

**Missouri Corporation Commission
Office of Public Affairs & Consumer Protection**

James and Angela Dickson (Complainants)

VS.

KCP&L (Respondent)

File Number EC-2016-0230

This letter is in response to the letter submitted by KCP&L on April 15, 2016. James and Angela Dickson would like to present further evidence to the Commission regarding the safety of the Advanced Meter Infrastructure (“AMI Meter”) and/or “Smart Meter” that was placed on their home on January 20, 2016.

According to the MO Statutes Title XXV for regulations of certain utilities and carriers, section 393.130.1 states every gas corporation, every electrical corporation, every water corporation, and every sewer corporation shall furnish and provide such service instrumentalities and facilities as shall be safe and adequate and in all respects just and reasonable.

Let’s start by looking at the definition of “Safe” according to Webster’s Collegiate Dictionary:

“Safe” according to Webster’s Dictionary:

Free from harm or risk: UNHURT; secure from threat of danger, harm or loss.

As we take a look at smart meters, let us keep in mind the definition of “safe” and see if smart meters truly are free from risk, harm or danger as is required by MO Statute XXV section 393.130.1.

Smart meters emit wireless radio frequency/microwave radiation. There are numerous health concerns regarding electromagnetic radiation, and as smart meters use the same technology to send signals as cell phones the health ramifications are the same. We will explore the health concerns after we take an in depth look at

how electromagnetic radiation works and what it does to our bodies. We will be citing evidence from articles written by Barrie Trower. His background information is listed below:

*Barrie Trower trained at the Government (Ministry of Defense) Microwave Warfare Establishment(s) early in the 1960's covering all aspects of microwave (MW) radiation technology, uses and health dangers. Later works included underwater bomb-disposal, which incorporated MW technology.

*In the late 1960's and 1970's, a part of his task was to extract confidential (hitherto secret) information from master criminals, terrorists, and spies. This included Cold War MW Technology.

*He is a Scientific Advisor to the Radiation Research Trust and the H.E.S.E. (Human Ecological Social Economical) Project.

*His first degree is in Physics with a specialization in microwaves. His second degree is a research degree. He has a teaching diploma in human physiology. Before retiring, he taught advanced physics and mathematics at South Dartmoor College.

*He is the author of both Tetra Reports for the Police Federation of England and Wales and the Public and Commercial Service Union.

*In April 2010, he gave a speech for the King of Botswana.

[Http://www.magdahavas.com/wordpress/wp-content/uploads/2010/08/Barrie_Trower_SA.pdf](http://www.magdahavas.com/wordpress/wp-content/uploads/2010/08/Barrie_Trower_SA.pdf). He has adopted and incorporated by reference his opinions and findings therein.

*His work is done entirely free of charge and he has never accepted money from any person or organization in all the years he has been doing this research. He is absolutely independent.

We will start by introducing his article "Secret Report on Cell Phone Dangers and Tetra". As you will soon see, his article encompasses the issue of electromagnetic radiation as a whole; "AMI" meters and/or "Smart Meters" would fall into this category. His research findings reflect the dangers that these proposed meters pose to humans based on the findings of electromagnetic radiation. The entire article can be read in its entirety-please see our attachments. Let's let Mr. Trower explain in terms that we can all understand how electromagnetic radiation works and the effects it has on the human body. Let us also think about the "Smart

Meter” that KCP&L has placed on our home and everyone else’s home in Kansas City and see whether the following information really would fall into the category of being “safe” according to MO Statutes Title XXV for regulations of certain utilities and carriers, section 393.130.1.

INTRODUCTION FROM BARRIE TROWER

“With respect to my fellow scientists I shall be writing this report in non-scientific speak for all of those readers who have not had the benefit of a scientific education.”

WHAT IS ALL THIS REALLY ABOUT?

“Imagine the field around a magnet and imagine ordinary everyday static electricity. If you put the force field from the magnet with the force field from the static electricity you make a wave. This wave is called an electromagnetic wave. There are lots of different types of electromagnetic waves but they are all made of the same two things - magnetic and static. The only difference between the waves is their wavelength or the length of the wave and the number of waves that can be produced a second, i.e. the frequency. All of these waves are put into a table called the electromagnetic spectrum.

