**Main comment:**

The proposed FCC draft order completely ignores ADA and the rights of those who already have microwave sickness, aka, electromagnetic sensitivity, such as myself. In addition, the massive rollout of this technology will probably lead to many more people falling ill with the condition or suffering other ill serious health problems (cardio, autoimmune, MS, Parkinsons, etc.) from the extremely exposure to extremely unhealthy levels of radiofrequency (RF) radiation (wireless radiation). Please read my testimony below, which goes into detail about the devastation that microwave sickness has wrought on my life.

Please think about the health of the young generation, who have grown up bathed in RF, and whose health and cognitive abilities will be even more profoundly affected by it. Please think of all those who are already ill and/or the elderly who are also far more vulnerable to the effects of high RF exposure. Please think of Joe Biden’s son, John McCain, and many other less famous people, who have also died of “rare” brain tumors and forms of brain cancer that have become more common in recent years.

Remember also that there are other ways of providing faster Internet connection, namely fiber optics, which does not present the same severe public health hazards.

**Personal Testimony Statement**

I’m a middle-aged woman from Berkeley, California. Until recently, I worked as an editor, for the state government and earlier, for McGraw-Hill Higher Education. I also worked as a college professor of French for many years. For the past two and a half years, I have been a daily caregiver (along with my mom) for my seriously ill father.

Microwave sickness (aka, electromagnetic hypersensitivity [EHS]) hit me like a hammer blow in early June 2017, a year ago. It was a no-brainer to make the connection between my symptoms and their cause: when I had my (brand new) iPhone on, the pain in my head would immediately commence. When I kept the phone on airplane mode or powered it off, the pain went away or didn’t arise. I had had glimpses of the same pain for several years, but only when using our cordless phone. At the time, I attributed the pain to a poor quality phone and avoided using it. In April 2017, I began to feel that pain anytime I used my iPhone at my ear; when my jack broke, it became hard to avoid using it at my head in certain circumstances. (I discovered that if I removed my earring in the ear near the phone, the pain wouldn’t be quite as bad.) Then the perfect storm hit me over a one-week period: I experienced extreme emotional and physical stress, associated with being a caregiver, along with a high increase in radiofrequency (RF) radiation (activation of my new iPhone and Comcast doubling our Internet speed). Soon, just having my iPhone connected and reading my email triggered the pain. Soon thereafter, I could no longer be anywhere near my phone in the house unless it was on airplane mode or powered off. Before long, I could even feel the smartphones of our next door neighbors and their workers (who were building a porch about 20 feet from where I worked in my living room), even when the phones were just connected, and not in active use.

During the first couple of weeks, the burning pain and pressure in my head were preceded by a very unpleasant, dizzying sensation accompanied by a very faint, oddly metallic smell. Since we live in an area with poor reception, the cell phone signals here are particularly strong. I couldn’t work when the workers were building the porch. But when I went to the nearby regional park that has almost no cell phone reception and thus no RF, my symptoms would quickly subside and I’d feel fine (as long as I avoided people there too, since the signals are even stronger there).

I have *no doubt* about the correlation between my symptoms and exposure to high RF (as well as high EFs and high MFs). A small and very accurate RF meter (Acousticom 2) that I now carry with me everywhere I go invariably reveals an extremely high level of RF (1.0–6.0 V/m or higher) in places where my symptoms are worst. And the places where it measures low RF levels, I feel fine, unless the electric fields (EFs) or magnetic fields (MFs) are at an unhealthy level (I have EF and MF meters too).

Exposure to high EMF levels (of which high RF is the most prevalent and the most lethal for me) now triggers a range of possible symptoms in me. The most common one (and generally the first one to appear) is painful “buzzy” pressure in my head (temples, cheekbones, or sides of head near my ears, especially on the right side). It feels as if my head were in a slowly tightening vise. This occurs when I’m near a connected smartphone, a cordless phone base, or in high ambient RF (such as WiFi), as well as high MFs (which are quite rare, except in our house). Depending on the phone or the strength of the WiFi, it can take from 1 to 20 minutes for the symptoms to set in strongly. If I’m just a few feet away from someone who is talking on a smartphone, I *immediately* experience terrible burning pain in and around my right ear, and that pain will linger with me till the end of the day unless I’m able to go to my shielded bed canopy or to the local park (mentioned above) for a half an hour to recover. Sometimes, it feels as if my eardrum is expanding and will burst. At other times, it’s like an earache, a searing pain in my ear that starts as a small pinprick sensation and soon grows intense and broader.

