way that toxins are more easily carried into the brain.

With mounting questions from an increasingly concerned public wishing to know what is being installed in our homes, and interested in knowing what effects wireless smart meters have on ourselves, our children, our friends and our families, it's time we hold policy makers accountable for ensuring that a democratic, truly transparent decision-making process is taking place with respect to smart meters. The current "Ready-Fire!-Aim" approach to rolling-out wireless smart meters for the smart grid is negatively affecting human health and the environment.

Just as we recognized the proverbial "writing on the wall" with regard to technological wonders of their times: Agent Orange, Asbestos, CFCs, Diethylstilbestrol (DES), Dioxin, DDT, lead paint, and Thalidomide ... it's time for us to stop, wait for results from current scientific studies, do a thorough job gathering all relevant wireless smart meter information, engage in open dialogue all involved communities, and take a careful look at what role we really want wireless smart meters to have in our world today. If smart meters are harming increasing numbers of people, we potentially have a huge ticking time bomb on our hands... one that is leaving few habitable places left on Earth for growing numbers of individuals who have less and less tolerance for modern day electrosmog.

Dated this <u>9th</u> day of January, 2013.

STATE OF CALIFORNIA ALAMEDA, ss:

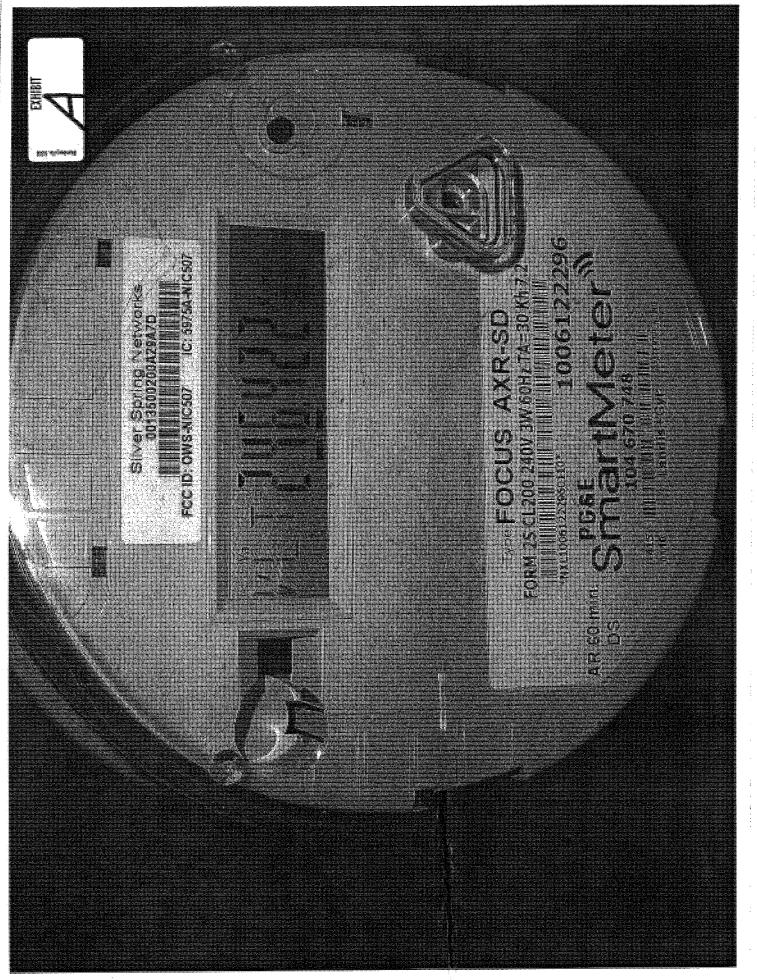
January <u>09</u>, 2013

Personally appeared the above-named 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,

COLLIN BECKER
COMM. # 1926751
NOTARY PUBLIC - CALIFORNIA III
ALAMEDA COUNTY
My Comm. Exp. March 25, 2015

Notary Public/Attorney-at-Law
Collin Beder

Name Typed or Printed



Friedman Lay Witness Testimony Redacted 125 of 293

#### PRE-FILED DIRECT TESTIMONY

MPUC Docket No. 2011-00262 Please state your name, address and contact information. 1 Q. A. My name is 2 Was a smart meter installed at your residence? 3 Q. 4 A. No. Did you offer to provide testimony in another proceeding about your experience with 0. 5 smart meters? 6 Yes. I have had serious health problems related to smart meters and to all types of digital 7 A. meters (including smart meters and radio-off smart meters), and I offered testimony in a 8 Michigan Public Service Commission hearing (Case No U-17053) reviewing a proposed opt-9 out program for Detroit Edison Company's Advanced Metering Infrastructure. I am an 10 Intervenor in that case. This testimony was offered to show that an analog meter needed to be 11 offered as a smart meter alternative. Unfortunately, the Commission struck this testimony, 12 holding that the type of meter to be used in Detroit Edison's opt-out plan was not open to 13 consideration and that, therefore, the health testimony was not relevant. 14 Is the attached document marked as Exhibit A a true and accurate copy of the testimony 0. 15 that you offered to provide to the Michigan Public Service Commission? 16 Yes, it is. A. 17 Are the statements that you made in the attached Exhibit A still true and accurate? 18 0. A. Yes. 19 Do you wish to add anything here not included in your statement in Exhibit A? 20 0. Yes. Things took a turn for the worse when I spent a five days at my parents' in Arizona over A. 21 Thanksgiving 2012. I have not slept well there for about a decade, but attributed it to the time 22

3

4

5

6

7 8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

change. In 2001, I slept really well. The next year, I couldn't sleep. I just tossed and turned and finally, after a very long time, would sleep fitfully. I thought it must be the bed, and moved to a different bed. It didn't help, but I stayed in that bed. Every year since, I have slept poorly, and wondered about the bed and the time change and wondered why, even if I spent two weeks there, I could not adjust and sleep.

The last two years, I basically haven't slept at all while there. Turns out, my parents have a Turtle meter on their home. It doesn't transmit wirelessly, but over the power line. It's digital. That's been on the home since 2002, which is about when I began experiencing a lot of difficulty sleeping. In about October or early November of 2012, my father told me that they had a digital meter on their home, and that he thought it had been put on about 4 years ago. This was actually good news to me, because I thought, Well, I don't feel anything at my parents. Everywhere there is a smart meter, I can feel the meter immediately when I enter the building, so I had made the assumption that if I couldn't feel it, it wasn't a problem for me (or at least not an immediate problem; from what I had read, I knew that down the road it could potentially be a health problem). I was so glad, because I felt like if worst came to worst, I could move back to Arizona and live in the electric cooperative district (Trico) that includes my parents' home.

I spent five days there sleepless, again wondering why I could not sleep and wondering why I couldn't adjust to the time change. The last day I was there, my father told me that the meter on their home is a Turtle meter. That night, as I lay sleepless, it suddenly dawned on me: I couldn't sleep because they had a digital meter! But then the question was, Why was it even worse the last two years?