At one end of this electromagnetic spectrum you have the very short waves, namely gamma rays and x-rays and at the other end of the spectrum you have the very long waves, namely radio, TV and waves from overhead power cables. All of these waves have the same properties; that is to say they all behave the same. They can all be reflected, refracted, and they all travel at the same speed, which is the speed of light. For interest, if you were one wave of light you would be able to travel around the world nearly seven times every second; that is the speed of light. The electromagnetic spectrum is ordered so that at the short wave end you have the gamma rays, x-rays, ultra-violet, visible light, infra-red, microwaves, radar, TV and radio in that order. The ultra-violet and above are known as ionizing waves and there is no argument as to the damage they can cause when entering the body. Below ultraviolet is said to be non-ionizing and this is where arguments occur between scientists as to whether damage can occur inside the human body through exposure to these waves.

WHAT IS BELIEVED TO HAPPEN AS THESE WAVES ENTER OUR BODIES?

"I will try to summarize the thousand or so research papers written over the last 20 or so years and explain or summarize what happens when the electric and magnetic part of the wave goes into our bodies.

We being water based animals act like airdials to these waves. As the waves go into our bodies an electric current is generated inside our bodies which is how airdials work; waves come in and electricity is generated. The electricity generated in our bodies like all electric currents goes to ground through our bodies and like all electric currents it takes the path of least resistance. Unfortunately the path of least resistance through our bodies, although only representing 10% of our pathways, carries 90% of our traffic rather like the M1 motorway. The traffic in our bodies, namely hormones, antibodies, neurotransmitters know where they are going because they also carry an electric charge. The hormones, antibodies and neurotransmitters know where to "get off" because there is a corresponding opposite charge at the site of delivery rather like the positive and negative ends of a battery. The problem is if you have an electric current passing through the body it can change this charge, either on the hormones, antibodies or neurotransmitters or the site of delivery.

An analogy to that would be - if you were in Paris on the Underground system and you could not speak a word of French, but you had a map with the station name of where to get off and somebody took out one or two of the letters, you may get off or you may not, and this can happen in the body. The hormones, antibodies or neurotransmitters may get off where they are meant to get off or they may carry on and miss their target. As a one-off this probably would not be very important but continuous interference over many years it is argued can lead to many illnesses.

A similar effect is that the destination for some of these hormones, neurotransmitters, antibodies is a surface of a cell where chemicals will pass through a membrane into a cell. If you think of a cell in our body, be it a brain cell, bone cell etc., as having a positive and negative charge on the outside and the inside similar to a battery the difference in these charges will draw the chemical into the cell or draw poisonous substances out of the cell. If the charge is changed on the outside of the cell, then necessary chemicals may not go in or poisonous chemicals may not go out. An analogy to that would be - think of your house as a cell in your body. Essential things like food, water and fuel come into the house

and poisonous things like waste and gases leave the house. In fact a house is very similar in many ways to a cell in our body. Now, if we had a blockage and waste could not leave the house or sometimes food or electricity did not come into the house, over a short period of time we would survive this, but continual disruption over many years will probably have a knock-on effect on the health of the inhabitants particularly if they are young or frail. This is my explanation of how electromagnetic waves affect our cells.

A final description is possibly the accumulative effect of all the particles going through the body each second. Each particle carries a small amount of momentum with it. As an analogy, imagine you are driving down the M1 in the largest lorry you could possibly imagine and you are hit by the smallest dust particle you could ever imagine. Obviously the dust particle will not affect the speed or momentum of your lorry but if you have 400,000,000 dust particles a second for many years they could if something else was going wrong with your lorry exacerbate the effect and slow your lorry, and that is the crucial point. All of these effects I have described are believed to have one final conclusion. They all in their own way suppress the immune system. When you suppress the immune system as I will show in research papers, you tend to have more colds, more coughs, longer colds, longer coughs, longer illnesses, depression, anxiety leading to suicide or taken to its ultimate - leukemia.

“I will summarize just four of what I consider to be extremely well written research papers by arguably the world’s leading scientists in this field. There are other leading scientists of course but I cannot list them all in this report. I am using these as specimen papers.

