

**FCC 13-39**  
**Before the**  
**Federal Communications Commission**  
**Washington, D.C. 20554**

In the Matter of	)	
	)	
Reassessment of Federal Communications	)	ET Docket No. 13-84
Commission Radiofrequency Exposure Limits and	)	
Policies	)	
	)	
Proposed Changes in the Commission's Rules	)	ET Docket No. 03-137
Regarding Human Exposure to Radiofrequency	)	
Electromagnetic Fields	)	
	)	

To: Office of the Secretary  
Federal Communications Commission  
Washington, DC 20554

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November 1, 2013



6. The FCC has a duty to the public to protect the public health and safety from harm from radiofrequency radiation (H.R. Report No. 104-204, p. 94).
7. In May 2011, IARC classified radiofrequency radiation, including radiation from all wireless technologies, as a class 2B possible carcinogen.
8. In the 2012 BioInitiative Report, the authors conclude radiofrequency radiation is a carcinogen. The 2012 BioInitiative Report is incorporated by reference herein in its entirety (<http://www.bioinitiative.org/>)
9. “Public safety standards are 1,000 – 10,000 or more times higher than levels now commonly reported in mobile phone base station studies to cause bioeffects.” (<http://www.bioinitiative.org/conclusions/>)
10. The FCC radiofrequency radiation limits are outdated and obsolete. They are based on physics, not biology and, therefore, the limits are so high that they are useless for protecting the population from harmful biological effects. (<http://www.bioinitiative.org/>) Since the FCC lacks the expertise to establish meaningful biologically-based safety limits, it is the duty of the FCC to advocate for allocating funding and authority to the EPA to establish biologically-based safety limits. 2012 HR6358 exists as a model of legislation to do just that.
11. The FCC is not entitled to essentially disregard comments from citizens because they cannot provide global cost-benefit analysis (*Scenic Hudson v. Federal Power Commission*), as is suggested by paragraphs 109 and 209. The Commission has an affirmative duty to inquire into and consider all relevant facts. They must use government resources to perform the relevant analysis. The FCC should request that the EPA use its taxpayer-funded resources and experts present at its National Risk Management Research Laboratory to conduct all of the cost analyses the FCC has asked for in this proceeding.
12. In paragraphs 65, 66, and 67, I provide information about the monetary costs incurred by me and my family as a direct result of the FCC's negligence in not putting into place biologically-based RF safety limits years ago. The emotional and social costs have also been very steep. None of the common uses of wireless technology comes close to justifying the monetary, physical, emotional, and social price our family has been forced to pay for it.
13. My family's on-going health nightmare, caused by the presence of biologically active levels of radiofrequencies on the electrical grid and radiofrequency radiation transmitted into the environment through use of wireless technology, is illustrative of why it is essential that the EPA finally be empowered to establish biologically-based radiofrequency radiation safety limits.
14. I am a type 1 diabetic and I use an insulin pump. My blood sugar is under good control, as long as I can avoid exposure to high frequencies.
15. I have had many instances where my blood sugar has increased dramatically in response to high frequency exposures and I have not been able to lower it with additional insulin until the

high frequency exposure has stopped. One particularly memorable incident occurred when the neighbor, for whom I custom combine and who carries a cellphone that is turned on, joined me in the combine for about 3 hours. Prior to him entering the combine with his cellphone my blood sugar was 100-120. A short time later I tested and it was over 300. I took a bolus of insulin several times and my blood sugar did not respond. Minutes after he left the cab with his cellphone I tested and my blood sugar was dropping. It bottomed out near 30. I drank four cans of soda to get my blood sugar back to normal. This is far more than normally required and seemed to be because the insulin was finally able to act properly. Another incident occurred when we were visiting my wife's relatives in Canada. I again had high blood sugar that would not respond properly to insulin. We discovered that the neighbor's wireless router was responsible. I have also had similar reactions to high frequencies on electrical wiring, also known as "dirty" power or electrical pollution.

