



April 15, 2016

FortisBC Inc.
Suite 100 1975 Springfield Rd
Kelowna BC
V1Y 7V7

Att: Mark Warren
cc: Michael Mulcahy and Others

Re: FortisBC Wireless Smart Meter Program Safety Wasn't Qualified to BCUC. It is Illegal and Extremely Dangerous As Applied. Damage & Liability Measurable by the Second.

Mark Warren:

I have copied this to municipalities, RDOS, other governing agencies, Kelowna Safe Meters, etc as well as the President & CEO of FortisBC. Michael Mulcahy isn't aware of the real costs or liability created by his own management, the British Columbia Utilities Commission(BCUC), BC Government, Minister Rich Coleman, BC Hydro, MLA Norm Letnick, City of Kelowna, former MP Ron Cannan, Canadian Government and others not doing their jobs. I warned Mark Warren at the public information session on smart meters at the Holiday Inn that wireless meters were illegal as applied. FortisBC Linemen were in attendance and when I asked the lineman what happens if our 60 Hz electrical grid fluctuates by a few Hz, he stated that it crashes. The point is 900 MHz and 2.45 GHz interacting with 8.3 Hz or .1 Hz of the brain is crashing the human electrical grid plus much more. FortisBC's own Electrical Engineer Lindsey's quote at a meter swap in Kelowna that 900 MHz of the smart grid interacting with 8.3 Hz would create **ALL kinds of harmonics**. The 8.3 Hz is one of the frequencies of the brain and an admission of adverse health effects.

FortisBC did not qualify wireless smart meters at the Oral Hearings in Kelowna for the BCUC, they were arrogant, ignorant and dismissive of everyone. Mark Warren, Exponent Inc experts hired by FortisBC and others will have to qualify for FortisBC CEO and President how they were technically overwhelmed by the Specific Absorption Rate test which is a plastic head with fluid in it.

The transcripts and evidence of the BCUC with FortisBC "experts" under oath will verify Mark Warren and their expert witnesses from Exponent Inc were technically disqualified. Dr. William Bailey from Exponent admitted under oath that critical science was missing in their risk assessment for FortisBC and that in order for people to be hurt, they had to be exposed to the RF EMFs. Dr. Bailey also confirmed there was no environmental assessments done and when asked about pollinators exposure(responsible for global food), he said they adapt. Mark Warren confirmed under oath how the smart grid is hitting people, buildings, infrastructure and ecosystems.

The BCUC's summary agreed with FortisBC lawyers dismissing me and wrote "**it is clear that he is unqualified to give expert opinion evidence on the health effects of RF, exposure standards for RF, engineering, physics or geological phenomena such as earthquakes.**"

The unfortunate reality with the BCUC's statement is my international medical credential as a Professor lecturing accredited medical education for education credits required for ongoing medical licensing and applicable across North America was dismissed. My electrical and Building Engineering credentials were dismissed as was my 35 year Thermal Radiation background which includes consulting for utilities and industries across the board including the utility FortisBC purchased from the City of Kelowna. While the BCUC referred to **phenomena** and Mark Warren called a **hypothesis**, Exponent's Electrical Engineer Yakov Shkolnikov confirmed the high speed oscillations. That validates the engineering, physics and the atomic and molecular vibrations billions of times per second. It is important to note the BCUC Panel was disadvantaged in the FortisBC application for smart meters because the BC Legislative Assembly had allowed BC Hydro to bypass **all** regulatory process to mass install meters and the required smart grid. FortisBC as the smaller provincial utility went through the BC Utilities Commission application process. The FortisBC application for wireless should have failed and it isn't a debate but that would have required reversing BC Hydro's smart meter program.

Here is a link responding to Mark Warren's negligent response through the Kelowna Daily Courier on FortisBC Smart Meters. Page 9-11 show meter bases and compromised electrical connections. Page 12 shows 60 Hz oscillations Mark Warren and the BCUC called a phenomena in an electrical inspection in FortisBC's coverage area. Page 12 shows the oscillations again as it refers to FortisBC's wireless causing buildings to be non compliant with BC Building Code. Transcripts and evidence of the BCUC are here. <http://thermoguy.com/wp-content/uploads/Response-to-FortisBCs-Daily-Courier-Article-Advances-Meters-are-Safe-and-Smart.pdf>

While I cross examined FortisBC experts for 3.5 hours, FortisBC chose not to cross examine me at the BCUC Oral Hearings even though my opening statement as a Registered Intervener looked forward to cross examination. I was there in the best interests of FortisBC, the customers as well as the ecosystems in FortisBC coverage area. FortisBC also chose not to cross examine retired Canadian military officer Jerry Flynn who specialized in electronic warfare for over 20 years.