When I refer to research papers I am not referring to something that somebody has sat down one Sunday afternoon and just written. These research papers have sometimes hundreds of references in the back and each reference on its own is usually 5-10 years’ work by a group of scientists where their work would have been peer reviewed, and in a lot of cases published. So for arguments sake, if a paper has say 100 references in the back that could well constitute 500-1,000 years accumulative work.

The first paper (Appendix 2, Reference 2) by Dr Neil Cherry was presented in May 2000 to the New Zealand Parliament, to Italy, Austria, Ireland and the European Parliament in Brussels. This paper has 122 references. I have photocopied the references to show that as well as being peer reviewed, many are published. I will do this with the other three papers (Appendix 3).

From this research paper some illnesses caused by long-term low level electromagnetic radiation are:

Heart problems;

Blood problems;

Interference with bone marrow;

Tumors;

Calcium interference;

46% reduction in night-time melatonin;

It is believed that during the daytime light going through our eyes passes a message to the pineal glands in the brain which slows down the production of melatonin. At night when no light goes through our eyes the production of melatonin is speeded up. Melatonin is believed to scavenge cancer cells and impurities in our bodies and boost the immune system. If a person is sleeping, the microwave radiation is believed to act on the pineal gland and suppress the night-time melatonin to daytime levels; hence the good work of the melatonin at night will be restricted leading to suppression of the immune system.

Increased arthritis

Skin problems

Ear problems

Risk to leukemia

Childhood cancer

Sleep problems

Depression

Memory loss

Difficulty in concentrating

Mental conditions

A very recent discovery shows that microwave radiation changes the permeability of the blood brain barrier. Our brain has its own immune system as does our body. The blood brain barrier keeps everything that is designed to be kept within the brain inside it and protects the brain from any unwanted diseases or chemicals which could harm it. Similarly it allows out of the brain anything dangerous to the brain. The blood brain barrier is rather like a sieve where only particles of a certain size may go through. Professor Salford at Lund University in Sweden has shown that such pulsing as from mobile phones (or smart meters) can alter the permeability of the blood brain barrier (Appendix 4, Reference 3).

Also, it is shown that the electromagnetic radiation going into the body can change the size of the particles moving around the body (Reference 4). This is rather like an ice skater spinning on her skates. With her arms out she spins slowly, but if she pulls her arms in she spins faster. Microwaves can affect the particles in our body by changing their spin; hence their size. They can be made smaller or larger. With the changing of the permeability of the blood brain barrier and the changing in size of particles, unwanted particles may enter the brain or necessary particles may leave the brain. The connection here with mental conditions is that Dr. Hyland of Warwick University has written that the uptake of drugs; in particular neurological drugs is inhibited because of changes in the blood brain barrier. This can lead to:

Neurological illnesses

Headaches

Dizziness

Fatigue

Miscarriage, and

Infertility.

My final paper by a very highly respected New Zealand doctor, Dr. Eklund (Appendix 7, Reference 7) which has 37 references shows leukemia clusters in and around ordinary radio and TV transmitters around the world. She says on page 13 that adult leukemia within 2 kilometers of a transmitter is 83% above expected and significantly declines within increasing distance from the transmitter. Similarly skin and bladder cancers follow a similar pattern. As a scientist I could argue that if leukemia's and cancers are known to exist from ordinary radio and TV transmitters which take many years to form and radio and TV waves are at the long end of the electromagnetic spectrum, and it is known that exposure to gamma rays or x-rays can cause death within a matter of weeks, a hypothetical line could be drawn from the long waves to the short waves to determine the length of time or exposure doses needed to cause such illnesses. Fitting into this pattern would be several years' exposure to sunlight causing skin cancer. There are obvious anomalies with this; namely personal health, hygiene and all sorts of other factors, but as a crude estimate I would argue that the further up the electromagnetic spectrum you go, the shorter the time for the serious illnesses to occur. Being water-based animals we are particularly sensitive to microwaves; this is why microwave ovens work. Microwave ovens resonate the water molecules in food and when molecules resonate they re-emit the energy they absorb as heat. This is why the food warms up and the plate does not, because it does not contain water.

