create an electromagnetically clean environment to eliminate symptoms.

Havas' new study adds to the growing interest in the health effects of cell phones, which also transmit microwave radiation, broadening the focus beyond cell phones' association with brain tumors to their potential effect on other systems, including the heart. It also raises serious concern about risks of exposing schoolchildren to Wi-Fi networks, providing a possible explanation for why some children in schools with Wi-Fi are being diagnosed with, and medicated for, heart irregularities that they believe may linked to Wi-Fi. (See CBS News Coverage on Dangers of Wi-Fi in School and Canadian Global TV Coverage of Dangers of Wi-Fi in School)

"What we found is what many people have said for a long time about devices that emit microwaves," stated Dr. Havas. "People don't just feel ill, their heart begins to race and this is measurable with medical heart monitoring devices."

AUDIO INTERVIEW WITH DR. HAVAS

In the image below, from the study *"Provocation Study using Heart Rate Variability Shows Radiation from 2.4 GHz Cordless Phone Affects Autonomic Nervous System"* by Havas et al, Subject B experienced an increase in heart rate on exposure to a nearby portable phone. The heart rate immediately returned to the baseline after the cordless phone was unplugged.



Havas' study in the *European Journal of Oncology* on heart rate variability was blinded, which means that the volunteers did not know when the phone was on or off. Forty percent (40%) of subjects had a moderate to severe reaction only when the phone's base station was on, and emitting microwaves. Those who responded experienced arrhythmia (irregular beats of the heart) and/or tachycardia (rapid heart rate). The symptoms were often accompanied by feelings of pain or pressure in the chest and anxiety that would appear and disappeared for no apparent reason.

This is the first study documenting immediate and dramatic changes in heart rate associated with microwave radiation exposure at levels of exposure well below (0.5%) federal guidelines in Canada and the United States (1000 microW/cm²). It points to the extraordinary inadequacy of current exposure guidelines to protect the public's health.

Havas states, "While not everyone who is electrically sensitive responds in this manner, those who do will have difficulty being in environments where microwave radiation is present, which is virtually everywhere in our modern, wireless culture." She adds, "Cordless phones and cell phones as well as wireless computers and wi-fi networks generate this form of microwave radiation."

Additional symptoms of EHS include headaches, fatigue, difficulty concentrating, poor short-term memory, difficulty sleeping, skin problems, tinnitus, nausea, and dizziness. Many of these symptoms are subjective and difficult to measure.

Havas' study heralds the ability of health practitioners to determine if cardiac irregularities might be

triggered by electromagnetic radiation, using readily available assessment technology, before resorting to invasive or chemical symptom-suppressing cardiac therapeutics.

READ STUDY PUBLISHED IN THE EUROPEAN JOURNAL OF ONCOLOGY October 23, 2010

Dr. Havas is a world-renowned expert in electromagnetic fields. Her teaching and research is concerned with the biological effects of electromagnetic pollution including radio frequency radiation, electric and magnetic fields, dirty electricity and ground current. She is author of the BRAG Antenna Ranking of Schools Report, which teaches schools how radiation exposure from neighborhood cell phone towers and antennas can be assessed and remediated, Zory's Archives, an ongoing review of thousands of recently released studies on the biological effects of electromagnetic fields, dating back over a half century, drawn from U.S. government and military, and Russian and Eastern European, sources, and co-author of "Public Health SOS: The Shadow Side of the Wireless Revolution".



EXHIBIT D

STATEMENT FROM SANTA CRUZ COUNTY PUBLIC HEALTH
OFFICIAL CITING RISKS OF SMARTMETER™ PROGRAM



County of Santa Cruz

HEALTH SERVICES AGENCY

POST OFFICE BOX 962, 1080 EMELINE AVE., SANTA CRUZ, CA 95061-0962
TELEPHONE: (831) 454-4114 FAX: (831) 454-5049 TDD: (831) 454-4123

Poki Stewart Namkung, M.D., M.P.H.
Health Officer
Public Health Division

Memorandum

Date: January 13, 2012
To: Santa Cruz County Board of Supervisors
From: Poki Stewart Namkung, M.D., M.P.H. *PON*
Health Officer
Subject: Health Risks Associated With SmartMeters

Overview

On December 13, 2011, Santa Cruz County Board of Supervisors directed the Public Health Officer to return on January 24, 2012, with an analysis of the research on the health effects of SmartMeters.

Background

In order to analyze the potential health risks associated with SmartMeters, the following questions should be asked:

- 1) What is the SmartMeter system and what is the potential radiation exposure from the system?
- 2) What scientific evidence exists about the potential health risks associated with SmartMeters?
- 3) Are there actions that the public might take to mitigate any potential harm from SmartMeters?

SmartMeters are a new type of electrical meter that will measure consumer energy usage and send the information back to the utility by a wireless signal in the form of pulsed frequencies within the 800 MHz to 2400MHz range, contained in the microwave portion of the electromagnetic spectrum. SmartMeters are considered part of 'smart grid' technology that includes: a) a mesh network or series of pole-mounted wireless antennas at the neighborhood level to collect and transmit wireless information from all SmartMeters in that area back to the utility; b) collector meters, which are a special type of SmartMeter that collects the radiofrequency or microwave radiation signals from many surrounding

Health Risks Associated With SmartMeters

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buildings (500-5000 homes or buildings) and sends the information back to the utility; and c) proposed for the future, a power transmitter to measure the energy use of individual appliances (e.g. washing machines, clothes dryers, dishwasher, etc) and send information via wireless radio frequency signal back to the SmartMeter. The primary rationale for SmartMeters and grid networks is to more accurately monitor and direct energy usage

The public health issue of concern in regard to SmartMeters is the involuntary exposure of individuals and households to electromagnetic field (EMF) radiation. EMFs are everywhere, coming from both natural and man-made sources. The three broad classes of EMF are:

- extremely low frequency, ELF (from the sun or powerlines)
- radio frequency, RF (from communication devices, wireless devices, and SmartMeters)
- extremely high frequency, known as ionizing radiation (x-rays and gamma rays)

Much of this exposure is beyond our control and is a matter of personal choice; however, public exposure to RF fields is growing exponentially due to the proliferation of cell phones, and wireless fidelity (Wi-Fi) technology. To understand the relationship between EMF from SmartMeters and other sources, it is helpful to view the electromagnetic spectrum:

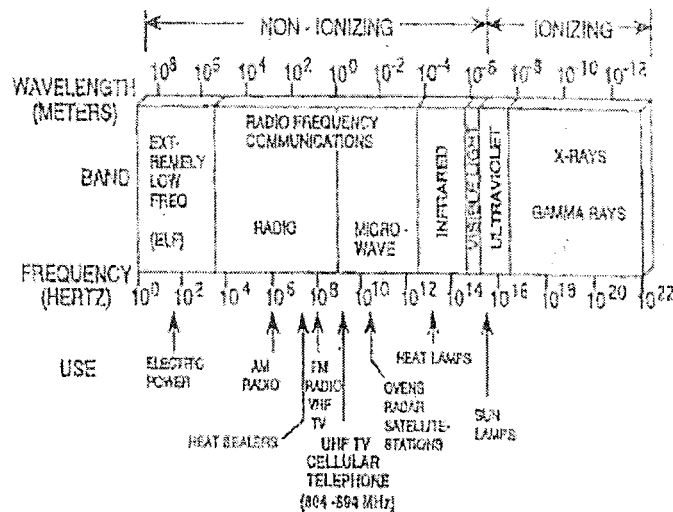


Fig. 1: The electromagnetic spectrum, showing the relation s between ELF and RF fields, wavelength and frequency, and the ionizing and non-ionizing portions of the spectrum

The Federal Communications Commission (FCC) has adopted limits for Maximum Permissible Exposure (MPE) that are based on exposure guidelines published by the National Council on Radiation Protection and Measurements (NCRP). The limits vary with

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the frequency of the electromagnetic radiation and are expressed in units of microwatts per centimeter squared. A SmartMeter contains two antennas whose combined time-averaged public safety limit of exposure is $655 \mu\text{W}/\text{cm}^2$ (Sage, 2011). According to the California Council on Science and Technology (CCST) Report (2011), within distances of three to ten feet, SmartMeters would not exceed this limit. However, CCST did not account for the frequency of transmissions, reflection factors, banks of SmartMeters firing simultaneously, and distances closer than three feet. There are numerous situations in which the distance between the SmartMeters and humans is less than three feet on an ongoing basis, e.g. a SmartMeter mounted on the external wall to a bedroom with the bed placed adjacent to that mounting next to the internal wall. That distance is estimated to be one foot. The CCST Report also states that SmartMeters will generally transmit data once every four hours, and once the grid is fully functional, may transmit "more frequently." It has been aptly demonstrated by computer modeling and real measurement of existing meters that SmartMeters emit frequencies almost continuously, day and night, seven days a week. Furthermore, it is not possible to program them to not operate at 100% of a duty cycle (continuously) and therefore it should not be possible to state that SmartMeters do not exceed the time-averaged exposure limit. Additionally, exposure is additive and consumers may have already increased their exposures to radiofrequency radiation in the home through the voluntary use of wireless devices such as cell and cordless phones, personal digital assistants (PDAs), routers for internet access, home security systems, wireless baby surveillance (baby monitors) and other emerging devices. It would be impossible to know how close a consumer might be to their limit, making safety a uncertainty with the installation of a mandatory SmartMeter.

This report will focus on the documented health risks of EMF in general, the relevance of that data to SmartMeters exposure, the established guidelines for RF safety to the public at large, and then provide recommendations to ameliorate the risk to the public's health.

Evidence-based Health Risks of EMFs

There is no scientific literature on the health risks of SmartMeters in particular as they are a new technology. However, there is a large body of research on the health risks of EMFs. Much of the data is concentrated on cell phone usage and as SmartMeters occupy the same energy spectrum as cell phones and depending on conditions, can exceed the whole body radiation exposure of cell phones (see Attachment B1, Figure 4). In terms of health risks, the causal factor under study is RF radiation whether it be from cell phones, Wi-Fi routers, cordless phones, or SmartMeters. Therefore all available, peer-reviewed, scientific research data can be extrapolated to apply to SmartMeters, taking into consideration the magnitude and the intensity of the exposure.

Since the mid-1990's the use of cellular and wireless devices has increased exponentially exposing the public to massively increased levels of RF. There is however, debate regarding the health risks posed to the public given these increased levels of radiation. It must be noted that there is little basic science funding for this type of research and it is largely funded by industry. An intriguing divide, noted by Genuis, 2011 is that most

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research carried out by independent non-government or non-industry affiliated researchers suggests potentially serious effects from many non-ionizing radiation exposures, most research carried out by independent non-government or non-industry affiliated researchers suggests potentially serious effects from many non-ionizing radiation exposures research funded by industry and some governments seems to cast doubt on the potential for harm. Elements of the controversy stem from inability to replicate findings consistently in laboratory animal studies. However, analysis of many of the conflicting studies is not valid as the methodology used is not comparable. Despite this controversy, evidence is accumulating on the results of exposure to RF at non-thermal levels including increased permeability of the blood-brain barrier in the head (Eberhardt, 2008), harmful effects on sperm, double strand breaks in DNA which could lead to cancer genesis (Phillips, 2011), stress gene activation indicating an exposure to a toxin (Blank, 2011), and alterations in brain glucose metabolism (Voikow, 2011).

In terms of meta-analyzed epidemiological studies, all case-control epidemiological studies covering >10 years of cell phone use have reported an increased risk of brain tumors from the use of mobile phones (Hallberg, 2011). Other studies have pointed to an increasing risk of acoustic neuroma, salivary gland tumors, and eye cancer after several years of cell phone use and the tumors occur predominantly on the same side of the head as the phone is used. The analysis of brain cancer statistics since the mid 20th century in several countries reveals that brain tumor formation has a long latency time, an average of over 30 years to develop from initial damage (Hallberg, 2011). Therefore using studies such as the Interphone Study which looked at shorter latency periods for the development of specific brain cancers will result in inconclusive data.

Another potential health risk related to EMF exposure, whose legitimacy as a phenomenon remains contentious, is electromagnetic hypersensitivity (EHS). In the 1950's, various centers in Eastern Europe began to describe and treat thousands of workers, generally employed in jobs involving microwave transmission. The afflicted individuals often presented with symptoms such as headaches, weakness, sleep disturbance, emotional instability, dizziness, memory impairment, fatigue, and heart palpitations. Clinical research to verify the physiological nature of this condition did not begin in earnest until the 1990's and found that the EMF involved was usually within the non-ionizing range of the electromagnetic spectrum. In the early 2000's, estimates of the occurrence of EHS began to swell with studies estimating the prevalence of this condition to be about 1.5% of the population of Sweden (Hilleert et al., 2002), 3.2% in California (Levallos et al., 2002), and 8% in Germany (infas Institut für angewandte Sozialwissenschaft GmbH, 2003).

In 2004, WHO declared EHS "a phenomenon where individuals experience adverse health effect while using or being in the vicinity of devices emanating electric, magnetic, or electromagnetic fields (EMFs)...Whatever its cause, EHS is a real and sometimes debilitating problem for the affected persons (Mild et al., 2004)."

Currently, research has demonstrated objective evidence to support the EHS diagnosis, defining pathophysiological mechanisms including immune dysregulation in vitro, with

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increased production of selected cytokines and disruption and dysregulation of catecholamine physiology (Genuis, 2011).

Until recently, the diagnosis of EHS has not received much support from the medical community due to lack of objective evidence. In an effort to determine the legitimacy of EHS as a neurological disorder, however, a collection of scientists and physicians recently conducted a double-blinded research study that concluded that "EMF hypersensitivity can occur as a bona fide environmentally-inducible neurological syndrome (McCarty et al., 2011).

Safety Guidelines

The guidelines currently used by the FCC were adopted in 1996, are thermally based, and are believed to protect against injury that may be caused by acute exposures that result in tissue heating or electric shock. FCC guidelines have a much lower certainty of safety than standards. Meeting the current FCC guidelines only assures that one should not have heat damage from SmartMeter exposure. It says nothing about safety from the risk of many chronic diseases that the public is most concerned about such as cancer, miscarriage, birth defects, semen quality, autoimmune diseases, etc. Therefore, when it comes to nonthermal effects of RF, FCC guidelines are irrelevant and cannot be used for any claims of SmartMeter safety unless heat damage is involved (Li, 2011).

There are no current, relevant public safety standards for pulsed RF involving chronic exposure of the public, nor of sensitive populations, nor of people with metal and medical implants that can be affected both by localized heating and by electromagnetic interference (EMI) for medical wireless implanted devices. Many other countries (9) have significantly lower RF/MW exposure standards ranging from 0.001 to 50 $\mu\text{W}/\text{cm}^2$ as compared with the US guideline of 200-1000 $\mu\text{W}/\text{cm}^2$. Note that these recommended levels are considerably lower than the approximately 600 $\mu\text{W}/\text{cm}^2$ (time-averaged) allowed for the RFR from SmartMeters operating in the low 900 MHz band mandated by the FCC based on only thermal consideration.

In summary, there is no scientific data to determine if there is a safe RF exposure level regarding its non-thermal effects. The question for governmental agencies is that given the uncertainty of safety, the evidence of existing and potential harm, should we err on the side of safety and take the precautionary avoidance measures? The two unique features of SmartMeter exposure are: 1) universal exposure thus far because of mandatory installation ensuring that virtually every household is exposed; 2) involuntary exposure whether one has a SmartMeter on their home or not due to the already ubiquitous saturation of installation in Santa Cruz County. Governmental agencies for protecting public health and safety should be much more vigilant towards involuntary environmental exposures because governmental agencies are the only defense against such involuntary exposure. Examples of actions that the public might take to limit exposure to electromagnetic radiation can be found in Attachment B2.

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EXHIBIT E

STUDY SHOWING IMPACTS TO MAMALIAN BRAIN RELATED
TO LEARNING, MEMORY AND ALZHEIMER'S IMPACTED
BY WHOLE EMF EXPOSURE

Greek Researchers Show Crucial Regions of the Brain Related to Learning, Memory, Alzheimer's Impacted by Whole Body EMF Exposure in Animals

25.01.2012 by emily Category [Electromagnetic Health Blog](#)

A Greek scientific study led by Adamantia Fragopoulou and Lukas Margaritis has demonstrated important protein changes in the brain of animals following whole body exposure to RF electromagnetic fields, similar to the kind of microwave radiation emitted from cell phones, portable phones, WiFi and wireless computer equipment. The study, **“Brain proteome response following whole body exposure of mice to mobile phone or wireless DECT base radiation”**, was published in *[Electromagnetic Biology and Medicine](#)*, Early Online: 1–25, 2012 (See Abstract, below).

Important regions of the brain necessary for learning, memory and other functions of the mammalian brain were impacted by the microwave radiation, including the hippocampus, cerebellum and frontal lobe, at exposures below the ICNIRP (*International Commission on Non-Ionizing Radiation Protection*) safety

guidelines. A total of 143 proteins in the brain were impacted by the RF radiation over a period of 8 months, providing new evidence for a potential relationship between everyday cell phone use, wireless transmitters and wireless computer equipment and electrosensitivity symptoms, such as headaches, dizziness and sleep disorders, as well as with tumors, Alzheimer's and even metabolic effects.

The study simulated 3 hours of cell phone exposure over eight months, 8 hours of DECT portable phone exposure over eight months, and included a sham exposure control group. The results showed both down regulation and up regulation of the proteins.

TABLE 1 Number of differentially expressed proteins across three major brain regions, following long-term electromagnetic radiation exposure to conventional mobile phone (M) and DECT wireless base (B).

Proteins	Hippocampus		Frontal lobe		Cerebellum	
	B	M	B	M	B	M
Upregulated	11	37	12	19	8	36
Downregulated	11	33	11	18	10	18
Total number of proteins changed	22	70	23	37	18	54

Several **neural function related proteins** (i.e. Glial Fibrillary Acidic Protein (GFAP), Alpha-synuclein, Glia Maturation Factor beta (GMF), and apolipoprotein E (apoE)), heat shock proteins, and cytoskeletal proteins (i.e. neurofilaments and tropomodulin), were shown to be impacted by the radiation, as well as **proteins of the brain metabolism** (i.e. Aspartate aminotransferase, Glutamate dehydrogenase), in *nearly all of the brain regions studied*.

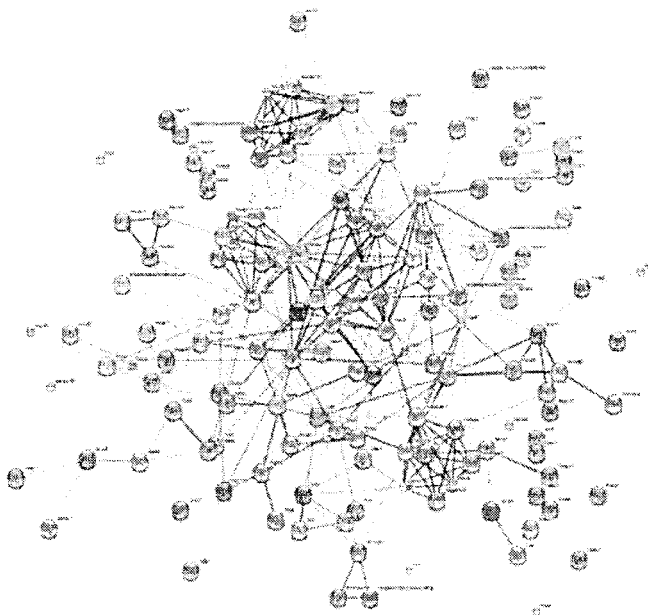


Figure 2 from the study shows the 143 proteins that have changed (up- or down-regulated) and their functional relationship based on a literature survey.