When I got back to Ann Arbor, I continued to talk to my parents about this. My mother reminded me that two years ago, they got wireless. (My parents live in a very rural part of

Arizona, so a strong wireless antenna is required.) Clearly, the addition of the wireless to the dirty electricity already generated by the Turtle meter made the problem even worse! The bedroom where I sleep is about 15 feet from the wireless antenna (I didn't know there was an antenna nor where it was located until I spoke with my mother this year about it). In 2011 (the year the wireless was installed), I was there for 11 days, and exhausted the entire time. My sleep was abominable, although I actually did sleep. This year, I essentially did not sleep. I lay awake the entire night, tossing and turning, managing to grab a small amount of unrestful sleep early in the morning. I would awake exhausted, and spent the entire vacation, just like the year before, feeling terrible and barely able to function, barely being able to even take a walk, unable to read or do much of anything. This year, I would get up, walk a tiny bit, lie down for an hour, walk home, then lie down outside and try to sleep.

Interestingly, when I went to the Tucson International Airport to go home, I couldn't even feel the wireless in the terminal.

The cumulative effect that exposure to EMFs creates became apparent to me on the plane ride home, and afterward in Ann Arbor. I was in the plane, tired, just looking out the window (we'd probably been flying for about an hour, maybe less) and suddenly I got a headache. I attributed to the wireless on the plane (though I hadn't experienced that on the way out). As I said, I was looking out the window, and we were passing over wind turbines. I didn't think much of it. The headache passed within about 10 minutes. I was reading, about an hour later, and suddenly got a headache again. I stopped reading in order to be with my headache, looked out the window, and lo and behold, we were passing over another wind farm! Unbelievable. The headache passed as we moved away from the farm. I didn't experience any more headaches on the plane.

My ears rang intensely for 3 days after I got home, a high-pitched, intense ringing unlike anything I'd experienced before. The ringing has never stopped, two months later, though it's decreased in intensity. My body buzzed for three days, something I again had never experienced.

Medical Library at the University of on December 2, 2012. I felt a crush of what I now call one of the various EMF feelings I experience. I had never felt that in that library before. In fact, now that Ann Arbor was almost entirely installed with smart meters, I considered the University of one of the few possible places I might spend time, since the university has its own power plant and presumably wouldn't be getting smart meters. I spent 3.5 hours at the med library. I felt really good and wired and awake when I got home around 8 p.m. That night, just like at my parents', I was unable to sleep the entire night. The next day, I was in the room of my house reserved for my occupation when I felt an EMF sensation. I couldn't understand it. The next day, I felt it again. I used a meter that measure voltage transients, and found out that one outlet in the room, an outlet into which nothing has ever been plugged, was emitting a high amount of transients. I checked it again the next day—I wasn't feeling anything strange, and the meter showed a normal reading. Since then, I feel it off and on.

The list could go on and on. On December 8, I felt something strange in my body, and sensation I associate with smart meters, though brief, and that I'd felt recently a few times in my kitchen. I noticed my neighbor using their garage door opener. It is only this neighbor's garage door opener that bothers me. The fluorescent lights at the outdoor farmer's market bothered me, yet another place I now cannot spend time in. On the 14<sup>th</sup>, I went to a friend's house that does not have a smart meter, for a meeting. I could barely stand it. She has

19

20

21

22

23

24

fluorescents, halogens, dimmer switches. I asked her to turn some of them off. I still did not feel good, and some time later asked her if we could move to another room where I knew she had incandescent lights. I still did not feel good. Then she told me she had wireless. She's had wireless for some time, but this was the first time I could feel it. Then, we left the house. I was walking about five feet behind two people as one of them, about five feet from her car, when suddenly, wham!, something passed through my falx cerebri (the connective tissue membrane that separates the two lobes of the brain) and a millisecond later I heard her car door opener and heard the beep of it. Even this I was now sensitive to. As I said, the list goes on, and the passage of time has not improved things. Even my computer is problematic, and I feel strange sensations coming from it. If I stay away from buildings with smart meters, fluorescent lights, and my computer for a few days, I recover to some extent—that is, I can then interact, briefly, with these devices without feeling anything. In my living room, I have had a dimmer switch for 15 years, which I have always left turned up all the way because otherwise it bothered me. About a month ago, even that, turned up all the way, bothered me intensely, I kept the light off in my living room, illuminating the room by means of the lights from other rooms. I was finally able to put a regular switch on it a couple of days ago.

Everything I'd been told about increasing sensitivity is, sadly, coming true. I didn't think it would. I was not going to be that person. I was going to conquer this sensitivity.

I believe that the switched mode power supplies are as much of a problem as the RF. Non-analog meters may solve the problem for some people, who are only apparently sensitive to wireless, but they will not solve the problem for many of us. My experience at my parents' makes that clear, as does the sensitivity I have always had to fluorescents.

I also want to add that in the testimony I submitted in U-17053, I noted that I could no longer go inside my bank for banking purposes and switched to using an ATM. Since that

- testimony was written, the bank installed new ATMs that have all sorts of lights around them. I

  can no longer use those ATMs. I have switched to using the night drop to deposit my checks,

  which is not always a good option because the money will not picked up until the following

  day and because I cannot check my balance except over the phone.
- 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?
- 8 A. Yes. I submit the attached sworn testimony in support of complainants Ed Friedman, et al in their case before the Maine PUC as evidence that smart meters are not safe.



STATE OF MICHIGAN WASHTENAW, ss

January 38, 2013

Personally appeared the above-named and 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

MARY GENEUA BICKARD

Name Typed or Printed

My Commission Expires: FEB 12 20/

10

MARY GENEVA RICKARD NOTARY PUBLIC, STATE OF MI COUNTY OF LIVINGSTON MY COMMISSION EXPIRES Feb 12, 2017 ACTING IN COUNTY OF WASHTENAW

#### **EXHIBIT** A

#### STATE OF MICHIGAN

#### BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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

QUALIFICATIONS AND DIRECT TESTIMONY OF

### QUALIFICATIONS OF

1 2	Q.	Do you swear that the testimony you are about to give is the truth, the whole truth, and nothing but the truth?
3	A.	I do.
4	Q.	Please state your name, address and contact information.
5	A.	My name is
6	Q.	On whose behalf are you testifying?
7	A.	That of myself as Intervenor.
8	Q.	What are your qualifications to testify?
9 10 11 12	A.	I take my electric service from Detroit Edison. I have been affected by the smart meter installation in multiple ways: my health, my ability to earn an income, my ability to perform major activities of daily living as defined by the Americans with Disabilities Act, my ability to attend religious and spiritual services, my ability to access government services and health-care services. My health is negatively impacted by the nontransmitting digital meter
14		Detroit Edison proposes as an alternative to the smart meter.

#### DIRECT TESTIMONY OF

1	$\mathbf{Q}.$	What is	the	purpose of	your	testimony	1?
---	---------------	---------	-----	------------	------	-----------	----

- 2 A. To provide information that establishes that there is a need for a no-fee opt-out and the
- 3 need for an analog meter option. To provide information that may help the Commission in
- 4 determining that smart and digital meters create certain kinds of economic, medical, social, or other
- 5 harm or hardship, as outlined in Intervenor Linda Kurtz's Petition for Intervention, to some or all
- 6 persons such that Detroit Edison and the Commission must not require those who are or who are
- 7 likely to be so harmed to have a smart or digital meter placed on their home or place of business or
- 8 to be otherwise deprived of rights and liberties, as outlined in Intervenor Kurtz's Petition for
- 9 Intervention, by the deployment of the advanced metering infrastructure, smart meters, or digital
- meters, and, in the alternative, that such persons must be able to avoid such harm to their person
- and property without being charged a fee
- 12 Q. How long have you lived at your current residence?
- 13 A. I have lived in my home since 199. I own my home.
- 14 Q. What has your experience with smart meters been since your first encounter with
- 15 them?
- 16 A. It has been terrible. There is the health aspect and then there is the social aspect.
- 17 Q. Tell us about the health aspect. What health effects have the smart meters had on
- 18 you?