Along with the pain in my head, I invariably develop brainfog: poor short term memory, slow mental cognition, and difficulty speaking. In addition, I often become very irritable and short-tempered with both family and strangers (not at all my normal temperament). Deep fatigue is another frequent symptom: I find myself yawning deeply, after I’ve entered a zone high in RF, even if my energy level had been fine up to then. Prolonged high exposure often causes increasing tenderness in the area under my ear, down into my neck. Finally, when exposed to high RF and/or high DE, I sometimes feel a constriction in my chest (especially when I used to work on my iMac). Recently, I have begun to experience some new symptoms too (though still rarely): tinnitus and lightheadness/vertigo. In short, high EMFs and especially high RF exposure have a whole-body/mind effect on me.

Microwave sickness has completely turned my life upside down. About two weeks after it started to develop, I had to stop going into the office altogether, and work entirely from home. I also had to stop attending the church I’ve gone to for decades and find a new pool to swim in, because both were located across the street from multiple cell phone antennas. The Yahoo support group for people with EHS is very aptly named “EMF Refugee.”

In February of this year, I began to develop increasing sensitivity to another form of electricity, “dirty electricity” (aka, electromagnet interference [EMI]), emitted by almost all computers and modems

at high levels, as well as by any energy-saving technology (LEDs, dimmers, solar panels, etc.). Even after eliminating most internal sources of DE, our house is filled with a high level of it coming in from the neighborhood electrical grid. In June 2017, I had eliminated our WiFi router and hardwired my computer to the internet, but I became intolerant of the high level of DE riding the wires in our house (it was a cold winter, unfortunately, so we used the heater a lot). In March, I could no longer tolerate the DE emitted by my computer and had to take an indefinite leave of absence from work.

EHS is very aptly referred to as technological leprosy. Already, many places and events are off limits to me because the RF is too high: movie theaters, concert halls, most churches, stores that provide WiFi to their customers (such as REI and Whole Foods), most restaurants and cafes, and post offices. I will probably never go to San Francisco again, nor will I fly, take a train, or travel on any form of public transportation. Uber and Lyft are also off limits to me. All metallic moving vehicles greatly amplify internal sources of RF. A 5G rollout will further restrict my already limited radius of movement and alienate me from others.

I can only visit a couple of my friends in their homes, since those who live in apartments or condos can’t lower the RF level enough for me (their neighbors’ WiFi or nearby cell phone antennas and towers keep the RF level too high). In fact, I have to meet most of my friends in a couple of regional and city parks where the RF is still low enough. With a massive 5G rollout, the few remaining oases I have would most likely disappear. Even if by some miracle they remained tolerable, I likely wouldn’t be able to get to them without sustaining extremely high RF levels en route. I would become essentially a prisoner in my home, possibly even a prisoner in my bed canopy, the only place in the house where I am completely shielded from RF (and EFs too).

I had to change my primary care physician and find someone who was open to my condition *and* whose office had a bearable level of RF (by a minor miracle, I found someone who met both conditions). I cannot consult a number of medical practitioners whom I would like to go to for treatment because the WiFi in their office is too strong or they are located too close to cell phone antennas or towers. When I go to the dentist (or anywhere, for that matter), I am at the mercy of those around me, who generally all want to keep their phone connected (and use it) while they are waiting for their appointment or getting seen. Some people are kind and accommodating, but it is never easy to ask someone to inconvenience themselves for me, a stranger. And in most places (such as a crowded doctor’s waiting room, a subway platform or a bus) it would be impossible to ask everyone to power off their phones. Instead, I just leave. Every stranger (and some friends too) I encounter in public is a potential threat. In addition to the physical pain caused by the high RF of someone’s smartphone, I feel great anxiety each time I dare to ask someone to power off their wireless devices for me and risk disbelief or ridicule. I prefer to either suffer in silence, or better yet, stay away and avoid the situation altogether.

Carrying out caregiving duties for my elderly old father became extremely difficult in the last year before he passed away; his health also suffered due to my condition. When my dad had to go the ER last spring, I was not able to be an effective health advocate for him. My mom (who is practically deaf), was the only person who could go to the front desk and complain or ask for information. I wore a protective head hood in my dad’s ER room, but it only shields me so much *and* makes people think I’m crazy. In addition, I could no longer accompany my dad into the consultation rooms of most of his doctors after I developed this condition.

One of my worst fears is that my sensitivity to EMF will continue to grow to the point where I will no longer be able to live in my parents’ home at all and might have to live out of my car in parks, as I know some other people with this condition do.

The world is already a very dangerous place for me to negotiate, even *without* increasing the RF by a quantum leap, as 5G will do. With 5G prevalent, the world would become a truly terrifying and torturous place for me to inhabit; indeed, I don’t think it’s apocalyptic to predict that I probably would not survive for long.