Adamantia F. Fragopoulou, M.Sc., PhD Candidate, in the Dept of Cell Biology and Biophysics at University of Athens, Greece, lead author of the study, says,

“Our study is important because it shows for the first time protein changes in the mouse brain after EMF exposure and in particular in very crucial regions like **hippocampus, cerebellum and frontal lobe**, all **involved in learning, memory and other complicated functions of the mammalian brain**. We have demonstrated that **143 proteins** are altered after electromagnetic radiation, including proteins that have been correlated so far with Alzheimer’s, glioblastoma, stress and metabolism. In its perspective, this study is anticipated to throw light in the understanding of such health effects like headaches, dizziness, sleep disorders, memory disorders, brain tumors, all of them related, to the function of the altered brain proteins.

“Until now there is limited evidence relating EMFs with the impact on specific brain proteins. Further analysis of the affected proteins as well as replicating the experiment under similar conditions (data presently under analysis) is expected to offer new insights explaining the overall effects.”



Lukas H. Margaritis, PhD, Professor Emeritus (as of Sept 2010) of Cell Biology and Radiobiology, Dept of Cell Biology and Biophysics, University of Athens, head of the Athens research group, says,

“A high throughput approach (mass characterization of biomolecules, similar to microarrays that analyze the total genes of an organism) as that of the **Proteomics*** has never been used so far in **EMF research of BRAIN TISSUES** following whole body exposure of model animals (mice) at **SAR values below ICNIRP’s recommendations**. It is also the first time that wireless DECT phones base radiation is involved in lab animal studies and specifically in such molecular effects. The message taken out of this work is that people should be very cautious when using mobile phones next to their body (especially next to their brain), whereas the wireless DECT should be located as far away as possible from places that people use to spend many hours a day, not to mention children of all ages.”

** Proteomics is the study of the structure and function of proteins. Proteins are the primary components of the physiological metabolic pathways of all cells. They influence the functioning of all bodily systems, such as the immune system, endocrine system, neurological system (including cognitive function),*

respiratory system, etc. Malfunction in protein integrity has been linked to hereditary diseases, nervous system disorders, diabetes, to name just a few cases. Proteins are responsible for energy production and information transfer, in fact modern CELL BIOLOGY considers that there is no single cellular function that is not mediated by proteins.

The study by Fragopoulou et al. suggests immediate follow up on these findings are warranted, as changes in molecular effects in the brain can raise questions about what the effects would be on the brain *after much longer durations* of exposure to RF radiation, as is common today from frequent cell phone use and wireless exposures, as well as the *effect of cumulative exposures* on the brain and mental functioning; immune system defects; fatigue; chronic sleep disorders; and effects on fetuses and sperm quality. The research extends our understanding from the Volkow et al. study (*JAMA. 2011;305(8):808-813. doi: 10.1001/jama.2011.186*), which demonstrated impacts of cell phone radiation exposure on brain glucose metabolism, without understanding the mechanisms of action. The Fragopoulou et al. study presents a plausible theory why glucose metabolism in the brain may become altered, possibly through an oxidative stress effect.

Special Concern for Children

Regarding the implications of the Greek findings for the learning capability of children in formative years, the authors say,

“The evidence for dysregulation of proteins in the brain from whole body exposure to RF/MW radiation, such as the radiation emitted by cell phones, portable phones, wireless devices or ambient RF/MW from cell towers, whether proteins are upregulated or downregulated, is of great concern for its impact on children’s capacity to learn.”

When considered together with other studies published by the University of Athens team (Fragopoulou et al. 2010, on **spatial memory disorder**, and Ntzouni et al. 2011 on **recognition memory disorders**, the authors say, “This proteome study implies that mobile phone radiation exposure at a normal intensity (and even below ICNIRP’s guidelines) is capable of detuning **learning/memory functions** and possibly other brain functions important **in person-to-person communication and understanding**. The impacts on society are unpredictable as EMFs are not a drug that is delivered to specific body parts or functions. EMFs can attack through oxidative stress every single cell that receives enough energy at non-thermal levels. The potential consequences for learning, memory and interpersonal relations, at the very least, need society’s immediate attention, given the widespread exposure to microwave radiation across the globe.”

People exposed to microwave radiation from cell phones, wireless networks and citywide Wi-Fi have long complained of cognitive difficulties ranging from attention problems, difficulty focusing, poor memory, visual and hearing disruptions, headaches, dizziness, depression and foggy thinking. The Fragopoulou et al. study deepens scientists’ understanding of the *mechanisms of action* of microwave radiation’s effect on the brain, and on mental functioning, due to changes in proteins and in protein functioning.

Dr. Martin Blank, Associate Professor, Department of Physiology and Cellular Biophysics, Columbia University, and Past President of the Bioelectromagnetics Society, says,

“The paper by Goodman and Henderson (1987) showed that short-term (minutes) exposure to EMF will

stimulate protein synthesis, and Fragopoulou et al. now show that this can lead to important changes in brain composition and function. Such changes may account for symptoms like insomnia, nervousness, fatigue, headaches, etc. that people report after exposure to cell phones and other wireless technologies. The biological verdict became obvious when Goodman and Blank (1994) showed that cells react to EMF as potentially harmful by activating the cellular stress response. There is no question that we should limit our exposure to EMF to help protect our brains and all cells in the body.”

Studies Showing RF Effects Below Safety Guidelines

A growing body of research clearly shows health effects from microwave radiation *at non-thermal levels* of exposure, and effects at exposures far lower than international safety guidelines. One review of the literature, by Carlos Sosa, MD of Columbia, South America, found biological effects from non-thermal levels of EMF exposure at exposure levels well below international safety guidelines in several respects:

	Effects at:	Less Than Guidelines
Psychological changes	.03 W/kg	50x Less
Immune System Effects	.015 W/kg	100x Less
Increase Calcium Efflux	.005 W/kg	300x Less
DNA Damages	.0024W/kg	600x Less
Induces Stress Response	.0110 W/kg	1,600x Less
Affects BBB	.0004 W/kg	4,000x Less
Affects Cardiac Ca	.00015 W/kg	10,600x Less
Enhances Cell Proliferation	.00002 W/kg	76,000x Less

Source: Carlos Sosa, MD

The UK charity MobileWise recently published *“Mobile phone health risks: the case for action to protect children”* in November 2011, summarizing and listing more than 200 peer-reviewed studies from a range of international research institutions linking mobile phones at non-thermal exposures to serious biological and health consequences.

A Russian team of researchers also has recently released a study published in *Radiation Biology, Radiation Ecology 2011, Volume 51, No.5, p 611-623* showing **significant long-term (4 years) cognitive decline in children** (ages 7-12) in users of mobile devices compared to controls, once again demonstrating exposure guidelines are inadequate. Lead author of the study, Professor Yury Grigoriev, Chairman of Russian National Committee on Non-Ionizing Radiation Protection and a member of the WHO’s International Advisory Committee on “EMF and Health”, says,

“Our recent 4-year monitoring of effects from cell phone radiation on children, published in *Radiation Biology, Radiation Ecology* (Volume 51, No.5, 2011), demonstrates an increase in phonemic perception disorders, abatement of efficiency, reduced indicators for the arbitrary and semantic memory and increased fatigue. Over the four-year monitoring of 196 children ages 7-12 who were users of mobile communication devices, a steady decline in these parameters from high values to bottom standards compared to controls, was observed. **The short-term and long-term potential consequences for society from exposing children to microwave radiation from cellular communication devices must be immediately acknowledged, globally, and**

responsibly addressed.”

A history of exposure standard setting in the telecommunications industry, The Procrustean Approach, by Don Maisch, PhD of EMF Facts in Australia, describes *‘the manipulation of telecommunications standards by political, military, and industrial vested interests at the expense of public health protection.’*

The Seletun Scientific Statement, a statement by international scientists in February 2011 (watch video), called for reduction EMF exposures globally to reflect the known biological effects at radiation exposures far lower than international guidelines in order to protect the public health and the health of future generations.

The recent Fragopoulou et al. research adds to the body of science demonstrating we are changing and deregulating biological functioning in the brain with the unchecked proliferation of RF electromagnetic fields from telecommunication and utility technologies. These effects are occurring at exposures below safety guidelines and the safety guidelines urgently need to be changed to protect public health.

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? If so, state**
5 **approximately the date when it was installed.**

6 A. Smart meter was installed on February 1, 2012 at [REDACTED] Rd.

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

10 A. [REDACTED]: I requested that the smart meter be replaced with the regular
11 meter because my fiancé started with headaches everyday from April until an
12 emergency surgery to remove a brain tumor (a fast growing glioblastoma tumor).
13 Her chair was three feet from where the smart meter was installed outside. The
14 smart meter was replaced on August 8, 2012.

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

16 A. [REDACTED]: I was charged \$51.00 to replace the smart meter with the old
17 meter and \$12.00 per month is added to current bills.

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

19 **Identify any health concerns you may have about smart meters and whether**

1 **these concerns are based upon any specific physical or medical conditions that**
2 **you or any of your family members may have.**

3 A. [REDACTED]: Our health concern is that this could have caused my death (very
4 early). [REDACTED] had headaches constantly for some time also. The glioblastoma
5 tumor I had removed on May 5th was cancerous and chemo meds and radiation
6 treatments last 2 ½ months. One MRI after and clear right now.

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

11 A. As far as we know just the smart meter.

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

15 A. No real answers as to whether smart meters caused the medical emergency.

16 [REDACTED]: To add I had an MRI at [REDACTED] Hospital in November
17 2010 and results were normal – no tumors and no cancers.

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

21 A. No. I have not had a chance to discuss this with them. Both of us have a family
22 doctor – Dr. [REDACTED], [REDACTED] Healthcare Center. Oncology for [REDACTED]

1 is Dr. [REDACTED] Hospital. Radiation Oncology – Dr. [REDACTED]
2 [REDACTED] for Cancer Care.

3 **Q. Have you observed any pets exhibiting adverse reactions to smart meter**
4 **transmissions? Describe the circumstances.**

5 A. Our German Shepard did not stay around us in the living room and would constantly
6 wet on the floor.

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

10 A. Yes. The headaches ended when the smart meter was removed. Tension slowed
11 and we are feeling better.

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

14 A. [REDACTED] had major loss of memory, confusion and headaches. [REDACTED] had major
15 tension and headaches. Daily living was very hard. Starting in October, 2012, I
16 will have an MRI done every three months and was told the tumor could come back.

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

19 A. We had an option not to have the smart meter installed and basically thought it
20 would be okay. Unfortunately it was not. We got very behind on bills and had to
21 pay and be broke. We still are, but still have to pay extra on the CMP bill each
22 month. Before traveling to [REDACTED] radiation treatments we had to invest in a used

1 vehicle to travel as the vehicle we had prior could not get a new sticker, so we had to
2 junk it.

Dated this 23rd day of January, 2013.

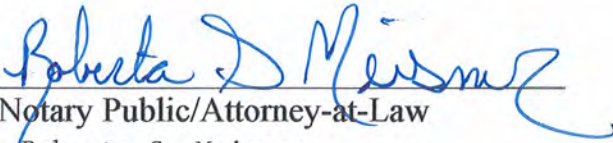


STATE OF MAINE

~~CUMBERLAND~~, ss:
FRANKLIN

January 23, 2013

Personally appeared the above-named , 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
Roberta S. Meisner

Name Typed or Printed

My Commission Expires: 02/24/2019

ROBERTA S. MEISNER
Notary Public, Maine
My Commission Expires February 24, 2019

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

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

2 A. [REDACTED]

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

5 A. Yes, in late 2005, Central Hudson installed one for our weekend home in
6 [REDACTED], New York, and in June, 2009, Con Edison installed one on our [REDACTED], New
7 York residence.

8 In 2006, my husband, our two teenage sons, and I began spending weekends and
9 vacations at our new house in [REDACTED]. There was an AMR (automatic meter reading)
10 digital utility meter (DU) on a pole 100 feet from that house, which at the time, had no
11 meaning for me, except that I occasionally saw a truck pull up to take a meter reading.
12 AMR DU meters are an early version of "smart meters."

13 In June 2009, Con Edison installed an AMR electric transmitting digital meter on the
14 outside of my home in [REDACTED] New York. They also installed a
15 transmitting digital gas meter in my basement. The electric meter was labeled as
16 follows:

17 Centron
18 0716701200 CL200 240V 3W Type C1SRP 30TA 1.okh
19 Ca. 0.5 FM 2s 60Hz
20 A72AQ 7978929. 59689 345

21 I did not record the information from the Central Hudson AMR DU meter or from the
22 Con Edison gas DU meter.

23 **Q. Please describe any adverse reactions you have had to the smart meters.**

24 A. From 2006 to 2009, when I was at our home in [REDACTED] I had sporadic and unusual
25 heart palpitations, always at night, which would jolt me out of my sleep. This
26 happened only when I was in [REDACTED]. In 2008, I went to my doctor for a check up and
27 to have my heart tested. He found me in good health with nothing wrong with my
28 heart. At that time, I did not know any information about the pulsing electromagnetic
29 emissions from DU meters and that these meters were causing this type of reaction in
30 other people.

1 For most of the summer of 2009, we traveled back and forth between [REDACTED] and
2 [REDACTED]. I continued to have sporadic heart events.

3 After the summer months, we returned to [REDACTED], where an electric AMR DU meter
4 had been installed in June 2009, and in September 2009 I began noticing the following
5 unusual symptoms: Agitation, Memory and word loss, Inability to concentrate on my
6 work, Nervousness, Unusual menstrual disruption; A mole began to grow larger on my
7 back.

8 At 51, I wondered if I was developing an early form of Alzheimer's disease. I was not
9 well, which at the time I described as feeling "unhinged," and I again went to my
10 doctor but he did not know what was wrong with me.

11 In February 2010, during a major snowstorm in [REDACTED], I was in my living room,
12 next to my fireplace, about five feet away from the electric AMR transmitting meter,
13 outside my living room window. My husband was traveling and my sons were not at
14 home. The electricity went on and off several times during that storm. Suddenly
15 during one of these electrical events, I heard a very high pitched piercing sound in my
16 right ear and I experienced painful pressure in both of my ears. This caused me to
17 double over in pain.

18 Along with the symptoms I had been experiencing previously, as noted above, I began
19 to develop worse symptoms: Severe heart palpitations; A loud and very disturbing
20 buzzing-pulsing sound especially in my right ear; Extreme agitation; Interrupted sleep
21 with nightmares of being attacked; Waking with severe heart palpitations; The mole on
22 my back began to blow up and grow larger; Pains in my jaw and teeth.

23 I became terrified that I was going to die of a heart attack. I began to sleep on my
24 kitchen floor so that the sound of the refrigerator would drown out the terrible buzzing
25 in my ears. When I left [REDACTED] for [REDACTED], I had the same symptoms there. Some
26 of the symptoms would lessen when I went outside, so I began to suspect that
27 something was wrong inside, perhaps with the electricity.

28 After a conversation with an electrical specialist, I began to suspect that my symptoms
29 might be traceable to the AMR DU meters that Central Hudson and Con Edison had
30 installed. The DU meters were in fact the only newly introduced electrical and
31 technical appliances in our homes.

32 Q. Did you have the smart meters removed? If so, please describe the
33 circumstances of your request or complaint to the utility companies and their
34 response.

35 A. In February 2010, after I became suspicious that the Radiofrequency/Microwave
36 (RF/MW) radiation emissions from the AMR DU meters were making me sick, I

1 requested both Central Hudson and Con Edison to remove all AMR DU meters from
2 both of my homes.

3 Central Hudson replaced the electric AMR DU meter with an analog meter.

4 Con Edison required me to get a letter from my doctor, which shocked me. I
5 wondered how my personal medical information was the business of a utility
6 company. Con Edison removed the gas AMR DU meter, but instead of replacing the
7 electric AMR DU meter with an analog meter, they installed another electric DU
8 meter, which they told me was not an AMR meter and had NO antenna or RF/MW
9 radiation. They said that I would need to provide them, in the future, with meter
10 readings. They also told me that I would be hearing from their health division, which
11 I never did. Because at that time I was uneducated about both electromagnetic
12 radiation and various meter types, I was grateful that Con Edison made the switch and
13 I was hopeful that this new DU meter would have no effects on my health.

14 I recorded the following information from the second DU meter that Con Edison
15 installed on my home.

16 Schlumberger Centron
17 CL200 120V 3W Type CN15
18 30TA 1.okh
19 Ca. 0.5 FM 25S 60Hz
20 HF5006914736AAV*
21 71BQ 6914736
22 25 440 021

23 My symptoms became worse after the second DU meter was installed. I then pleaded
24 with Con Edison to remove the second DU meter and I told them that "I might die" if
25 they did not. Con Edison removed the second and final DU meter from my home on
26 March 12, 2010, and replaced it with an analog meter.

27 **Q. Please explain why you wanted the smart meters removed.**

28 **A.** The only possible explanation for the change in my health was that new transmitting
29 meters with unbearable and unrelenting radiofrequency radiation emissions had been
30 installed in and on our home in [REDACTED] and in [REDACTED]

31 During the time that the AMR DU meters were on our homes, my husband developed
32 high blood pressure and had to be placed on blood pressure medication. My family
33 was unusually agitated during this time.

34 I have learned that other people in [REDACTED] also became ill after AMR DU meters were
35 installed on their homes. None of them has been able to get the utility companies to
36 remove the AMR meters despite vigorous requests for the utilities to do this. The

1 utilities claim the meters are safe and are flatly refusing to remove any meters, even
2 when a letter from a doctor has been supplied asking for their removal.

3 When I asked the "Meter Relations" department (212-460-4111) at Con Edison if I
4 could see a copy of the test results for human exposure to the
5 radiofrequency/microwave (RF/MW) radiation from the meters, I was told that I must
6 obtain a subpoena to acquire that information.

7 AMR electric meters are not Underwriter's Laboratory Approved, which means that
8 state and federal agencies approved the meters but did not test them for health and
9 safety and that is why Con Edison refused to answer my question. To the best of my
10 knowledge no transmitting digital utility meters AMR or "smart" were tested for health
11 and safety, yet the meters emit and transmit levels of RF/MW radiation, designated a
12 Class 2B Carcinogen by the World Health organization.

13 **Q. Did your symptoms or adverse reactions cease when the smart meters were**
14 **removed?**

15 **A.** Yes. In the hours following Con Edison's final removal of the last DU meter from my
16 home my symptoms became less extreme. Specifically, on March 4, 2010, when Con
17 Edison replaced the first AMR DU meter with another DU meter, my symptoms
18 continued to worsen. My heart felt as if it was flipping in my chest. I was in a
19 terrified state, unable to sleep and truly frightened that I would have a heart attack.
20 After making many more calls to Con Edison, on March 12, 2010, Con Edison
21 workers, including a manager of the meter department, came and removed the second
22 electric DU meter from my house and finally replaced it with an analog meter.

23 My immediate responses to the removal of the DU meter were so remarkable that I
24 recorded them.

25 I felt as if I were being released from being electrocuted; I felt weighted down with
26 exhaustion; the buzzing-pulsing became quieter; I felt tingling in arms.
27 Within hours I began feeling slightly better. The loud buzzing-pulsing did not go
28 away but inside my house it got noticeably quieter. My thoughts became less
29 scrambled.

30
31 Within weeks: The mole on my back bled, dried up and fell off (documented by my
32 dermatologist); I began to menstruate again, but never again normally as was the case
33 before the meter was installed.