24

25

26

27

28

29

30

31

32

33

34

35 36

- 19 I will list them.
- Insomnia. If I am in a building with smart meters for more than about 15 minutes, I
   cannot sleep that night. Moreover, if I am in a building with smart meters for a half
   hour or more, or for short periods of time over several days, I am unable to sleep for
   several days.
  - Heart palpitations. The same as with the insomnia, although I do not *always* experience the heart palpitations when exposed. However, when I do get them, they can go on for several days.
  - Cognitive dysfunction. This is especially present when I am in a building that also has a lot of wireless in it already. I forget what I came to the store to get. If I am talking to someone, I cannot keep track of my thoughts. I have a thought, and then I cannot complete it. I want to think and I cannot. I forget words. It is like being old long before your time.
  - Anxiety in my body. This isn't a mental anxiety—it is a physical feeling, *not* accompanied by anxious mental thoughts.
  - Pressure in my head, as described above.
  - Pressure in my body, as described above.
  - Occasionally, headache or incipient migraine.
  - Tinnitus, sometimes.

Inevitably, I get the insomnia. Inevitably, if in a building for more than 15–20 minutes, I get the cognitive dysfunction. Inevitably, if I am in a house for more than 5 minutes, I get the pressure and other weird sensations, as well as the agitation/anxiety in my body. If I am in a bigger building, it may take up to 10 minutes to feel these sensations, though it usually happens more quickly. And sometimes, especially if it's a house, I feel them the moment I cross the threshold.

I have sometimes been barely able to sleep for 3 days and have had heart palpitations for three days after being in a building with smart meters. My second encounter with smart meters occurred toward the end of June (June 22–23), when I was forced to be in buildings with smart meters for hours two days in a row. One of these encounters was at my doctor's office, again, where I did not know they had been installed. However, the moment I stepped over the threshold of the building, I could tell they were on the building. After the incident at my doctor's I had heart palpitations for the next three days.

On top of all this, I have now become more sensitive to all sorts of electrical and wireless devices. This did not happen immediately. But now, there is hardly a building in Ann Arbor without a smart meter, so in order to do anything, I must be exposed to them. I have to get groceries, I have to do other errands. I do them as quickly as I can, but I cannot do everything in under 10 minutes. About a month ago, I began to notice that I was bothered by things that had never bothered me—the cordless phones in my home; sometimes the headset from my cell phone (the EMF travels up the wires); fluorescent lights in buildings that don't have smart meters on them, wireless in the Michigan League. With the fluorescent lights, I will feel the same agitation in my body and a very strong desire to leave the store immediately.

The effect on me is much, much worse in a home than, usually, in a big building. I assume that that is because the walls in a home are much closer to me--thus all the currents are closer to me and have greater impact. Also, the smart meters are way, way closer in a home. In one friend's house, if I stood in her kitchen, the meter would be five feet away from me, and that is standing as far away from it as possible.

#### Q. How do you know it's smart meters that are affecting your health?

A. It's obvious. When I step over the threshold of a building, I know whether there's a smart meter on the building because I can feel it. I feel all these weird sensations, like I've described above. Then, I don't sleep that night. And/or I get heart palpitations. And/or the other symptoms I've listed. Buildings that I was once fine in, one day I step inside, and it feels terrible. And so I know the smart meters have been installed.

Moreover, nothing else in my life has changed. When I heard about smart meters, I was concerned, but very hopeful that they would not bother me, since my cell phone did not bother me.

#### Q. Did you have these problems before smart meter installation?

- A. Before smart meter installation, I rarely experienced insomnia. Poor sleep, yes; insomnia—
   very rarely.
- Heart palpitations—I had a strange feeling in my heart many years ago, different than what I feel now. It was as if my heart were beating very fast. It lasted for a few days and never came back. This was different than what happens with smart meters.
  - Now that smart meters are everywhere in Ann Arbor, I sometimes feel strange sensations in my heart even when I have not been in a building with smart meters for a day or two. The first time I got that feeling was after being in my doctor's office and the other buildings.

Cognitive dysfunction—occasionally, but rarely to the degree I experience with smart meters and certainly not a sudden change from clear-headed, incisive thinking to sudden cloudiness. I have mitochondrial dysfunction, so I have periods of fatigue, and sometimes that is associated with trouble completing a thought or finding the right word. But that is something that creeps up slowly—it doesn't happen nearly instantaneously. With smart meters, I step over the threshold of a building with smart meters and within a few minutes to ten or twenty minutes, my brain goes in and out of working, I lose thoughts, there are empty spaces in my thinking. Yesterday, I had to be in a building with smart meters, interviewing someone. I could feel the smart meter the moment I stepped over the threshold. I didn't in fact know whether this meter might be installed on this building, but I asked my interviewee. She said there was. I felt pressure like a vise around my head, and a weird vibration in my body. About 20 minutes into the interview, I was no longer able to think, to ask questions. With a lot of effort and time, I could make some headway, but only with some help from the person helping with the interview. I'd also like to add that this interviewee, like several other people I have interviewed who have positions of authority in the community—doctors, people with directorial or supervisory roles in government—have given an interview, then consulted with their attorneys and told me not to use their interviews. These are people who have been made sick by the smart meters and are also seeing the effects on the people they treat, provide services to, and/or supervise. They have been excited about providing information and being heard. Then, they consult an attorney and refuse to testify. Everyone is so afraid of DTE.

- Pressure—no.
- Bodily sensations of agitation—no.
- 32 Headaches or migraines—occasionally.
- Tinnitus—I have had a very, very mild tinnitus at least since the age of 12, but not even enough to remark to the doctor about. However, with smart meters, I can have the kind of tinnitus that people normally describe: the buzzing isn't something so mildly in the background you barely notice it; it is front and center.

6

7

8

9

10

11

12 13

14

15

16 17

18

19 20

21

22

23

24

25

26

27 28

29

#### Q. When did you first notice that your health was affected by smart meters?

- 2 A. The first time I ever encountered a smart meter was sometime in June of 2012. Someone I
- 3 knew peripherally invited me over to her house. I walked into the house, which was on Huron
- 4 Street in Ann Arbor, and was nearly bowled over. It is really hard to describe the effects one feels
- 5 from something like this because they are not sensations we experience in normal life and so we
- 6 don't have good words for them. There was a way in which it was like being pressed upon from all
- 7 sides, sort of like the pressure you feel when taking off really, really quickly in an airplane, the kind
- 8 of pressure I imagine astronauts feel. That pressure was all over my body, though that particular
- 9 type of pressure was probably slightly less in my head.
- In my head, as I stood, and later sat, in that house, it felt like something would shoot in. Not like a
- shooting pain. It was wider than a pain, and it wasn't painful per se, though it was extremely
- unpleasant. It was as if what I can best describe as "empty rays" shooting through my head from
- time to time. Like two or three, and then it would stop for a while. It was really, really weird.
- 14 I found that my body was becoming agitated. It wasn't a mental agitation, per se, but an agitation of
- my body. It quickly became hard to think. I would lose my thoughts.
- I can tell you more about what it was like, and this has been my experience in other houses with
- smart meters: It is like you are in the middle of a funnel cloud of electromagnetic current—you are
- encircled by these currents and can feel them. That is what is really weird about it. Then, on top of
- that feeling, these "empty rays" pass through your head from time to time. Like I said, these are
- wide, and sort of like a light beam in that they are kind-of empty inside. I know this sounds weird,
- but think of how science fiction writers describe things. This is science fiction. Science fiction
- 22 writers have been incredible predictors of the developments of the future—and we are now living
- in some of that world.

