

**NH COMMISSION TO STUDY THE ENVIRONMENTAL AND HEALTH EFFECTS
OF EVOLVING 5G TECHNOLOGY**

Meeting held:

7/24/20

9:00-11:00 am EST

Via Zoom (<https://unh.zoom.us/j/93912769762>)

Via telephone-US (+1 646 876 9923) ID: 939 1276 9762

In attendance: (12)

Rep. Patrick Abrami-speaker of the house appointee

Rep. Ken Wells- speaker of the house appointee

Kent Chamberlin-UNH-appointed by the chancellor

Denise Ricciardi-public-appointed by the governor

Michele Roberge-DHHS- Commissioner of DHHS appointee

Dr. Paul Heroux- Professor of Toxicology, McGill University- speaker of the house appointee

Rep. Gary Woods-speaker of the house appointee

Senator Jim Gray-president of the senate appointee

Senator Tom Sherman-president of the senate appointee

Brandon Garod-AG designee, Asst. AG Consumer Protection

Bethanne Cooley-CTIA , trade association for wireless industry and manufacturers

Carol Miller-NH Business & Economic Affairs Dept

Not present: (1)

David Juvet-Business and Industry Association

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Meeting called to order by Rep Abrami at 9:03 am

Abrami: For the sake of time, I am going to open the meeting. This is the New Hampshire Commission to Study the Environmental and Health effects of evolving 5G technology. I have a short version of something I have to say. Due to the Covid 19 virus and the Executive order signed by the Governor this public meeting is allowed to be conducted via Zoom. It is open to the public for viewing and was duly posted as a zoom meeting. With that said, if you are not a member of the Commission, can you please turn your cameras off and mute yourselves? That would be much appreciated.

I. Approval of minutes from 7-1-20:

The first order of business is the minutes. I sent them out about a week ago. By the way, Deb you did a great job of compiling them once again. I did get an email from Michelle asking for two corrections. I think we misunderstood for Augustus Ong, listed under attendees. Michelle was in attendance. Also, on page 29, "this was a very helpful discussion". Those are the changes that I have gotten so far. Were there any other changes? So without objection, the minutes are approved as amended.

II: Around the table member thoughts:

Abrami: The first thing we are going to do today is go around the room. The zoom room if you will. What we would like to do is talk about where we are at and the kind of recommendations, possibly that we would like to see in the report and where you stand on the whole issue. I am envisioning the room as it was at the State House and will go to my left. That means, Tom you are up first. Again, it's a general discussion and your thoughts as to where we are at and what we should be doing.

Sherman: Thank you, Patrick. I think I said it and it was in the minutes from last time. My overriding thoughts on this are that there is enough evidence to raise concern but I'm not sure there is enough evidence to show causation between exposure and specific health impacts. So, what the means to me is that there is more than ample evidence that a non-biased large scale study or studies needs to be done to demonstrate that we are not going to be implementing an entire system of communications that would put either human health or the environment at risk. I think of the Precautionary Principle. I also recognize we have several other examples where industries have said to us, this is safe. I can think of my own profession where we used to say, "Trust me. I'm a doctor".

I think we all know that phrase, trust by verify is the very least where we need to be. In this case, there is ample distrust because the Commission has already seen the amount of industry influence on the regulatory bodies. By the way, that's nothing new in Washington, DC or in some states. When I was in Virginia, our entire oversight for agriculture was from people who had formerly been in the industry. So when you think of some of the chemicals like glyphosate, people from the industry were regulating the industry and we know where that gets us.

My overriding New Hampshire response to this is, I would like to see the ability of communities to control their environment until such a time that an independent, scientifically based study or studies have been done to demonstrate the safety of this technology. I think that is consistent with Precautionary Principle of public health. I think it is consistent with the way many of us in New Hampshire view our personal freedom. And I don't believe we have ever been shown a compelling need to, right at this moment, on an urgent basis, implement 5G technology. I guess that's my summary statement.