34 **Q. Are you paying opt-out fees?**

35 **A.** I have not been asked to pay opt-out fees by Central Hudson or Con Edison. I am,
36 however, one of the only homeowners for whom both of these utility companies have
37 removed the DU meters. As of today, both utility companies are refusing to remove

1 any DU meters, including for homeowners who have provided medical letters to the
2 utilities.

3 Q. Do you or any of your family members experience electromagnetic sensitivity
4 symptoms in proximity to radio frequency devices, such as Wi-Fi, microwave
5 ovens, cell phones, cordless phones, other devices?

6 A. We had Wi-Fi, DECT portable phones, cell phones and fluorescent light bulbs for
7 many years and to my knowledge they had never bothered me. Since this happened to
8 me, I have physical symptoms, which at times are unbearable, when I am exposed to
9 these devices.

10 My husband, two sons and I had lived in our homes with wireless internet, DECT
11 phones and cell phones for many years. Our lives have been drastically altered since
12 this happened to me. We have spent close to \$40,000 in electrical and medical bills
13 since 2010, so that I can remain at home. Since being injured by the RF/MW
14 radiation emissions from the DU meters, I am no longer able to physically tolerate
15 wireless equipment.

16 The symptoms I have when I am in direct contact with some wireless equipment and
17 some electrical equipment are: Splitting pain and pressure in my head and ears; My
18 throat closes up; Loss of sleep; Loss of concentration; Ringing in my ears; Heart
19 racing.

20 Since the DU meters, both my husband and my younger son have experienced periodic
21 but mild reactions when near a cell tower. My son has experienced electrical
22 sensations in his ears while going through his college library security system. My
23 older son, who was attending [REDACTED] College in [REDACTED] the entire time the DU meters
24 were on our home in [REDACTED] has not experienced physical symptoms when near
25 wireless devices.

26 Q. Do you experience symptoms when you are near other smart meters?

27 I develop symptoms of tinnitus, heart racing and a pain in my head when I am as near
28 as one foot and as far as 15 feet away from an AMR or smart DU meter, when it
29 transmits or emits signals. I develop symptoms when I visit homes and buildings with
30 AMR DU meters. I can no longer spend time at friend's homes, which have the
31 meters. I feel symptoms outside in my neighborhood because there are meters
32 everywhere. Using an HF35C Electrosmog Analyser, I can read a constant stream of
33 varying levels of RF/MW signals from the meters. DU meters have a very distinct
34 radiation ping sound. Contrary to what Con Edison has stated to me in writing, the
35 particular electric DU meters used by Con Edison can send RF/MW signals once every
36 one to two seconds and up to 30 seconds apart.

1 This "signal hopping" technology is a non-stop, 24/7, RF/MW exposure which
2 surrounds people inside their homes and neighborhoods, with a pulsing/pinging
3 RF/MW signal similar to that of a human heart. I no longer have an AMR meter on
4 my home, but the RF/MW radiation continues to ping in my home through the
5 electrical wiring from the AMR DU meters in my neighborhood.

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

8 A. I have seen several doctors and medical professionals about this problem since 2010
9 and I have had my heart checked. My primary doctor, a homeopath M.D., has been
10 very helpful for me.

11 My doctor has recommended that I should not have any DU meters of any type at my
12 homes. He provided me with letters for both Con Edison and United Water stating
13 that, because of my extreme sensitivity to electromagnetic radiation, I must not have
14 any RF/MW emitting devices on my home. It is obvious from what has happened to
15 me in the last two and a half years that when I am exposed to wireless and some
16 electromagnetic radiation, I become ill. I am much healthier when I am not exposed
17 to any wireless equipment.

18 Within a year of this happening to me and because of the strange and painful symptoms
19 I was experiencing in my jaw and teeth, I sought out special dentists, one to remove a
20 nickel post in a root canal in my upper jaw and the other to remove all of the metal
21 dentistry, including mercury, cadmium, nickel and silver from my mouth. Although
22 these sound like extreme measures, my research led me to believe that these
23 procedures might relieve me of symptoms caused by electromagnetic radiation
24 conducting through the metal in my mouth. This proved to be very helpful for me.

25 **Q. Has your experience with smart meters caused any disruptions in your daily**
26 **living?**

27 A. My life has been dramatically changed since this whole nightmare started. In 2008, I
28 was a fully functioning, working [REDACTED] and [REDACTED]. During that year I illustrated the
29 book, [REDACTED]
30 published by Rutgers University Press.

31 I have never yet returned to the level of work I was doing before I was injured by the
32 radiation emissions from the DU meters. Wireless equipment and some electrical
33 equipment make me feel sick. I can no longer use a cell phone, other than in an
34 emergency. I can no longer use wireless Internet or be in a home or building for a
35 long period of time, which uses Wi-Fi. I can no longer be near a person using a cell
36 phone. I can no longer be near cell phone antennas, which means I can no longer go to
37 our local farmer's market because of its close proximity to cell transmitters. I used to
38 work in an artists studio with other artists, but I can no longer do that and I am now

1 very isolated. Traveling has become very difficult for me because Wi-Fi affects my
2 sleep.

3 I can no longer attend village board meetings in [REDACTED] because of the cell
4 transmitters on the roof. My life has changed very much. I consider myself very
5 lucky that I have not lost my life, my family and my friends. I wish this had never
6 happened to me.

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

9 **A.** I am living proof that DU meters, "radio on" or "radio off," make some people very
10 sick. As my family and friends would attest to, I was perfectly happy using wireless
11 technology and healthy in general before I was over-exposed to the extreme
12 electromagnetic radiation from the DU meters.

13 Somewhere between the design and the manufacturing of all DU meters, something
14 went terribly wrong and the radiation emissions from these flawed meters is far beyond
15 what the utilities might have realized. Utility companies across the U.S. now know
16 that some of their customers are becoming ill from this technology, yet they are
17 holding on to this dangerous mistake because they invested billions of dollars into it.

18 The contamination of the electrical wiring from the meters must be investigated.

19 These are some of the questions that the utility companies must be required to answer
20 and submit actual proof of their answers.

21 Were the meters tested for health and safety?

22 If so what was the testing method?

23 What are the levels and frequencies of RF/MW radiation that are being conducted on
24 home and building electrical wiring?

25 What was the method of testing the RF/MW emissions?

26 What are the precise levels and frequencies of the RF emissions from the meters?

27 Were the meters tested in isolation?

28 Were the meters tested in combination with wireless electrical equipment such as
29 Wi-Fi and DECT phones?

30 In a real life situation there might be electrical circuits in a home or building with
31 faulty wiring, which could cause very high electromagnetic fields. Were the meters
32 tested when attached to a home with faulty electrical wiring?

33 What happens when the conducted and pulsing RF/MW radiation from a "smart" meter
34 contaminates wiring, which already has dangerous and high electromagnetic fields
35 because of faulty wiring?

36 As far as I know there was never proper testing to determine the outcome of attaching

1 this flawed and dangerous technology to an entire home electrical system. We know
2 for a fact that the particular AMR DU meters used in my area of New York were never
3 properly tested. The fact is utility companies and state public service commissions
4 jumped on this ill-conceived project without ever requiring proper testing for health
5 and safety. When I asked Con Edison for the health and safety testing on the meters,
6 they told me that I would need a subpoena for that and that I should contact the FCC.

7 The FCC has made it very clear to me that they are not in the health business but only
8 the frequency business. We should not need to fight to be safe in our homes, safe
9 from utility companies that are trying to bully their customers because of a \$10 billion
10 mistake.

11 AMR and "smart" meters are flawed and dangerous technology. They must be
12 recalled.

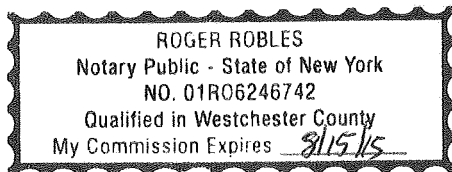
Dated this 18 day of January, 2013.

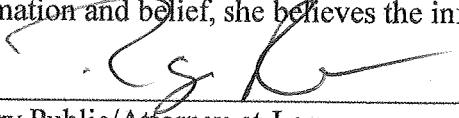


STATE OF NEW YORK
WESTCHESTER, ss:

January 18, 2013

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




Notary Public/Attorney-at-Law

Name Typed or Printed

My Commission Expires:

08/15/15

Radiation Sickness; Testimonials of Twelve People; 2013

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

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

2 A. [REDACTED]

3 [REDACTED]

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

5 A. Yes, it was installed in the Fall of 2011.

6 **Q. Did you have the smart meter removed? Please describe the circumstances of**
7 **your request or complaint to CMP and their response.**

8 A. On October 1, 2011, we wrote to CMP and asked that our smart meter be removed
9 and replaced with the conventional meter that was there prior to the installation of the
10 smart meter. Our request was based on [REDACTED]'s serious health issues and her
11 medically suppressed immune system.

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

13 A. Yes. We requested that the analog meter be replaced at no cost to us based on a
14 medical exemption, but CMP's manager of community affairs told us that CMP has
15 no choice or flexibility in changing or eliminating the opt-out charges and that they
16 would reinstall the smart meter for a \$40 one-time fee and \$12 per month in
17 perpetuity.

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

19 A. After 14 years of devastating heart disease-including two near-fatal heart attacks from
20 dissections of two of her major arteries, emergency by-pass surgery, and subsequent

1 ventricular tachycardia (deadly arrhythmia) requiring the implantation of a
2 defibrillator-[REDACTED] recently received a heart transplant at [REDACTED] Hospital in
3 [REDACTED]

4 The highly qualified medical experts at [REDACTED] Hospital,
5 including the Chief of Infectious Disease, told us that the smart meter is not without
6 risk because of [REDACTED]'s conditions and her impaired immune system.

7 **Q. Do you or any of your family members experience electromagnetic sensitivity**
8 **symptoms in proximity to radio frequency devices, such as Wi-Fi, microwave**
9 **ovens, cell phones, cordless phones, smart meters or other devices? Please**
10 **describe the symptoms and the circumstances when they occur.**

11 A. Yes. We do not use cell phones for the same reasons we do not want a smart meter at
12 our home. We use cell phones only when travelling to [REDACTED]

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

16 A. Most heart transplant patients live only 10 years. They usually do not die of heart
17 complications. They die of infections and cancers, to which they are extremely
18 vulnerable as a result of a medically suppressed immune system. [REDACTED] has little-
19 to-no immune system to fight disease of any kind. A slight cold puts her at instant
20 risk for pneumonia, which we've come close to several times. One killer virus
21 resulted in her wearing a PIK line for antibiotics in her arm for six months. She is
22 checked four times a year for multiple cancers, and has had several skin cancers

1 removed. We will not allow her to be put at increased risk for cancer, more cardiac
2 arrhythmias, or other adverse health effects from the Smart Meter.

3 We are both well informed about [REDACTED]'s medical complications and the
4 increased risks she faces when exposed to potential environmental hazards. I, [REDACTED]
5 [REDACTED], am a retired founding officer of [REDACTED]
6 [REDACTED] company. I, [REDACTED] am the author of a best-selling book [REDACTED]
7 [REDACTED], bringing national awareness to heart disease as the # 1
8 killer of American women, and I give an annual lecture at [REDACTED] Medical School on
9 immunosuppression in cardiac transplant patients for the department of [REDACTED]
10 [REDACTED] Biology.

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

14 A. The Chief of Infectious Disease at [REDACTED] Hospital told us that the
15 smart meter is not without risk.

16 **Q. Have you or any of your family members experienced symptoms or adverse**
17 **effects while in the proximity of smart meters in particular (as opposed to**
18 **multiple devices in question 6)? Describe the circumstances. At what distances**
19 **from the meter do symptoms a) appear, b) increase and c) become acute?**

20 A. After the smart meter was installed, [REDACTED] would occasionally experience dizziness
21 and more fatigue than is normal. After the smart meter was removed, these symptoms
22 disappeared.

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

3 A. The smart meter adds unnecessarily to my wife's already high health risks. My wife
4 is battling several types of cancer and the smart meter puts her at an increased risk for
5 cancer and for more cardiac arrhythmias. CMP's refusal to make accommodations
6 for [REDACTED] and other people with compromised medical conditions is unethical and
7 immoral. Being compelled to pay \$144 annually, in perpetuity in order to protect
8 [REDACTED]'s health is outrageous and it is an unnecessary hardship – especially when
9 we used an analog meter at our home for 27 years at no additional cost to us.

Dated this _____ day of January, 2013.

[REDACTED]

[REDACTED]

STATE OF MAINE
CUMBERLAND, ss:

January ___, 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: _____

1 opposed to multiple devices in question 6)? Describe the circumstances.
2 At what distances from the meter do symptoms a) appear, b) increase and
3 c) become acute?

4 A. After the smart meter was installed, [REDACTED] would occasionally
5 experience dizziness and more fatigue than is normal. After the smart
6 meter was removed, these symptoms disappeared.

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

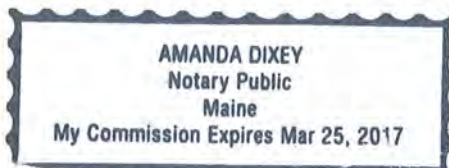
9 A. The smart meter adds unnecessarily to my wife's already high health
10 risks. My wife is battling several types of cancer and the smart meter
11 puts her at an increased risk for cancer and for more cardiac
12 arrhythmias. CMP's refusal to make accommodations for [REDACTED] and
13 other people with compromised medical conditions is unethical and
14 immoral. Being compelled to pay \$144 annually, in perpetuity in order
15 to protect [REDACTED] health is outrageous and it is an unnecessary
16 hardship – especially when we used an analog meter at our home for 27
17 years at no additional cost to us.

Dated this 16 day of January, 2013, [REDACTED]

STATE OF MAINE
CUMBERLAND, ss:

January 16, 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,



Amanda Dixey

Notary Public/Attorney-at-Law
Amanda Dixey

Name Typed or Printed
My Commission Expires: March 25, 2017



Ms. Sara J. Burns
President and CEO
Central Maine Power Company
83 Edison Drive
Augusta, ME 04336

**Subject: Request for medical exemption to have Smart Meter removed at no cost
(MPUC Docket #2010-345)**

Dear Ms. Burns:

I am writing to you regarding the Smart Meter recently installed at our home. My wife [REDACTED] and I respectfully request that this meter be removed and replaced with the conventional meter that was there prior to the installation of the Smart Meter a few weeks ago. And we request that this be accomplished at no cost to us, based on a medical exemption.

My wife [REDACTED] is recovering from a recent heart transplant

After 14 years of devastating heart disease—including two near-fatal heart attacks from dissections of two of her major arteries, emergency by-pass surgery, and subsequent ventricular tachycardia (deadly arrhythmia) requiring the implantation of a defibrillator—[REDACTED] recently received a heart transplant at [REDACTED] Hospital in [REDACTED]. She was thin, fit, only 44, and in prime health when she had her first dissection. The cause of her heart disease was an undetected, and still not defined genetic defect. There is no heart disease in her family, and she has led a lifetime of good health habits, which saved her life twice.

[REDACTED] continues to work hard at doing her bit for recovery. She is an exemplary patient, who also wrote a best-selling book [REDACTED] bringing national awareness to heart disease as the #1 killer of American women. She appeared on [REDACTED], and has become a poster-child for the American Heart Association. Despite our combined and considerable effort, however, my wife's heart transplant recovery has been complicated, requiring unscheduled medical trips to MGH, some by ambulance and helicopter.

Moreover, [REDACTED] will be forever on immune suppressants, up to 20 drugs a day. This means, her immune system is artificially put to sleep through powerful, toxic drugs (cancer producing), so that her heart will not be perceived as an invader and fought (rejected, is the medical term) by our naturally fierce white blood cells. This is where the issue of the Smart Meter comes in.

The Smart Meter adds unnecessarily to my wife's already high risks

Based on national, longitudinal data, most heart transplant patients live only 10 years. They usually do not die of heart complications. They die of infections and cancers, to which they are extremely vulnerable as a result of a medically suppressed immune system.

Your medical experts say there is no risk from CMP's Smart Meters. But my wife has an acute medical complication. Other credible experts disagree with yours. Our experts at [REDACTED] Hospital, including the chief of infectious disease, who follows [REDACTED]'s case intimately, says

[REDACTED]

that the Smart Meter is not without risk. We do not use cell phones, by the way, for the same reason that we do not want a Smart Meter.

My wife has little-to-no immune system to fight disease of any kind

A slight cold puts her at instant risk for pneumonia, which we've come close to several times. One killer virus resulted in her wearing a PIK line for antibiotics in her arm for six months. She is checked four times a year for multiple cancers, and has had several skin cancers removed. I could go on and on, but I think you get the idea. I will not allow her to be put at increased risk for cancer (or more cardiac arrhythmias) from the Smart Meter.

[REDACTED] and I understood fully the risks of cardiac transplantation when we chose this path. To wit, I am a retired founding officer of [REDACTED]-based, leading global [REDACTED] company. My wife gives an annual lecture at [REDACTED] Medical School on immunosuppression in cardiac transplant patients for the department of [REDACTED] Biology. We are fully and intelligently engaged in this project of new life.

I am pleading with you, Ms. Burns

Please understand my concern and support my request for a medical exemption. We already have a CMP Medical Tag on the meter at our home and a red cross marker on the transformer providing service to our home. I cannot accept the medical prescription of CMP lawyers and doctors for the ongoing medical care and treatment of my wife. And to have to pay \$144 annually in perpetuity for the reinstallation and use of an analog meter that served our home at no cost for 27 years is unconscionable. [REDACTED]'s heart transplant alone cost almost \$400,000. Would you like me to add up all the hospitalizations as well as the cost of her meds—not to mention the cost of peace of mind? How can I allow you to install something that puts at risk the very life we are fighting to save?

Of our married life, 65% has been spent in hospitals. We have been given a huge gift: a heart that once belonged to someone else, adding to our sense of responsibility, to our determination to lead the healthiest lives possible. Kindly grant us an extension of our already extant medical exemption with CMP and at no cost to us. Thank you for your compassionate consideration.

Sincerely,

[REDACTED]

Copy to: Karen Geraghty, MPUC

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

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

2 A. [REDACTED]
3 [REDACTED]

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

5 A. No, we opted out and kept our old meter.

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

7 A. Yes, unfortunately. We are afraid of the consequences if we don't.

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

9 A. We have many concerns about smart meters. Although they are not based on any
10 diagnosed physical or medical conditions we currently have, I am concerned that
11 increased exposure to radio frequency radiation over time could result in our
12 becoming sensitive. I am well aware that this type of radiation is classified as a
13 class 2B carcinogen by the World Health Organization. Having a very strong
14 history of cancer in my family, I work hard to avoid carcinogens or anything that
15 could be hazardous to me or my family. Our 1st grade daughter, for example,
16 does not attend the primary school that is right over our back fence because it has
17 Wi-Fi. I have read that young children are particularly susceptible to the harmful
18 effects of radio frequency radiation as their skulls are thinner and there is more
19 fluid in their brains and they are still developing. The only school we could find

1 for her that didn't have Wi-Fi in the building she would be in is 25 miles away.
2 Consequently we are driving several thousand extra miles a year and having to
3 come up with private school tuition just to keep her safe.

4 Unfortunately, the school recently installed Wi-Fi in her building. I have
5 given the school administrators information about Wi-Fi and they are in the
6 middle of a school-wide conversation about wireless and I expect a decision soon
7 about what they will be doing as I have stated we wouldn't be back if there
8 continues to be Wi-Fi in her building.

