HOUSE OF REPRESENTATIVES



2 State House Station Augusta, Maine 04333-0002 (207) 287-1440 TTY: (207) 287-4469

Tracy L. Quint

318 Westford Hill Rd.

Hodgdon, ME 04730

Residence: (207) 217-4493

Tracy.Quint@legislature.maine.gov

Senator Lawrence, Representative Sachs, and esteemed members of the Energy, Utilities, & Technology committee, thank you for allowing me the opportunity to present LD 878, Resolve, to Study the Effects of 5G Technology on Bird, Bee, and Insect Population and the Effects of Long-term Exposure on Children.

Have you walked around a grocery store and noticed toddlers watching shows on cellphones? Have you been in your local school where the students do a substantial amount of work on laptops, only to go home and spend the evenings on their cellphones? Have there been studies on the potential harm that could occur? I discovered that the State of Maine has no science-based technology safety information to provide to the public. As a registered nurse of 27 years, I am surprised that the information is not readily available.

The Science and Risks

Let me start with the environmental studies. I have learned that the earth's natural electromagnetic field, which is meant to regulate the electrical systems of all living cells, pulses just 7.83 times per second, that's measured in Hertz.

Currently our wireless signals carry our data back and forth using man made microwaves that pulse at a million times per second in the Megahertz range, and a billion times per second in the Gigahertz range. Again, the earth pulses adjust 7 times per second. Invisible man-made radiation overpowers that.

Our birds, bees and pollinators have built-in navigation systems that are meant to be synchronized with the earth's electromagnetic field, this is how they get back and forth to their nests and hives. The science shows the increasing electro-pollution is dysregulating their navigation systems.

4G, or fourth generation technology, uses long waves to carry data and signals. 5G, or fifth generation, uses these longer waves, but is now adding an additional layer of short millimeter waves that are about the same size as many of our pollinators. Studies show these man-made frequencies are a leading cause of bee colony collapse and disappearing species. I found the non-industry funded science on the biological impact to us, our land, and our children to be concerning.

The U.S. National Toxicology Program at the National Institutes of Health is the global gold standard for toxicology research. They have completed a study that concludes clear evidence that cell phone radiation causes cancer and DNA damage. Our biological cells cannot keep up with the damage done by this radiation. Repeated studies around the world document that wireless radiation causes infertility, neurotoxicity, immunosuppression, and more.

The science explains several mechanisms of harm. I'll share four with you.

- 1. First, this radiation causes blood cells to clump together, known as the Rouleau Effect (pubmed.nlm.nih). Our red blood cells should be free-floating to bring oxygen to our organs. When the blood cells coagulate together, they cannot deliver the oxygen to where it needs to be. This oxidative stress is a precursor to many chronic illnesses.
- 2. Second, our cells communicate with each other through electrical impulses. It is these electrical signals we are measuring when we do an EKG of the heart or an EEG of the brain. Science shows the radiation pulses from wireless technology dysregulate our body's electrical signaling and can cause a host of downstream illnesses.
- 3. Third, we have a membrane called the blood-brain-barrier to keep toxins from entering the brain. The science shows these pulsations of microwave radiation are penetrating and can cause permeability of the blood-brain barrier.
- 4. Fourth, our circadian rhythm is synchronized to the Earth's natural light cycles. In the hours of darkness during sleep, our brain releases melatonin from the pineal gland to regulate sleep and aid in cell repair and regeneration. Unfortunately, the brain cannot distinguish between natural daylight and this man-made light energy form of wireless radiation. When surrounded by wireless signals at night, the brain, believing it is daylight, does not release melatonin. This helps to explain why many people, including children, do not have the necessary sleep cycles required for rest. This can have neurological and cognitive effects.

Why We Don't Know

Although wireless harm may be news to you and me, since 2002, the United States Access Board's Indoor Environmental Quality Project has indicated that electromagnetic sensitivities may be considered disabilities under the Americans with Disabilities Act with ICD codes given. They have recommended accommodations posted online.