My plea would be to have to start working on these studies and to ask our federal delegation, as they've done with PFAS, to start looking at where there has been exposure and what has been the impact. And start funding some of these studies at a federal level outside of the different regulatory agencies. I was really impressed by the consistency of response or I guess the consistent lack of response from the EPA and the FDA. It's amazing to me, that they seem to not want to respond even to a statutory state commission. So, I guess I'll close by saying the parallels to other exposures that we have, are really clear. And the lessons that we've learned from something like PFAS, where a few years ago, I started working on PFAS back in 2014. The industry knew about those dangers from the 1950s. They continued to profit with manufacture until at least 2003 when DuPont pulled out. 3m continues to and at this point, we have over a 100 communities and/or water systems in the state impacted and those are just public systems. Now we're playing catch up. But at the exact same time this week coming

out and Lancet are two, scientific articles looking at the data on PFAS and broadening the concern to diabetes, obesity, breast cancer. None of which, we have talked about on our way through this. So here we have an opportunity before the industry has an ability to expose us. To say, let's put the brakes on, let's get the data. You show us that it's safe in independent studies, not funded by you, but funded by an independent body and overseen by an independent body. And then we can move forward together to implement this new technology. That's my feeling I and thank you for the opportunity.

Abrami: Thanks Tom. I forgot to mention that once we're done with the round table, I'm going to ask Denise to just briefly discuss our non-response from the FDA in relation to the FCC. That is a discussion that we need to have. The other thing is that this meeting is being recorded, so everybody knows, It's pretty much for the ease of doing our minutes at the end for Deb. And that, any chat room discussions that are going on will become part of the minutes. We did make them part of the minutes from last meeting. Ok. Let's continue around the room here.

Wells: Yes. Thank you. In looking over the materials that we were previewing for this meeting, I came up with a number of recommendations, about seven of them. And it seems to me, that there are three levels of issues here. One is *general RF* radiation from Wi-Fi, 5G and all that. Then there *specifically 5G* and then on top of that, and I would give it the highest priority is the 5G *small cell antenna network*, which I think poses particular hazards. And I think that we should explore ways that New Hampshire can take unilateral action to protect our population, our environment, our forestry industry, and also supply the fastest broadband and communications to our population. I have a couple of things that I think would be worthwhile here. If this type of technology is to be developed, the state of New Hampshire could require that installers and owners of these systems carry enough insurance to cover the potential claims of New Hampshire residents who are exposed. We should require also insurance to compensate based on potential losses in the forestry industry, agriculture, hive losses, etc. Here's another separate issue. It occurs to me there's a parallel here with 5G and the mining rights in coal country where farmers found that they didn't own the rights to the mineral below them and their farms were turned into strips of gravel. I think it's a private property and liberty issue.

Broadcasters must be specifically granted rights for their signal to intrude on private property. And if they don't have those rights, they must not do that. Senator Sherman mentioned the problem that many of the studies, clearly there are conflicts of interest. I think that, that following the example of Jersey City and some others where they there's been a moratorium placed until, say, a UNH study is completed when that is not funded by industry, but where there's a demonstrable freedom from conflicts of interest.

Abrami: I guess there is some debate on whether Jersey City moratorium is in place or not.

Wells: Yes. I understand. I saw the petition that was circulated as a possible model. Then I wonder if the state of New Hampshire can impose its own maximum intensity limits and require that equipment have an accessible off switch if they're found to be out of compliance. And with that, I think I'll conclude my remarks and listen to what others have to say.

Abrami: Okay. That's very good, Ken. Thank you. There are some good points from both you and Tom so far.

Chamberlin: So as I listen to the previous two speakers, I'm in agreement. I echo their concerns. And essentially Sherman in particular, what you had to say is very much along the lines of what I feel both what you said just now and what's in the minutes. My belief is that we have a serious issue with exposure. The scientific data is pretty overwhelming. Although those data, the data is, is being completely ignored by the regulatory bodies. And that's kind of the elephant in the room here is we have a regulatory body that says that these standards set 30 to 50 years ago are acceptable. Yet the evidence, scientific evidence suggests that it's not. So that clearly is something that we have to address, explicitly in whatever report we have. Other issues, is the yes, we can ask for things like insurance. We can mandate that the providers have insurance to cover any issues that may come about as a result of this. The property rights, is also a good angle also.

But at this point, I don't feel like I need to see any more scientific evidence. I'm pretty convinced. Since I got on this, I'd been reading article after article and that's pretty convincing that yes, there's a problem. The one thing that we don't know that would be nice to know is the degree of risk. How much risk do you encounter by having a cell phone? being near a cell phone tower? We need to, to get that. And I think that we can and we should pursue something like a moratorium until we figure out and get answers to some of these very important questions.