When it came to cost of wired meters over wireless, Registered Interveners like myself were allowed to ask questions for FortisBC to answer.

http://www.bcuc.com/Documents/Proceedings/2013/DOC_33530_C19-11_WKCC_IR-3.pdf

FortisBC refused to answer the questions and the BCUC made a decision to support FortisBC. Unfortunately for FortisBC, Mark Warren admitted under direct cross examination by me that FortisBC would cover 17,000 sq kms with these highly penetrating RF EMFs. FortisBC admitted under cross examination by Jerry Flynn that the 900 Mhz antenna for the network had a range of 3 Kms or 1.8 miles. Those admissions by FortisBC substantiates my questions to FortisBC on cost.

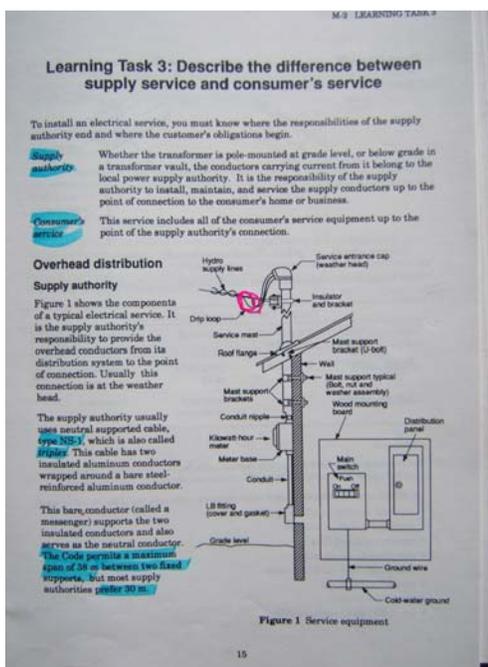
In supporting suspension of the FortisBC application put forward by another Registered Intervener, here is my extremely qualified response which includes accurate infrared imaging showing the energy FortisBC is attempting to save. The buildings in the document are in FortisBC's coverage area and smart meters whether wired or wireless will not save one watt of energy. Page 16-18 show buildings in Kelowna grossly exceeding Kelowna Bylaw 7245 on Climatic Data or BC Building Code 1.1.3. FortisBC is using massive energy waste reacting to the symptoms of solar EMFs interacting with absorbent exterior finishes. Page 18 shows Kettle Valley buildings generating atmospheric heat over 92 deg. C on a 29 deg. C day. The development is not compliant with building code and FortisBC is generating millions of watts per hour responding to symptoms.

http://www.bcuc.com/Documents/Proceedings/2012/DOC_32604_C19-6_WKCC-Submission-RDCK-Nelson-Creston_Suspension.pdf

Kelowna City Manager Ron Mattiussi was informed and he reported to me that he and Ron Cleveland were working on it.

The United Nations Climate Change Meeting in Paris reported a 2 deg C rise in atmospheric temperature being globally catastrophic and Kettle Valley alone is generating atmospheric heat 60 deg. C hotter than that. Ex PM Harper will have to account for not passing on this information to the UN Members or sharing it with PM Trudeau. It would have created millions of tax paying jobs while removing massive energy waste from electrical grids immediately.

With regard to changing meters on a meter base, it is important to distinguish there is a defined physical point where utility's electrical generation and distribution ends and utilization starts. Electricians don't work on the utility's distribution and the utility isn't qualified nor does it have the jurisdiction to do the electrician's work for the building owner.



The meter base belongs to the building owner and the meter with the tamper seal belongs to the utility. Utilities have the right to work on their equipment on properties but **can only read the meter**. The meter is physically and electrically attached to the building owner's meter base. When work is to be done on the meter base, both the utility and the building owner's electrician attend but the building owner's electricians do the work. The utility has no authority or jurisdiction to trespass, pull meters under varying electrical load and work on the meter base.

