LD878 Written Testimony from Ken Gartner of Warren, MA (BioSaferHousing@gmail.com)

March 26, 2025

Maine Legislature, Committee on Energy, Utilities and Technology (sponsor Tracy Quint)

Resolve, to Study the Effects of 5G and Other Non-ionizing Radio Frequency Radiation-emitting Technology on Bird, Bee, Insect and Other Wildlife Populations and the Effects of Long-term Exposure on Children

I would like to encourage Maine to study the impact that wireless communication signals have upon the living environment, including humans. LD878 asks that a commission be authorized to research this matter, to better inform government policy and to better track the health implications of novel technology having unintended deleterious consequences. From such knowledge, will come wisdom.

New technologies arise, soon generating much buzz and excitement, a market is established, an industry then evolves around the production and dissemination of such technologies, eventually some of the demerits show themselves to be endemic to the technology, distrust and caution replace irrepressible enthusiasm, finally regulatory intervention is established to ensure that 'too much of a good thing' is reined in.

This is a common cycle we have seen for hundreds of years. Use of asbestos, mercury and lead provided important benefits and associated industries thrived for many years before finally being understood to have deleterious health and environmental effects. From the 1920-1950s, shoe-fitting X-rays performed in shoe stores by shoe salesmen was lauded as a wonderful technology. As horrified as we are now about these oversold and incautious hazards, so too will our descendants be as they come to understand our current societal over-exposure to injurious microwave radiation. We are harming ourselves, based on the magical thinking that there are no deleterious consequences to rampant deployment of wireless technology, that there is no impingement on human biology, that there is no such notion of their being 'too much'.

A sober, open-minded and evenhanded commission in Maine will soon find that there is much to be concerned about with respect to the biological impact of wireless communication signals upon living systems. Human biology is complicated, far beyond the ken of most physicists and electrical engineers, who are often the ones most vocally insisting that wireless is safe for everyone unless the signal strength is so high that it causes chemical changes due to heating (ie, like a microwave oven). These trusted authorities – for this is how to they deemed by the Federal government, which has made the FCC the key rulesmaker, an agency without any medical staff and conducts no health research – insist lower signal strength wireless signals have no negative biological effects. The proposed Maine commission will soon see that this is a patently false viewpoint, one that helps sell merchandise, aims to avoid legal liability for harm and tamps down individual dissent with the repeated mantra of 'your health is in good hands -- you can surely trust us because we are scientists'.

I work primarily with people whose health is adversely affected by very low levels of wireless communication signal energies. Many of these people were using modern technology with impunity, until they 'suddenly'

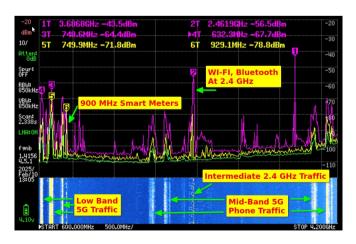
no longer could tolerate it. Often, there were ignored warning signs of escalating sensitization but these clients were not attuned to listen to what their body had been telling them. Their journey though the medical system ranged from bafflement because 'your labs all look normal' to outright denial that their symptoms are indeed real and so must be contrived, as from a psychological source. Here, the doctors are the authorities figures who do not comprehend the import of over-exposure to wireless communication signals to their patient's health.

As a practicing building biologist in Massachusetts, I am invited into the homes of people who are concerned about the effects of EMFs (both power-frequency and radio frequency man-made electrical energies). Sometimes, they have a family member who feels acutely worse when exposed to particular devices or in particular areas in their home. Using measurement tools, we identify what EMFs exist in their environment and find ways to make that space safer for the person. Unfortunately, sometimes the sources of EMF irritation are beyond easy control (such as a nearby cell tower or a bank of broadcasting utility meters) and the corrective options are fewer. There is a clock ticking, in my experience, such that when a person starts to show acute sensitization to EMFs, then continued exposure can reduce the threshold before symptoms manifest, so that soon they tolerate ever less of their own home environment and eventually become reactive to EMFs in any form in the most dramatic cases. At this point, even going to the doctor's office will worsen one's health still further.

