

Smart Meter Frequencies are Illegal & Very Dangerous

by Curtis Bennett

Technology advancements are very important but it is critically important the upgrades are done safely or they can adversely affect all life on the planet. It is important for governments, education, industries, insurers, medicine and everyone without exception to educate themselves on implementing technology upgrades because it impacts all of us.

There are two ways to install technology upgrades, either by wiring or wireless. Keeping it simple, wiring involves insulated wires with conductors made of copper or aluminum that are the length of the circuit. For electricity in our homes, power (watts) is confined to the insulated conductors and the electromagnetic fields (EMFs) inside wires cancel each other out.

Using wireless technologies requires special considerations because of the potential dangers. The wireless circuit isn't insulated, power (watts) are bathing entire coverage areas and the EMFs can interact with anything they touch.

In the discussion on wireless, radio frequencies (RF) for cell phones, Wi-Fi or smart meters are not the same as solar radiation EMFs, fluorescent lights, infrared, light or natural EMFs. Wireless frequencies go through buildings and they go through you, your pets, pregnant women, babies, vulnerable patients as well as anything absorbent they interact with.

Smart Meters are measurement devices for remote monitoring of gas, water or electricity consumption. The primary objective of smart meter installations is for utilities to monitor energy consumption and save energy while reducing costs. Many provinces, states and countries are choosing to install a wireless smart grid because of cost factors. Wireless is thought to be cheaper because reading a meter from a remote location can be done without the construction and wiring costs to connect the meters in or on buildings. Unfortunately, there were extremely critical mechanisms missed on the safety and cost savings of employing a wireless over a wired smart grid.

Human Exposure to Radio Frequency Electromagnetic Fields

Human exposure to RF EMFs used by cell phones, Wi-Fi or smart meters are governed by Health Canada's Safety Code 6 in Canada and the FCC in the United States. Safety Code 6 and the FCC use the same scientific standards as other international bodies. Even though safety standards on human exposure to radio frequencies are based on decades of scientific literature, the mechanisms linking the frequencies to adverse health effects were admitted to be missing.

Safety Code 6 states "The predominant health effect to be avoided is the unintentional stimulation of excitable tissue as is the heat effect." Experimental studies have shown that induced electric fields and currents can lead to nerve and muscle depolarization. Depolarization is a normal function but not by an EMF trigger from wireless exposure.

An example of intentional stimulation of tissue is medical imaging like an X-ray in an imaging environment, intended position of use and other exposed parts of the body protected.

The test adopted by the FCC, Safety Code 6 and others is the Specific Absorption Rate (SAR) The name itself is alarming because it is an admission that RF energy is being absorbed when there is zero acceptable absorption levels of RF EMFs. Here is the archaic test model used for absorption levels and mechanisms missed globally.

Specific Absorption Rate (SAR)



Here is a picture of the test used for RF EMF exposure to cell phones, Wi-Fi and smart meters.

The bracket holds the cell phone in the intended position of use. The highest power density is measured at the base of the antenna and the red arrow is pointing to the small localized area of the skull thought to be radiated.

The white arrow on

top of the head highlights the hole in the head where the model is filled with fluid simulating tissue. There is a temperature probe inside the hole to measure "thermal" or "non thermal" effects on biologic systems. Watts/kg is used for amount of absorption.

Wi-Fi exposure for children, teachers, adults and pregnant women is considered safe 24/7 because the wireless computer or other portable devices aren't held against the head like a cell phone.

Exposure to wireless Smart Meters is considered safe 24/7 with distance because the meter isn't held against the head like a cell phone.

Here is a link for the Specific Absorption Rate testing. <http://www.cemag.com/archive/03/01/miller.html>

In order for frequencies to cause adverse health effects, it has to be substantiated how the frequencies interact with biological systems. When you see and read the above testing used for exposure to wireless frequencies, can you see the missing mechanisms in safety standards that link the frequencies to adverse health effects?