To the left is a picture of a low voltage electrical service and part of our electrical trade's certification showing the physically defined point where the utilities services end and electrician's utilization begins. The picture is from a module on low voltage and produced by the Province of BC, Ministry of Education, Skills and Training and the Centre for Curriculum and Professional Development. I put the pink circle at the drip loop where the utility's jurisdiction ends.

FortisBC and other utilities have used unqualified people to trespass as well as swap meters under varying electrical load. Proper meter base inspections were not done and electrical connections not maintained for decades were not cleaned or tightened. That is why there are meter base fires, arc, surges, meters blowing off buildings across North America. Utilities have endangered building owners, first responders as well as their own employees.

FortisBC Lineman can confirm for the utility that loose and corroded connections are the biggest cause of electrical failure. That is the reason we trouble shoot the connections every 6 months or yearly depending on the industry. Due to Mark Warren, FortisBC Lawyers, BCUC and others reckless representations on smart meters and the BCUC decision on FortisBC's application, it is important I provide my background.

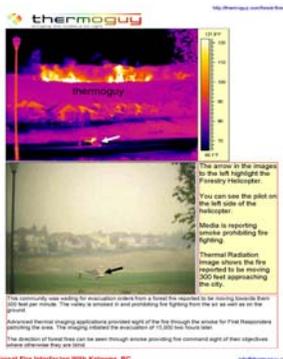
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To clarify my recognized electrical expertise, the governments across Canada with Industry Canada trained and certified **ONE** profession for the utilization of electrical energy produced across the country. Whether you work in, hospitals, universities, Microsoft, manufacturing, auto industry, oilfields, utilities including power generation, building development, etc, it is qualified electricians that design, construct, install, troubleshoot and maintain those electrical systems. When there is a power failure, electricians are the qualified professionals, Electrical Engineers are not qualified to do the electrician's work. We are governed by Canadian Electrical Code and calculate energy requirements with that code. There are no circumstances where we have personal opinions, get creative electrically or are dismissed administratively. The Canadian Electrical Code is published by the Canadian Standards Association(CSA). CSA is accredited by the Standards Council of Canada, a crown corporation which promotes efficient and effective standardization in Canada. This accreditation verifies that CSA is competent to carry out standards development and certification functions, and is based on internationally recognized criteria and procedures.

As well as an Interprovincial Red Seal Journeyman Electrician I have another credential as a Building Construction Engineering Technologist from NAIT which is **all** aspects of construction from contracts to completion. My fellow graduates in that program work as Project Managers, Site Superintendents, Building and Fire Inspection, Construction Estimating, Building Envelope, energy use, losses and many other areas of construction. That education has a common background with all engineering disciplines including Mark Warrens before choosing a field to specialize in. Buildings, their energy use(emissions) insulation, HVAC requirements are all based the design criteria contributed to Building Code by Environment Canada Meteorological Services, Building Code Rule 1.1.3.(Climatic and Seismic Data)

As a Thermal Radiation Consultant of 35 years for industries across the board, infrared consulting has saved industries, governments and insurers 100s of billions of dollars as well as lives. Temperature for us starts at -273 deg. C or -496 deg. F and there are no such things as non thermal effects, it is all thermal. Providing a visual of energy(temperature) that couldn't be seen allowed isolation of energy losses or problems before explosions or failure. The problems are verified and fixed by the industry's professionals. Syncrude, Suncor, Esso, Dow Chemical, manufacturing, utilities, power plants, mines, mills, etc as well as their insurers were insisting on qualified infrared inspections. Billion dollar industry would schedule shutdowns based on our reporting. Petro Canada as another example retained us to monitor one refractory lined vessel for a year so they could maximize production before shutting the vessel down for required maintenance.

I led our company to substantiate and implement infrared applications giving Fire Departments sight through smoke where otherwise they were blind. Here is one of the images taken in Kettle Valley, BC August 21, 2003 when a Forest Fire interfaced with Kelowna.



Due to jurisdictional conflicts and the Province of BC taking over, we couldn't get information through to Kelowna Fire Department that the fire could be seen through the smoke. While citizens of Kettle Valley were waiting for evacuation orders, here is what was coming towards the community through the smoke. Stopping a patrolling RCMP Officer and showing them the fire was here initiated the evacuation of 15,000 a couple of hours later. August 22, 2003 the fire interfaced with Kelowna and over 200 homes were lost. A local reported called later and asked if he could use the images we took where he showed radio

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dispatches between Kelowna Fire Department and BC Forestry confirming they were blind through the smoke. <http://thermoguy.com/shes-mighty-ugly-out-here/> Unfortunately this information was edited from the BC Public Fire Inquiry because it embarrassed the Premier's Office. The domino effect of the edited inquiry kept this from Arizona who lost 19 Fire Fighters overrun by a forest fire and even Slave Lake, Alberta where an interface fire is reported to have caused damage to 25% of their city.