- 24 Those "empty rays," when they pass through, it is like for a moment or two your thought processes
- 25 stop. It is really weird, because it is so quick you know it's happening and yet you don't. If you have
- ever had general anesthesia administered, then you might have an inkling of what it is like. When
- 27 they administer general anesthesia, you are fully present and then suddenly there is this huge blank
- space. When you get anesthesia, the blank space (the loss of consciousness) lasts for a long time—a
- 29 half hour to several hours. With a smart meter, it is so brief. But it can happen repeatedly. And in
- 30 that moment, you are blank. And aware a millisecond later that you were blank. It's very unsettling.
- 31 You know it is happening—just like when you are coming out of anesthesia, or when they haven't
- 32 administered enough—yet you can do nothing about it.
- 33 As I read more about the effects that smart meters can have on the human system, this experience
- made sense: It is interrupting the communication of the nerve cells in my central nervous system.
- As a biodynamic craniosacral therapist and a student of human anatomy and physiology, I learned,
- as we all did in school, that neurotransmission is an electrical and chemical phenomenon.
- 37 Q. You described being in a funnel cloud of electromagnetic radiation.

- 1 A. Yes. As time went on, it came to me that that is the best description, and, on my own, I
- 2 figured out why. Later, as I did more reading, I found out that what I figured out on my own was
- 3 exactly what any electrical engineer or electrician would tell you about what was happening. You
- 4 see, in a home, you are surrounded by wires, encircled by them as they pass behind every wall.
- 5 They are also often above you, in the ceiling, and below you, in the basement. And if you are in a
- 6 house like that first house I was in, which was three stories, each tenant has their own electronic
- 7 equipment on, pulling electricity through the house, and the funnel cloud is very, very high, much
- 8 higher than in a ranch house. So in a multi-storied house, the effect—at least this is my
- 9 experience—is increased. You feel like you're are in a soup of vibration and also that that suddenly,
- out of nowhere, a current will shoot transversely through your body. I couldn't figure out why there
- were these multiple sensations--vibration and these currents or rays. But then I learned that the
- 12 *magnetic* part of the electromagnetic field runs at right angles to the electrical field. So you have
- these currents encircling you as you sit in a room (and probably running above you and below you
- to a usually lesser degree) and in addition to that electrical field encircling you, you have the
- magnetic field running perpendicularly out to you. I wonder whether the "empty rays" I felt are
- those magnetic fields or whether they are the radiofrequency hot spots from intersecting smart
- 17 meter RF waves.
- Now, please understand that I learned all this terminology after my first encounter with smart
- meters. You know, this is the interesting thing about science. In science, we *observe* phenomena.
- Then we seek to explain it. Despite what is commonly taught as how the scientific method works.
- 21 most science is actually done inductively, not deductively. Thus, we observe phenomena, we seek to
- 22 explain it. We don't waltz in with a theory and attempt to prove it. Here, the phenomena are these
- extraordinary sensations in the body and other physiological phenomena: momentary lapses of
- consciousness, tinnitus, agitation, inability to think, and so on. When I first felt them, I had no idea
- 25 what was going on. But I could feel the sensations. Thus, I could ask the question, "What is causing
- 26 this?" And the simple, but in some ways not terrifically informative answer is, "Smart meters." But
- 27 how do they cause it? And that is where an understanding of how the currents work—the electric
- 28 and the magnetic fields—comes in. Once you understand that, the seemingly crazy becomes
- 29 explicable. Like gravity. None of us can see it, but all of us can feel it. And it exerts a powerful yet
- 30 invisible force on our bodies.
- 31 That is part of why this sensitivity to EMF is so hard to grasp. You can't see electric fields. You can't
- 32 see magnetic fields, either, though you can see how the magnetic fields operate if you get a magnet
- and some iron filings. It's so hard for anyone to believe that something you cannot see is wreaking
- havoc with your ability to think and sleep and your heart to function properly. I completely
- understand. I am very sensitive to these fields, but not as sensitive as some people I know, and
- 36 when they say that they can feel something, for instance, effects from a cell phone tower, I feel a lot
- of skepticism. It's human nature to mistrust someone else's experience when we've never felt it. So I
- 38 understand why people who can't feel it are skeptical
- 39 But remember this, we can't feel cancer, we can't feel the AIDS virus, we can't feel when we've
- swallowed a batch of E. coli, and most smokers don't feel bad when they smoke, yet each one of
- 41 those things is invisibly killing us. We should have learned by now that just because we can't see it or

- can't feel it doesn't mean it's not real. And just because we can't see or feel it doesn't mean it's safe!
- 2 Someone who is contracting a sexually transmitted disease is probably feeling great while they are
- 3 contracting it!

#### 4 Q. Did you know there was a smart meter on the first house you encountered with a

#### 5 smart meter?

- 6 A. No, not when I went over there. Once I was in the house and felt all these terrific pressures
- 7 and sensations, I asked if there was a smart meter on the house. I went outside and looked and saw
- 8 three smart meters on the house. I had learned about smart meters a few weeks earlier. Someone I
- 9 know peripherally had sent out an email talking about smart meters and how badly they were
- affecting her health. I didn't know if I would be affected, but I thought there was a chance. I didn't
- 11 know what a smart meter looked like, but since these meters didn't look like my own meter and had
- 12 a digital read-out, I assumed they were smart meters. Also, they had blue on them, which I later
- 13 learned is characteristic of the Itron smart meters.

#### 14 Q. Why did you think you might be affected?

- In 2008, I was given a laptop computer. I was so excited. I would be able to do computer work
- outside or go to a coffee shop and cruise the Internet. I work out of my home, so to be able to go to a
- place where there were other people, or to be outside in nature, was important to me. Well, I went
- outside, turned the computer on (while holding it on my lap), and within a little bit of time began to
- 19 feel a bit weird. By the time I'd been on that computer for a half hour, I was feeling strange, woozy,
- 20 not able to think well. I persisted. "I'm not going to give in to this feeling," I thought.

#### 21 Q. How did you know it was the laptop?

- 22 A. Well, it was pretty obvious. I turned it on, and in less than half an hour I felt ways I'd never
- felt before. I was so frustrated. I also knew why I was likely feeling this way. I'd had a client the
- 24 month before, a young guy, college student, who had come to me for craniosacral therapy. He told
- 25 me he couldn't use his computer, couldn't use his cell phone, couldn't even watch TV. At first, it was
- 26 just that he couldn't use the computer, but then it was all these different electronic devices. He said
- 27 it was called *electromagnetic sensitivity*. Since I'd just been in a study group with someone who'd
- 28 mentioned learning about this type of thing, I had an inkling of what he was talking about and didn't
- 29 think he was coming from out of left field. But not in a million years did I think I would have that
- 30 problem! I thought it was sad for him.