The World Health Organization, in 2011, classified this radiation as a Group 2B Possible Human Carcinogen. Now that animal studies have been completed, scientists are calling for this radiofrequency microwave radiation to be reclassified as Group 1 Carcinogenic to Humans. The WHO has reopened its investigation but it will take years to complete.

Harvard Law School Center for Ethics published a report called Captured Agency: How the Federal Communications Commission is Dominated by the Industries it Presumably Regulates. Harvard documents how the FCC, charged with setting safety standards, is run by former telecom employees looking out for industry interests instead of public safety. It is important to know the FCC was sued in 2021 for ignoring 11,000 pages of evidence of harm, yet they have done nothing to address the court order to update their hazardous public radiation exposure limits.

A Word of Caution

It is concerning that our current public radiation exposure limits were set by the FCC in 1996, considering the incredible, rapid proliferation of this ever-changing technology. These limits account for thermal, or heat effects, from man-made radio frequency. Ham radios and Emergency radio services are in this group, with information widely available and accepted. This bill does nothing to interfere with these services. My grandfather was a Ham radio aficionado. LD 878 addresses non-ionizing radiation because there is no real debate on the biological effects of ionizing radiation, and this is relatively well-regulated. This bill focuses on non-ionizing radiation concerns and current science regarding if there is any biological effects on wildlife, the environment, and probably our most sensitive human population, our children.

Closing Remarks:

Technology is progressing so rapidly and Maine citizens deserve to have answers to their questions and concerns. Like me, they should not have to search through mountains of information. New Hampshire, Massachusetts, Vermont, Connecticut, New York and others this session have legislation addressing wireless radiation concerns. As Representatives, we should demand to have this information readily available, proving that we have done our due diligence in addressing this public health issue. Title 22, Chapter 160 shows that our state at one time had an Advisory Committee on Radiation.

I would urge this committee to be a part of the solution and vote to allow this Resolve to move forward. Truly accurate, scientific information should never be feared. It should be searched for and freely available to everyone who seeks. Thank you.

Thank you for your time,

Chacy & Quint

Tracy L. Quint

State Representative

HOUSE OF REPRESENTATIVES



2 State House Station Augusta, Maine 04333-0002 (207) 287-1440 TTY: (207) 287-4469

Tracy L. Quint
318 Westford Hill Rd.
Hodgdon, ME 04730
Residence: (207) 217-4493
Tracy.Quint@legislature.maine.gov

Senator Lawrence, Representative Sachs, and esteemed members of the Energy, Utilities, & Technology committee, thank you for allowing me the opportunity to present LD 878, Resolve, to Study the Effects of 5G Technology on Bird, Bee, and Insect Population and the Effects of Long-term Exposure on Children.

Have you walked around a grocery store and noticed toddlers watching shows on cellphones? Have you been in your local school where the students do a substantial amount of work on laptops, only to go home and spend the evenings on their cellphones? Have there been studies on the potential harm that could occur? I discovered that the State of Maine has no science-based technology safety information to provide to the public. As a registered nurse of 27 years, I am surprised that the information is not readily available.

The Science and Risks

Let me start with the environmental studies. I have learned that the earth's natural electromagnetic field, which is meant to regulate the electrical systems of all living cells, pulses just 7.83 times per second, that's measured in Hertz.

Currently our wireless signals carry our data back and forth using man made microwaves that pulse at a million times per second in the Megahertz range, and a billion times per second in the Gigahertz range. Again, the earth pulses adjust 7 times per second. Invisible man-made radiation overpowers that.

Our birds, bees and pollinators have built-in navigation systems that are meant to be synchronized with the earth's electromagnetic field, this is how they get back and forth to their nests and hives. The science shows the increasing electro-pollution is dysregulating their navigation systems.

4G, or fourth generation technology, uses long waves to carry data and signals. 5G, or fifth generation, uses these longer waves, but is now adding an additional layer of short millimeter waves that are about the same size as many of our pollinators. Studies show these man-made frequencies are a leading cause of bee colony collapse and disappearing species. I found the non-industry funded science on the biological impact to us, our land, and our children to be concerning.