9 As for myself, I choose not to work in an office or workplace that is
10 equipped with Wi-Fi, which is one of the reasons I am working as a driver, using
11 my own vehicle where I am safe from this type of radiation.

12 Having a smart meter on our home would directly conflict with all of our
13 efforts that we take to ensure our safety. These efforts are not convenient. They
14 are costly and time consuming but we feel they are the only safe choice in today's
15 world. While we cannot easily control our exposure in public places, our home is
16 our safe haven. Having a meter on our home would undo all that we do to limit
17 our exposure to this radiation.

18 **Q. Do you or any of your family members experience electromagnetic sensitivity**
19 **symptoms in proximity to radio frequency devices, such as Wi-Fi, microwave**
20 **ovens, cell phones, cordless phones, smart meters or other devices?**

21 **A.** I experience occasional dizziness if I talk on a cell phone, which I use very rarely.
22 We have no wireless devices in our home. In public I try to avoid places with Wi-

1 Fi, etc. due to health concerns. Although I do experience occasional dizziness
2 when I am out, I couldn't say whether or not that is due to radio frequency
3 radiation as it is not always clear where it is. I will note however that I spent the
4 night at a relative's home one night and was under the impression that they did not
5 have Wi-Fi. I was wide awake most of the night, as if it were the middle of the
6 day, and I had no idea why since I usually sleep soundly. The next day I learned
7 that they did indeed have Wi-Fi and that the router was very close to the bed I was
8 sleeping in.

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

11 **A.** No, I have not sought an evaluation.

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

14 **A.** Our concern with smart meters goes beyond health. We feel these meters with
15 their wireless transmissions pose a serious risk to our safety. These meters are
16 hackable. The FBI states that someone with only a moderate level of computer
17 knowledge and possessing low-cost tools and software that's easily available
18 online would likely be able to compromise smart meters. Having a smart meter
19 would put our entire family at risk from invasion of privacy, unauthorized access
20 to our personal information and information about our habits and whether or not
21 we are home, and the threat of an attack on the smart grid which could shut off our
22 power. The smart grid is vulnerable, according to former CIA Director James

1 Woolsey. These concerns, coupled with health concerns and the health and safety
2 concerns echoed by major agencies and organizations which are designed to
3 protect us, render these meters anything but smart for our family.

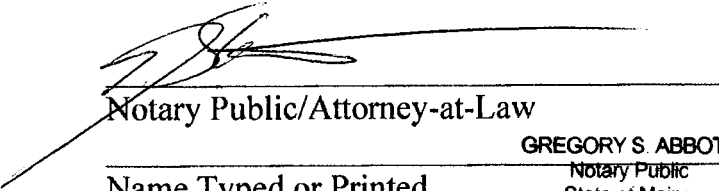
Dated this 22nd day of January, 2013.

[REDACTED]

STATE OF MAINE
CUMBERLAND, ss:

January 22nd 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

GREGORY S. ABBOTT

Name Typed or Printed

Notary Public
State of Maine

My Commission Expires: My Commission Expires January 29, 2018

**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. The meter was installed on 10/26/10 when I was not home. When I came home
6 from an errand that day, the burglar alarm had gone off and the computer in the
7 house was screwed up. The installers left a note that I found in the driveway. I
8 called CMP to complain about the alarm and computer. They reimbursed me for
9 the cost to fix the computers.

10 **Q. Did you experience any unusual symptoms after the meter was installed?**

11 A. Not immediately, but my energy level was gradually diminished and I began
12 having regular headaches. I had never had headaches before.

13 **Q. Did you ask to have the smart meter removed?**

14 A. Not right away. I did not make the connection between my symptoms and the
15 smart meter until I was talking to my neighbor about my headaches and low
16 energy. He mentioned the smart meter and I realized that it was a potential cause
17 of the symptoms. I called CMP on 3/8/11 and complained about constant
18 headaches and low energy. CMP scheduled to remove the smart meter and replace
19 it with the analog meter on 3/21/11.

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

2 A. No.

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

4 A. It was the smart meter that I believe gave me headaches and “zapped” my energy
5 level. I woke up every morning with a low grade headache and felt tired all of the
6 time.

7 **Q. Do you experience headaches or other symptoms when in proximity to other**
8 **radio frequency devices, such as Wi-Fi, microwave ovens, cell phones, or**
9 **cordless phones?**

10 A. No, I seldom use my computer, microwave oven or cell/cordless phones, and if I
11 do it is for a very short period of time.

12 **Q. Did the symptoms subside after they removed the smart meter?**

13 A. Yes. After a short period of time I realized I no longer had headaches when I
14 woke up. My energy level is back to normal.

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

17 A. No. It just slowed me down and gave me aggravating headaches.

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

20 A. Many of my neighbors and friends became “sick” after the smart meter was
21 installed. I will not pay CMP to abstain from putting a smart meter on my home,

1 Q. Do you experience headaches or other symptoms when in proximity to other
2 radio frequency devices, such as Wi-Fi, microwave ovens, cell phones, or
3 cordless phones?

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5 and if I do it is for a very short period of time.

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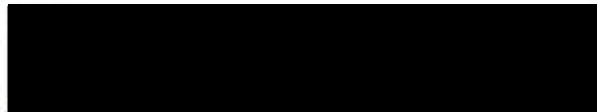
9 Q. Has your experience with smart meters caused any disruptions in your daily
10 living? Please describe the circumstances?

11 A. No. It just slowed me down and gave me aggravating headaches.

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

14 A. Many of my neighbors and friends became "sick" after the smart meter was
15 installed. I will not pay CMP to abstain from putting a smart meter on my
16 home, that is harmful to me and my family and friends; and I don't want or
17 need. I consider that to be extortion.

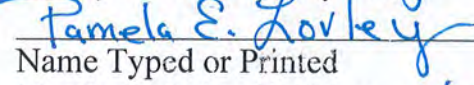
Dated this 22 day of January, 2013.



STATE OF MAINE
CUMBERLAND, ss:

January 22, 2013

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


Notary Public/Attorney-at-Law

Name Typed or Printed
My Commission Expires: 6/21/2014

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

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

2 A. [REDACTED] I am a
3 retired [REDACTED] and a retired
4 [REDACTED]

5 **Q. Was a Sensus AMI smart meter installed at your Mother's (Helga Felicijan)**
6 **residence? If so, state approximately the date when it was installed.**

7 A. Yes, a Sensus AMI smart meter was installed at my Mother's residence. The
8 smart meter was installed approximately September of 2009.

9 **Q. Is your Mother paying an opt-out fee?**

10 A. No. My Mother would like to opt-out but that was not available until 2010.
11 Further, she has no option for a Non-RF emitting smart meter option so it does
12 her essentially no good to opt out.

13 **Q. If a smart meter has not been installed, or if one was installed but removed**
14 **and replaced by an analog meter at your request, please describe the**
15 **circumstances of your request or complaint to CMP and their response.**

16 A. My Mother asked for an opt-out based upon the Americans with Disabilities Act
17 due to her problems with racing heart. Her utilities opt-out option still uses RF
18 radiation technologies and will not help her. They have not answered her ADA
19 request and it has been over 9 months. My mother doesn't want a smart meter

1 because it has increased her irregular heart rate hospitalizations. Since a faraday
2 cage has been put around her smart meter her irregular heart rates have reduced.
3 However, she now requires more medication to keep them in check as it is
4 impossible to avoid smart meters in her town.

5 **Q. Have you had a problem with the Sensus Smart Meter installed at your**
6 **Mother's house?**

7 **A.** Yes. I visited her for a little over 2 weeks in 2010. At the time, I didn't have
8 smart meters in my area. While at my Mother's home I had intense headaches,
9 trouble sleeping, and heard constant buzzing/humming sounds. My mother's
10 smart meter is installed approximately 6 feet from common living areas. I didn't
11 realize that my Mother had a smart meter installed just outside the
12 bedroom/kitchen area where I spent much of my time. I noticed that when I
13 drove home along the rural Columbia River my symptoms all left me. These
14 symptoms did not return until Southern California Edison began major
15 deployments of Itron Smart Meters in my area.

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

17 **A.** I do not and have never had a smart meter on my home because I paid an opt-out
18 fee of \$75.00 and \$10.00 per month to read the meter. However, I hear the
19 buzzing and get headaches from the smart meters installed in my area. I have
20 approximately 72 smart meters installed in the other townhomes in my complex.
21 The meters are installed approximately 45 feet from my home.

1 **Q. Please describe why you do not want a smart meter at your residence.**
2 **Identify any health concerns you may have about smart meters and whether**
3 **these concerns are based upon any specific physical or medical conditions**
4 **that you or any of your family members may have.**

5 **A. I don't want any smart meters on my home or anywhere around my home because**
6 **I can hear a constant buzzing/humming sound from the meters 24 hours a day.**
7 **When these meters transmit, I get intense migraine type headaches that last for**
8 **the duration of the transmissions (generally 15 seconds). The closer I am to the**
9 **smart meter when it transmits the more intense the pain is. I also find that the**
10 **smart meter transmissions wake me up in the middle of the night generally**
11 **around 3:30 a.m. I know several people who have the same reactions to the**
12 **meters as I do and get awakened at around 3:30 a.m. as well.**

13 **Q. Have you tried to verify that it is actually the smart meters causing your**
14 **health problems?**

15 **A. Yes. Before the smart meters were deployed throughout the area, I could go out**
16 **to smart meter free zones and not have any symptoms. As soon as I get back to**
17 **the smart meter area I hear the buzzing/humming immediately. I did this at least**
18 **7 times in order to verify that it was indeed the smart meters that were giving me**
19 **the buzzing/humming and headache problems. I have also noted that recently the**
20 **rural areas around me have been deployed. I have noted that as I travel through**
21 **the hills I can tell when the RF signal weakens and when I almost cannot hear it,**

1 it will increase again to full strength and within a few feet I can see the repeater
2 infrastructure on the power poles.

3 **Q. Do you or any of your family members experience electromagnetic sensitivity**
4 **symptoms in proximity to radio frequency devices, such as Wi-Fi, microwave**
5 **ovens, cell phones, cordless phones, smart meters or other devices? Please**
6 **describe the symptoms and the circumstances when they occur.**

7 A. My mother has trouble sleeping and has rapid heart rates so intense that she has
8 been hospitalized several times. I hear a constant buzzing/humming that drives
9 me crazy after a while. I also have sleep disturbances. Prior to smart meters I
10 never had a problem falling asleep. I get severe headache pain similar to a
11 migraine when the meters transmit data. I have more severe joint pain, my skin
12 itches, and I am more fatigued and have troubling concentrating. My neighbor
13 has had headaches and has lost the hearing in one of her ears due to inflammation.
14 Prior to the smart meters, I didn't have these kinds of symptoms. Prior to the
15 smart meters, my mother had very few (1-2 per year) heart irregularities. That
16 has risen to at least 4 times the rate prior to smart meters.

17 My mother and I have cell phones with no internet abilities and low RF
18 emissions. Our phones are not used very frequently as they are primarily for
19 emergency use. We both have cell phone shields for our phones. My mother and
20 I do not use the microwave oven, don't have cordless phones, and don't have Wi-
21 Fi. I live at least 1300 feet from any cell tower. My mother's closest cell tower is
22 approximately 10 miles away.

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

4 A. My Mother has been diagnosed with an irregular/racing heart rate, high blood
5 pressure, diabetes. I have COPD and peripheral neuropathy.

6 Q. Have you or any of your family members experienced symptoms or adverse
7 effects while in the proximity of smart meters in particular (as opposed to
8 multiple devices in question 6)? Describe the circumstances. At what
9 distances from the meter do symptoms a) appear, b) increase and c) become
10 acute?

11 A. While spending approximately 2-3 hours putting a faraday box around my
12 Mother's smart meter that sits on a pole, my brother got a severe headache, felt
13 nauseous, had trouble sleeping that evening, and felt as if he had flu-like
14 symptoms. He has never had a reaction to RF radiation like that before. Once he
15 left the proximity of the box and it was incased in the faraday cage with only a
16 small opening (2 x 2 inches) pointed away from the home he began to feel much
17 better. This was an interesting reaction because it didn't necessarily believe that
18 the smart meter could be a problem. After his experience, he is convinced that
19 smart meters are dangerous. He believes that nothing should be allowed on a
20 home that makes people ill.

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

1 A. My boarder terrier reacted negatively to smart meters. My dog was partially
2 blind and deaf but when we would walk within 10 feet of a smart meter he would
3 try to run as if he was in pain or scared. Once we got about 50 feet away from the
4 smart meter, he would relax.

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

8 A. I have noted that within hours of smart meters being totally deployed in my
9 neighborhood my symptoms got much worse. I investigated the situation because
10 I didn't notice the deployments as I heard the buzzing first. When I investigated I
11 saw that my neighborhood was deployed. Prior to the CPUC allowing SCE to
12 deploy, most of my neighbors had been on the delay list for installation. The
13 primary reason they don't opt-out now is because they don't have the extra
14 money in this economy to pay the opt-out fees.

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

17 A. My daily living is severely disrupted. I don't sleep well and have trouble
18 functioning properly during the day. When the transmissions occur the pain is so
19 intense I stop what I'm doing. The constant buzzing/humming drives me crazy. I
20 used to be able to drive into the hills (20-30 miles away) for relief but as everyone
21 around me is deployed the pain is only more intense and there is no place to go to
22 get away from the sounds.

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

3 A. I believe that smart meters and RF radiation have NEVER been properly
4 evaluated for safety. This is particularly true for women, children, and the unborn
5 that are generally more susceptible to toxins in the environment. I believe that
6 smart meters are not safe and that it is cruel and heartless to expose people to
7 constant pain and suffering for something that doesn't even save energy.

8 I don't have a smart meter but my neighbors smart meter RF signals
9 invade my home. I believe that this violates my home and I have had my
10 property and safety taken from me without compensation or permission.

11 I know that human bodies don't experience pain without cause. Thus, I
12 know that there will be some kind of long term health consequences to all these
13 smart meter deployments. As a teacher who is in special education and has seen
14 children with disabilities on the rise, I believe that RF radiation may play a big
15 part of the problem. I know I have trouble concentrating around these RF signals
16 and children are more sensitive and would likely have more problems. Children
17 just don't tell us often because they don't know any other reality. Thus, they
18 don't realize the buzzing and headaches are not normal.

19 I believe that no public utilities commission should be allowed to rule on
20 any RF issue if they have any connections to industries that are RF technology
21 producers or users.

I believe that Utility Commissioners should be fitted with a device that makes them hear a buzzing 24 hours per day, makes their heart race uncontrollably so that they must be hospitalized at least 1 time per week, gives them headaches 4 times per hour, wakes them up in the middle of the night, and leaves them exhausted. I believe that after just 1 month of this, they would outlaw every smart meter in their state. These are not mild symptoms but ones that devastate and destroy your life. You live but not well and not with a quality of life that we are guaranteed by the Constitution of the United States. Smart meters are dangerous and over time I am convinced that they will increase health care costs in this country.

Dated this 31st day of January, 2013.

STATE OF CALIFORNIA
ORANGE, ss:

January 31, 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,

See Attached

Notary Public/Attorney-at-Law

Name Typed or Printed

My Commission Expires: _____

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

USCA Case #20-1025 Document #1869762 Filed 11/04/2020 Page 429 of 494

State of California

County of

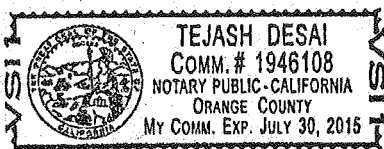
Orange

On 1/31/13 before me,

Date

TEJASH DESAI, NOTARY PUBLIC

personally appeared



who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Place Notary Seal Above

Signature

Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document:

Document Date:

Number of Pages:

Signer(s) Other Than Named Above:

Capacity(ies) Claimed by Signer(s)

Signer's Name:

☐ Individual

☐ Corporate Officer — Title(s):

☐ Partner — ☐ Limited ☐ General

☐ Attorney in Fact

☐ Trustee

☐ Guardian or Conservator

☐ Other:

Signer Is Representing:

Signer's Name:

☐ Individual

☐ Corporate Officer — Title(s):

☐ Partner — ☐ Limited ☐ General

☐ Attorney in Fact

☐ Trustee

☐ Guardian or Conservator

☐ Other:

Signer Is Representing:

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

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

2 A. [REDACTED]

3 [REDACTED]

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

5 A. No

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

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

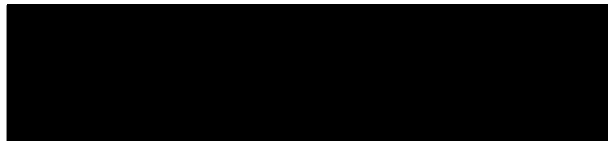
19 A. Yes.

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

1 A. My experience with smart meters and digital meters has been everywhere but my
2 own house – my work places, in businesses, at the library, in government
3 buildings, at the houses of friends, in churches. My own house is still a relatively
4 safe place to be because I have an analog meter, which has no negative impact on
5 me. The houses around me have smart meters and I am impacted by those meters.
6 One does not need a smart meter on ones own house to be impacted by the radio
7 frequencies emitted by tens of thousands of smart meters in a community.

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

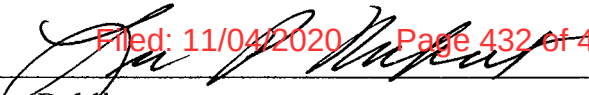
11 A. Yes. I submit the attached sworn testimony in support of complainants Ed
12 Friedman, et al in their case before the Maine PUC as evidence that smart meters
13 are not safe.



STATE OF MICHIGAN
WASHTENAW, ss

January 28, 2013

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



Notary Public

LISA P REIFERT
Notary Public, State of Michigan
County of Washtenaw
My Commission Expires Feb. 24, 2018

Name Typed or Printed

My Commission Expires: _____

EXHIBIT A

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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

QUALIFICATIONS AND DIRECT TESTIMONY OF



QUALIFICATIONS OF [REDACTED]

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

3 **A.** I do.

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

5 **A.** [REDACTED]

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

7 **A.** That of Intervenor Cynthia Edwards.

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

9 **A.** I take my electric service from Detroit Edison. I have been affected by the smart meter
10 installation in the community in terms of my health

DIRECT TESTIMONY OF Cynthia Edwards

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 Intervener Cynthia Edwards Petition for Intervention, to some or all persons
5 such that Detroit Edison and the Commission must not require those who are or who are
6 likely to be so harmed to have a smart or digital meter placed on their home or place of
7 business or to be otherwise deprived of rights and liberties, as outlined in Intervenor
8 Edwards Petition for Intervention, by the deployment of the advanced metering
9 infrastructure, smart meters, or digital meters, and, in the alternative, that such persons
10 must be able to avoid such harm to their person and property without being charged a fee.

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

12 A. March 31, 2012.

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

14 A. I have worked at [REDACTED] since 2008. I also have been a landscape
15 gardener for 35 years, and am a receptionist at [REDACTED]

16 **Q. Do you have a smart meter on your home?**

17 A. No

18 **Q. When as the first time you learned about smart meters?**

19 A. I saw a magazine article sometime in 2011 talking about improving the electric grid which
20 mentioned smart meters, and also talked about how they were going to save energy and
21 reduce energy consumption, of which I am very in favor of.