#### 31 Q. So how did you resolve the problem with your laptop?

- 32 A. I called the place I got the computer from. The guy told me how to shut the wireless off. I
- was so bummed! I did it. It was slightly better, but still impossible for me to use this \$1000
- 34 computer that could not be returned!
- 35 So, I talked to the guy again, and he told me to try taking the wireless card out. I did that, and I can
- 36 use the computer just fine. And, in fact, the LED screen is a thousand times better than the CRT
- 37 screen I had before, which would make me exhausted. This screen doesn't tire me out to the same

- 1 extent—less flicker, less dirty electricity, all that. Everyone knows CRTs are much harder on you,
- 2 just like fluorescent lights.

#### 3 Q. Do you experience problems with other wireless or electrical devices?

- 4 A. Some, but not all. Wireless in a room, at least before the installation of smart meters, was
- 5 not a problem for me. Like many people, I went to coffee shops to work on my computer, and there
- 6 is wireless at all of them. Perhaps I was affected in some kind of way (and from what I have now
- 7 learned about the hidden, unfelt effects of RF radiation on the human body, I probably have been),
- 8 but it was not anything I could directly feel.
- 9 Dimmer switches have always bothered me. I can hear the buzz if they are not turned all the way
- up, and they make me feel weird if they are not turned all the way up. I feel that agitation I
- 11 described earlier.
- 12 Most CFLs I cannot stand, though certain ones I can tolerate.
- 13 Fluorescent lights exhaust me, like they do many people, if I am under them for a few hours, but,
- prior to the installation of smart meters, I could not *feel* anything from most of them. It's just that I
- would be fatigued after being around them.
- 16 My cell phone does not bother me, at least not now. We have measured the RF output from it, and it
- is extraordinarily low. It is an old phone by today's standards—a 2008 model. But I never put it to
- my ear—I use a headset and I often keep it shut off unless using it. Except for when I am walking, I
- do not carry it next to my body.
- But here is the clincher. When I received the laptop, I also got a wireless router, of course. I never
- used it, never even opened the box because of that initial experience outside. But earlier this year, I
- needed a router. I called the computer store, and the guy told me I wouldn't have any problem with
- 23 the router. I wasn't too sure about that, but he was, so I decided to try it. I plugged it into the wall
- 24 and immediately I felt something happen to my heart. Unbelievably scary—like it was being
- penetrated by a current, by something that would twist it—right where the aorta enters the heart. I
- pulled the plug immediately.
- 27 Also highly relevant, when I walked into Best Buy a few years ago, I felt all sorts of strange
- 28 sensations—a lot of things like I feel now with the smart meters. I couldn't really figure it out, but
- 29 came to the conclusion that they must have added wireless throughout the store and that was what
- 30 had changed. That made me a little concerned, because I knew that many coffee shops, at that time,
- 31 were adding wireless, but I didn't have those sensations anywhere else. I figured that the amount
- and density of computer and stereo equipment in that store must be what made the difference. I
- 33 now suspect that the switched-mode power supplies in the equipment, combined with extremely
- 34 strong wireless, were what caused these feelings. I could barely stand to be in there, and from then
- on, I never went to Best Buy unless I absolutely had to buy something, and I got in and out as
- 36 quickly as I could. But I didn't worry about it per se, I just figured it was Best Buy, since I didn't
- 37 experience these things anywhere else.

- 1 Similarly, but to a lesser extent, when I went to Ace Hardware on Stadium Boulevard a couple of
- 2 years ago, or maybe only a year ago, I noticed something different. I would get 15, maybe 20, feet
- 3 away from the checkout counters, and I would feel strange and uncomfortable. Not the same way as
- 4 in Best Buy, and certainly not as intense, but something along the same lines. I didn't like it at all. I
- 5 was fine in the rest of the store. I noticed all the clerks were walking around with headsets. I figured
- 6 it must be the wireless current. I didn't know much about that sort of thing then.
- 7 Oh, and once that happened, after a few months, the things you swipe your credit card through--in
- 8 some stores--specifically, Whole Foods and Ace Hardware--those card readers started to bother me
- 9 when I was close to them. There was this incredible intensity that came out of them. I think both
- Whole Foods and Ace changed their card readers, because at some point this year, they didn't
- bother me anymore. And note: I wasn't bothered at any other store, so clearly what is transmitted
- through some is not transmitted through others.
- Finally, I have a new washing machine, bought in June. It's computerized. Every time I press the
- buttons, I feel jolts in my head. It's a quick click, as fast as the push of a button. This would have
- been unbelievable to me, but by the time I had this experience, I had read about voltage transients,
- so at least I knew what was going on. What I do in order to be able to use the machine is put the lid
- up to block the control panel. Then I bend down so I'm at the same level as the lid to keep the
- current from hitting me. I have to count the number of times to punch each button so that I can do it
- 19 without seeing. Yeah, it sounds crazy, but it's true. And it makes sense, because the thick metal of
- the lid blocks most of the rays.

#### 21 Q. You live near a cell phone tower. Does that bother you?

- A. I live 1000 feet from a huge cell phone tower. When I first noticed it, quite a few years ago, I
- 23 got worried, because I'd heard that they could be bad for your health, but I realized that nothing felt
- 24 different to me. I was still sleeping okay, too. I think this is really important: The utilities tell us that
- smart meters aren't bad for us, yet I am terribly affected by them, can feel them throughout my
- body, they give me insomnia and heart palpitations, yet I can live next to a cell phone tower for
- 27 years and not feel these strange sensations nor have these *palpable* health effects (it may be
- affecting my health, but I cannot *feel* it).
- Q. Have the health effects you experience as a result of smart meters affected your ability to work and earn a living? If the answer is yes, describe how.
- 31 A. Yes. I work for myself as a therapist and therapist and therapist, and I
- It affects my fatigue level and thus my competence and productivity; I cannot
- take a job outside the home; I cannot keep up my continuing education credits and thus my
- 34 license.
- When I have been unable to sleep because of smart meters, I cannot do When I am
- unable to sleep because of smart meters, I am not as good a see as I can be
- Furthermore, business this summer slowed considerably. I began to consider seeking work
- elsewhere, perhaps partnering with another health-care practitioner, and realized that with