As was pointed out earlier, this is not new. We have seen these types of issues. That is where industry just says it's no problem. This won't hurt you. We've seen that from smoking doctors, from the tobacco industry. We've seen from the fossil fuel industry dealing with things like climate change, which they knew 50 years ago that this would have an impact. So we keep seeing this pattern again and again. And what happens is that the industry makes an investment before we're able to find out or to demonstrate that whatever they're investing in, causes problems. And once they've made the investment, it's kind of hard to turn back, but I think that we have this opportunity now to just move forward to come up with moratorium so that they won't invest they won't get too much of an investment, won't get ahead of the curve as it were, before we figure out how much of a risk this imposes. Thank you.

Abrami: Thank you, Kent. Good points.

Ricciardi: I, too concur with everyone who has spoken. I think the one thing we can agree on all of us is that whether some of us believe it's unsafe and maybe some of us are uncertain. I think the biggest thing we can agree on is that there's a lot of disagreement in the scientific community. I feel that the science that we have seen and the evidence that has been brought before us and all of the materials we've been reading and speakers we've been listening to. I am convinced have a serious issue. And I really believe that it will harmful to just put this out. And I think we have to put stipulation on how things should be. I feel that the state could impose mandatory hard wiring for technology. In the meantime, continuing studies that are real studies. We're having a problem with the FCC. They haven't changed anything after all these years. It's a captive agency. They are a non- health agency. I made some

notes. We could as a suggestion, call for a halt to 5G and its infrastructure until RF limit has been set by federal health and safety agencies. There is no health agency overseeing any of this.

Again, state could call for wired infrastructure which is safe, and actually is faster. Not only that, it's safer in the ability to not be hacked. So, there are many measures there. We can call a halt until the scientists determine how the adequate methods of measuring should be. We can also pass bills that support further research for transparency and education on 5G and wireless devices to be used in the Internet of Things. In my opinion, it would be completely irresponsible for this commission to just blindly roll this out with all the compelling evidence. I don't want us to be like the PFAS or the tobacco industry. And there are some huge differences with this than anything else. If this is put in front of every other home, you are now robbed of your choice. You know, if you don't want to use a cellphone, you don't have to use a cellphone. If you don't want to live near a tower, you can look to where you want to live. This robs you of your choice. And that goes against our New Hampshire constitution. I have a full report on all of this, but that's sort of the gist of it. Do you want me to go right into segue into the questions that I've sent to the FCC and the FDA, or do that at the end?

Abrami: Why don't we do that at the end? I've got Carol Miller next.

Miller: Morning everyone. Here are my thoughts on this... I mean, the science is the science whether it's true or false, it's overwhelming. Every article that I've read, it's just overwhelming. But having said all of that, RF is RF. We've RF with 4G, 3G, Wi-Fi, whatever you name we have RF in our lives. And there are people who are sensitive to RF. And depending on the degree of RF they're getting it could cause the health issues or whatnot. We have some big challenges ahead of us. Cell services not regulated at the state level. It's regulated at the federal level. So I'm not sure that towns in the state can dictate anything to the Cell carriers. There are strict rules in place and we could be setting ourselves up for major lawsuits. So that's where some of my concern goes.

My recommendations really are more practical. And I agree with everyone else's recommendations that have been said so far. What can the industry itself, due to its devices and to its antennas and its system, to reduce the effects of RF to the public? Is there a technology that can do that shielding in phones that that creates less RF to the individual? And, and I think, it could be a costly solution for the industry. But if we're going to have any effect by, I think that that's where we really need to focus our efforts, along with all the other recommendations. Yes. Let's study it. I mean, it has been studied. We need to study it. Can towns literally put a moratorium on it? I don't know. Can the state say that everybody has to have a wired connection? I don't think so. So what we need to do is look at things that can be accomplished and through this committee, get that information out there. And I'll close my comments.

Abrami: Somewhere along the line over the over the years a left turn was taken. We were heading on the journey to fiber optics. And then then now we got, you know, the evolution of 5G. And we know fiber optics is actually more robust. They carry more information and they're less likely to be hacked if you will.