16. Greater exposure to radiofrequency radiation from the ever increasing use of wireless technology will endanger my health by making my blood sugar harder to control.
17. Data cited in the review of Soviet literature related to the biological effects of exposure to radiofrequency (rf) radiation suggest this is true. It mentions that in one study 75% of people working in rf fields were prediabetic. (See Dodge, incorporated by reference herein in its entirety [http://www.magdahavas.com/wordpress/wp-content/uploads/2010/08/Dodge\\_1969.pdf](http://www.magdahavas.com/wordpress/wp-content/uploads/2010/08/Dodge_1969.pdf))
18. Two papers looking at the historical incidence of diabetes provide further evidence of harm from exposure to rf. [*Historical evidence that electrification caused the 20th century epidemic of 'diseases of civilization'*] by Samuel Milham ([http://www.medical-hypotheses.com/article/S0306-9877\(09\)00579-9/abstract](http://www.medical-hypotheses.com/article/S0306-9877(09)00579-9/abstract)) and [*The Rise of Childhood Type 1 Diabetes in the 20th Century*] by Edwin A.M. Gale (<http://diabetes.diabetesjournals.org/content/51/12/3353.full>)] Milham finds a significant correlation between electrification and increased rates of diabetes mortality. Gale concludes that increases in prevalence of type 1 diabetes through the last century must be linked to environmental factors. Both provide objective support for my personal observations that rf affects my blood sugar levels and interferes with the ability of the insulin from my pump to act. Presumably my body's own insulin was similarly affected, stressing my pancreas, and resulting in me developing type 1 diabetes.
19. In 2011, I spent about 22 hours a week in the Madison, WI area vending at farmers markets during the spring, summer and fall. After market season ended and I finished custom combining, I was no longer around cellphone radiation on a daily basis. I had to decrease my basal insulin rate. Over about a month it dropped about 16%. Since then our rf environment has deteriorated and my basal insulin use has increased.
20. When I am exposed to high frequencies, I feel ill. If I have to run errands in town, I usually return home with a headache. I often find my blood sugar goes up in stores. I have been forced to leave meetings early because of feelings of nausea.

21. We have two small children whom we are homeschooling so they will not be exposed to the dangerous high frequency environment in our local public school (Waterloo, WI). The school has both WiFi and high electrical pollution levels.
22. Our children both experience health problems when exposed to high frequencies. They feel sick, become hyperactive, less able to think logically and control their behavior. They also sleep poorly in bad high frequency environments. The recent increase in radiofrequency radiation exposure has given them chronic cardiac arrhythmias.
23. The drastic measures we have taken to reduce their exposure has momentarily stabilized them at about early stage 2 radiofrequency sickness. (See Dodge) We are very concerned that any increase in the radiofrequency radiation levels could again push them over the edge toward stage 3 radiofrequency sickness. They should not be involuntarily exposed to a pollutant that has such profound detrimental effects on them.
24. Because of the serious effects exposure to high frequencies has on our health, we do not own a cellphone, cordless phones, wireless router, baby monitors, or subscribe to wireless internet.
25. My personal experience has shown me how serious the effects of exposure to high frequencies can be. Over the years I have only occasionally had time to read the research on high frequency exposure. I recently read the paper by Halberg and Johannsen in *Pathophysiology* [Ö. Hallberg, O. Johansson, Apparent decreases in Swedish public health indicators after 1997—Are they due to improved diagnostics or to environmental factors? *Pathophysiology*(2009)]. I believe that paper alone should raise enough doubts to halt all additional spectrum rollouts, the smart meter rollout, expansion of wireless internet and expansion of other wireless communications until safety limits to protect the public health during continuous exposure to high frequencies from all sources including transmitted and electrical pollution are established. For more information about electrical pollution as a potent source of high frequency exposure please see [www.electricalpollution.com](http://www.electricalpollution.com).
26. I knew that an increase in levels of transmitted radiowave and microwave radiation would be very detrimental to my health and that of my family and would further impair our ability to live a normal life.
27. Therefore, we refused installation of the We Energies AMR meters, which transmits a spike of microwave radiation (approximately 1800  $\mu\text{W}/\text{m}^2$ ) every 6 seconds 24 hours a day, 7 days a week, on our two electrical services.
28. We had to turn away at least one installer who came to install meters after we were on the record with We Energies and the PSC as not wanting an AMR meter installed.
29. We were concerned that we would find AMR meters installed despite our clearly expressed refusal to have AMR meters, so we padlocked our meter pedestals and installed clearly worded permanent signage.