The warmth on and behind the ear felt by users of mobile phones is one type of heat. Another type of heat unknown to the user, therefore not reported are hotspots within the body from microwaves. These hotspots are tiny areas in the body which warm up considerably when exposed to microwave radiation. The problem with warming up areas inside the body is that a very recent research paper has shown that heat shock proteins are produced to protect the cells in the body from damage. Heat shock proteins act rather like scaffolding around a building; they go around the cell and protect the DNA from damage from the heat. Heat shock proteins have been known to work when the temperature rises by just 2 degrees. Now the problem with heat shock proteins is as well as protecting the good cells they can also protect and save from destruction cancer cells. So, if you have a cell in your body which is turning cancerous and would normally be destroyed by the body's immune system, the heat shock proteins will protect it and it will continue to grow. This work was carried out by Dr. David de Pomerai, of Nottingham University (Appendix 8, Reference 8).

The accumulative factor puts a very different slant on doses of microwave radiation. In particular an accumulative level of radiation can build up very quickly when you receive 400,000,000 waves every single second. This is why scientists are concerned and warnings have been issued for people with pacemakers, hearing aids, insulin pumps in relation to interference of their apparatus from electromagnetic waves. Warnings are also given to persons with metal implants in their bodies. These implants can a) warm up; and b) absorb the microwave radiation and re-emit it at a different wavelength. I have been around the world talking to scientists and we agree, although it cannot be proved, that the recent incidents in breast cancers in ladies could be due to the metal under wiring in bras absorbing microwave radiation and re-emitting it at a different wavelength into the mammary glands of the breast. The mammary glands are known to be particularly sensitive to radiation and they are known to be easily changed into cancer cells.

UNDERSTANDING RADIATION

*There are unknown phenomena concerning low level radiation that is not generally understood by the users of communication instruments. **Following the Chernobyl incident it was found that long-term continuous low level radiation of all types was as dangerous as high level doses of radiation.** With high level doses of radiation the anti-oxidants in the body (Vitamins A, C, E, etc.) rush to defend and repair the area of the body being damaged. However with low level radiation the anti-oxidants are not activated and because the dose is accumulative the problems can build up and are usually present before the body realizes that there is trouble. So, low level does not mean safer. Also the smaller you are the more you tend to absorb.*

THE ABSOLUTE PARADOX

Since the early 1960s this country, America and Russia have had what is called the non-lethal weapons program or synthetic telepathy program. It is very well documented now that in the early 1960s in Moscow the Russians beamed continuous low level radiation (microwaves) down onto the American Embassy causing miscarriages, leukemia's and other illnesses to the Embassy staff. Since then the non-lethal weapons program has become very sophisticated indeed. It is used a) as a long-term low level radiation weapon to cause populations illness and b) at higher intensities to cause blindness, heart attacks or confusion. Details of all of the intensities are unknown to me but knowing that microwave radiation is

accumulative, any effect can only be a matter of time. In quoting this research I refer to documents listed under Reference 15. So sophisticated is this research, and I refer to Operation Pandora Joint CIA/MI6 Operation since the 1960s, Operation Woodpecker USSR 1976, Operation HAARP still running in USA; they are able to define specific pulse frequencies to cause specific brain malfunctions or illnesses.

For instance:

Frequency Illness Caused

4.5 Paranoia

6.6 Depression/Suicide

11 Manic behavior/Anger

25 Blindness if aimed at the head/Heart attack if aimed at the chest

Other consequences of frequencies used but not listed here are hysteria, trauma, lust, murder and cancer, and may all be induced.

HAARP, which is being researched by a nun, Dr. Rosalie Bertell, who is concerned about what it represents along with other scientists knows that HAARP is capable of bouncing low level continuous microwave radiation pulsed off the ionosphere to any community in the world and may cause cataracts, leukemia, changes in blood brain chemistry, changes in blood sugar levels, blood pressure and heart rates.

The paradox of course is how can one system of pulsed microwaved radiation be used as a weapon to cause illness or death and at the same frequency and unless close range, a similar low intensity be used as a safe communications instrument.