Miller: yeah, but that doesn't solve mobility problems. That's the lore that cell cellular coverage is. It's the ability to have your phone on you and your data anywhere any time. But that does not mean to say

that fiber isn't important. Fiber is the infrastructure of the future and where New Hampshire should be funneling any investments, or all investments, right? (I like the thumbs up) to fiber connectivity and stop putting band-aids on a sagging telecommunications infrastructure. I have very strong feelings about that. But cellular is a different creature altogether. It actually needs fiber to be able to transport data. Everything comes into the wired network, even by cellular. So it's the mobility, the ease of use, it's the instant connection, instant reach ability that the mobile industry has captured. And so therefore, there needs to be some work on their part to abate all of this RF bubbling to the surface. And, you know, I agree with everyone else, but I just wanted to offer a practical solution or I guess sound check to what we're actually doing here.

Abrami: Thank you Carol. Beth Cooley, you are up.

Cooley: Alright, can you see me? Hear me? I am having some issues.

Abrami: I like those things behind you. Looks like Star Trek.

Cooley: Yes. I am in outer-space. Well, good morning everyone. I appreciate the opportunity to provide our thoughts at this point in time. You know, in terms of recommendations at this point, my thoughts are, I think we need more experts because everyone has been anti 5G at this point. And in fact, some of the "experts", their research on this topic has been called "junk science", quote-unquote. So my first recommendation and Rep. Abrami, you and I talked about this before the pandemic is Dr. Swanson didn't get to finish his presentation back in November. So I'm sure he'd be happy to answer questions because he ran out of time. I understand some folks may not agree with his point of view. But I think Rep Abrami, you and I discussed offline that we want a balanced approach to this commission. So that's sort of point one in terms of the experts in the science. I think the other side has some questionable credentials. Second, I think it would be helpful. We sent around, I think maybe three weeks ago, a recent study from the radiation safety journal on 5G a new study. I think it would be helpful to hear from the authors of that as well. And Rep Abrami, if you're open to it, I'd be happy to see if we can do some outreach to those authors. And that's sort of my first recommendation on the on the expert side.

I'm the first to admit I'm not an expert. CTIA is not an expert. We defer to those that are. We think we need to hear from the people that are smarter than us.

Abrami: Beth, I've always said to you, I'm open to hearing from all sides. And you gave us Dr. Swanson and he was sort of out of time, but we could probably dedicate some time more or any other experts that you may have.

Cooley: Yeah, that would be great Rep Abrami. And I want to say they're not, you know, industry experts. They're speaking their thoughts, their research. So I'd be happy to do that outreach.

The only other item I'd like to raise that I'm not sure that we've talked about. I think it's been distributed. But it's important to note that other states have done this. They've done the research and even your neighbors in Vermont and Connecticut have done this. And I think it's important to look at those recommendations. Other states like Louisiana, Oregon, Hawaii have also done reports on this as

well. So I believe some of those have been distributed, but I don't think we've talked about them. I know there have been a lot of things distributed into this group in terms of articles and studies. So I'd just like to highlight that other states are doing this too. And rather than re-invent the wheel, I think it would be helpful to look at what they looked at.

Those are sort of my two recommendations at this point in time. I appreciate a given me the opportunity.

Abrami: Well, Beth, if you have any documents from these other states that you could share with us, that would be fine.

Cooley: Absolutely.

Abrami: Okay. Well, thank you.

Ricciardi: Can I interject to make a comment?

Abrami: Yes.

Ricciardi: Okay. Since Beth did bring that up, I actually have in front of me what other states have done. And she referenced Hawaii. I can send this link out to everyone. Hawaii county planning board passed a resolution to halt 5G. Farragut, Tennessee has a resolution calling on state and federal governments to halt 5G until health risks are evaluated. The Washington DC advisory 3G/ 4G committee resolution opposing small cell wireless and 5G technology, wants studies confirming safety. I have a whole list here that does speak to what Beth just said. I'll make sure that committee gets that.

Cooley: Yeah, Denise, I think that's a good point to look at what other states have done, but I think it's important to understand the context. For example, in Hawaii county, the council passed the resolution this week. It's a nonbinding resolution. As you well know, it is illegal to stop infrastructure at the state and local level on the basis of RF, as that is regulated at the federal level. So the Hawaii county resolution that was passed is non-binding, and I believe Rep Abrami sent out our comments when it was before the planning board a few weeks ago.

Abrami: Yes I sent it out and I also want to know if theses have teeth or not. That's the question, you know, in the legislature we do resolutions to Congress and to the federal government but they're not binding to anybody other than it's a statement of a position. In this case, we have a commission that that's looked at this very closely. And that is a bit different than some of these other commissions from other states. I would say we have more technically minded people on this commission and then some of these other states may have, you may know more than I do about that Beth. Tom has his hand up.