30. In response to our continued refusal to allow installation of the meter, we were threatened with disconnection. (See WeEnergies9Dec2011.pdf)
31. My parents tried to refuse to take a transmitting meter so we would still be able to visit and were bullied into taking the meters by a disconnect threat. We can no longer visit. Our one try was cut short by our younger son feeling so ill that he was crying and begging to leave - in spite of it being Christmas with relatives, presents, and candy.
32. Both We Energies and the PSC maintained, over the phone and at a meeting with our state legislators, that we had three choices and represented them as accommodation.
  1. Take the AMR meters.
  2. Take the AMR meters and move them anywhere on our property at our considerable expense (thousands of dollars to move them even short distances).
  3. Get off-grid.
33. We do not consider these choices to have been any form of accommodation since we could not have moved the meters far enough to protect our health. Also, the radiofrequencies the meters produce get on the wires, essentially turning the house into a low-power microwave. This proved to be a problem even though our nearest neighbor is over half a mile away. Having two meters of our own would have worsened the effect.
34. We consider the refusal to accommodate us and the threat to disconnect us to have been bullying and intimidation on the part of We Energies and the Wisconsin Public Service Commission.
35. My wife met, as part of a group, with state legislators (Sen. Grothman, Rep. Jorgensen, and Connie Schulze, a staff-member of Sen. Darling's, who were supportive, but unwilling to sponsor legislation to help us.
36. My wife called numerous federal agencies - to no avail.
37. In March 2011, we received a letter from We Energies threatening to disconnect us within 48 hours for denying them access to the meter pedestal, which we own. This, in spite of the fact that, during a conversation about the supposed safety issue and the fact that We Energies can easily disconnect power to our farm at our transformer in case of an emergency, Tom Held (Supervising Engineer Meter Technology) concurred saying "I know. They can pull the fuse."
38. We had been customers in good standing.
39. Again we appealed to the PSC (PSCMarch2011WEcutoff.pdf) for accommodation under the ADA and asked that they address the radiation coming off of our transformer and causing cardiac arrhythmia for our son, only to be told that they would stand by and watch us disconnected, although they would make We Energies wait until after April 15. They did not address the dangerous radiation at all.

40. After consulting multiple lawyers, realizing that the sole power to provide or deny accommodation resided with the PSC, and even being told outright by one lawyer that our best bet was to get off the grid, we began making preparations -at considerable expense- in case we were forced off-grid, fighting all the while.
41. We got a propane refrigerator, a pilot light gas stove, installed a gravity flow hot water heating system, acquired a generator to run our commercial freezer and installed a solar photovoltaic system to run a new DC well pump and sump pumps and converted our computer to run on DC.
42. We felt that the PSC was in violation of its own statutes in standing by and watching customers in good standing get disconnected and that We Energies was in violation of the law, but with no one to defend us, we had no recourse other than the one easily accessible public forum - a Letter to the Editor. (We had contacted various legal organizations including the ACLU, Public Citizen, Common Cause, and NRDC. All said that they have limited funding and they had never heard of this before. News outlets were similarly uninterested - utilities and telecom companies provide substantial funding through advertising or outright ownership.) We did also reply to the PSC.
43. The PSC once again refused to exercise their right to stop We Energies from disconnecting us for refusing the transmitting meter.
44. The PSC refused to accommodate us in large part because the AMR meters were supposedly in compliance with FCC radiofrequency limits (see PSC27Apr2011reDATCP.pdf), in spite of the fact that FCC limits were never intended to protect anyone from the biological effects we experience. Compliance with FCC limits has been used to force many many people from across the country to have devices which compromise their health.
45. After we wrote the letter to the editor, Sue Crane, Manager Special Projects at We Energies contacted us and asked that we remove the padlock stating that she would personally guarantee in writing that the meters would not be changed for 6 months.
46. On October 8, 2011, we sent letters to the PSC and We Energies requesting that they remove our electrical service since they had repeatedly ignored our requests to address the problems on their system that were causing large amounts of very high frequency radiation to radiate off of our transformer and our house wiring.
47. We had been forced to sleep in a tent a half mile from our home site (and at least that from other electrical services) from the end of July through October 13, 2011 - the start of early deer hunting season - in order to stabilize our sons' cardiac health. (From the start of deer hunting until the secondary wires were removed on October 19, 2011 we slept in the bed of our full-sized truck parked in our metal machine shed with the openings facing the transformer electrically shielded and the bed opening away from the transformer. The electrical service to the shed was already disconnected thus preventing it from conducting the radiofrequencies in.)