22 **Q. So prior to reading this article, you knew nothing about smart meters?**

23 A. No.

24 **q. Did you have any concerns about smart meters at that time?**

25 A. No. They seemed like a great idea.

26 **Q. Why did you become concerned about smart meters?**

27 A. I received an email from a friend with information saying there were health problems
28 associated with smart meters and there were issues that the electric companies weren't
29 addressing, but I didn't pursue looking into it. I forgot about it until I received a letter from
30 DTE saying a smart meter was going to be installed on my house within a few weeks.
31 Because I had heard more negative information in the meantime, and I was becoming

1 concerned, I attended a talk at a bookstore in Ann Arbor a few weeks later, which presented
2 information on the health impact of smart meters and radio frequencies. I became very
3 concerned for my health and decided to learn more.

4 **Q. What did you do then?**

5 A. I called DTE to say I didn't want a smart meter and had a 45 min argument on the phone
6 with a customer service person. The assured me there were no problems with the meters
7 and said there was nothing I could do to stop the installation even if my doctor said I
8 shouldn't have one because of my health issues. I then sent a certified letter to DTE saying
9 not to install a smart meter on my house because I had health issues that it would
10 negatively impact and locked my meter. I then called a Mrs. Curtis at DTE and discussed
11 the situation. She told me she would put me on an "opt-out" list, but that the details of that
12 were yet to be decided. This was in mid-late June.

13 **Q. What are the health issues you refer to?**

14 A. I have a compromised immune system and digestive system, an irregular heartbeat, and
15 have had fatigue and sleep issues. I have hypothyroidism which I take medication for. I
16 have worked hard and at great expense for many years to build my health and strength so
17 that I can functional normally in the world. My doctor said it would not be safe for me to
18 have a smart meter on my house. She also told me to limit my exposure to all radio
19 frequency devices.

20 **Q. Have you noticed any effects from smart meters?**

21 A. When I go into buildings with smart meters I experience heart palpitations, tightness in my
22 chest and head, headaches, mental confusion, my ears ring at a very high level

23 **Q. How do you know it is smart meters and not something else?**

24 A. Before the installations of smart meters in Ann Arbor, my health symptoms were minor and
25 under control. I was doing hard physical labor without problems. Late this spring I started
26 having an increase in heart issues, increased fatigue, and cognitive issues with memory and
27 fuzzy thinking at work. And I started having headaches, which I rarely ever had. This was
28 all before I knew anything about smart meters and their impact. My symptoms have
29 increased steadily since then from exposure outside of my house. So I am extremely
30 worried about a smart meter being installed on my house and these symptoms becoming
31 worse. From what I have researched, the physical impact is cumulative and does not just go
32 away, but continues to degrade health.

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

1 A. I have always been negatively impacted by fluorescent lights, which cause me to feel
2 fatigued. With what I have learned about radio frequencies I think I am impacted by radio
3 phones and just never made the connection to what I was experiencing.

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

6 A. Not in a big way yet. I do notice I am a lot more tired now that there are smart meters in my
7 work place and virtually everywhere I go. I have had to call in sick several times since
8 spring with terrible headaches as well. If my symptoms increase I could be at risk of losing
9 my job and not having the energy to do physical labor.

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

12 A. Somewhat. I find I don't enjoy going out any more because I am feeling the impact of the
13 meters and just don't want to be exposing myself to the damage it is doing.

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

17 A. Yes. I can't stay in the library for very long as my heart starts acting up and my head gets
18 tight, sometimes I get a headache, and my thinking gets fuzzy.

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

21 A. No.

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

24 A. Yes, when I go to a place with a smart meter because of the physical impact. I don't want to
25 be there because I don't feel well.

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

28 A. I notice the impact but I go anyhow, because what else can I do?

29 **Q. DTE has asked the Commission for approval of a plan that would not allow anyone to keep**
30 **their analog meter. Instead, those choosing to opt out of smart meter installation, if an opt-**
31 **out is instituted, will be forced to take a 3-watt digital meter on their house. Have you had**
32 **experience with the 3-watt digital meter?**

33 A. Yes.

34 **Q. What was that experience like?**

1 A. I was recently in a house with the 3-watt digital meter. After I had been there a while my
2 heart began pounding, my head felt buzzy and very tight, and my ears were ringing very
3 loudly. I took my blood pressure and it was 145 over 75. Because I have chronically low
4 blood pressure (often less than 100) this was quite alarming. , The woman who lives there
5 had also been experiencing severe problems which included increased blood pressure. If
6 the same meter was installed on my house I would be in big trouble.

7 Q. Do you have anything else to say regarding smart meters?

8 A Yes. I don't want to have to pay for something that is endangering my health. If these meters
9 have to be installed then I expect DTE to install mitigation devices to protect me from the
10 negative impacts. If I'm to have no choice then DTE has to bear the cost of protecting me.
11

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

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

2 A. [REDACTED]

3 [REDACTED]

4 [REDACTED]

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

7 A. Yes, September 2011.

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

11 A. My wife was developing acute hypersensitivity to the smart meter and we
12 requested its removal. It began with ringing in her ears while watching TV
13 sporadically. She didn't watch often because she was often away from home
14 working on projects in the field. [Our TV is located in our living room with large
15 window facing the neighbor's smart meter about 28' away.] [REDACTED] went to Texas
16 for 5 weeks in March and April 2011, and upon return home her ear ringing
17 escalated such that she sought medical attention. With greater exposure to TV
18 now that she was home in August and September, 2011, the ringing escalated as
19 did her inability to sleep well.

1 Finally it became too much and we called CMP to have the smart meter
2 removed and replaced with an analog meter. Throughout, we kept CMP advised
3 of her reactions and they were for the most part dismissive. CMP removed the
4 smart meter on 10 October, 2012.

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

6 A. Yes.

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

8 A. We do not want a smart meter because we are concerned over mounting health
9 problems related to the meters which we did not fully understand. Unfortunately
10 we both had become ill by the time we were aware of the magnitude of the risks
11 and serious devastating consequences to our health.

12 Our work has been adversely affected and related stress has been profound.

13 My wife had also had Lyme Disease and was treated with antibiotics over
14 the previous year making her immune system weaker and more susceptible to the
15 assault from smart meters.

16 I experienced ringing and pressure in both ears and inability to sleep for
17 days and weeks. I have lost 11 pounds. The symptoms, for both me and my wife,
18 became so bad we had to abandon our house of 33 years.

19 [REDACTED] has developed a horrible hypersensitivity to radiofrequency waves
20 and sound in general. She has ear ringing in her left ear ranging from light ringing
21 to intense when near smart meters or in vicinity of other RF devices, like in
22 airports shopping areas in town and on flights. She has lost her ability to sleep.

1 [REDACTED] now has tingling and burning in both hands when close to smart meters, or
2 other wireless devices emitting RF. Her hands and fingertips turn red and or
3 become covered in red blotches. She now suffers from heart palpitations and has
4 lost 10 pounds. In August, 2012, she started to feel "lightning bolts" in her left
5 eye following the viewing of Democratic convention on TV. It may be that our
6 TV, facing the living room window and the neighbor's smart meter, was reflecting
7 emissions from their meter directly to our eyes. Around this time all symptoms
8 increased and we had the meter removed in October.

9 **Q. Did your symptoms or adverse reactions cease when the smart meter was removed?**

10 A. Not at all. When our meter was removed, the situation seemed to grow worse or at
11 least our sensitivity was now in a more acute stage. Though my wife had
12 repeatedly asked if I heard the ringing I did not until our meter was removed. Our
13 neighbor's smart meter is about 28' away directly in line with our living room
14 window. Our symptoms were the worst in our living room and our bedroom,
15 which is directly above the living room. It became impossible to remain in either
16 room as our conditions of sensitivity became more acute in October, November
17 and December, even after our meter was removed. Our own smart meter was on
18 the opposite side of our house from our neighbors.

19 When our symptoms did not improve following our meter removal, this led
20 us to believe the neighbor's meter was more detrimental to our health than our
21 own had been. In fact there was a several day period when the neighbor's meter
22 was removed and temporarily swapped back to an analog meter and during this

1 time our symptoms lessened. When the neighbor's smart meter was replaced, our
2 symptoms intensified.

3 Even with the entire living room covered with 2 layers of grounded
4 aluminum and a 4x8' sheet of corrugated metal outside the window which is also
5 covered with grounded aluminum we still experience ear ringing only less so. The
6 ear ringing is much more pronounced now upstairs in our bedroom and affects us
7 even in a very short period. We have noticed the ringing appears worse during
8 inclement weather with clouds and or rain. In October and November upon
9 returning from work the ringing would begin upon entering our home.

10 **Q. Have you received medical attention for your symptoms?**

11 A. We both had complete physicals with blood work at [REDACTED] Family Medicine.
12 See Exhibits A and B. No middle ear or ear infections noted. Caregiver was
13 unaware of smart meter issues. We both received intensive acupuncture
14 treatments in November and December with the acupuncturist recognizing the
15 seriousness of our conditions, the similarity to acute toxicity cases observed in
16 other patients and the assault to our health. See Exhibit C

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

19 A. Recommendation to minimize time in our home and to get out of and stay out of
20 this toxic RF environment as soon as possible. Recommendation was also to take
21 things one step at a time because as devastating as the problem is, it is
22 overwhelming. Taken as a whole, the stress would make us weaker and unable to

1 deal with the ravages of the problem. So, our coping with this has been
2 incremental, day by day in survival mode.

3 **Q. Has your experience with smart meters caused any disruptions in your daily living?**

4 **Please describe the circumstances?**

5 A. Yes! Our lives have been devastated. It has affected our health and our
6 [REDACTED] business. We have had to leave our home with 4 cords of wood put
7 away in the barn for winter and the garlic we planted for next year. Everything in
8 our lives has been adversely affected, including relationships within our
9 community and with our neighbors. Our lives have been totally
10 interrupted/imploded and become surreal. We could never have imagined
11 something this devastating could happen to us.

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

14 A. It is unbelievable these problems are occurring with the PUC-sanctioned CMP
15 wireless RF meters. People's lives, our lives, have been devastated with traumatic
16 effects, perhaps leading to life-long disabilities. It is no exaggeration to say this
17 experience has been torture for us. We could never have imagined this would
18 happen to us; our health and work destroyed and our home of 33 years becoming
19 toxic to us. The whole thing has been surreal in the extreme.

20 The belittling of our health concerns we repeatedly reported to CMP has
21 been one of the worst if not the most horrendous nightmares of our lives. To not
22 be accountable for their product [smart meters] and simply remove it from the

1 neighbor's [with such health concerns raised] is unconscionable. We have
2 bounced from client's homes, friend's houses and our tents in sub-freezing
3 temperatures for months and CMP has known this every step of the way.

4 We were forced to leave our home of many decades while CMP repeatedly
5 tells us there is nothing they can do and that the meters are safe. Home is where
6 the heart is, it is a sacred space for all of us. For us, that home was destroyed.

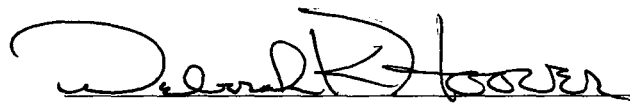
Dated this 14 day of January, 2013.



STATE OF MAINE
WALDO, ss:

January 14, 2013

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



Notary Public/Attorney-at-Law

DEBORAH K. HOOVER

Name Typed or Printed

My Commission Expires: Aug 17, 2019

WINTERPORT FAMIL MEDICINE (A Division of Sunbury Primary Care)

Exhibit
Page No. 528

NAME: [REDACTED]		CHART # [REDACTED]			
DATE	1/18/18	VS	T: 97.9 BP: 100/70 P: 74 Wt: 126.2 Ht: [REDACTED]		
Visit Type	☐ FU ☐ D W M ☐ Acute ☐ Hosp/ER FU ☐ CPX ☐ Consult ☐ Other				
C	☒ New ☐ Estab Initials: [REDACTED]				
C	☒ poss ear infection				
HPI	☐ Location ☐ Quality ☐ Severity ☐ Timing ☐ Duration ☐ Context ☐ Modifying Factors ☐ Assoc S&S Brief: Acute problems: 1-3 Elements or 1-2 Estab Problems Extended: Acute Problems: 4+ Elements or 3+ Estab Problems				
? ear infection feels swollen - took tylenol - helped some @ Daygym @ C/C/C. No pain in dentals - just cleaned still has battling lymph disease. she has hand itchy, burning pain & @ eye pain. she is due to see Dr. Hersh shortly.					
SH	Smoker: Current Former ☒ PPD: [REDACTED] ETOH: Y ☒ Exposure: Y ☒ Marital Status: S ☒ M ☐ D ☐ W Occupation: [REDACTED]				
FH	☐ No Change-See:				
PMH	☐ No Change-See: Immunizations, Surgery, Trauma, Illnesses, Hospitalizations				
ALLERGY	☐ No Known Drug Allergies ☒ No Change-See: 1/37				
MEDS	☒ No Change-See: 1/37 ☐ No Medications				
EXAM	NL	See Note	☒ No Distress		
ORGAN SYSTEMS					
Const					
Eyes					
ENT/M					
CV					
Resp					
GI					
GU					
MS					
Skin					
Neuro					
Psych					
Heme					
Lymph					
Immun					
BODY AREAS					
Head					
Neck					
Chest					
Breast					
Abd					
Gen					
Back					
Extrem					
Checkmark = Exam					
ROS	NL	ABNORMAL	See Note		
Const		☐ Fever ☐ Lethargy ☐ Distress ☐ Sleep			
Eyes		☐ Vision ☐ Pain ☐ Redness ☐ D/C			
ENT/M		☐ Hearing ☐ ST ☐ Pain:			
CV		☐ CP ☐ Palpitations ☐ Syncope ☐ Ankle Swelling			
Resp		☐ SOB ☐ DOE ☐ Cough ☐ Wheezing			
GI		☐ Constip ☐ Diarrhea ☐ Indig ☐ Appetite ☐ NV			
GU		☐ Dysuria ☐ Hematuria ☐ Nocturia ☐ Abnl Menses			
M/S		☐ Swelling ☐ Stiffness ☐ Pain:			
Skin		☐ Rash ☐ Itching ☐ Mass ☐ DC ☐ Jaundice			
Breast		☐ Weakness ☐ Dizziness ☐ Confusion			
Neuro		☐ Depression ☐ Anxiety ☐ Panic Disorder			
Psych		☐ Heat/Cold Intol ☐ Goiter ☐ Hair Loss			
Endo		☐ Lymphadenopathy ☐ Bruising			
Heme		☐ Hives			
Lymph					
Allergy					
Immun					
#	ASSESSMENT	E = Estab/Chronic N = New M = Minor/Self Limited S = Stable U = Unstable W = Work Up Needed	#	PLAN	RTC: D W M PRN
	@ pre-auricular cellulitis ? lymph disease			Kepler 500 7 P O T ID x 14 days Apply warm moist towels 3-4 x day Argon offered her appt @ ED but she declines - she will see me again in 2 weeks let me know how she would like to proceed	
				Health Maintenance	
				☐ Mammo ☐ Flu Vax ☐ Pneumovax ☐ dT ☐ Sern Colonoscopy ☐ B Density ☐ PSA	
				☐ SL/M = 1 ☐ Each Est Prob = 1 ☐ New Prob - No ☐ New Prob ☐ Review/Order Lab, ☐ EKG, XR, Oxi = 1 ea ☐ Indep Rev ☐ Image = 1 ☐ Discuss ☐ Obtain Old ☐ Records = 1 ☐ Summary/Review Old Records or ☐ Obtain Additional Hx = 2 (Specify)	
				☐ Counseling/Coordination > 50% (C/C Time min/Total Time: min)	
				☐ SL/M = 1 ☐ Each Est Prob = 1 ☐ New Prob - No ☐ New Prob ☐ Review/Order Lab, ☐ EKG, XR, Oxi = 1 ea ☐ Indep Rev ☐ Image = 1 ☐ Discuss ☐ Obtain Old ☐ Records = 1 ☐ Summary/Review Old Records or ☐ Obtain Additional Hx = 2 (Specify)	
				☐ Counseling/Coordination > 50% (C/C Time min/Total Time: min)	
				☐ SL/M = 1 ☐ Each Est Prob = 1 ☐ New Prob - No ☐ New Prob ☐ Review/Order Lab, ☐ EKG, XR, Oxi = 1 ea ☐ Indep Rev ☐ Image = 1 ☐ Discuss ☐ Obtain Old ☐ Records = 1 ☐ Summary/Review Old Records or ☐ Obtain Additional Hx = 2 (Specify)	
				☐ Counseling/Coordination > 50% (C/C Time min/Total Time: min)	
				☐ SL/M = 1 ☐ Each Est Prob = 1 ☐ New Prob - No ☐ New Prob ☐ Review/Order Lab, ☐ EKG, XR, Oxi = 1 ea ☐ Indep Rev ☐ Image = 1 ☐ Discuss ☐ Obtain Old ☐ Records = 1 ☐ Summary/Review Old Records or ☐ Obtain Additional Hx = 2 (Specify)	
				☐ Counseling/Coordination > 50% (C/C Time min/Total Time: min)	
				☐ SL/M = 1 ☐ Each Est Prob = 1 ☐ New Prob - No ☐ New Prob ☐ Review/Order Lab, ☐ EKG, XR, Oxi = 1 ea ☐ Indep Rev ☐ Image = 1 ☐ Discuss ☐ Obtain Old ☐ Records = 1 ☐ Summary/Review Old Records or ☐ Obtain Additional Hx = 2 (Specify)	
				☐ Counseling/Coordination > 50% (C/C Time min/Total Time: min)	
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				☐ Counseling/Coordination > 50% (C/C Time min/Total Time: min)	

FAMILY MEDICINE (A Division of Primary Care)

NAME: [REDACTED] CHART # [REDACTED]

DATE: 5/11/20 VS: T: BP: 110/76 P: 62 Wt: 123.8 Ht: 5'10" V: A: S: O: D:

Visit Type: ☐ FU ☐ O ☐ W ☐ M ☒ Acute ☐ Hosp/ER FU ☐ CPX ☐ Consult ☐ Other ☐ New ☒ Estab Initials: [REDACTED]

C C Pain in eye

HPI: ☐ Location ☐ Quality ☐ Severity ☐ Timing ☐ Duration ☐ Context ☐ Modifying Factors ☐ Assoc S&S
Brief: Acute problems: 1-3 Elements or 1-2 Estab Problems Extended: Acute Problems: 4+ Elements or 3+ Estab Problems

① Eye pain since Friday. She points to the lower corner of the right eye & eating tomatoes & chocolate. Has a Hx Lyme dx. and she was feeling well & eating Doritos. Keflex for cellulitis in past traveled to Texas for ~ 3 months, liked & did not have any of her constitutional sx. However & eating tomatoes & chocolate last weekend all of her sx came back. The right eye feels like there is something in it. Denies trauma.