Cell phones, wireless computers or portable devices using Wi-Fi and smart meters are the end point device. The rest of the wireless radiation infrastructure was left out of the radiation equation. The number of frequencies, antennas, collectors, Wi-Fi routers, smart meter routers, relays, meters, Home Area Networks, all wireless equipment and orientation of the EMFs weren't included. Leaving this information out negates safety testing and changes present reporting on safety immediately.

Another critical mechanism missing in the Specific Absorption Rate is limits of exposure were developed without incorporating the electrical properties, millions (billions) of frequencies and vulnerability of biological systems. People were treated as meat heating and lower frequencies didn't heat tissue, so were called non thermal effects. You can't leave frequencies and electrical information out of an electrical equation. The equation would be incomplete.

Dangers of Wireless Smart Grid

The flawed SAR test model was used by Public



Curtis Bennett speaking on the danger of smart meters

Utilities Commissions (PUC) and utilities for their representation of safety or savings with the wireless smart grid. Distance from the meter is presented as keeping people safe from frequency exposure.

Electrical Compatibility

The electricity in our homes or used by industry has a frequency of 60 Hz in North America and the inspection plate on appliances or devices states 60 Hz for electrical compatibility. The electrical grid, the appliances and devices would not work safely or efficiently without that compatibility. Electrical compatibility is very important with smart meter frequencies interacting with human or other biological systems.

A Texas utility named Oncor replied through their lawyer the average area covered by each smart meter router was 5 square miles. The average area covered by each collector was 125 square miles. That means almost everything within the coverage area is interacting with high speed frequencies they aren't electrically compatible with. The Texas PUC document on safety with distance from the meter is meaningless when you are in the coverage area. The meters are the endpoint device, the routers and collectors have to be included in the equation. http://www.thermoguy.com/pdfs/Smart_Meter_Safety.pdf

The coverage area confirms everything in the area is hit by the frequencies, including humans. Laws are precise on the

stimulation of tissue being avoided. See the highlighted area on page 2 where a utility links standards of acceptable human exposure of smart meter frequencies between Health Canada and the FCC. <http://www.thermoguy.com/pdfs/BC-Hydro-RF-Fact-Sheet-Detailed.pdf>

BC Hydro states in their fact sheet sheet distance from the meter is safer and the meter base reflects the meter frequencies from the building. To the left is their smart grid showing the wireless circuit hitting all buildings, the people in them and everything in between.

The highlighted area on Page 19 of the BC Utilities Commission states compliance with Safety Code 6 is required. <http://www.thermoguy.com/pdfs/BC-Utilities-Commission-BCH-Smart-Metering-Infrastructure-Program-Business-Case.pdf>

The highlighted area on page 10 of Canadian Telecommunications Association Act states compliance with Safety Code 6 is mandatory and a condition of license for towers. <http://cwta.ca/wordpress/wp-content/uploads/2011/08/Connecting.pdf>

As per the utility's diagram above and the coverage areas, the frequencies are going through buildings while hitting everything in between. The frequencies are illegal as applied and much more dangerous than represented. There are reasons we don't apply frequencies recklessly.

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Poetry of Clarissa Shepherd

Fellow travellers Support and Chat (FMS CFS/ME)

<http://www.facebook.com/group.php?gid=109937565707495&ref=mf>

Grieving in Order to Heal

We shed our tears for a while and then began our day.

For me, it's not only about where I am today, but about how long I've been here. Unlike some illness, when we speak of ours, it's in terms of years, not days or weeks. We all suffer at its hands the loss of things undone, lives not lived, events missed and the days yet to come.

Then there are the times when an event in our lives brings up painful memories. Some even taking us back to the time that we first got sick.

We then feel as if we're right back there, in the thick of that early pain. It can be overpowering and scary. Leaving us in a state of grief.

We don't have to dwell on this grief yet we must see it, feel it, and release it, each time it comes to the surface. Otherwise, it comes back the next time, with reinforcements. Ignoring it doesn't cause it to go away. It only encourages it somehow.

My hope for us would be that through all of the griev-

ing, we'll forgive ourselves for being in this place not of our own making.

In order to move forward, we must grieve our loss or we may find ourselves stuck within the walls of our illness. So grieve, cry, release, and live the best life you can, for each day. Knowing you're not alone in your brand of sorrow.