48. Both sons were affected, although our younger son was affected more severely. After initial tachycardia incidents which we became aware of in the fall of 2010, they moved on to irregular heartbeat and heart rate which finally got quite slow and irregular, particularly during sleep. Additionally, Holter monitoring found that both boys had sinus arrhythmia. This is consistent with the descriptions of stages one and two of radiofrequency sickness in Dodge (attached). On a Holter monitor, our younger son only had a high of 242 bradycardia incidents hourly at the tent versus 1637 hourly at home. Our older son had a high of 165 bradycardia incidents hourly at home with no comparable due to a mistake on the part of the hospital. Our younger son's heart rate got so slow one night when we were forced by broken tent poles to sleep at home that he lost bladder control, wetting only his underwear because the volume of urine was so small. When my wife went to him in response to his call, he was agitated and upset, but his heart rate was very slow and the beats were weak and irregular. This continued for a couple of hours. We did not sleep in the house again after that until after the secondary lines were removed.
49. The deterioration in our health began shortly after the smart meters were installed in our area. Strong power line communication signals (likely related to broadband over power lines) in the 12.4 to 13.2 MHz and 25.5 to 26.3 MHz range along with communications signals radiating from our end of the line transformer and our home wiring seem to have been the final straw.
50. Signals in the 1 MHz to 80 MHz range used for broadband over power lines and communications signals are not supposed to cross the transformer. However, what happens when the signal hits the end of the line has not been considered as far as I know. Our experience suggests that it radiates and does cross the transformer enough to radiate off of the wiring and plumbing throughout the house at biologically-harmful levels.
51. We are now off-grid to protect our family's health.
52. After going completely off-grid, I had three heavenly weeks. I slept well, felt well, and had lots of energy. Our pets' health improved. Most importantly, our sons' cardiac rhythms had almost completely normalized.
53. Then, in early January 2012, 4G cellphone service was installed in our area. Within a week, our sons' cardiac rhythms were again highly irregular. Our younger son was again waking us in the night crying and feeling unwell with a highly irregular cardiac rhythm.
54. I screened all the windows with aluminum screen to reduce his exposure. Again, he slept through the night and was less clingy, but their cardiac rhythms remained irregular.
55. We are currently essentially housebound, unable to spend significant time in houses or businesses which have transmitting meters, which includes almost every electrical service in our area.
56. Due to the detrimental health effects that we experience, we are unable to visit friends and relatives who have transmitting meters.