The U.S. National Toxicology Program at the National Institutes of Health is the global gold standard for toxicology research. They have completed a study that concludes clear evidence that cell phone radiation causes cancer and DNA damage. Our biological cells cannot keep up with the damage done by this radiation. Repeated studies around the world document that wireless radiation causes infertility, neurotoxicity, immunosuppression, and more.

The science explains several mechanisms of harm. I'll share four with you.

- 1. First, this radiation causes blood cells to clump together, known as the Rouleau Effect (pubmed.nlm.nih). Our red blood cells should be free-floating to bring oxygen to our organs. When the blood cells coagulate together, they cannot deliver the oxygen to where it needs to be. This oxidative stress is a precursor to many chronic illnesses.
- 2. Second, our cells communicate with each other through electrical impulses. It is these electrical signals we are measuring when we do an EKG of the heart or an EEG of the brain. Science shows the radiation pulses from wireless technology dysregulate our body's electrical signaling and can cause a host of downstream illnesses.
- 3. Third, we have a membrane called the blood-brain-barrier to keep toxins from entering the brain. The science shows these pulsations of microwave radiation are penetrating and can cause permeability of the blood-brain barrier.
- 4. Fourth, our circadian rhythm is synchronized to the Earth's natural light cycles. In the hours of darkness during sleep, our brain releases melatonin from the pineal gland to regulate sleep and aid in cell repair and regeneration. Unfortunately, the brain cannot distinguish between natural daylight and this man-made light energy form of wireless radiation. When surrounded by wireless signals at night, the brain, believing it is daylight, does not release melatonin. This helps to explain why many people, including children, do not have the necessary sleep cycles required for rest. This can have neurological and cognitive effects.

Why We Don't Know

Although wireless harm may be news to you and me, since 2002, the United States Access Board's Indoor Environmental Quality Project has indicated that electromagnetic sensitivities may be considered disabilities under the Americans with Disabilities Act with ICD codes given. They have recommended accommodations posted online.

The World Health Organization, in 2011, classified this radiation as a Group 2B Possible Human Carcinogen. Now that animal studies have been completed, scientists are calling for this radiofrequency microwave radiation to be reclassified as Group 1 Carcinogenic to Humans. The WHO has reopened its investigation but it will take years to complete.

Harvard Law School Center for Ethics published a report called Captured Agency: How the Federal Communications Commission is Dominated by the Industries it Presumably Regulates. Harvard documents how the FCC, charged with setting safety standards, is run by former telecom employees looking out for industry interests instead of public safety. It is important to know the FCC was sued in 2021 for ignoring 11,000 pages of evidence of harm, yet they have done nothing to address the court order to update their hazardous public radiation exposure limits.

A Word of Caution

It is concerning that our current public radiation exposure limits were set by the FCC in 1996, considering the incredible, rapid proliferation of this ever-changing technology. These limits account for thermal, or heat effects, from man-made radio frequency. Ham radios and Emergency radio services are in this group, with information widely available and accepted. This bill does nothing to interfere with these services. My grandfather was a Ham radio aficionado. LD 878 addresses non-ionizing radiation because there is no real debate on the biological effects of ionizing radiation, and this is relatively well-regulated. This bill focuses on non-ionizing radiation concerns and current science regarding if there is any biological effects on wildlife, the environment, and probably our most sensitive human population, our children.

Closing Remarks:

Technology is progressing so rapidly and Maine citizens deserve to have answers to their questions and concerns. Like me, they should not have to search through mountains of information. New Hampshire, Massachusetts, Vermont, Connecticut, New York and others this session have legislation addressing wireless radiation concerns. As Representatives, we should demand to have this information readily available, proving that we have done our due diligence in addressing this public health issue. Title 22, Chapter 160 shows that our state at one time had an Advisory Committee on Radiation.

I would urge this committee to be a part of the solution and vote to allow this Resolve to move forward. Truly accurate, scientific information should never be feared. It should be searched for and freely available to everyone who seeks. Thank you.

Thank you for your time,

Chacy & Quint

Tracy L. Quint

State Representative