We walk this path together in order that the journey may be a bit lighter. Healing can not begin until we let go.

Path of Chronic Illness

Walk with me?
First take my hand. We'll talk as we go.

Let's take the path less traveled. They'll be few that we know. Let's try to remember, where we first began. What were you doing? Where were you in your life? What kind of person were you? I can see you as you go.

It started so innocent. Seemed only a short jaunt. This new path that we're on, seems as some kind of a taunt.

Look behind us. Friends are lagging as we travel. They don't seem to want to go with us. We must stop working, end a career, halt our life as we go.

Do you feel afraid, unsure, confused? We're going down a winding road now. Hold my hand tightly.

Do you miss who you were? The road is a slippery slope for us now. We must cling together as we go.

See over there. The doctors, tests, medications? We'll get to know this stop well. Do you need to rest? We can stop and take it all in. Seems so unreal.

This can't be where we should be. There's hardly anyone on this part of the trail. We must move forward, somehow. Together we can go on.

We're learning as we're on this new journey. We barely recognize who we were and have forgotten where the path began.

I feel your grip stronger. You're learning to twist and turn with the path we're on. Finding your way through the weeds which have grown.

There are not many people we know with us now. They stepped off the beaten path.

You seem to be growing into your own as we walk. You understand more, feel more, care more, appreciate more. What we're leaving behind doesn't seem to be as important as what we see ahead of us.

How creative you're becoming in the way you're learning to walk. How courageous and compassionate you've become. Who is this

new you? You've found so many things inside you that you never knew were there before. Our road is still difficult, yet more passable now.

Can you see the clearing ahead? I feel your grip lessen as you learn to maneuver the winding trail. Pain, sorrow, fear, anger, they're falling away a bit now.

There's a bench at the end of the path. Let's sit a bit. You're not the same as you were. A bit worn, yet brave as well. I feel a rebuilding of your spirit. It can be seen in your smile.

There are new faces looking at us. New people who understand. I feel they'll be important for our future as we find our way. Although our journey is rocky, we're following through. This path less traveled by me and you.

Walk in the Light of Your Fearlessness

Many times we feel disconnected from everyone due to chronic illness. We can't always express how or what we feel to others. This leaves us frustrated and alone in a room filled with people. We reach deep inside to see a part of us that many people never need to find. We hold on tight to places in our mind that many people never need to go. Survival is a daily task, and peace can many times be a stranger to us.

As I think of those surviving chronic illness, I am reminded of how brave you are. You are not your illness. You are a mighty sword, of a warrior, going to battle each day for your life.

You are not your harmful thoughts, for they are imposed on your mind. Yet, as a mighty sword, you are greater than those awful thoughts that enter the mind and affect your body and life.

Together we stand, for apart we fall. We each give to the other the strength to move forward even when we would rather lie down and quit. You show your strength and courage with each breath you take, every obstacle you overcome, each time you learn new ways to cope.

You are fearless, even in your pain, for you move ever forward, in spite of it. All of your adversity has rebuilt you, mind, body and spirit.

Allow the reality of this truth to wash over you. To fill up your innermost being, bind you, hold you, carry you and settle inside you. You are heroes of a unique kind, taking a journey down a very winding road.

With uncertainty around every curve, you rise to the occasion with grace.

Walk in the light of your fearlessness, for you are the description of courage.

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Building Code Compliance

Buildings are designed for seismic activity in building codes, frequencies going through structural components and fire separations will cause molecules to polarize (change direction) 180 degrees at twice the speed of the frequencies. At 900 MHz, it equates to measurable molecular earthquakes 1.8 billion times per second. Buildings won't comply with building code and fire separations will be compromised. Here is an example of what that looks like in an insured electrical application in the infrared spectrum. http://www.thermoguy.com/pdfs/Electrical_Frequency_Problem_in_Lu_mbermill.pdf

Energy Savings

A primary consideration for installing the smart grid is to conserve energy and reduce GHG emissions. This link to heat loss from buildings shows massive energy waste in the infrared spectrum not being addressed or saved by the smart grid. <http://www.thermoguy.com/globalwarming-heatloss.html>

Urban Heat Islands are created when solar radiation (EMFs) of buildings causes them to grossly exceed building codes.