57. We cannot completely escape the constant exposure from neighbors transmitting utility meters, 4G cellphones, and the power line frequencies which still radiate from the junction box down the road that terminates the line.
58. As 2012 passed, we had to do more and more shielding to compensate for the ever increasing levels of radiation from wireless technology. We have had to restrict the amount of time our outdoors-loving sons can be outside. They are now only able to be out an hour a day. If they are out more than that with any regularity their cardiac arrhythmias become severe enough that they become clingy and we are awakened in the night.
59. I am a beekeeper. My bees used to be healthy. The increased radiofrequency radiation in the last couple of years has not been good for their health. We lost all of our hives over winter the past two years. The winter of 2011-2012, with removing the transformer and its radiation from our yard, 80% survived the winter. Last year with the 4G cell service and dramatically worse RF environment, we again lost all our bees by the end of winter. Even losing one hive by the end of summer. Radiofrequency radiation can interfere with bee navigational abilities, impair their immune systems, and therefore decrease the health and vigor of my hives. Please see “The Birds, the Bees and Electromagnetic Pollution” by Dr. Andrew Goldsworthy, May 2009, for more information.
60. We do not want to continue to be guinea pigs for the government-sanctioned rollout of new technologies with insufficient safety standards, in total disregard for the Nuremberg Code of Ethics (<http://www.hhs.gov/ohrp/archive/nurcode.html>). We do not want to continue to be part of the experiment being involuntarily carried out on the American people verifying the results of decades old research showing that the long-term health effects of these wireless signals can be profound and dangerous. (See Dodge)
61. I have had difficulty keeping up with outdoor work such as planting, cultivating, harvesting, and animal care duties, as well as building maintenance projects, since I also feel unwell if I have to spend too much time outdoors. We are working on shielding some of my working spaces, but the outdoors is my work area and there is no good way to shield that.
62. Radiofrequency radiation levels have climbed high enough that even being inside most of the time was not protective enough to keep our sons from being symptomatic. We have had to begin shielding further. Every little bit helps for awhile, then more people use their phones more, stream video more, etc and the levels increase further and we have to shield some more. How long before radiofrequency radiation levels climb high enough that being outside at all is dangerous? What happens when we have shielded the whole house and even so being inside does not offer enough protection?
63. I wonder if I will get to see my sons grow to adulthood together or if one or both will have their lives cut short by the lack of meaningful biologically-based safety limits for radiation from wireless devices. They are sweet intelligent wonderful children and do not deserve to suffer or pay the final price so telecom companies can make more money.

64. Our situation perfectly illustrates the absolute inadequacy - irrelevance even - of the FCC radiofrequency radiation limits for protecting human health. These adverse effects are happening at levels far below existing radiofrequency radiation limits.
65. The FCC has asked for monetary costs, as though money is all that matters. The meters necessary to verify RF related problems cost us over \$1,500. Going off-grid, which was necessary to protect the lives of our sons, cost us over \$70,000 dollars based on simple addition of the costs of all the separate parts and steps necessary to make that happen. The cost was that low because we were able to do much of the work ourselves. The solar installer estimated that the system we wished to put in at that time would cost us over \$80,000 just for the solar system, not including the new heating system, refrigerator, well-pump, super-insulating the freezer, freezer generator, freezer/generator control switches, etc.
66. Shielding materials have cost us over \$2,500 so far, also based on simple addition, and are likely to cost us at least \$4,000 more just for the shielding materials, also based on simple addition. It has cost over \$7,000 to get new windows for the low E coating which helps block RF, again far less than most people would pay because I can install them. I cannot stress enough that these are only the monetary costs and do not include the physical, emotional, and social price our family has been forced to pay for the FCC's negligence in not implementing biologically-based safety limits. We are not wealthy and do not earn vast sums each year so it is a real question as to how long we can continue to pay for the continuous upgrades necessary to protect our family's health, yet how can we not? But, if we lose the farm doing it, what will happen to us?
67. FCC negligence in not establishing meaningful RF safety limits has caused us to pay more for health insurance. My diabetes diagnosis is probably due to "dirty" electricity exposure in my childhood, another potent source of exposure to RF. My blood sugar levels, mentioned in paragraph 15 are quite reactive to RF radiation from wireless devices. They are also reactive to "dirty" electricity. RF exposures can stimulate autoimmune reactions. My diabetes diagnosis put me in the uninsurable category. I was fortunate to be able to get health insurance through the Wisconsin Health Insurance Risk Sharing Plan (HIRSP), however even with the subsidy it was quite a bit more expensive than insurance I could have gotten as a healthy young man. We had to have HIRSP policies for our sons as well, not due to their health which was great prior to the RF toxicity problems outlined above, but because you cannot insure children without at least one adult as primary on the policy. As an example of the great expense this caused us, the non-HIRSP insurance quote we got in 2012, necessary to re-apply to HIRSP, for the whole family was \$713.54/month. The premium for my insurance alone through HIRSP at that same time for the same \$1,000 deductible was \$554/month. HIRSP premiums at that same time and deductible level were \$729/month for Catherine and \$387/month for each of the boys. Up until the 2008 flood and policy changes allowed us to qualify for health insurance assistance we were paying similar large monthly premiums. Thus, FCC negligence, resulting in the absence of biologically-based RF safety limits for electrical quality, caused my wife's CFS diagnosis (actually RF sickness verified time and again by improvement in low RF environments) and my diabetes, and forced our family to pay significantly more (nearly 3 times more) for health insurance than we would otherwise have had to.