Low level pulsed signals have even been tried in the oceans. It was reported (Reference 17) by Gibby Zobel that the whales and dolphins beached themselves because their delicate navigation systems were damaged by the low level pulses. This is not surprising as like us they are mammals. The comment from the Minister at the time was "it's their fault for being in that part of the ocean when they could have moved away".

As KCP&L has stated in their response letter, they are not exceeding the radiation levels put in place by the FCC.

FCC regulations protect only against gross overheating and do not protect from biological harm caused by low (“non-thermal”) levels of microwaves. Wireless smart meters emit non-thermal levels 24/7, and exposure is inside every home and involuntary. This is of urgent public concern.

From the EPA: “The FCC’s current (radio frequency/microwave) exposure guidelines, as well as those of the Institute of Electrical and Electronics Engineers (IEEE) and the International Commission on Non-ionizing Radiation Protection, are thermally based, and do not apply to chronic, non-thermal exposure situations.....the generalization by many that the guidelines protect human beings from harm by any or all mechanisms is not justified.” Norbert Hankin of the EPA’s Office of Air and Radiation, Center for Science and Risk Assessment, Radiation Protection Division, July 16, 2002.

The FCC’s guidelines can show a device to be *unsafe*, but cannot prove that a device is safe. Non-thermal levels of exposure are simply not regulated by the FCC. There are thousands of peer-reviewed studies showing potentially harmful biological effects of non-thermal levels of microwave radiation. Some of these studies were done with humans, and most were on mammals with nervous systems and biochemistry nearly identical to humans. The sheer volume of these studies is cause to strongly infer human risk until proven otherwise, especially since some of the studies done directly on humans do show harm. Furthermore, the World Health Organization has classified low level non-thermal microwave emissions, *specifically including* that emitted by (wireless) smart meters, as a possible human carcinogen.

Now that we have seen the health dangers of smart meters, let us take a look at yet another danger involving smart meters. It seems that smart meters are a fire hazard as well. (Any hazard or threat on any level does not meet the definition of “safe” according to MO Statutes Title XXV for regulations of certain utilities and carriers, section 393.130.1). Please see the following link and read about all of the fires and explosions involving smart meters.

<http://emfsafetynetwork.org/wp-content/uploads/2016/01/Summary-of-Evidence-on-Smart-Meter-Fires.pdf>

As we have seen, the dangers of radio frequency/microwave radiation are very real. The health hazards have been well documented. The fires and explosions are too numerous to count. Please tell us, after viewing all of the evidence above and the attachments below, how smart meters could possibly meet the definition of “safe” service instrumentalities and facilities according to MO Statute XXV section 393.130.1.

Jim and Angie Dickson request that the MO State Commission uphold our request to allow us to remove our smart meter and replace it with an analog meter that we have already purchased.

Complainant requests that KCP&L allow all residents of *Kansas City* the right to change back to analog meters at any time they request for no extra charge. If meter reading is an issue we request the customer be allowed to provide the utility companies with the meter information on a monthly basis as has been allowed already for rural customers.

Radiation poisoning is a very serious issue. It is time the utility companies acknowledge that and warn their customers so they may make informed decisions regarding their family’s health and privacy. We request that information regarding the dangers and health hazards regarding radiation exposure that is continually being emitted into their homes and the dangerous effects it has on the human body be given to the customer. We ask that these warnings be sent out to people before a smart meter is put on someone’s residence and then once a month along with the monthly bill continually as long as a customer has a smart meter.

AND for such further order or orders as the Commission may deem necessary.

Please see following four attachments:

https://mail.google.com/mail/u/0/?ui=2&ik=f06e562848&view=att&th=1544ef094577b252&attid=0.1&disp=safe&realattid=f_ingea3hj0&zw

https://mail.google.com/mail/u/0/?ui=2&ik=f06e562848&view=att&th=1544ef094577b252&attid=0.2&disp=safe&realattid=f_ingeasdc1&zw

https://mail.google.com/mail/u/0/?ui=2&ik=f06e562848&view=att&th=1544ef094577b252&attid=0.3&disp=safe&realattid=f_ingebqpy2&zw

https://mail.google.com/mail/u/0/?ui=2&ik=f06e562848&view=att&th=1544ef094577b252&attid=0.4&disp=safe&realattid=f_ingeebii3&zw