Recently, I went to a client's home who reported mild symptoms of poor sleep in one bedroom. I found that house was awash with wireless signals all night from a new washer/dryer, a 'smart' cat food dispenser, a 'smart TV', several thermometers and random dongles whose actual purpose was not memorable. Many of these devices actually don't require wireless features in order to perform their primary function and certainly should not be emanating all the time even when they are not actively in use. Yet, because it is believed that there is no harm done, more of these injurious broadcasting features are added routinely to encourage sales.

Here is an example of a typical client's exposure to wireless radiation, even after I have them turn off their phones and their wireless router. Cell towers, cell traffic, Bluetooth and WI-FI, Utility meters are all frequent impinging influences into the home environment.

In this case, one apartment dweller was seeing a large impingement from a neighbor's wireless devices. Such radiating energies are invisible, but that does not mean that they have no negative effects. The graphed traces show the current (yellow) and peak (magenta) signal strengths recorded. The blue area at the bottom captures the last 3 minutes, with color intensity representing signal strength. Here, the cell towers are in bright bands, representing their reference pilot signal that guides cell phones to their closest tower.



Here is an example of a bedroom, adjacent to an Eversource broadcasting smart meter in a neighborhood of closely spaced houses also with many such utility meters for gas, electric and water. These utility meters broadcast usage information multiple times per minute, which are captured as small horizontal lines in the blue area of the trace. None of this is necessary, at best can be considered nice-to-have, yet seem to be a root cause of so many health declines.

In the spectrum analyzer trace, the yellow trace represents the most recent sampling and the magenta trace represents the maximum signal strength seen in the last few minutes. At the bottom, in the blue area, is a historical record of the last ten seconds. When there is an emanation blip from a 'smart' meter, it shows up as a short horizontal line. The brighter white lines were of higher strength, presumably a nearer source. This trace was taken in the bedroom of someone who has had sleep issues since moving to this location.



One client has become so electrically sensitized that she gets an acute symptom – as if a 3 inch spike is inserted into the top of her skull – whenever an aircraft flies overhead, no matter how distant up above. The emanations from that plane cause an escalated biological response, far out of proportion to the actual signal strength involved. This is part of what makes it hard to understand the true effects of modern technology – human biology is complicated and much of the harm may be self-induced by its response to such stimuli. An example: when lights are made to flicker at a certain rate, this can trigger a epileptic fit ... would that fit be less intense if those flickering lights were made somewhat dimmer? No, it is the essence of the signal, not its strength, that is the operative aspect.

So, how best can government protect its citizens while not disrupting 'Progress'? The Precautionary Principle is a well-thought-out paradigm that acknowledges a particular technology may be so novel that we do not know what its long term effects will be, so that it will be scrutinized carefully even while it is being deployed to the general population. It is a trade-off that works effectively and fairly. 'Industry' will never favor regulation or suggestions that their products might have liability¹ exposure for health injury caused. Advocates for human health will usually prefer a heavy approach to prevent injurious technologies from being forced upon the populace, especially those too fragile of constitution to weather such assaults (such as the unborn or those who are chronically ill), until there has been long-term testing done to assure biocompatibility. The Precautionary Principle balances the interests of all parties as a prudent way to manage societal risks.

¹ Sometimes, this manifests as the 'Polluter Pays Principle', when some kind of societal cleanup is required to undo damage

Why should the Maine government care? First, there are already government policies in place that promote or require technologies which the Commission may find actually have an injurious aspect. It would be best that government policies acknowledge that some health implications exist, allowing 'opt-outs' and safe alternatives in all cases where a credible health risk is at play. This includes –

- WI-FI in schools
- Utility residential smart grid
- Residential Solar PV
- 'Green' technologies such as LED lighting, variable speed motors, efficient mini-splits
- Electric Vehicle charging infrastructure
- Required in-person presence at government offices, where rampant wireless exposure exists

The Precautionary Principle engages science rather than crude speculation and guesswork. It involves establishing a clearinghouse where the current progress of a novel technology deployment (say WI-FI in schools, which is explicitly part of LD878) can be recorded, so that perceived problems can be received, cataloged and inform future safety review. Right now, there is no meaningful government agency for people to register their complaints about wireless technology: local health boards do not know what to do; state public health agencies do not encourage such; the EPA and FDA say it is not in their jurisdiction; the FCC says, categorically, that no such health problems could possibly exist and long as the signal strength is within limits. We can, and must, do better for our citizenry.