Sherman: But I just have a quick question for Beth, you used the term "junk science". I was wondering which science you were referring to when you called some science "junk science".

Cooley: So this wasn't a quote from me. Another scientist called one of our previous speakers, research on cell phone RF issues, "junk science".

Abrami: Okay. Thank you. Okay, we will move on now. Brandon Garod.

Garod: It's Brandon, that's ok. It's a very common mistake. So I am a little bit leery at this point of continuing to hear from experts on either side because I think that we could call experts for the rest of the Commission. I think there is a difference of opinion. Some people think it's safe. Some people think it's not safe. I think there is enough evidence to suggest that it might not be safe that we should as a commission, have an obligation to flag that for the state. And you I don't think that hearing from more experts is going to move us in one direction or the other in terms of a commission deciding definitively yes, this is safe or no, this isn't safe. I think that there is some evidence it is not safe.

It is not, in my opinion, a foregone conclusion that this is definitely not safe, but if there is evidence to suggest that it might not be safe, I think that it is important that it is thoroughly vetted and tested before there's an enormous roll out in the state. And I think that's even more important, echoing what Senator Sherman said at the beginning, which is that there really in my opinion, does not seem to be immediate compelling need to have 5G in the state of New Hampshire at this point. My cell phone works great, almost anywhere I am. I can get on Wi-Fi, almost anywhere I am. We're able to meet as a commission remotely. We're able to do our jobs remotely. I'm not sure what the benefit is of having 5G if it's not thoroughly vetted and tested and confirmed, definitively, to be safe before it's rolled out. It would be great. You know, the faster things are, the better things work. Obviously, it's better for us moving forward technologically as a society. But at this current juncture, I don't see an immediate compelling need. I think that it's clear as a commission that we have some evidence that it's safe and some evidence that it's not. And now it turns to, you know, what are we as a Commission going to do in order to fulfill the task that we've been given as a commission, which is to make a recommendation.

And that's where I really struggle. Because like others have said, you know, I'm I think I'm the only lawyer on this commission. I spent some time doing some legal research yesterday and in anticipation of today's meeting. The Telecommunications Act of 1996 is very clear. The state cannot pass a law or regulation that prohibits the telecommunications infrastructure from coming into the state. It is preempted. It's completely regulated by the federal government. There's a carve-out for public health and safety but that is limited because there's a lot of litigation that has come from that in terms of whether that only applies to the state, or whether that can be attributed to local government as well, towns and municipalities. And overwhelmingly, for the most part, it's only the state that can pass a resolution that directly correlates to protecting the health and public safety. I don't think that the science is there in order for us to pass any sort of law that would prohibit or inhibit 5G, in order to say that it is in a direct correlation to protecting the health and wellness of citizens of New Hampshire. Any sort of recommendation that is passing a law or passing a regulation or a barrier to entry is going to be heavily, heavily litigated. And you know, whether it's successful or not, as, you know, is always an open question. But I think that to the extent that we decide to recommend any sort of legal barrier, we need to be prepared for that. That's going to result in a very long drawn-out legal battle.

I do certainly support any recommendations that we can make that are not likely to lead to extensive litigation that we may not have a leg to stand on. I think that the public needs to be made aware of the findings of this commission. I think that there needs to be more public awareness about the issues. And I

think the people in New Hampshire have a right to know about the science and about the studies that have been done. Anything we can do as a commission to increase public awareness even if it is like the Hawaii resolution. Yes, it's non-binding. But it's something. It's at least the community saying, yes, we have concerns about this. And this is what we're going to do to take the steps that we can in order to make people aware and to do our part to say that we as a community have concerns. And I think that is probably the sort of recommendations that we need to be looking at moving forward as a commission.

Abrami: Ok Brandon, that's great. When I speak at the end, I want you to react to one of the things I am going to say whether we even think it has potential of being a legal issue. So thank you. Michelle Roberge.

Roberge: I represent the department of Health and Human Services on this commission. We feel, where this is regulated at the federal level, that certainly more work needs to be done at the federal level to ensure that the standards are protective of public health. We know that the standard haven't been reviewed for a number of years. We know that there are a lot of studies that have come out and certainly more studies that we've heard, and what we're learning from this commission. More robust studies need to be done to ensure that they are protective of public health.