Groundwater is considered to be nature's hidden treasure and the Department of Fisheries and Oceans used our work as their standard in RFP in imaging groundwater from the air. Here is a link so you can see basic imaging of groundwater using non invasive radiology. <http://thermoguy.com/ground-water/>

With injury or infection there is an inflammatory response 100% of the time and medicine was effectively blind to these temperatures. In the wireless interaction with people, it is referred to as non thermal effects when there are no such things as non thermal. Everything is thermal above Absolute Zero. Here is a very basic image of a wrist injury showing inflammation using non invasive radiology. The purpose is to provide sight for medicine as well as to stop the billions in insurance fraud.

www.thermoguy.com/ Wrist Injury info@thermoguy.com

IR information	Value
Time of creation	7:08:24 PM
File name	B0216-44.img

Injured Right Wrist

With injury or infection there is an inflammatory response that can be seen and isolated. This worker had a complaint of the right wrist being injured. This worker's claim was being denied because the source of the inflammation or area of inflammatory response couldn't be seen.

Injury can be seen as can insurance fraud and this is lectured in medical education for Continuing Medical Education credits required for ongoing licensing.

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Our work with Dr. Ronald Lynch, Integrative Health Forum and associates will save governments as well as insurers billions of dollars. Most importantly is the fact this is lectured in accredited medical education for education credits required for ongoing medical licensing. It is applicable to all health professionals across in the U.S. as well as Canada. That means it isn't a debate, it is now medical education. FortisBC lawyers can confirm the significance because lawyers require ongoing education credits or they are suspended from practicing law.

Here is a link to other very basic imaging including the early detection of Breast Cancer, Ebola, wireless radiation damage, etc. <http://thermoguy.com/ebola-screening-at-airports-is-reactive-ridiculous/>

Here is a letter from Health Education Administration on the accredited program and you will see me as one of their faculty lecturing the dangers of RF EMFs.

<http://thermoguy.com/wp-content/uploads/Integrative Health Forum on Medical Education Including Wireless Exposure.pdf>

100% of what we do on the planet has a domino effect into health, our bodies and ecosystems. As an Adjunct Professor, I am one faculty member for a group of 14,000 licensed health and consulting professionals putting on accredited medical education programs applicable to millions of health professionals for Continuing Medical Education credits required for ongoing medical licensing. Our participation in that medical education includes magnetism and the dangers of EMFs. The causal link between RF EMFs and adverse health effects has been lectured for Continuing Medical Education Credits required for ongoing medical licensing. It is applicable across Canada as well as the United States and expanding.

FortisBC should take this as seriously as they would any reported electrical emergency because the damage and liability is measurable by the second. There is no margin of error and the peer reviewed science is electricity, biology, engineering, all sciences with supporting Building Codes, Electrical Codes, Auditor General Act, etc.

FortisBC experts including Mark Warren were dismissive, technically disqualified and admitted under direct cross examination that critically important science was missing in Exponent Inc's Risk Assessment Report. FortisBC expert Dr. Yakov Shkolnikoff stated under cross examination it would be his duty as an Electrical Engineer to revise his report if critical science was missing. Where is that revised report?

FortisBC wouldn't ignore an electrical problem being reported by their professionals and FortisBC shouldn't have been dismissive of the ramifications and liability of electromagnetically inducing large geographical areas. That puts all the Cities, Districts, ecosystems, buildings, infrastructure, etc inside man made microwave ovens for ease of communication with wireless devices. There is nothing electrically compatible with those highly penetrating electromagnetic fields(EMFs) except wireless portable devices. The problem is it puts people, buildings, fire separations, infrastructure and everything hit by the RF EMFs inside the wireless electrical circuit.