If you were asked what the term 'living safely with technology' means, would you be able to define it? How would you teach such skills to your children? How were you taught to live safely with technology? In fact, the concept does not exist in the public mind, your parents did not teach it to you, your school curriculum did not meaningfully address the topic. Putting aside the dangers from the radio frequency emanations, there are numerous other societal effects – poor posture, distraction, withdrawal from human contact, online-bullying, vision strain. By taking the broad measure of the topic, with avenues for public participation we will all end up with a safer world. We cannot wait for the Federal government to do this; we must each do it ourselves. There will be no cavalry coming to rescue us from our own technology.

References

A very good description of the Precautionary Principle is found here²

Two specific historical references to societal hazards that often took a century to rein in are the "Late Lessons From Early Warnings' volumes.

• 2001 - https://www.eea.europa.eu/publications/environmental_issue_report_2001_22/issue-22-part-16.pdf/view

² https://unesdoc.unesco.org/ark:/48223/pf0000139578

• 2013 - https://www.eea.europa.eu/publications/late-lessons-2/late-lessons-2-full-report/late-lessons-1/late-lessons-2-full-report/late-lessons-1/late-lessons-2-full-report/late-lessons-1/late-lessons-2-full-report/late-lessons-1/late-l

A well-researched page-turner that studies the impingement of electromagnetic energies, including wireless, upon human health and the ecosystem, was written by the late Arthur Firstenberg in 2017: <u>The Invisible Rainbow: A History of Electricity and Life</u>

I am including a separate upload of my own authorship, a list of Symptoms and Conditions that have been frequently reported in connection with deployed broadcasting utility meters. Ironically, most of the five hundred testimonials I read in order to create this document were presented to the Maine Legislature in 2013. These are topics that have been known about quite literally for decades. Meanwhile, people have becoming ill and many more are on a path to do so now. Symptoms of EMF-Overexposure With Focus on Residential 'Smart' Meters, Jan 24, 2025.

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Good afternoon. My name is Kenneth Gartner and I am a practicing building biologist from Warren, Massachusetts.

We humans are electromagnetic beings and we are all over-exposed to wireless communication signals.

Such man-made signals are perceived by our bodies, yet we haven't evolved any particular coping strategy to deal with them. Thus, not all people have the same tolerance to their presence in their lives. Whereas one person appears to deal well while swimming in a sea of digital wireless signals, another person's biology may be struggling. They may be experiencing persistent ringing or buzzing in the ears, heart palpitations, blood pressure dysregulation, sleep disruption or piercing headaches while in the vicinity of such wireless signals.

And so beloved technology seems to have a darker side. Reassurances about wireless devices having 100.00% safety for 100.00% of the population are unfounded. There are too many conflicting interests to get a truthful answer from a casual Internet search.

In fairness to all -- both those desiring more wireless technology and those desiring less – there needs to be a proper comprehension of the health implications and then policies derived to ensure that the needs of all societal members are addressed. Like other forms of air pollution, wireless signals need to be kept from impinging upon people who either derive no benefit from them or are actively harmed from such signals. A balance is required, one based upon solid information.

The proposed LD878 Commission will include a variety of different voices and their work will engage the public. Such are vital safeguards to avoid the typical backroom deals and compromises that have led to the current state of denial about the injurious aspects of wireless tech. We remain hopeful that a final commission report will inform Maine public policy going forward and so provide an answer to the question: from whom are we to learn how to live safely with wireless technology?

Surveys conducted in several countries suggest that between 1 and 10% of the human population experience some biological effects from wireless technologies, some to a point so severe that they must absent themselves from any exposure. How many tens of thousands of Mainers are now experiencing these side effects? We would not know because currently there is no agency to record such information.

The prudent policy to deal with such risks inherent to a novel technology is The Precautionary Principle and in my written testimony submission I describe this paradigm in more detail. In brief, rather than delaying until proven safe, deployments are scrutinized carefully for early warnings of trouble and course corrections made. A common sense approach that most Mainers can get behind.

Kenneth Gartner Warren, Massachusetts LD 878

Senator Lawrence, Representative Sachs and members of the EUT Committee:

I am submitting two files in SUPPORT of LD878

* (this first one) Is my written testimony specifically for LD878, which includes the text from my Oral testimony given earlier today

Please vote Ought to Pass on LD 878.

Thank you