Billions of dollars of energy costs are wasted responding to the symptoms of buildings being radiated by solar EMFs. The massive energy waste is not being addressed or saved by smart meters and buildings are still super heating the atmosphere, contributing to weather severity. Air conditioning is refrigeration and using 1000s of watts of power per hour in every home responding to symptoms of the exterior solar exposure. <http://www.thermoguy.com/urbanheat.html>

Meter Accuracy, Fire Safety & Installations

There have been several complaints on the accuracy of meters regarding billing. Were the meters and wireless equipment tested for accuracy in the full load EMF of the coverage areas?

Fires in meter bases and electrical device failure inside buildings have been reported. Homeowners' meter bases and old wiring has been blamed when the electrical reality dictates otherwise. Qualified and licensed electrical contractors do not jump fences or sneak on properties to change meters under load.

Working with homeowners, not changing meters under load and maintaining or changing the meter base is the electrical reality.

Electrical equipment requires ongoing maintenance and the meter bases of homeowners have never been maintained since the installation of the original meter which may be decades. Unqualified electrical professionals aren't qualified for the scope of work without exception. Here is a link highlighting connection issues and their dangers in the infrared spectrum. http://www.thermoguy.com/pdfs/Smart_Meter_Fires_and_Installation.pdf

Adverse Health Effects

With the mechanisms reported linking the frequencies to adverse health effects and the 100s of square miles of coverage areas, deployment of wireless smart meters is very dangerous.

The mechanisms linking the frequencies to adverse health effects was reported to Health Canada and by expert witness at the request of Canadian Parliament's Standing Committee on Health October 26th, 2010.

January 8th & 9th, 2011 the dangers of wireless frequencies was lectured in medical education for CE credits required for medical licensing. The medical program is approved and recognized in North America. Wireless environments need to be considered in medical

diagnosis or related symptoms will be treated.

http://www.thermoguy.com/pdfs/Medical_Education_Letter_on_Wireless_Lectured_in_Medical_Academia.pdf

That qualifies the reporting of the American Academy of Environmental Medicine on smart meter dangers. http://www.thermoguy.com/pdfs/American_Academy_of_Environmental_Medicine_Press_Advisory_on_EMFs.pdf

Pacemakers are put in by health insurers and recipients are told to stay out of an electromagnetic fields (EMFs). The wireless coverage areas are taking the EMFs to the recipient's home where interference with the pacemaker is a reality. This is a link to an interview of a pacemaker recipient that ended up saved from smart meter frequencies until they shut off his pacemaker and he ended up in critical care. <http://youtu.be/BRDhogkdxW4>

Health monitoring equipment isn't designed to be in an EMF and the coverage areas with the missing mechanisms confirm the equipment and vulnerable patients are at incredible risk.

Lyme patients, Autism, neurological challenges and chronically ill are in extreme danger. The wireless coverage areas include

their home and opting out of smart meter programs will not keep people safe. An electromagnetic trigger can affect nerve and muscles putting vulnerable people at great risk. In 2011, the province of British Columbia reported Sudden Infant Death Syndrome was up 30% over 2010 and information was submitted to the Coroner's Office that EMFs couldn't be ruled out as a contributor to the death of vulnerable babies.

May 31, 2011 cell phone radiation was reported as "possibly" carcinogenic by the World Health Organization. If the W.H.O. had known the mechanisms linking the frequencies to adverse health effects had been reported, the frequencies would have been reported as carcinogenic.

Here is a link to testimony for the Texas Senate Committee on wireless smart meters and I refer to the coverage areas as biological killing fields radiating buildings as well as infrastructure. http://www.thermoguy.com/pdfs/Texas_Senate_Committee_Meeting_on_Smart_Meters.pdf The dangers of wireless frequencies as applied are reported as an unprecedented health and environmental emergency. We aren't insured for it and liabilities aren't considered in costs.

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