1 2 3		the deployment of smart meters, this was an impossibility. There is absolutely no way that I can work in a building with smart meters. I can't be in a building with smart meters long enough to get a massage, let alone long enough to give them all day!
4		Because of the deployment of smart meters, I was unable to attend my biannual therapy conference in Maryland. I was so looking forward to this educational
6		and networking opportunity, especially because I am past president of the association and
7		its current journal editor. But in early September, I found out that smart meters had been
8		deployed in Maryland and I knew they were likely installed at the conference site. Which
9		they were. Part of my compensation as journal editor is that my expenses to, from, and at the conference are paid for. I was unable to attend. I suspect that I will never be able to
10 11		attend a conference again. Not only will I not receive this compensation that I am owed (at
12		this point, the equivalent of \$5000), my ability to earn an income is severely limited because
13		I will not be able to keep up with developments in the field. BCST is a hands-on work. It is
14		not a skill that can be learned from reading books or taking a course online.
15		Furthermore, I had begun taking workshops on Hellinger work, which is a type of therapy I
16		can use as an adjunct in my work. Because smart meters have been deployed at the Ann
17		Arbor location where these workshops are held, I can no longer learn this modality. Like
18		BCST, it is a work that must be learned in in-person collaboration with others.
19		Moreover, each year, I attend the annual herapy conference here in Ann Arbor. I
20		also practice Polarity Therapy. The building where those workshops are held has also been
21		smart metered, and I will never be able to attend the conference again. There is no way that
22		I can spend 3 hours a day in a smart metered building, let alone 8 hours a day for 4 or 5
23		days.
24		I will be unable to keep my therapy license because of this. To be completely clear:
25		Michigan has passed therapist licensing. No licenses have been issued yet, but as of
26		November 2009, all therapists who wish to be licensed must be getting continuing
27		education credits. These credits include the modalities listed above, as well as
28		therapy courses, which I also attend. I can no longer get these credits.
29		So what am I to do? Stop practicing? Go on welfare? Flout the law and hope I don't get
30		caught?
31	Q.	Have the health effects you experience as a result of smart meters affected your
32	Q.	ability to interact socially with others? If the answer is yes, describe how.
33	A.	My social life has dwindled to nearly nothing. I am unable to be in the home of any friend
34		because every friend has a smart meter on their home. I cannot meet a friend for dinner, go
35		to a movie. I cannot date, because I can't go anywhere.
36		Earlier this year, I joined a number of great Meetup groups. These are social groups where
37		people with similar interests get together weekly, monthly, perhaps a few times a week. I

1 2	was having a great time with the quit every one of those groups because of smart meter installation.
3 4 5 6	There is another group I belong to that meets in the winter and spring. I just realized that I am not going to be able to attend that group anymore. I am not going to be able to go to the annual Christmas party for the spiritual center I was a part of until the installation of smart meters made it impossible for me to attend functions at the center.
7 8 9 10 11	You know, I shop at a co-op, and I used to eat there, hang out there, work on my computer there. It's a social hub in Ann Arbor. I can be certain that I'll see someone I know at least every other time I go there. I can chat. Have a conversation. Catch up with people I wouldn't otherwise see. All that's over. I have to get in and get out, or I pay for it by not sleeping for the next one or two days.
12 13 14	Have the health effects you experience as a result of smart meters affected your ability to access public services, such as the public library, government offices? If the answer is yes, describe how.
15 16 17 18 19	Yes. I love going to the library, especially browsing the book sale. I was so grateful that I was still able to go to the library. Then, one day a couple months ago or so, I walked into the library and knew it had been smart metered. The cognitive dysfunction, the weird feelings in my body, incipient headaches. It wasn't quite as bad in the basement, where the book 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 22 23 24 25 26	If I wish to speak to my city council on any issue, including the smart meter issue, I have to weigh the ill effects on my health vs the possibility that my words will have an influence. I have attended council and environmental and Washtenaw County Commission meetings several times in the last year on a variety of issues, but if I do now, I will wind up not sleeping for one to two nights and experience the cognitive dysfunction, etc. I have already discussed
27 <b>Q.</b> 28	Have the health effects you experience as a result of smart meters affected your ability to freely assemble outside? If the answer is yes, describe how.
29 30 31	Yes. There are several places in Ann Arbor that I cannot tolerate being because of the incredibly high RF in those areas. This includes parts of Washington and Liberty Streets, where marches often take place.
32 <b>Q.</b> 33	Have the health effects you experience as a result of smart meters affected your ability to access religious or spiritual services? If the answer is yes, describe how.
34 A. 35 36	They have utterly affected it. I can no longer attend talks or services at the center I once went to. I want to explore several other religious/spiritual communities in Ann Arbor, and also attend talks, but now I cannot. If a friend dies, how will I attend their funeral? One friend died in April of this year. At least there were no smart meters then, and I could attend his wake.

1 2 3 4		The monthly spiritual group I am a part of can now meet only at my home or the home of one woman whose home has not yet been installed. Soon we will be able to meet only at my home. It was important to people to rotate the gatherings, but we will no longer be able to do that unless I drop out.
5 6 7		My spiritual life is very important to me, and an integral part of the work I do as a therapist. Yet one more avenue of self-realization, community, and education has been cut off from medue to smart meter installation.
8 9	Q.	Have the health effects you experience as a result of smart meters affected your ability to freely access health services? If the answer is yes, describe how.
10 11 12 13 14 15 16 17	A.	Yes. I told you about my experience at my doctor's. Recently, I needed to see my doctor again. I called the clinic and explained that I could <i>not</i> be in their building and wanted a referral to the specialist I needed to see. They refused, and said I had to come in. I waited out in my car, freezing, for one hour before they called me for my appointment (they were an hour late). Then, I had to be in that doctor's office, which is one of the worst buildings I have been in, for one hour for my appointment. I have pre-cancerous lesions on my face, hands, and legs. I had a choice: ignore them and potentially have them turn cancerous (I grew up in Arizona, and my sister has already had a malignant growth removed from her neck), or deal with the effects of the smart meters on my health.
19 20		I have visits to each at San
21 22 23 24	Q.	Have the health effects you experience as a result of smart meters affected your ability to perform one or more major life activities not already mentioned? If the answer is yes, describe what activities and how the effects have affected your performance of these activities.
25	A.	Yes.
26 27 28 29 30 31		Caring for myself. Going to the grocery store. Buying necessary clothing. Banking—once smart meters were installed at my bank (and I could feel it the moment I walked into the bank), I got an ATM card. I prefer to do all my banking with a person, not a machine, and had not had an ATM card for years, but got one the day I walked into the bank and could feel the smart meters. Getting my hair cut. Buying necessary materials for remodeling and maintaining my home.
32		Browsing a store.
33 34 35 36		Learning—both because I cannot attend the educational functions I need to and because of the cognitive dysfunction that inevitably occurs when exposed to smart meters for whatever reason. Furthermore, once I am exhausted and have insomnia because of smart 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 6 7 8 9	Q.	DTE has asked the Commission for approval of a plan that would not allow anyone to keep their analog meter. Instead, those choosing to opt out of smart meter installation, if an opt-out is instituted, will be forced to take a nontransmitting digital meter on their house. Have you had experience with the nontransmitting digital meter?
10	A.	Yes.
11	Q.	What was that experience like?
12 13 14 15 16 17 18	A.	The nontransmitting digital meter makes me feel <i>horrible!</i> I was hopeful that when I went over to someone's house who had a digital meter that I would not be affected. I thought I <i>might</i> be, but I certainly did not expect what I encountered. I stepped over her threshold and my ears began ringing immediately. That is the first time that had ever happened to me. At that point, I had not experienced that with a smart meter. My body felt like it was buzzing. I could not stand to be in her house. It was every bit as awful as the smart meter. The only difference was, I did not feel those "empty rays." I left that house after about 7 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 22 23 24		I experience many of the same physiological changes (anxiety sensations, which are due to cortisol, etc.) as with a smart meter. I cannot say whether they digital meter will cause me insomnia because I have never stayed in a house with a nontransmitting digital meter long enough to know whether that's a problem.
25 26 27		Several weeks after my experience with the digital meter the first time, I was at that same home a second time, again briefly, and experienced the same sensations as well as a pressure through my body.
28 29	Q.	In your experience, will the nontransmitting digital meter solve the health problems you experience with smart meters?
30	A.	No.
31	Q.	Are the nontransmitting digital meters an acceptable alternative to the smart meter?
32 33 34	A.	No, because they will not solve the health problems I and others experience. It is very clear to me from my personal experience that smart meters and digital meters—at least the new, nontransmitting digital meters—cause many of the same health effects. I had no idea of this

