

January 4, 2014

Do No Harm - Halt the Deployment of Smart Meters

Dear Governor Christie,

There are significant health and privacy issues related to the installation of smart meters on homes.

I was born and raised in New Jersey, and am an Electrical Engineer (B.S. Rutgers, '87) and Biomedical Engineer (M.S. University of Virginia, '89) who suffers from a severe case of Electromagnetic Hypersensitivity (EHS). After just a short term exposure to Radio Frequencies (RF) from cell phones, computers and most other devices that emit electromagnetic fields (EMF), I get headaches, chest pains, tinnitus and an ill feeling. The symptoms are acute, last for days or weeks.

After sixteen years of work as a Principal Software Development Engineer I was forced to resign because the symptoms were so disabling.

Just as the widespread wire tapping by the National Security Agency (NSA) has been ruled to be an unconstitutional infringement of privacy rights (a violation of the fourth amendment), so too is placing a smart device on peoples homes. Smart meters are surveillance devices which scan electrical signatures and determine exactly what appliances are in use, and when a person is home.

On December 17, 2013 Ulster County, NY lawmakers backed an opt out for electric utility meters, and there are bills pending in the state legislature and New York state senate that would allow electric customers to decline the installation of smart meters. The grounds of the opt out is that the technology is making residents ill (headaches, insomnia and heart palpitations).

RF safety limits established by the Federal Communications Commission (FCC) are archaic and highly flawed. They assume malignant biological affects from RF radiation can only occur at levels that cook tissue.

They assume that the only way to alter biochemistry is by breaking covalent bonds between atoms, whereas it only requires extremely low levels of RF to affect the the very weak forces involved in cellular enzymatic synthesis and other biochemical functions. Damage occurs at power levels well below thermal levels and increases the chance of cancer, and sensitize people to become EHS. If the trend continues, then within five years 50% of the population may report adverse affects from EMF.

The grim reality is that detrimental biological effects occur at much lower levels than the FCC limit and everyone is chronically exposed to RF radiation 24 hours a day. Altered physiology from nonthermal levels of RF include reduced fertility, lower sperm counts, sperm motility, EEG, immune function, hormone levels (cortisol, adrenal), reduced melatonin levels, which is an antioxidant that helps the body repair DNA from oxidative stress – the result is increased risk of cancer (1). Chronic exposure produces serious acute and chronic health affects.

The peak intensity of pulses emitted by smart meters are much higher than the biological threshold and well into the range of biological effects, and expose everyone to radiation 24 hours a day. More harm is caused by pulsing microwaves.

The FCC and their consultants are industrial electrical engineers (IEEE) who are not trained in the medical field and therefore are not qualified to assess biological harm. They continue to turn a blind eye to the mounting, undeniable evidence and continue to deceptively claim that there is no substantial evidence at all.

The medical profession is raising red flags, urging stricter regulations and more restraint on the deployment of smart meters. The American Academy of Environmental Medicine has issued at least three papers with warnings. Russian physicians have documented “microwave sickness” as far back as the 1940s since the advent of RADAR.

An ever growing population of Electromagnetic Hypersensitives (EHS) are experiencing debilitating symptoms from exposure to nonthermal levels of RF and EMFs. It is estimated that 3% of the population has EHS (1). People with severe cases of EHS have painful symptoms at 1 millionth the levels established by the FCC (this has been confirmed by personal observation and through talking to others). Symptoms include headaches, insomnia, fatigue, tinnitus, heart palpitations, skin rashes, and more. Most people don't directly feel the symptoms, yet we are all being affected by the ever increasing electromagnetic field (EMF) loads.

Those who have faith in the FCC guidelines are naive and placing themselves and their children in jeopardy. Humanity is on the brink as genetic mutations are passed down to future generations.

Chronic stress caused by elevated secretion of cortisol, adrenaline has been proven to occur at 0.006 uW/cm² (1/166,000 the FCC limit of 1000 uW/cm²). RF causes an increased production of free radicals and oxidants, resulting in oxidant stress and damages DNA. Furthermore, RF restricts humans from producing melatonin which is a natural, strong anti-oxidant which helps us sleep and repair DNA damage during sleep. This results in cancer, particularly breast cancer (1).

Both RF radiation and very low frequency magnetic fields are rated as 2b carcinogens. Health care costs will only escalate because of the diseases resulting from the widespread proliferation of RF and EMF.

Upon exposing women to low level microwave radiation (below thermal levels) 47% had miscarriages prior to the 7th week of pregnancy. The power level was 5 uW/cm² (1/1000 FCC limits) (2, see the New Barrie Trower WiFi report). This is below what most school girls will receive in classrooms with wifi transmitters. Women are at risk of still births, fetal abnormalities or genetically damaged children when they give birth. Genetic damage may pass to future generations. Children are particularly vulnerable because their nervous systems are just developing.

Placing a smart meter on an EHS person's house is the equivalent to forcing sugar down a diabetics throat, or forcing an allergy sufferer to live in a house with the smell of perfume. It is inhumane and denies every person their pursuit of happiness. You may as well throw us under a barreling bus.

It is not enough to have an opt out because the neighbors smart meters will still flood the neighborhood with RF. Smart meters should be banned completely. EHS sufferers have no place to go because RF is so ubiquitous. In the long run it will be a waste of money to install an expensive infrastructure to only have to tear it down when people start to complain of ill health.

There are alternatives to deploying a mesh network of smart meters which emits numerous pulses all day. I would be happy to speak with your engineers about emitting longer pulses fewer times per day.

Two doctor notes substantiate my plight. One follows:

"Mr. - manifests debilitating physical and cognitive symptoms related to exposure to electromagnetic fields. As a result he should avoid living in proximity to wireless smart meters and should maintain an analog utility meter at home." Dr. Samuel Schneider, MD.

I do not consent to have a smart meter placed on my house nor in my neighborhood.

Eli

References:

(1) For an extensive list of references, see "Biological and Health Effects of Microwave Radio Frequency Transmissions, A Review of the Research Literature. Paul Dart, MD. June 4, 2013.

<http://apps.fcc.gov/ecfs/document/view?id=7520940898>

(2) New Barrie Trower WiFi report – Humanity at the Brink. September 24, 2013.

<http://citizensforsafetechnology.org/Humanity-at-the-Brink--Barrie-Trower,15,3333>