EXAM: NL See Note
ORGAN STATUS
Const ☒ No Distress
Eyes ☒ Ankle about
ENT/M ☒ Exophthalmos. Appear to be a sty
CV ☒ Upper lateral eyelid.
GI
GU
MS
Skin
Neuro
Psych
Heme
Lymph
Immun
BODY AREAS
Head
Neck
Chest
Breast
Abd
Gen
Back
Extrem
Checkmark = Exam

ROS: NL ABNORMAL See Note
Const ☐ Fever ☐ Lethargy ☐ Distress ☐ Sleep
Eyes ☐ Vision ☐ Pain ☐ Redness ☐ D/C
ENT/M ☐ Hearing ☐ ST ☐ Pain
CV ☒ CP ☐ Palpitations ☐ Syncope ☐ Ankle Swelling
Resp ☐ SOB ☐ DOE ☐ Cough ☐ Wheezing
GI ☐ Constip ☐ Diarrhea ☐ Indig ☐ Appetite ☐ NV
GU ☐ Dysuria ☐ Hematuria ☐ Nocturia ☐ Abnl Menses
M/S ☐ Swelling ☐ Stiffness ☐ Pain
Skin ☐ Rash ☐ Itching ☐ Mass ☐ DC ☐ Jaundice
Neuro ☐ Weakness ☐ Dizziness ☐ Confusion
Psych ☐ Depression ☐ Anxiety ☐ Panic Disorder
Endo ☐ Heat/Cold Intol ☐ Goiter ☐ Hair Loss
Heme ☐ Lymphadenopathy ☐ Bruising
Allergy ☐ Hives
Immun

ASSESSMENT E = Estab/Chronic N = New M = Minor/Self Limited S = Stable U = Unstable W = Work Up Needed
Sty @ upper eyelid
? Lyme disease

PLAN RTC: D W M PRN
Because her constitutional sx were resolved in the Keflex in January, I tend to believe that she won't have lateral L.D. sx. Therefore I am going to try another round of Abx. I want to make sure to the eyelid.

Health Maintenance ☐ Mammogram ☐ Flu Vax ☐ Pneumovax ☐ dT ☐ Scrn Colonoscopy ☐ B Density ☐ PSA
☐ Review/Order Lab, EKG, XR, Oxi=1 ea ☐ Indep Rev Image=1 ☐ Discuss w/Doc=1 ☐ Obtain Old Records=1 ☐ Summary/Review Old Records or Obtain Additional Hx = 2 (Specify)

Hx - Need 3 of 3 at or above level MDM - Need 2 of 3 at or above level CODE: Estab: 2 of 3 at or above level New: 3 of 3
Brief 1-3 Acute Elements ☐ SL/M=1 (Max=2) ☐ Each Est Prob=1 (+1 if Unstable) ☐ New Prob - No WU=3 (Max=3) ☐ New Prob w/WU=4 ☐ Review/Order Lab, EKG, XR, Oxi=1 ea ☐ Indep Rev Image=1 ☐ Discuss w/Doc=1 ☐ Obtain Old Records=1 ☐ Summary/Review Old Records or Obtain Additional Hx = 2 (Specify)

HPI ROS PF SH Level Dx Data Risk
0 0 PF 1 0-1 1 SL/Minor
2+ SL/Minor, 1 Estab Stable, OTC Rx, PT/OT
1 Acute Uncomplicated Illness or Injury
1+ Estab Unstable, 1 Acute w/Systemic Sx
2+ Stable Estab, New Prob/?Prog, Rx Med
Life threat, Suicide, Abrupt Neuro Change
Estab Very Unstable, Intense Rx Mon, DNR

MDM Hx Exam BAOS Estab New Time (min)
SF PF 1 99212 10
SF EPF 2.4 99202 20
LC EPF 2.4 99213 15
LC D 5.7 99203 30
MC D 5-7 99214 25
MC C 8+OS 99204 45
HC C 8+OS 99215 40
HC C 8+OS 99205 60

Counseling/Coordination > 50%
C/C Time min/Total Time: min

Signature: [REDACTED]

Friedman Lay Witness Testimony Redacted 245 of 293

FAMILY MEDICINE/A Division

Primary Care

PATIENT PHONE CALL

Message For TinaURGENT ☐ Yes ☐ NoPatient's Name [REDACTED]Age Weight Caller Home Phone [REDACTED]Work Phone Pharmacy Pharmacy Phone REGARDING: ☐ Illness☐ Phone Follow-up☐ Rx1st Refill☐ Injury☐ Referral☐ Test Results☐ Medications☐ Returning Call☐ Other

MESSAGE:

Lyme disease is really acting up. Hands are in a lot of pain. Can she go back on doxycycline? (Buck conn Pharm)

RESPONSE:

Need to stop ceph
See purple.

Date 11/5/12Time 8/8By M. SpencerBy

PROBLEM

☒ OK TO FILE

(3/27/12)

Date: _____ Name: _____ DOB: _____

PATIENT PHONE CALL

Message For TC / Mary Caring URGENT ☐ Yes ☐ No
 Patient's Name [REDACTED] Age _____ Weight _____
 Caller _____ Home Phone 223-4040 Work Phone _____
 Pharmacy RAT Pharmacy Phone _____
 REGARDING: ☐ Illness ☐ Phone Follow-up ☐ Rx1' Refill
☐ Injury ☐ Referral ☐ Test Results
☐ Medications ☐ Returning Call ☐ Other _____

MESSAGE: Pt calling because she is taking Keflex due to being treated for Lyme By TC, Pt Date _____ Time <u>0812</u> By <u>[Signature]</u> PROBLEM _____	RESPONSE: still having symptoms and wanted to know if she could go on doxycycline. yes we can on paper By <u>[Signature]</u> OK TO FILE <u>05/29/12</u>
---	--

(3/27/12)

7/25/12 RD: TSH. in
10-12-12 - Pt Blood draw TSH _____ AK

FAP Y MEDICINE (A Division of Sunbury Primary Care)

NAME: [REDACTED]		CHART # [REDACTED]		
DATE	10-12-12	VS	T97.1 BP: 118/60 P: 74 WT: 121.6 Ht: 5'10"	
Visit Type	☐ FU ☐ O ☐ W ☐ M ☒ Acute ☐ Hosp/ER ☐ FU ☐ CPX ☐ Consult ☐ Other	☐ New ☒ Estab	Smoker: Current ☐ Former ☐ No ☐ PPD: ☐ ETOH: ☐ Y ☒ N	
C	Lyme disease flare up		Exposure: ☒ Y ☐ N Marital Status: ☒ S ☐ M ☐ O ☐ W	
HPI	☐ Location ☐ Quality ☐ Severity ☐ Timing ☐ Duration ☐ Context ☐ Modifying Factors ☐ Assoc S&S Brief: Acute problems: 1-3 Elements or 1-2 Estab Problems Extended: Acute Problems: 4+ Elements or 3+ Estab Problems		Occupation: [REDACTED] No Change-See: [REDACTED]	
Here to talk about Lyme dx. Few weeks ago she started to numbness & tingling in the arms & hands & started to mess w/ R (Keflex) & Doxycycline. She felt great went to Fla for a few weeks and came back. The dx started coming back and she started taking Japanese knotweed & started taking Japanese knotweed & started taking Japanese knotweed & started taking Japanese knotweed. T floats -> now after no objective find. she is wondering if she has		See list labs drawn; Blood draw TSH		
EXAM	Const ☒ Eyes ☒ ENT/M ☒ CV ☒ Resp ☒ GI ☒ GU ☒ MS ☒ Skin ☒ Neuro ☒ Psych ☒ Heme ☒ Lymph ☒ Immune ☒	No Distress ☒	T Lyme dx flare and/or "new meta exposure" -> Her mign in the	
ROS	Const ☒ Eyes ☒ ENT/M ☒ CV ☒ Resp ☒ GI ☒ GU ☒ M/S ☒ Skin ☒ Breast ☒ Neuro ☒ Psych ☒ Endo ☒ Heme ☒ Lymph ☒ Allergy ☒ Immun ☒	Abnormal ☒ Fever ☐ Lethargy ☐ Distress ☐ Sleep ☐ Vision ☐ Pain ☐ Redness ☐ O/C ☐ Hearing ☐ ST ☐ Pain ☐ CP ☐ Palpitations ☐ Syncope ☐ Ankle Swelling ☐ SOB ☐ OOE ☐ Cough ☐ Wheezing ☐ Constip ☐ Diarrhea ☐ Indig ☐ Appetite ☐ N/V ☐ Dysuria ☐ Hematuria ☐ Nocturia ☐ Abnl Menses ☐ Swelling ☐ Stiffness ☐ Pain ☐ Rash ☐ Itching ☐ Mass ☐ OC ☐ Jaundice ☐ Weakness ☐ Dizziness ☐ Confusion ☐ Depression ☐ Anxiety ☐ Panic Disorder ☐ Heat/Cold Intol ☐ Goiter ☐ Hair Loss ☐ Lymphadenopathy ☐ Bruising ☐ Hives ☐	See Note	

ASSESSMENT E = Estab/Chronic N = New M = Minor/Self Limited S = Stable U = Unstable W = Work Up Needed

PLAN RTC: D W M PRN

Tertiary Lyme disease

Have offered neurology consult and she will think about. For

now start ceph 500 mg po q12 x 10d

if better will start another 2 week course.

Health Maintenance

☐ Mammogram ☐ Flu Vax ☐ Pneumovax ☐ dT ☐ Scin Colonoscopy ☐ B Density ☐ PSA

☐ SUM = 1 ☐ Each Est Prob = 1 ☐ New Prob - No ☐ New Prob w/WU = 4 ☐ Review/Order Lab ☐ Indep Rev ☐ Discuss ☐ Obtain Old ☐ Summary/Review Old Records or ☐ Obtain Additional Hx = 2 (Specify)

☐ Need 3 of 3 at or above level ☐ MDM - Need 2 of 3 at or above level

☐ Counseling/Coordination > 50% ☐ C/C Time min/Total Time min

☐ SUM = 1 ☐ Each Est Prob = 1 ☐ New Prob - No ☐ New Prob w/WU = 4 ☐ Review/Order Lab ☐ Indep Rev ☐ Discuss ☐ Obtain Old ☐ Summary/Review Old Records or ☐ Obtain Additional Hx = 2 (Specify)

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Friedman Lay Witness
 Redacted 248 of 293

JA 09726

MEDICAL ASSOCIATES LABORATORY

MD-Director

Patient: [REDACTED]

Patient #: [REDACTED]

Birth: [REDACTED]

Age: 62 years

Home Phone: [REDACTED]

Gender: Female

Work Phone: [REDACTED]

Accession No:	410046	405175	380943	375836	341887	320383	313050	120448		
Doctor:	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]		
Collection Date:	10/12/2012 10:52	07/25/2012 07:59	07/15/2011 10:38	05/05/2011 09:12	02/02/2010 07:57	04/17/2009 08:17	01/07/2009 08:14	11/01/2002 10:15		
Fasting Status:	NO	NO	UNKNOWN	YES	YES	YES		UNKNOWN		
NA				138		143		143		135 - 148 MEQ/L
K				4.4		4.1		4.1		3.5 - 5.3 MEQ/L
CL				102		103		107		98 - 110 MEQ/L
CO2				29		32		25		24 - 34 MEQ/L
GLUCOSE				73		81		74		70 - 110 MG/DL
BUN				13.0		17.0		17.0		6.0 - 20.0 MG/DL
CREA				0.7 L		0.8		0.8		0.8 - 1.4 MG/DL
CALCIUM				8.1 L		8.4		8.7		8.3 - 10.0 MG/DL
ALBUMIN				3.8		4.0		4.3		3.4 - 5.0 G/DL
T. BILI				0.4		0.4		0.4		0.0 - 1.2 MG/DL
AST (SGOT)				24		19		14		7 - 40 U/L
ALT (SGPT)				39		32		28		10 - 65 U/L
ALK PHOS				100		85		68		42 - 141 U/L
T.PROT				7.0		6.9		7.1		6.0 - 8.5 G/DL
GFR				90.4		78.0				ml/min
CHOL				252 H	225 H	177	259 H			140 - 200 MG/DL
TRIG				84	55	42 L	88			45 - 150 MG/DL
HDL				89.0 H	90.0 H	87.0 H	75.0 H			26.0 - 72.0 MG/DL
HDL/CHOL				35.3 H	40.0 H	49.2 H	29.0 H			13.9 - 22.2 %
VLDL				16.8	11.0	8.4 L	17.6			9.0 - 30.0 MG/DL
LDL CALCULATED				146.2 H	124.0	81.6	166.4 H			74.0 - 140.0 MG/DL
TSH	2.570	6.940 H	1.970	0.210 L	0.420		0.480	4.117		0.350 - 5.500 UIU/L

Reviewed By: [REDACTED]

Date: [REDACTED]

L = Low CL = Critical Low BL = Borderline Low IL = Invalid Low A = Abnormal
H = High CH = Critical High BH = Borderline High IH = Invalid High N = Normal

Cumulative Report

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[REDACTED] FAMILY MEDICINE
[REDACTED]
[REDACTED]

Dear [REDACTED],

The results of your tests are as follows:

- ☐ Blood tests
- ☐ Total Cholesterol = _____ (Goal is less than 200)
 - ☐ Triglycerides = _____ (Goal is less than 200)
 - ☐ HDL Cholesterol = _____ (Goal is greater than 35)
 - ☐ LDL Cholesterol = _____ (Goal is less than 130)
 - ☐ Hemoglobin A1C = _____ (Goal is less than 7%)
 - ☐ Blood sugar = _____
 - ☐ Prostate Blood test (PSA) = _____
 - ☒ Other: Thyroid 2.57 (Normal)
- ☐ PAP Smear
- ☐ Culture
- ☐ Mammogram
- ☐ MRI
- ☐ CT
- ☐ Bone Density
- ☐ Ultrasound
- ☐ Other test results: _____
- ☐ Normal.
- ☐ Continue same medication.
- ☐ Results too high
- ☐ Follow diet closer
- ☐ Change medication: _____
- ☐ Repeat test: _____
- ☐ Call medical assistant for instructions.
- ☐ Call office for an appointment.
- ☐ Comment: _____

Orig Mailed to
PT 10-15-12
- Jk

If you have any questions, please do not hesitate to call our office.

Sincerely,

[REDACTED] Family Medicine

FAI

✓ MEDICINE (A Division of

any Care,

NAME: [REDACTED] CHART # [REDACTED]

DATE	11-6-12	VS	T: 98.3	BP: 112/80	P: 72	Wt: 166	Ht:	V	O		O
								A	S		D

Visit Type	☐ FU ☐ D W M ☒ Acute ☐ Hosp/ER FU ☐ CPX ☐ Consult ☐ Other	☐ Estab ☐ Initial	Smoker: Current Former No PPD: <u> </u> ETOH: Y N
C	C H	SHS	Exposure: Y N Marital Status: S M D W

C	Estb - Ear Ring	Occupation:	
1	☐ Location ☐ Quality ☐ Severity ☐ Timing ☐ Duration ☐ Context ☐ Modifying Factors ☐ Assoc S&S	2	No Change-See:

API Brief: Acute problems: 1-3 Elements or 1-2 Estab Problems Extended: Acute Problems: 4+ Elements or 3+ Estab Problems

Here I establish. It's van complaint is

H. & L. L. arriving in the cars (mainly) PM

3b ☒ No Known Drug Allergies ☐ No Change-See:

the 6/ he has
"a.s.t." that his neighbor has.

11-6-13- Bd draw CMC

and the balance contained 4 cups and 1 1/2

neither of which have done anything about it. He is in rock

that he is relatively healthy and doesn't have any ear

to explain
if the

W. H. H. H.

XAM	NL	9cc Note	☒ No Distress
ORGAN SYSTEMS			

ROS	NL	ABNORMAL	9cc
-----	----	----------	-----

Const	☐ Fever ☐ Lethargy ☐ Distress ☒ Sleep
-------	--

Eyes	☒ Vision	☐ Pain	☐ Redness	☐ D/C
ENT/M	☐ Hearing ☐ ST ☐ Pain: _____			

CV	☒ CP ☐ Palpitations ☐ Syncope ☐ Ankle Swelling
Resp	☐ SOB ☐ S2S ☐ Cough ☐ Wheezing

[illegible]

GU	☐ Dysuria ☐ Hematuria ☐ Nocturia ☐ Abnl Menses
M/S	☒ Swallowing ☐ Stiffness ☐ Pain

[illegible]

Neuro	☐ Weakness	☐ Dizziness	☐ Confusion
Psych	☐ Depression	☒ Anxiety	☐ Panic Disorder

Endo	☐ Heavy Cold Intol ☐ Goiter ☐ Hair Loss
Hemo	

Lymph	☐ Lymphadenopathy ☐ Bruising
Allergy Immun	☐ Hives

ASSESSMENT	E = Estab/Chronic N = New M = Minor/Self Limited	E	N	M	#	PLAN	RTC; <u>1</u> D W <u>M</u> PRN
	S = Stable U = Unstable W = Work Up Needed	S	U	W			

Trinitis und cause				Retur 1 no für CP+
--------------------	--	--	--	--------------------

				has CMP, CISC tool,
--	--	--	--	---------------------

[illegible][illegible]

☐ SL/M = 1 ☐ Each Est Prob = 1 ☐ New Prob - No ☐ New Prob ☐ Age ☐ Review/Order Lab, ☐ Indep Rev ☐ Discuss ☐ Obtain Old ☐ Summary/Review Old Records or
(Max=2) (+1 if Unstable) WU=3 (Max=3) w/WU= 4 Data EKG,XR,Oxi=1 ea Image = 1 w/Doc=1 Records=1 Obtain Additional Hx = 2 (Specify)

X - Need 3 of 3 at or above level					MDM - Need 2 of 3 at or above level					CODE: Estab: 2 of 3 at/above level Now: 3 of 3					☐ Counseling/Coordination > 50%				
HPI	ROS	PFSH	Level	Dx	Data	Risk				MDM	Hx	Exam 8A/OS	Estab New	Time (min)	C/C Time	min/Total Time	(min)		

0	0	PF	1	0-1	1 SL/Minor	SF	PF	1	99212	10
1	0	EPF	2	2	2+ SL/Minor, 1 Estab Stable, OTC Rx, PT/OT Class of Illness, Class of Injury	SF	EPF	2-4	99212	10
1	0	EPF	2	2	2+ SL/Minor, 1 Estab Stable, OTC Rx, PT/OT Class of Illness, Class of Injury	LC	EPF	2-4	99213	15

Problems						1 Acute Uncomplicated Illness or Injury	LC	D	3-7	99214	30
						1+ Estab Unstable, 1 Acute w/Systemic Sx	MC	D	5-7	99214	25
						2+ Stable Estab, New Prob?/Prog, Rx Med	MC	C	8+ OS	99204	45
						Lifethreat Suicide Abusal Nviro Change	HC	C	8+ OS	99215	40

nts	Estab Problems	10+	2/3	C	4	4	One Inlet, 3000 Estab Very Unstable, Intense Rx Mon, DNR	HC	C	0-00 8+OS	99205	60	1	☐
-----	----------------	-----	-----	---	---	---	---	----	---	--------------	-------	----	---	--------------------------

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MEDICAL ASSOCIATES

Medication List

Patient Name: _____

DOB:

Allergies: NKDA

[illegible]

PATIENTS FAMILY HISTORY

Relative	Living	Deceased	Cause of death	Age at Death
Father 72	✓			
Mother 670	✓			
Brothers				
Sisters				
Sons				
Daughters				
Maternal Grandfather				
Maternal Grandmother				
Paternal Grandfather				
Paternal Grandmother				

Any family members known to have:

(check all boxes that apply)

	Father	Mother	Brother	Sister	Son	Daughter	
Heart Attack							
High B.P.							
Diabetes							
Stroke							
TB							
Epilepsy							
Migraines							
Thyroid Disease							
Cancer							
Heart Disease							
Asthma							
Allergies							
Alcoholism							
Ulcers							
Colitis							
Kidney Disease							
Arthritis							

MEDICAL ASSOCIATES LABORATORY

Cumulative Report

MD-Director

Patient:

Patient #:

Birth:

Age:

45 years

Home Phone:

Gender:

Male

Work Phone:

Accession No:	411628										
Doctor:											
Collection Date:	11/06/2012 09:40										
Fasting Status:	NO										
WBC	5.1									Ref. Range	Units
RBC	4.78									4.8 - 10.8	CMM
HGB	16.1									4.70 - 6.10	CMM
HCT	46.3									14.0 - 18.0	G/DL
MCV	96.9 H									42.0 - 52.0	%
MCH	33.6 H									80.0 - 94.0	UX3
MCHC	34.7									27.0 - 33.0	uuG
PLT	153.0									32.0 - 35.0	%
MPV	9.7									130.0 - 450.0	CMM
RDW	15.2 H									7.4 - 10.4	FL
LY%	35.2									11.5 - 14.5	%
MO%	8.8									20.0 - 51.0	%
GR% (NEU%)	56.0									2.0 - 10.0	%
LY#	1.8									30.0 - 70.0	%
MO#	0.4									0.9 - 5.3	CMM
GR# (NEU#)	2.9									0.1 - 1.1	CMM
NA	140									1.3 - 7.4	CMM
K	4.5									135 - 148	MEQ/L
CL	102									3.5 - 5.3	MEQ/L
CO2	29									98 - 110	MEQ/L
GLUCOSE	91									24 - 34	MEQ/L
BUN	18.0									70 - 110	MG/DL
CREA	0.8									6.0 - 20.0	MG/DL
CALCIUM	8.3									0.8 - 1.4	MG/DL
ALBUMIN	4.1									8.3 - 10.0	MG/DL
T. BILI	0.6									3.4 - 5.0	G/DL
AST (SGOT)	21									0.0 - 1.2	MG/DL
ALT (SGPT)	35									7 - 40	U/L
ALK PHOS	49									10 - 65	U/L
T.PROT	7.6									42 - 141	U/L
GFR	111.1									6.0 - 8.5	G/DL

L = Low CL = Critical Low BL = Borderline Low IL = Invalid Low A = Abnormal
H = High CH = Critical High BH = Borderline High IH = Invalid High N = Normal

Cumulative Report

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MEDICAL ASSOCIATES LABORATORY**Cumulative Report**

MD-Director

Patient: [REDACTED]

Patient #: [REDACTED]

Birth: [REDACTED]

Age: 45 years

Home Phone: [REDACTED]

Gender: Male

Work Phone: [REDACTED]

Accession No:	411628									
Doctor:	[REDACTED]									
Collection Date:	11/06/2012 09:40									
Fasting Status:	NO									Ref. Range Units
Reviewed By: _____					Date: _____					

謙

泰

January 7, 2013

To Whom It May Concern

Re: [REDACTED]

I treated both [REDACTED] and [REDACTED] three times in late November and December 2012. They were both complaining of severe tinnitus and insomnia occurring after installation of 'smart meters' by Central Maine Power in their neighborhood. For Ms. [REDACTED], symptoms also included pain and burning in the hands. Both were agitated from the lack of sleep.