1 2 3 4 5 6	so in Sv vo	then I began investigating smart meters. I thought the problems with smart meters were blely because of the RF (radiofrequency) radiation. It was months before I came across formation about switched-mode power supplies and how they might also harm health. witched mode power supplies step the 240 volts coming off the power line down to 4–10 blts to run the switched-mode power supply (SMPS). Analog meters don't need SMPS ecause analog meters don't need electricity to run.
7 8 9 10	ca yo	came across said <i>nothing</i> about how horrible the digital meters make you feel. They just outlined that they might be harmful to health. It made you think about it in the same way bu think about other things that we are cautioned are harmful to our health—you think, Vell, maybe it's a little bit harmful, but what isn't in this day in age?"
11 12 13 14	th hu	ence in the house with the nontransmitting digital meter made it very clear to me that ere is a lot of similarity between the smart meters and the new digital meter and that a age portion of what I and others experience is due (at least in part, if not solely) to the oltage transients generated by the switched-mode power supplies.
15 16 17 18	me Be	It to emphasize very strongly that I have been in a house with an <i>old</i> digital meter, a digital eter that can't be converted to a smart meter. It was put on the house about 4 years ago. Sing in that house is no different than being in my own home. The old digital meter is othing like the new one. It is an entirely different experience!
19 20		nything else you wish to say about how smart meters have affected your ability to perform ajor or minor activities of daily living?
21 22 23	ev	en though I am living in a city. I can't do any pleasurable thing anymore that involves sything outside of my home other than walking through the woods.
<ul><li>24</li><li>25</li><li>26</li><li>27</li><li>28</li><li>29</li></ul>	an mo lik At	with the near completion of smart meter installation in Ann Arbor in the last month— id therefore my inability to have a respite in any grocery store—I seem to have become ore sensitive to every sort of electrical field. I am very afraid that I am going to become te that college student who came to see me—unable to use any sort of electrical product. The least he was still able to socialize with friends at their homes, a restaurant, a bar, go to surch, spend time at the library. I can't even do that!
30 31	_	hat do you feel is a reasonable accommodation to allow you to perform major tivities of daily living?
32 33 34 35 36 37 38	the mu jur dis de	ell, it's very obvious. Smart meters must be banned, as must the digital meters that create ese horrific voltage transients. It is amazing to me that all around the country, unicipalities have been spending millions of dollars making every sidewalk in their risdiction conform to ADA requirements, whether or not any person with a mobility sability lives in that neighborhood. I am all for making things accessible. But the eployment of smart meters has made every place—every building, every social setting, every ome, some streets, every educational facility, every religious institution—inaccessible to me.

1 2		Every person in a wheelchair can go to city hall, can get a special cart at the grocery store, can have a sign language interpreter present if need be, but I and others who are immediately and deeply impacted by the electromagnetic fields created by the installation
3		of smart meters in every building in Michigan, are <i>barred</i> from every public space unless we
4 5		make the choice to risk, in a very deep and real way, our health.
6	If the	y 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 9		going to reduce energy consumption. Enough studies have shown that they've had no 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 b	are 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 o	nly 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

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

present since my later years in high school.

29

35

36

37

38

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

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

1 no energy for life, no zest. The heart palpitations I experience would surely damage my 2 heart so badly I would slowly die. The fatigue and cognitive dysfunction would make me 3 incapable of earning any type of living, let alone taking care of myself and my home. 4 Q. Is there anything else you wish to say about how smart meters have affected your 5 health or your life? 6 Yes. My heart feels weird a lot of the time now. I do not have smart or digital meter on my A. 7 home, yet ever since that exposure in June at my doctor's, my heart has felt weird off and on. 8 No matter where I go now, I am in the RF field from smart meters. Short of hiring someone 9 or begging someone to do all my shopping, etc., I must be exposed to some extent to these 10 meters. The installation of these meters has devastated my social life. It is unbelievable and unconscionable 11 12 that something that hurts so many people—I am not the only one—so tremendously has 13 been allowed to be deployed in our society. 14 And I want to say that the digital meters DTE proposes to replace the smart meters affect me and 15 others as badly in nearly every way as the smart meters. If that digital meter is put on my 16 home, I will be as dead as I will be if a smart meter is installed. 17 DTE has its own reasons for installing these meters. What I astounds me is that their ignorance, 18 myopia, greed, denial, or whatever it is, is apparently causing them to be so rigid, so 19 uncompassionate, so unbending, and so uncaring that they would force people to put on 20 their homes something that, quite literally, is going to kill some of us very quickly. Their grid 21 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. 22 They've already ruined my life in many ways. The State of Michigan needs to ensure that 23 24 even if I am forced to live like a hermit, I can still *live* in my own home rather than slowly die 25 from fatigue and heart problems. 26 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 27 area! Don't you people get it! You have forced me, and others, to live like hermits. None of us 28 wants to live this way! Until a couple months ago, I didn't live this way. 29 30 Lastly, I want to say that I know how to live with pain. I have to get injections in to my joints every 31 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 32 33 take hardship. I am not here because I am imagining something. I am not here because of 34 fear. I am here because my body will not survive a smart or digital meter on my home. I am 35 here because of the reality of what these meters do to my body.

### PRE-FILED DIRECT TESTIMONY

### OF MPUC Docket No. 2011-00262

Please state your name, address and occupation.

Q.

2	A.	
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

- in health.
- Q. Do you experience electromagnetic sensitivity symptoms in proximity to radio 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.
- Yes. I have headaches, fatigue and ringing in the ears if within a few feet of the 6 A. 7 smart meter for a duration of time, i.e. sitting in living room where meter is installed. Sensitivity to all wi-fi devices has developed since the smart meter was 8 installed. At first in July in 2011, fibromyalgia, weakness and fatigue occurred, 9 then in October and November 2011 face numbness, tingling occurred, followed 10 11 by more advanced to acute reactions of burning of the head and face in April and May of 2012. The symptoms have continued to increase to headaches, anxiety, 12 dizziness, nausea, weakness, muscle pain (widespread), joint pain and acute and 13 sudden face, neck and chest burning along with the headaches when exposed to 14 EMF conditions. Ringing in ears and aching teeth are more recent symptoms. 15
- 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.
- Yes. I have sought out and located a few doctors knowledgeable in this area. All have diagnosed me with EMF Hypersensitivity, allergic reactions to 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 m	nedical tre	eatment j	proto	col for	EMF pa	tie	nts.				

- Q. Has your physician or other medical care provider made any recommendations about exposure to electromagnetic devices, including smart meters?
- A. Remove smart meter. Avoid and discontinue use of all wireless phones and devices. Avoid EMF sources in the home as much as possible.
- Has your experience with smart meters caused any disruptions in your daily 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.

16

17

18

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

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

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

Dated this 3/ day of January, 2013.