The RF EMFs as applied will adversely affect all municipalities, Regional Districts, FortisBC, employees, their families and undermine FortisBC's gas utility as well as endanger their gas workers. That is separate from the RF EMFs causing buildings to be non compliant with BC Building Code including FortisBC property, buildings, infrastructure while not addressing energy waste plus much more. FortisBC and other utilities should never have moved forward with wireless when Canada's exposure code Safety Code 6(2009) admitted causality and biological plausibility were missing linking the RF EMFs to adverse health effects. Causality and Biological Plausibility linking RF EMFs to adverse health effects was found as well as reported through applicable authorities.

It was during the FortisBC application for smart meters that we found out the BC Government's Legislative Assembly had allowed BC Hydro to bypass **all regulatory process** to mass install smart meters and the required smart grid. No one was informed or consulted and Mark Warren confirmed under direct cross examination he didn't think it was a good idea to consult or inform anyone either. Unfortunately, regardless of intention that undermined all municipalities and Regional Districts in FortisBC's coverage area.

While Safety Code 6(2009) admitted causality and biological plausibility were missing, the strength of the code is to protect the public and unintentional stimulation of tissue is to be avoided. Experimental studies showed it can lead to never and muscle depolarization. Intentional stimulation of tissue includes medical imaging.

FortisBC expert Dr. William Bailey from Exponent Inc admitted under direct cross examination by me that in order for people to be hurt, they had to be exposed to the RF EMFs. Mark Warren stated people could be a short distance from the meter and safe. Mark then admitted under cross examination FortisBC would cover 17,000 sq. Kms with the RF EMFs. Jerry Flynn's cross examination of FortisBC confirmed the 900 Mhz antenna in one smart meter reached 3 kms(1.8 miles)

Dr. William Bailey under cross examination admitted the nervous, hormonal and immune systems work together. That means the nervous, hormonal and immune systems are compromised at the same time if you are hit by the RF EMFs. Some people are referred to as electrohypersensitive(EHS) when that isn't the electrical reality. The correct electrical language when inducing currents is electrocution.

Safety Code 6(2009) under the Purpose of the Code is to specify allowable contact and induced currents. (Currents are amps and is what can kill electricians or people, they are not just sensitive to electrocution) Safety Code 6(2009) states **“The rate and distribution of RF energy absorption depends strongly on the frequency, intensity and orientation of the incident fields as well as the body size and its constitutive properties (dielectric constant and conductivity).** Page 7 second paragraph of Safety Code 6(2009)” Linemen working for West Kootenay in the Okanagan have been killed because of their orientation to the EMF working on power lines.

FortisBC can use Ohm's Law $\text{Volts} = \text{Amps}(\text{current}) \times \text{Resistance}$ to qualify increases in cellular voltages. A .2 microvolt(millionths) of one volt increase changes White Blood Cells, .4 microvolts changes mood.

Mark Warren's documentation and language on smart meters refers to connections on the meter base being inspected? Having unqualified people do visual checks only isn't doing the required maintenance. While attending meter swaps for homeowner's, FortisBC installers have admitted it requires certified electricians to work on those connections and it wasn't done. In Summerland meters blew off buildings and that can be a result of the connections not being maintained, not the meter itself. Loose and corroded connections are the weakest physical point in that electrical system. Mark Warren say the meters are only transmitting a few minutes a day but confirms the grid is on 24/7 which means a 24/7 electromagnetic radiation dosage.

Pacemaker Recipients are told to stay out of an EMF. Manufacturer's Specifications state they are supposed to stay 2 feet away from an Induction Oven. FortisBC experts admitted under oath that the 900 MHz antenna will electromagnetically induce over 9800 feet. Mark Warren did not consult or inform Pacemaker Manufacturers. Transcripts of my cross examination will confirm Mark Warren was dismissive and did not consult nor did he think it was a good idea to do that. People with pacemakers that came to FortisBC's Office were dismissed.

My evidence for the BCUC included the RF EMFs causing the equivalent of molecular earthquakes inside building components and fire separations making buildings non compliant with BC Building Code Rule 4.1.3.6.(Vibration) Mark Warren dismissed electromagnetic induction(electricity) as a hypothesis. The BCUC summary dismissed that information and my credentials except FortisBC's expert Electrical Engineer Yakov Shkolnikov confirmed FortisBC antennas in the meter were 900 Mhz and 2.45 GHz for the Wi-Fi in the the building. He also confirmed the high speed oscillations(vibrations) 1.8 billion times per second for the 900Mhz and 4.9 billion times per second for the Wi-Fi. That substantiates the Building Code non compliance.