Each treatment ameliorated their condition and, so long as they stayed in places with low EMF levels, they were able to get some rest and to relax. Immediately on returning to their home or to any place with high EMF levels, symptoms would re-emerge with similar or greater intensity.

I treated both Mr. [REDACTED] and Ms. [REDACTED] for depleted pulse and low Qi energy and believe that their condition was directly stimulated by the high level EMFs encountered at home which then pushed them both past a tipping point where even moderate EMF exposure would reactivate the symptoms.

Please feel free to contact me if you need further information.

Sincerely,

[REDACTED]
[REDACTED], M.Ac.

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

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

2 **A. [REDACTED]**

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

5 **A. Yes. On December 20, 2010.**

6 **Q. If the 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 **A. After determining that my severe illness was caused by the meter, we consulted an**
10 **electrician on January 27, 2011, to move it to the utility pole behind our home. He**
11 **called CMP and learned that it would need to be mounted on a post instead of the**
12 **pole. Since this could not be done until Spring, CMP agreed to replace our original**
13 **analog meter. This was done on January 28, 2011. See my statement dated**
14 **February 13, 2011, attached as Exhibit A.**

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

16 **A. Yes.**

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

18 **Identify any health concerns you may have about smart meters and whether**

1 **these concerns are based upon any specific physical or medical conditions that**
2 **you or any of your family members may have.**

3 A. I am highly sensitive to EMF as well as other environmental toxins and allergens.

4 This was the most severe, life-threatening attack I have ever had.

5 **Q. Please describe the symptoms or adverse effects you experience while in the**
6 **proximity of smart meters.**

7 A. My severe attack included vertigo, seizures, muscle paralysis, mental confusion and
8 paranoia, headaches, back and leg pain, chest pains, blurred vision, and rashes
9 resulting in panic attacks.

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

14 A. I do not use WiFi or cell and cordless phones, and limit my use of microwave ovens,
15 TV, computers and x-rays. X-rays cause the most severe symptoms, the others
16 more minimal.

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

20 A. All of these conditions respond well to my acupuncture treatments, but are not
21 permanently healed.

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

5 A. Yes. I receive acupuncture treatments twice weekly to alleviate these symptoms.
6 See attached Exhibit B.

7 **Q. Did your symptoms or adverse reactions cease when the smart meter was**
8 **removed? Describe the circumstances.**

9 A. The most severe symptoms improved immediately. Others gradually lessened.

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

12 A. I have to limit the time that I spend in all buildings with smart meters. Vertigo and
13 severe back pain are the first symptoms to appear. I am gradually becoming a
14 recluse.

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

17 A. Since other environmental toxins may cause similar mental problems as the smart
18 meter does, I do not feel that I can testify in person. I would not be able to think
19 and communicate clearly. Hopefully, I might be able to testify by phone. I am
20 enclosing my letter which was included in the original petition to CMP. EMF
21 sensitivity is real, and it is regrettable that CMP did not research this problem more
22 thoroughly and look for a safer meter.

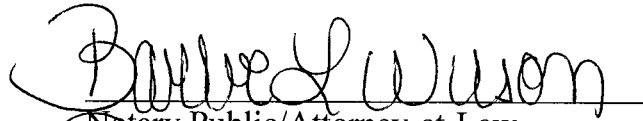
Dated this 9th day of January, 2013.

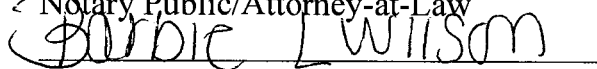
[REDACTED]

STATE OF MAINE
CUMBERLAND, ss:

January 9, 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

Name Typed or Printed

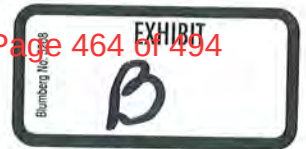
My Commission Expires: March 5, 2017

BARBIE WILSON
Notary Public, Maine
My Commission Expires March 5, 2017

A Smart Meter was installed on our home in Windham on December 20. Within a few days, I did not feel well, being unsteady on my feet and feeling dizzy when getting out of bed. On January 5, I became dizzy while bowling in my league at Yankee Lanes and had to stop. During the following three weeks I became severely ill with vertigo, seizures, muscle paralysis, mental confusion, headaches, back and leg pain, chest pains, blurred vision, panic attacks, and rashes. I was unable to follow my usual routine of grocery shopping, bowling twice weekly, attending church services, and exercising at Curves. My husband drove me everywhere and took over most of my household duties. He watched me constantly for fear of my falling or injuring myself in some way. One day I had the feeling that I just had to get out of our house, and I did find some relief by sleeping and staying in my car, and then by spending three nights in motels in Scarborough and Freeport where Smart Meters have not been installed. The symptoms always returned when I was in the house. After a thorough medical exam, blood and urine tests, and lower back x-rays disclosed nothing that would be causing these symptoms, I suspected that the Smart Meter might be the problem. CMP agreed to remove the Smart Meter, temporarily replacing our old meter until the PUC determines their future use. I immediately began feeling better at home. This past week I resumed driving and tried to return to my normal activities, but have found that the vertigo and other discomforts began to reoccur after I spent more than an hour in buildings equipped with Smart Meters. I already have to limit my exposure to energies such as microwave ovens, cell phones, and radiation, which have caused similar symptoms. This was the most severe, life-threatening attack that I have ever experienced, so I know that I will not be able to tolerate a Smart Meter on our home under any circumstance. I would greatly appreciate being able to continue using our original CMP meter.

Sincerely,





[REDACTED]

(207) 846-4433

[REDACTED]

Fax (207) 846-1366

[REDACTED]

[REDACTED]

10/23/2012

To whom it may concern:

RE: Patient, [REDACTED]

I have examined [REDACTED] and have been treating her since Smart Meters were installed in the spring of 2011. She has extreme sensitivity to the electromagnetic frequency of Smart Meters. She has responded to treatment with moderate success, but is still very sensitive and symptomatic when in close proximity to Smart Meters or their transformers/repeaters. Her symptoms include dizziness, nausea, headaches, disorientation, fever, joint pain and vertigo. Should you need any further information, please do not hesitate to contact me.

Sincerely,

[REDACTED]

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

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

2
3
4

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

6 **A. No.**

7 **Q. Did you have an adverse reaction to the meter?**

8 **A. My symptoms began following the installation of smart meters in my neighborhood.**

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

10 **A. Yes.**

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

12 **A. As a licensed Radio Ham [REDACTED], several years ago I became aware of the**
13 **dangers of the additive effects of radio frequency radiation through the proliferation**
14 **of wireless devices. I have made efforts to reduce my exposure to said radiation for**
15 **several years. I do not use a cell phone. There is no wifi home network in our**
16 **house and we have taken measures to reduce dirty electricity and other sources of**
17 **RF pollution. I have remained minimally involved in ham radio as a hobby.**

18 **My research into smart meters indicated that there was no benefit to me in**
19 **their installation. (As for the much-touted real-time feedback, I could readily**
20 **determine my electrical usage by noting what I turn on and through use of a**

1 Kill-A-Watt device. The billions being spent on this project are surely in pursuit of
2 another goal.) Moreover, the addition of a smart meter seemed thoroughly
3 detrimental to me because of greatly increased exposure to RF, loss of privacy, and
4 the much-reported-on danger of malfunction and fire from the devices themselves.

5 **Q. Do you experience electromagnetic sensitivity symptoms in proximity to other**
6 **radio frequency devices, such as Wi-Fi, microwave ovens, cell phones, or**
7 **cordless phones?**

8 A. Since the onset of my symptoms, I have stayed pretty close to home. I avoid RF
9 devices and have for several years. I do not have a wifi home network, nor do I use
10 a microwave oven, or DECT phones. I do not use a cell phone.

11 I have The Hum and experience physical vibrations in my body. The Hum
12 is a phenomenon experienced around the world, and is frequently described as
13 “mysterious” in its origination. It sounds like a diesel engine idling nearby. Its
14 volume is greater at some times than others. In his 2004 paper, David Demming
15 described my symptoms when he described The Hum as, “More than just a noise,
16 the Hum is also capable of manifesting as vibrations felt throughout the body and is
17 often accompanied by a suite of physical symptoms that includes headaches,
18 nausea, and pain in the ears.” My sensitivity to The Hum is becoming harder to
19 tolerate and harder to differentiate from other inputs. I have, however, noticed
20 feelings of disorientation near florescent lights and operating fans. I also
21 experience heart palpitations at times.

1 Q. Have your physician or other medical care provider made any
2 recommendations about exposure to electromagnetic devices, including smart
3 meters?

4 A. No. I have not consulted physicians on EMF exposure. Physicians are not
5 routinely trained in acoustics or radio frequencies. Since September, I have read
6 extensively on the subject, have consulted books and articles by experts in the field,
7 and have attempted to mitigate the effects of EMF radiation in reliance on their
8 recommendations. I have not been able to mitigate The Hum. EMF sensitivity is
9 not taken seriously in the States, as it is in Europe. Our legal exposure levels in the
10 US would not be 1000 times those of Europe if EMF sensitivity were taken
11 seriously here.

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

14 A. Yes. My sleep has been disturbed for many months now. I made a note to myself
15 in March, 2012, noting my having been awakened in the night by vibrations, a
16 phenomenon that had already been occurring from time to time. Then in the
17 middle of July, 2012, I began to be awakened and kept awake by both vibrations and
18 The Hum. I sought the source of The Hum, much in the way I later found
19 described by so many others on the Internet, by going out looking for it. I now hear
20 this sound 24 hours a day. It was at first most noticeable at night. Now it is always
21 "on", sometimes deafening in its intensity. Accompanying the Hum now are the

1 vibrations, increasing in severity, which cause my body to vibrate. The Hum is
2 exhausting, and yet it prevents one from obtaining adequate sleep.

3 I have a background in acoustics. These sound pressure levels are very
4 high. It feels like a buffeting on the ears. I have a theory of the mechanism of the
5 Hum, which I plan to pursue. I cannot yet prove, but I currently believe, that the
6 Smart Grid, a "Mesh" system that floods my neighborhood with RF, is responsible,
7 not only because my symptoms were coincidental with the arrival of the "Smart
8 Grid", but because others have convincingly implicated the "Smart Grid" with The
9 Hum all over the world. What CMP calls "*repeaters and collectors*" are routers.

10 From an interview with Curtis Bennett about the wireless routers:

11 *'Don't focus on individual smart meters, Bennett advises*
12 *electromagnetically exposed governments and power providers. "As soon as you*
13 *incorporate the routers, head-to-toe you are stimulating tissue. Margin of error:*
14 *zero. You are not insured for it." Human beings also complete the smart meter*
15 *circuit by inducting their wireless currents. "Head-to-toe impacts every function*
16 *in the body," Curtis Bennett says. Which is why he calls routers the "game*
17 *changer" in the smart meters discussion.'*

18 *Smart meters operate on cell phone frequencies. And studies have*
19 *confirmed that low power levels are extremely dangerous because they more closely*
20 *mimic – and confuse - the human body's intercellular communications. As a*
21 *Jewish lawyer told Bennett: "The holocaust pales in comparison. This is getting*
22 *them all."*

1 <http://www.willthomasonline.net/interview%20with%20thermoguy%20curtis%20bennett.htm>

3 The CMP website says in its Frequently Asked Questions:

4 ***“I know that Wi-Fi is safe and my home network runs 24/7. How does the Wi-Fi***
5 ***signal from my meter get to a CMP building?***

6 • *The technology chosen by CMP for our Smart Meter infrastructure sends a*
7 *signal, via radio waves, “over the air.” This technology utilizes equipment*
8 *(repeaters and collectors) that receives the signal from a large volume of meters*
9 *and then “hands off” this data to a “take-out point” (gateway). Data is*
10 *transferred from the gateway, via a third-party public provider, to a CMP building*
11 *in Augusta.*

12 • *Repeaters and collectors are predominately mounted on existing CMP poles and*
13 *gateways are predominately mounted on existing communication towers.*

14 B. Blake Levitt, when asked in an interview why people were still
15 uninformed about the dangers of RF said, “There is a long learning curve.”
16 Propaganda such as that on the CMP website ***“I know that Wi-Fi is safe ...”*** will
17 fool most of the people most of the time. For a while.

18 I am concerned for my health, as I am aware that exposure to Hum
19 frequencies is extremely dangerous, as these frequencies are the frequencies of the
20 body itself. Like a glass that vibrates and breaks when a singer strikes just the right
21 note, my whole body vibrates from The Hum frequencies. It is a well-documented
22 effect that anything stimulated at the right frequency will vibrate. I do not have a

1 smart meter on my house, yet I am exposed and harmed by the system I do not want
2 and cannot escape.

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

5 A. I want to tell you what I learned. When I became a radio Ham, I learned that effects
6 and dangers of RF are additive, that is, each additional source of RF, from wireless
7 baby monitors to wireless door bells, to microwave ovens, to routers, etc., add to a
8 person's total exposure. Hams putting out excessive signals can lose their licenses
9 or go to jail. These illegal signals can literally kill their neighbors. Yet these same
10 levels are ok if done by a major corporation, and no one is adding it up.

11 I learned about the early epidemiological studies on Hams showing high
12 cancer rates. Corporations and the military have taken out patents since the 1970's
13 developing Weapons Systems based on these frequencies. We know they are not
14 safe. Paid Industry "researchers" are brought out to say they are safe. Why is it
15 that the wireless industry cannot obtain liability insurance? The frequencies they
16 use are not safe. The World Health Organization now classifies RF/microwave
17 toxins emitted by wireless Smart Meters as a "Class B potential human carcinogen."
18 Despite CMP's putting words into our mouths to convince us (see above FAQ: "*I*
19 *know that Wi-Fi is safe and my home network runs 24/7.*") we know plenty
20 regarding the safety of RF frequencies. They are not safe.

21 The number of people becoming ill from these RF frequencies is increasing
22 and expected to be half of the population by 2020. If they are still alive.

1 I perceive a pattern. Asbestos. Cigarettes. RF. The perpetrators drag it
2 out in litigation, kill people, make money. In the end, the people pay for the
3 systems and are left with the liabilities. Profiteers walk away with the profits.
4 Regulators betray the public: there is no rule of law.

5 "At the length truth will out." People are figuring it out and will pursue
6 justice. What remains to be seen is whether the truth will be brought out by the
7 regulators doing their job, through litigation in the courts at great expense and
8 endless misery, or by the people in revolt. Life is harsh where there is no rule of
9 law. Let's not go there.

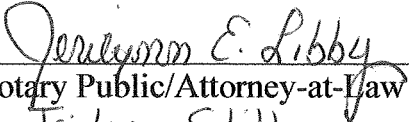
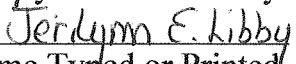
Dated this 25th day of January, 2013.



STATE OF MAINE
YORK, ss:

January 25, 2013

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


Notary Public/Attorney-at-Law

Name Typed or Printed
My Commission Expires: April 20, 2013

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

1 Q. Please state your name and address.

2 A. [REDACTED]

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

5 A. It was installed in the Spring of 2012 when I was not home.

6 Q. Did you notice any unusual symptoms after the meter was installed.

7 A. Yes. I began to have ringing in my ears, a racing pulse, and severe headaches. I
8 could not sleep at night. I did not have these symptoms before the meters were
9 installed in my home and my neighbors' homes. I could not figure out what was
10 causing the symptoms until I did some on-line research and learned that smart
11 meters emit EMF. I had no awareness about smart meters before this.

12 Q. Did you complain to CMP and request that they remove the smart meter?

13 A. I called and complained as soon as I figured out that the smart meters were
14 causing my problems. I told CMP that I had ringing in my ears, a racing pulse,
15 and headaches. They said there wasn't a department as of yet to help with my
16 circumstances, but they promised there would be and that they would get back to
17 me about my concerns. I am still waiting to be contacted by them. They did
18 replace the smart meter with an analog meter. Unfortunately my neighbor's meter
19 faces my home and I live in a mobile home park where it is loaded with smart

1 meters (350 plus smart meters) emitting a high volume of EMF. I still have
2 symptoms, particularly at night.

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

4 **A. Yes.**

5 **Q. Do you experience electromagnetic sensitivity symptoms in proximity to other**
6 **radio frequency devices, such as Wi-Fi, microwave ovens, cell phones,**
7 **cordless phones, or other devices?**

8 **A. I do not use cell phones because of the frequency level and never a microwave.**
9 **My heart races, and I get feelings of dizziness and unsteadiness around these**
10 **devices.**

11 **Q. Have you been seen by a doctor for your condition?**

12 **A. Yes. I called my regular physician when it first start bothering me but he was**
13 **unable to help me. I have been seeing Dr. Robert Deutch, D.C. in Portland. I've**
14 **tried protective meshes to shield the EMF but nothing works.**

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

18 **A. Just to do whatever I can to reduce my exposure. He told me to move, which is**
19 **not possible, they are installed all over the Brunswick area. I have gone back to**
20 **using a land line I unplug everything when I am not using it.**

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

1 A. Yes, I get probably 3-4 hours of sleep at night. I feel plugged in all the time,
2 anxious, short temper, nervous, headaches.