68. Not only is the absence of biologically-based RF safety limits in violation of common sense, the Nuremberg Code of Ethics, and the principles of public health protection, but the promotion of wireless technology, a technology that so severely restricts the activities of a portion of the population, violates the ADA, including the 2008 ADA amendments. The physical, social, and emotional costs of exclusion in spite of ADA protections and previous inclusion must be weighed in the EIS when it compares costs and benefits of the existing RF limits and enacting biologically-based RF safety limits.
69. The levels of radiation our family experiences on a daily basis from transmitting utility meters, cellphones, cell towers, wireless broadband, and other sources, - WITHOUT OUR PERMISSION - is already causing serious daily health problems for us. (All from devices that are supposedly individually compliant with the meaningless thermally-based FCC radiofrequency radiation limits.)
70. The FCC has no expertise for evaluating radiofrequency research and setting biologically-based safety limits. The FCC is not serving the public well by allowing the public health to be endangered by their lack of expertise. The FCC needs to tell Congress that they lack the needed expertise and ask Congress to provide funding to the EPA and invest them with the authority to set the biologically-based safety limits necessary to protect the public health and safety.
71. Without conservative safety standards designed to protect the public health of our entire population during continuous exposures from all detrimental health effects and the rigorous enforcement of such standards, we fear the long-term hazards to our family's health.
72. We have a right to be safe in our homes and our schools and workplaces, and we have a right to modern safety standards based on current science, not mistaken assumptions (the thermal model) and wishful thinking.
73. The existing FCC radiofrequency radiation exposure limits are way too high. Severe biological effects occur at far lower levels, as demonstrated by my family's experience, as well as in studies. If the FCC persists in ignoring this fact and does not adopt biologically-based radiofrequency radiation safety limits, it will be directly responsible for the ill health, even death, of millions of people. (See the 2012 BioInitiative Report - <http://www.bioinitiative.org/> - for mechanisms and diseases for which links have been made in recent scientific literature and Dodge - incorporated by reference herein in its entirety [http://www.magdahavas.com/wordpress/wp-content/uploads/2010/08/Dodge\\_1969.pdf](http://www.magdahavas.com/wordpress/wp-content/uploads/2010/08/Dodge_1969.pdf) - for connections made over 40 years ago.)

74. I reaffirm that the information contained in the paragraphs above are true and correct.

75. End of affidavit.

Dated this 01 day of November 2013.

Daniel Kleiber  
Signature of Person Making This Affidavit

State of Wisconsin ]  
                                  ]     ss.  
County of Jefferson ]

Subscribed and sworn to (or affirmed) before me this 01 day of November, 2013, by Daniel Kleiber of N9387 Riverview Dr., Waterloo, WI 53594, personally known to me or proved to me on the basis of satisfactory evidence to be the person who appeared before me.

Tammy L Cooper  
Signature of Notary Public

Notary Public Seal