The picture to the left is the Specific Absorption Rate Test Model and you can see why there are no reported health effects. The plastic head doesn't have any biology.

Mark Warren can qualify how the plastic head was used to bypass BC Building Code and Building Code compliance as well as all sciences.

FortisBC expert Yakov Shkolnikov is an electrical engineer that admitted during my direct cross examination that the RF EMFs could induce an electrical charge that could cause fires or explosions. That means FortisBC Electrical Division will undermine their Gas Division and create exceptionally dangerous situations for gas workers who were not consulted or informed. Blanket electromagnetic radiation undermines Canadian Electrical Codes where we classed areas are designed and constructed avoid a spark that will cause explosions.

While at the City of Kelowna Building Inspection Department with concerned citizens about Building Code compliance, Supervisors had been told by FortisBC that the technology was safe. The sad reality is that Building Code has changed and EVERY building would have to be designed to accommodate its RF EMF environment. As a result, construction professionals across the board, insurers, investors, banks have not been informed that the RF EMFs will cause accelerated corrosion of their new and existing buildings, fire separations, infrastructure as well as adversely affect the health of occupants. Here is a submission for the Canadian Nuclear Safety Commission on the accelerated corrosion of Nuclear Power Plants creating a potential nuclear failure within borders. <http://thermoguy.com/submission-for-canadian-nuclear-safety-commission-on-rf-emfs-causing-accelerated-corrosion-making-the-power-plants-non-compliant-with-building-codes/>

FortisBC has no choice but to stop the RF EMF assault or be liable including criminally. FortisBC has to arrange for 100% of their meters to be removed and meter bases re-inspected by qualified electricians. There is ZERO acceptable RF EMF exposure and that includes all meters whether electric, gas or water. BC Hydro has to follow with removal of their meters.

As is, complaints with the BCUC, Attorney Generals, Auditor Generals will be filed insisting on a Forensic Audit at the municipal, provincial and federal level of governments. The BCUC Panel itself will be held accountable for their negligence as will others and again their is no margin of error. The Memphis Police Association(2000 members) has called for a Forensic Audit of their City Council which includes their wireless smart meter program. There have been so many meter base fires, insurers are discussing exemptions for any related fires.

How are Kelowna and BC Realtors selling properties that are not compliant with Building Code and have a fire hazard that can burn the buildings killing the occupants? Building Inspectors can NOT pass those buildings and there is no margin of error.

Undermining medicine and medical insurance plus changing the scope of medical diagnosis without informing medical professionals is horrific. There is nothing more devastating to the world or the economy as well as education. University Degrees will no longer be applicable as all sciences will change with the blanket electromagnetic radiation electromagnetically inducing everything. This is an unprecedented health and environmental emergency which can not be dismissed or disputed. FortisBC's application for wireless was done while Health Canada was revising Safety Code 6. The Royal Society of Canada will have to account for the intellectually elite to be overwhelmed by a plastic head as well as editing my contribution on causality out of their reporting. Here is my 10 minute video presentation on the revision of Safety Code 6. <https://www.youtube.com/watch?v=clmb6Xwn6R4>

FortisBC has installed a wireless meter on a property I lease and I want it removed immediately as it is hurting people as well as the landlord's agent who has just had a breast removed because of breast cancer.

While I appreciate this isn't going to be popular, the plastic head isn't science and Health Canada's revision of Safety Code 6(2009) was supposed to reflect causation and biological plausibility that had been missing was found and reported by Canadian Government Electrical Professionals. FortisBC lawyers questions to me as a Registered Intervener and to discredit me are linked here. http://www.bcuc.com/Documents/Proceedings/2013/DOC_33705_C19-13_WKCC_Resps-FBC_IR-1_Intvr-Evidence.pdf

In closing, it is really important professionals expand on what has been stated because no sciences or professionals of any kind were informed or consulted. While some may want to dispute this document, you can't. EMFs are an electrical interaction first requiring a qualified electrical interpretation first. Wireless is an uninsulated electrical circuit and there are real reasons we wire the world.

Sincerely,

Professor Curtis Bennett

Chief Science Officer
Interprovincial Journeyman Electrician(Red Seal)
Building Engineering Technologist
Adjunct Professor for Accredited Medical Education For CME Credits
Thermal Radiation Consultant for 35 Years
www.thermoguy.com
curtis@thermoguy.com
Ph: 604-239-2694