STATE OF MAINE CUMBERLAND, ss:

January 31, 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: 10/0190

West and the Control of the Control

# PRE-FILED DIRECT TESTIMONY OF MPUC Docket No. 2011-00262

1 <b>Q.</b>	Please state your name and address.
2	A. (I am a tenant at this
3	address;
4	(I lived here for a year as owner
5	and now am the landlord)
6 <b>Q.</b>	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 <b>Q.</b>	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 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?
- A. I am paying the opt-out fees at my property, but I am strongly
- 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
- injury. I am very sensitive to EMF's, chemicals and other environmental factors.
- I cannot wear hats or sunglasses because they impact my cognitive focus and
- endurance. EMF has the same impact. I minimize environmental and chemical
- 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
- phones, smart meters or other devices?
- 17 A. EMF creates cognitive fatigue, dizziness, physical fatigue, and inability to
- focus. Smart meters seem to impact my sleep and level of exhaustion more than a
- wireless device does. I can't explain why.
- 20Q. If you have physical or medical conditions, including sensitivity to
- electromagnetic radiation, have these conditions been diagnosed? Identify
- 22 the diagnosis or description of the condition.

- A. Cognitive disorder NOS is official psych diagnosis. Toxic encephalitis is
- 2 also a diagnosis.
- 3Q. 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.**
- 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.
- 9Q. 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
- been giving the company line and are blaming the PUC.
- 13Q. 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
- would have to pay for both to be removed and then I have to pay the monthly opt-
- out fee for both meters. Given my medical condition, that I am on a fixed income,
- that I have a disability, I find it shameful that CMP is requiring me to pay for all
- these extra fees in order for them to make an accommodation. I have gotten into
- several discussions with CMP about this. They say this is the PUC's decision. I
- argued, unsuccessfully, that CMP had their own authority to waive the opt-out fee.
- 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 _	day of Janua	ry, 2013.	

STATE OF MAINE CUMBERLAND, ss:

January [ , 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

LICHELLE SUPRY Name Typed or Printed

My Commission Expires: 10-02, 2018

## PRE-FILED DIRECT TESTIMONY OF MPUC Docket No. 2011-00262

1	Q.	Please state your name and address:
2		A.
3		
4	Q.	Was a smart meter installed at your home?
5 6 7 8		A. Yes, four smart meters were supposedly installed in our 4-unit Victorian building sometime in July while we were traveling. We returned home on August 15, 2011, after two months of work and travel in Austria/Europe. We did 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 15 16		A. Immediately after our return on August 15, my wife and I started to experience headaches, disturbed sleep, fatigue, and tinnitus - I had a difficult time concentrating at work due to headaches and lack of sleep.
17	Q.	Had you experienced these symptoms before the meter was installed?
18 19		A. I had never experienced these symptoms before in my life. Before 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 26		degree in Civil & Environmental Engineering and work as a manager at a large  Bay Area firm My wife is a medical doctor. After receiving a

27 28 29 30		mailing earlier in the year from PG&E, we had put our 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.
31	Q.	Do you believe your symptoms are caused by exposure to the smart meter?
32 33 34 35 36 37 38		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 electrohypersensitivity 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).
40 41	Q.	When did you first associate your symptoms to the meters and why do you believe they are caused by the meter?
42 43		A. I will answer these questions by summarizing the timeline of events as they occurred.
14 15 16 17		<b>September 1, 2011</b> : 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.
18 19 50 51 52 53 54 55 56		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).
58 59 50		<b>September 10 - 30, 2011</b> : 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

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

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

## Q. Has your experience with smart meters caused disruptions in your daily living?

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

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

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

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

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

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

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

#### Q. Have you sought medical attention for your symptoms?

141

160

161 162

163

164

165

166

167

168

169

170

171

172

173

- 142 Between October 15 and November 22, 2011, we began to seek considerable A. 143 health treatments. 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.
- We contacted our Kaiser Permanente physician about our condition. He had heard from other Kaiser doctors that other patients were experiencing the same thing since smart meters were installed. He provided a letter for each of us to give to PG&E and the CPUC to have the smart meter bank removed from our building (Exhibit B).

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

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

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

- A. The effect of having the smart meters taken out was noticeable almost immediately. The home felt completely different. For the first time in 3 months, we were able to live and sleep in our own home. With the bank of four smart meters directly below our bedroom, this was not possible. Our tinnitus decreased somewhat and the heart palpitations/arrhythmia were not as frequent. The nervous system overload that we had been experiencing slowly started to diminish.
- The damage had been done however. I am now electro-hypersensitive; a condition that I did not even know existed a few months prior (See Exhibits C and D-4).

#### Q. What are your current circumstances?

- A. The electro-hypersensitivity issues persist. Being around wireless communications technology brings about headaches, fatigue and a lack of concentration and memory. I experience a tremendous pressure in my head that is very painful. It takes hours, sometimes days, for this head tension to decrease after I am exposed to wireless communication technology, strong electro-magnetic fields or a home or neighborhood with dirty electricity. Being sensitive to dirty electricity is a huge problem, as experts have shown it has increased on the power grid and on the wiring of homes with the deployment of smart meter/smart grid technology. We now use electricity sparingly in our apartment because it causes headaches. We only run our refrigerator when we are not at home and have to turn off the circuit breakers to our home at night.
- My wife has moved back to Europe for now as she just did not feel well here. Her symptoms have reduced since leaving California, but moving has forced her to give up her practice in the Bay Area. My own condition has worsened. It is difficult for me to be in urban environments, in a normal office environment or even on certain computers because of the electro-hypersensitivity (wireless devices and computers are now very difficult to be around, which was not the case just one year ago). I have persistent headaches that only diminish when I am away from wireless technology and other electro-magnetic fields. This will likely affect my ability to earn income, the places that I can live and may completely change my life, as it has for many other affected people. I question whether these costs are factored into any smart meter program.
- When I spend time in nature, away from all wireless communications equipment and electro-magnetic fields, my EHS symptoms, including headaches, completely disappear within 24-48 hours. However, they reappear almost immediately once I return to a populated area. I have also inadvertently done dozens of experiments

of my own where I would feel a microwave radiation source before seeing it. My 211 personal experience, along with similar testimonials of many other affected people 212 and a growing body of scientific evidence of biological harm from non-thermal 213 microwave radiation is how I know that we are harming people with smart meter/ 214 smart grid technology. The past 12 months have been extremely difficult for my 215 wife and I. We have spent periods of time at approximately 15 different locations 216 the past year, mostly searching for safe places to live. This has been very 217 disruptive to our lives. We are currently living on separate continents, but are 218 searching for a safe place to be together where we can both live and work. 219 I will add that it has been a considerable stress to us the past few months with 220 221

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

Dated this 3rd day of November 2012

STATE OF CALIFORNIA SAN FRANCISCO, ss:

222

223 224

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 Commission # 1944569 Notary Public - California San Francisco County My Comm. Expires Jul 17, 2015 Notary Public/Attorney-at-Law

Name Typed or Printed
My Commission Expires: July 17, 2015

#### **EXHIBIT A**

## STATEMENT FROM 52 PHYSICIANS AND SCIENTISTS CORRECTING MISINFORMATION RELATED TO SMARTMETER $^{\text{TM}}$ PROGRAM