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. As a result of the smart meters I now have hearing loss in my left ear. I feel that
6 these health issues they knew, but failed to let the public know. I never had any
7 problems sleeping and now forget it, it's a nightmare every night tossing and
8 turning – and the constant ringing in my ears. I know they are the cause of it
9 because I went to visit a friend in upstate New York and the ringing went away – I
10 certainly hope they find something that will protect our brains. The smart meter
11 has certainly had an adverse reaction on my life and can only hope that CMP will
12 be held accountable for any health related issues. Shame on THEM!

Dated this 28 day of January, 2013.



STATE OF MAINE
CUMBERLAND, ss:

JAN, 28, 2013
December __, 2012

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,

TIMBERLY HARRINGTON
Notary Public, Maine
My Commission Expires February 17, 2019


Notary Public/Attorney-at-Law

Name Typed or Printed Timberly Harrington
My Commission Expires: 2/17/19

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

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

2 **A. [REDACTED]**

3 Occupation: Disabled

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

6 **A. Yes. September 8 2011. The smart meter was installed by contractor or vendors**
7 **for CMP. After completing installation vendors made a repeat visit to my home**
8 **My home was one of three installations at this location. I was not home and my**
9 **neighbors called me and asked why the vendors returned?**

10 **Q. If a smart meter was installed but removed and replaced by an analog meter**
11 **at your request, please describe the circumstances of your request or**
12 **complaint to CMP and their response.**

13 **A. Between September 8 and November 27, 2011, the smart meter was on and I**
14 **began incurring unusually high electrical bills and electronics damage, and**
15 **became physically sick, I decided to opt out.**

16 CMP sent someone to troubleshoot the meter after I called when I received
17 my first bill with high usage which arrived in October for Septembers' billing
18 period. See Exhibit A. The CMP employee came within expected time and found
19 no meter failures. He pulled the meter and used equipment to test it. Unusually

1 high electrical billing continued into November. When I called CMP to report this
2 again, they sent another employee who again found no fault with meter. CMP also
3 hired private contractor to come out in November. The contractor, ESM who
4 came and did work outside on the pole added a new ground as well as other things.
5 He also came inside my home to check my outlets and fuse box and found no
6 inside wiring or faulty issues in the home I personally hired a series of contractors,
7 electrical and otherwise, to come troubleshoot due to the many issues I was
8 experiencing after the analog meter was changed to smart meter.

9 On November 27, I requested an analog meter back and CMP reinstalled
10 one. Within a week of an analog meter being reinstalled, CMP came out with a
11 voltage regulator to test, something they had refused to do while my smart meter
12 was in place. CMP stated that they did not have to bring a voltage regulator tester
13 while I was taking physical readings from the digital meter. In January 2012 CMP
14 changed my transformer due to issues I kept in contact about.

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

16 **A. Yes.**

17 **Q. Please describe why you do not want a smart meter at your residence.**
18 **Identify any health concerns you may have about smart meters and whether**
19 **these concerns are based upon any specific physical or medical conditions**
20 **that you or any of your family members may have.**

21 **A. As I stated above, the smart meter created many safety and health problems for my**
22 **family and I. Considering the number of electrical problems resulting from meter**

1 installation I feel most lucky our home did not catch fire and burn down. With the
2 smart meter in place, my son and I suffered physically and an elderly family
3 member died under most unusual circumstances. Our specific problems after
4 smart meter installation included:

- 5 1. Emergency room visits for my son due to rapid heart-beat and tightening in
6 his chest. While an elderly family member with Alzheimer's was living
7 with us, the smart meter aggravated her condition leading us to make
8 multiple visits to the doctor. She died in February with massive bleeding of
9 the brain, not associated with Alzheimer's. I know now that victims of
10 EHS have nosebleeds as a symptom which suggests a vascular response to
11 RF and which over two months of exposure to this frail woman may have
12 been at least in part responsible for her untimely death.
- 13 2. With the smart meter in place I developed insomnia, headaches, suffered
14 from rapid pulse, became dizzy, ringing or tones in the ears and suffered
15 from vertigo and developed neurological problems with tingling and
16 numbness in my hands and feet. I suffered none of these conditions before
17 the smart meter was installed. The meter was mounted about 5 feet from
18 our home and my bedroom all of these health effects created considerable
19 physiological, financial distress keeping me in an overwhelmed condition.
- 20 3. During the entire period the smart meter was installed we had light bulbs
21 throughout our home frequently blow.

1 4. In October of 2011, the motherboard on our home PC was destroyed. We
2 replaced it with a new laptop.

3 5. The meter recorded double and triple amounts of electrical usage during
4 the period of smart meter installation. See Exhibit B. CMP gave me a \$75
5 credit and sent a technician to test the meter but they found nothing. They
6 did hire a licensed electrical contractor who came out and concluded my
7 inside wiring had proper fuses and no faults. I also hired an electrician to
8 troubleshoot high usage and he found a constant feed on my well pump and
9 advised me to replace it as well to replace switch on my outside pole which
10 I contracted him to do.

11 6. My nearly new 3 year old refrigerator began freezing food during the time I
12 had the smart meter here.

13 7. ComCast Cable Technician service had to replace 1 of 2 receivers due to
14 inoperable due to many errors he scanned and he was able to repair the
15 other one.

16 8. Our hot water tank began heating excessively during this same period and
17 when replacing the thermostat did not solve the problem we had to replace
18 the hot water heater.

19 9. The also nearly new nine month old washer/dryer began malfunctioning in
20 the period from September, 2011 to January, 2012. In December they both
21 were inoperable and I had to use laundry mat

1 10. Our pellet stove used for alternative home heating had its motherboard
2 damaged and refused to operate in October, 2011.

3 **Q. Do you or any of your family members experience electromagnetic sensitivity**
4 **symptoms in proximity to radio frequency devices, such as Wi-Fi, microwave**
5 **ovens, cell phones, cordless phones, smart meters or other devices? Please**
6 **describe the symptoms and the circumstances when they occur**

7 A. Yes. In addition to the symptoms described above, my mother-in-law who lived
8 with us complained from Oct- Dec of major stomach digestion issues so much that
9 in November, 2011 she actually called 911 and was taken to [REDACTED] Hospital
10 ER. While the meter was here I consulted with her MD on many office visits.
11 After the smart meter was installed she suddenly became very disturbed. She said
12 she felt strange and began suffering from insomnia. Her MD ordered testing by a
13 specialist and she unexpectedly passed of massive brain bleed in February 2012

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

17 A. My heart condition worsened as did the other symptoms listed which I have never
18 had before. I did not consult with my MD about this in part because I wasn't
19 aware of electro sensitivity dangers. When I researched this and removed my
20 meter most symptoms also disappeared. I do not need any more evidence to
21 convince me how to avoid what was causing my and family's bad health.

1 Q. Did symptoms or adverse reactions cease when the smart meter was
2 removed?

3 A. Within two weeks of smart meter removal, some symptoms were reduced and
4 resolved. However, I now have a physician who ordered immediate cardiac
5 testing for conditions caused by what I believe was my smart meter exposure

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

8 A. Frequent trips to the MD & hospital for two of us, the death of a loved one, loss of
9 most everything electric in our home and the stress, financial costs and time
10 involved, in dealing and troubleshooting with these events the circumstances
11 became unbearable .

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

14 A. I hired a second electrician in December, 2011 who believed my smart meter
15 problems may also have involved transformer damage. Because CMP voltage
16 regulator test stated "your house has an unusually high power draw," my
17 electrician tested my home outlets and appliances. We turned on and checked
18 several appliances including dryer, oven, etc. and he confirmed normal electrical
19 draw. He also took readings at outlets and found nothing unusual. CMP requested
20 I report his findings to them and when I did, they came out in January, 2012 and
21 replaced my transformer.
22

1 Dated this 30 day of January, 2013.

Autumn Brook
Autumn Brook

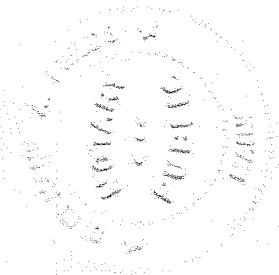
STATE OF MAINE
SAGadahoc, ss:

January 30, 2013

Personally appeared the above-named Autumn Brook, 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,

Stephanie A. Fields
Notary Public/Attorney-at-Law
Stephanie A. Fields
Name Typed or Printed
My Commission Expires: 9/14/19

STEPHANIE A. FIELDS
Notary Public, Maine
My Commission Expires September 14, 2019



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

Q. Please state your name, address and occupation.

[REDACTED]

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

A. I lived at [REDACTED] for 20 years and in October 2011, smart meters were installed in my building across from my bedroom. There were 2 smart meters for each unit installed so there were a total of 12 smart meters.

Q. If a smart meter was removed and replaced by an analog meter at your request, please describe the circumstances of your request or complaint to the utility company and their response.

A. I requested all of the smart meters be removed in January 2012 in a phone conversation with P.G.&E. They said that they were state mandated and could not be removed. On February 1, 2012, the opt out option was approved in California and I opted out of my smart meter and I asked the other tenants in my building and the building behind my house to opt out (the smart meters from the house behind me were across from my bedroom

as well). Only two other tenants of five opted out. This did me no good because there were still six smart meters across from my bedroom.

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

A. No. I had to move to Pennsylvania to get better because I could not get better in San Francisco with all the smart meters present.

Q. Please describe why you do not want a smart meter at your residence. Identify any health concerns you may have about smart meters and whether these concerns are based upon any specific physical or medical conditions that you or any of your family members may have.

A. Smart meters made me unable to function to perform my job anymore. I could not think or concentrate. I had an extreme pressure headache and agitation when I was around them. I had shortness of breath and heart palpitations. I had trouble breathing. I couldn't sleep, eat or drink normally. I broke out in hives on my face and was extremely emotional. My face became numb and I had a lump in my throat when around them.

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?

A. Yes, the symptoms around cell phones and wi-fi are very similar but not as extreme as the symptoms I get around smart meters.

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

A. I told my Doctor about them in San Francisco and she had never heard of this before but made a note in my medical records about this. She recommended that I stay away from smart meters.

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

A. (above)

Q. Have you experienced symptoms or adverse effects while in the proximity of other smart meters?

A. In San Francisco, I would walk to the beach with hives all over my face. My friends would meet me at the beach and we would walk and they told me that the hives on my face would go away the longer we walked on the beach. By the time I would walk to my house in San Francisco the hives would come back from walking down the street amongst all the smart meters. The closer I am to smart meters the more acute my symptoms become and when away from them they disappear. I spent one week in ██████████ CA with a friend who lives off the grid and all my symptoms disappeared completely.

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

A. Yes, I had to move across the country to get away from them. I had to start a business all over again in Pennsylvania. I had my business in San Francisco for 13 years. I could not go anywhere in San Francisco, except for the beach without being affected by Smart meters.

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

A. Smart meters are more dangerous than second hand smoke and should not be allowed anywhere in the U.S.A.

Dated this 25th day of January, 2013.

STATE OF PENNSYLVANIA
LANCASTER, ss:

January 25, 2013

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

Mary Jane Reed
Notary Public/Attorney-at-Law
MARY JANE REED
Name Typed or Printed
My Commission Expires:

COMMONWEALTH OF PENNSYLVANIA
Notarial Seal
Mary Jane Reed, Notary Public
West Hempfield Twp., Lancaster County
My Commission Expires April 17, 2015
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

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

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

2 **A. [REDACTED]**

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

4 **A. Yes.**

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

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

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

14 **A. Yes it is.**

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

16 **A. Yes.**

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

18 **A. [REDACTED]**

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?

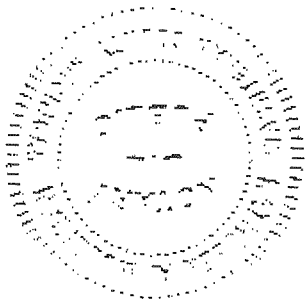
A. Yes. I submit the attached testimony in support of complainants Ed Friedman, et al in their case before the Maine PUC as evidence that smart meters are not safe.



STATE OF MICHIGAN
WASHTENAW, ss:

January 28, 2013

Personally appeared the above-named [REDACTED] and stated under oath that the foregoing Affidavit made by 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,



Kathleen A. Mulligan
Notary Public

Kathleen A. Mulligan
Name Typed or Printed

My Commission Expires: 9/21/14

KATHLEEN A. MULLIGAN
Notary Public, Washtenaw County, Michigan
Acting in Washtenaw County, Michigan
My Commission Expires September 21, 2014

EXHIBIT A

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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

Case No U-17053

QUALIFICATIONS OF [REDACTED]

1

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

4 **A.** I do.

5

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

7 **A.** [REDACTED]
8 [REDACTED]

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

10 **A.** That of Intervenor Linda Kurtz and Cynthia Edwards.

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

12 **A.** The electrical service at the house where I live is provided by Detroit Edison. I have been
13 affected by the smart meter installation both in terms of my health and in terms of earning an
14 income.

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. I have lived in my home 15 years. I rent.

13 Q. What do you do for a living?

14 A. I worked as a [REDACTED] I've done that for about 35 years.

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

16 A. I believe it was later in July.

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

18 A. No. But a few days after I believe it was installed, I went out to check and there was a smart
19 meter.

20 Q. Why did you go out to check?

21 A. Because I had intense ringing in my ears. I also felt extremely agitated and really wired.

22 Q. So did you know about smart meters?

23 A. Yes. A friend of mine had told me about them, to pay attention to them. I didn't go too far
24 with it as far as researching what he said. I talked with a few electricians.

25 q. So were you worried about the smart meters?

26 A. I was concerned, because I felt like it was a way for the electric companies to monitor my
27 personal habits, even knowing if I was home or not.

28 Q. Were you worried about the health aspects of smart meters?

29 A. I was concerned about it because of what my friend said, but I didn't make it important
30 enough to research or follow it.

31 Q. What happened to your health after the smart meter was installed?

1 A. I started experiencing almost complete sleeplessness, intense insomnia. I also felt electrical
2 shooting pains through different parts of the body. You know, I have experienced those
3 pains before that, but never at the frequency or intensity that I began to experience now. I
4 am one of those people who pays attention to everything, birds, animals, air, water. So when
5 something changes in my body, I feel it.

6 One thing I found that was happening a lot, I felt like I couldn't leave the house, like I
7 couldn't move my body right. It was like someone was moving my robot-body with a stick.
8 My brain didn't feel right. Sometimes I couldn't even move my body. Usually there was
9 extreme nausea right before I couldn't move. But I've never thrown up.

10 Q. **What did you do when you couldn't move or could barely move?**

11 A. I would try to drink some water, and then I would try to get out of my house.

12 Q. **How did you get out of the house if you couldn't move or you could barely move?**

13 A. I'd pray. It would take a little bit, but I could get out of the house.

14 Q. **How did you feel once you left the house?**

15 A. I felt better by the second. Two to three hundred feet from the house, I felt much better. I
16 am really sensitive. I can feel the energy off my neighbors' smart meters. But the ringing in
17 my ears doesn't go away. It does go away on sunny days when the sky is clear if I'm outside.
18 But I always hear it in my house.

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

20 A. There are days when I go into Lowe's, I am going to throw up, and I have to leave.

21 When I'm outside, I feel fine, but as soon as I get home

22 At home, I also experience a strong, dull pressure at my occiput, wrapping around to the
23 temple on the left side of my head. Also, I feel almost angry, there's a mood fluctuation. I
24 never used to be any angry person. I'm not saying I've never been angry, but the ongoing
25 consistency of the anger, it's become epic.

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

27 A. I feel a sick to my stomach feeling when I walk by a bunch of smart meters all lined up on a
28 wall. I get pain in my forearms, it is excruciating, a crush, like my arm is being squeezed by
29 a clamp and then released. I can experience that other times near meters, too, not just near
30 a bunch of them.

31 The artery going up the left side of my neck pulses and swells. It is painful, too, not a sharp
32 nerve pain, it's pretty dull, but it concerns me. I often get the occiput one at the same time.

33 I get numbness in my fingers and toes. I have experienced this numbness before, but it is
34 much more exaggerated now.

1 I get an intense pain in my heel and Achilles. I feel it when I get home. At night, it's almost
2 crippling.

3 I am so fatigued because I cannot sleep. It's like being tortured. I don't fall asleep.

4 I can't focus.

5 My teeth are in a lock-down bite when I sleep.

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

7 A. I wasn't feeling like this before. I was out of my home one day, and I came home, and
8 suddenly felt all these sensations. Like I said above, after a few days of feeling so bad, I went
9 out and checked my meter.

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

12 A. No. My body is really healthy. I haven't been to a doctor in 20 years. I have been to the
13 dentist.

14 **Q. So, prior, no fatigue, no depression?**

15 A. No. I'm happy most of the time.

16 **Q. How was your sleep before a smart meter was installed on your house?**

17 A. It was reasonable. The last three months, I feel like I've been in prison. I love life, I love
18 nature, I love people, I love the house. But the last three months. . . . I tell you, if someone
19 wants to mess with somebody, not letting them sleep is the way to do it.

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

22 A. Yes, because my sleep pattern is completely off. I'm unrested. I do a lot of ladder work, and
23 it messes with my balance and equilibrium. I feel dizzy, nauseated, loss of strength. I never
24 used to feel that way==I've always been so energetic. Productivity is decreased by 25
25 percent because I am just trying to feel better during my work day. The exhaustion makes
26 me depressed and unmotivated.

27 I have to go to Lowe's all the time. I have felt so bad in there sometimes that I have aborted
28 my cart and left what I was going to purchase. Sometimes, I walk in there and have to walk
29 out and leave without getting what I came for.

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

32 A. Some, yes. It affects my cognitive skills, speech. My head hurts. It affects my ability to
33 interact socially because I'm not as attentive to the other person, listening as well, as I
34 would normally be, as focused.

1 It's had an effect on my intimate relationships. I snap, I holler. I never used to do that.

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

5 A. No, I don't go to those places.

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

8 A. No.

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

11 A. No, because I don't attend religious services.

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

14 A. No, but like I said, I haven't been to the doctor in 20 years. I'm concerned about going to my
15 dentist again.

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

20 A. Reading, because my vision is kind of blurred sometimes and because I can't focus. Now, I
21 don't read at home anymore. I was a big reader. Now I read in a café or in my car at a
22 parking lot.

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

25 A. Yes, most definitely. I do not feel comfortable or at ease in my home. Very unrested.

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

28 A. Since the smart meter was installed, there have been power surges when I flip the lights on,
29 it's blown three switches so that I've had to replace them and blown seven light bulbs.
30 Everything I have now buzzes: lamps, DVD player, portable massage tool, infrasonic QGM
31 (which is an ultrasound machine). My refrigerators are just screaming all the time because
32 the compressors are very sensitive to the electrical surges.

33 **Q. How old is the wiring in your home?**

34 A. It's Romex.

1 **Q. Is there anything else you want to say about how the smart meters have affected your**
2 **life?**

3 A. Overall, it feels like something has happened to my body's electrical field, and a lot of things
4 don't function right.

5 **Q. What do you feel is a fair opt-out program?**

6 A. What is even close to being reasonable is to put my analog meter back on. I can read my
7 own meter. Businesses, everybody, should be able to opt out.