So we really need to make sure that at the federal level those agencies that include FCC, FDA, EPA really need to look at the science. I know there was a recent publication put out by FDA, I think it was in February 2020. They did look at number studies but didn't move forward with a standard review but again, more support of looking at those studies where they are not just looking at heat, but they're looking at other biological effect as well. The department at that point is supportive of that. And that's where we stand at this point. And I know there's other recommendations that are coming forth and that would be something we'd have to reevaluate as we pull the report together.

And I know Representative Abrami and I shared in an email that where we are, our role in this commission depending upon what recommendations that come out, being an executive agency put us in a conflict of interest situation if the legislature tries to implement any of the these, we essentially could be the body or agency that regulating it. We have to be careful of conflicts of interest. We definitely agree that more needs to be done at the federal level where it is regulated.

Abrami: I did respond back to Michelle's request or query about specific recommendations. And given that Michelle's representing the Department of Health and Human Services, there's concern whether that's an official position of Health and Human Services. When I chaired the marijuana Commission, we had a disclaimer that the recommendations in the report don't necessarily reflect the position of certain state agencies. So, I'll share that language with everybody down the road. We can take a look at that. And that's a problem with a commission when you have State agencies on them. They're between a rock and a hard place. That will go for the AG's office as well. They have to be careful. Their input is very valuable but it gets a little bit sticky once there are recommendations being made. Okay. Dr. Heroux.

Heroux: Yes. Thank you very much for the opportunity. I am going to propose some strong measures, but I realized that we have to avoid conflict with the FCC. I also realize that the measures have to be low cost and potentially reversible as well. So I think of this in terms of protecting various populations. So

first, to protect people from radiation from portable phones, I think that we should make it a law that cell phones do not work when they are held against the head, in other words using the proximity sensor. This is a simple alteration in software that when you put your phone against the head, it stops radiating. That means that you'd have to use your phone in front of you. So it doesn't change at all the functionality of the phone, but it practically eliminates the strong radiation to the brain. When you consider that the cost of assessing this SAR is from \$50 to \$200 thousand per phone. You eliminate a whole area of conflict. Of course, industry is not very eager for this because it reduces emphasis on the issue of heat from cell phones. But you maintain functionality. It's a very simple alteration. These sensors are already there and you eliminate connections with glioblastoma or auditory tumors. So that's one thing.

Now, to protect people from radiation from base stations, without making any comment on levels of radiation, I think that a 500 meter hold back and there was a distance should be should be that much. If you can deploy 5G with that kind of hold back, you know, fine. But we have data that shows that proximity to these towers is a health risk.

Thirdly, to protect young children, I think we should adopt the same measures that were adopted just a week ago in Russia in relation to wiring schools, limiting strongly the use of wireless, and forbidding the installation of base stations near schools. This is something that they have concluded to be a good idea on the basis of their most recent evidence.

Then to protect electro sensitive people, I think that we have to take measures that give them recourse, in terms of protecting themselves. I think that we should maybe train a few physicians in New Hampshire to become expert in this area so that they can confirm that some people are electro sensitive. And when they are confirmed, they would be entitled to some form of protection.

Lastly, it would be a good idea to protect citizens and businessmen because if in the future radiation becomes a stronger issue than before, some people who buy property might not be aware of the radiation levels on the property that they are buying. And they may face big losses as a result of this ignorance. So probably in New Hampshire, you already have specialists who are capable of assessing radiation. Maybe there should be some sort of framework that would make it practical for these people to give information on the levels of radiation in various places when there are transactions occurring. And in this way, you could build a picture of exposure in the state, as well as give these businessmen some form of protection. Thank you very much.

Abrami: Thank you, Paul. And Senator Gray.

Gray: morning. I am old enough to remember back in the late fifties when there was a big to do about high tension power line and cows that would be grazing underneath the high-tension lines. Since then, you know, we've done lots of studies on lots of different things dealing with the electro- magnetic radiation. Part of what's going on here, in my opinion, is that we have created a fear. People don't like change. And certainly if you have a fear of getting cancer, that is going to create strong emotion in various people.

I'm not saying that there are not people out there who are hypersensitive to RF. I am not saying there is no problem with RF. I'm saying that most of the data out there that we see needs a good peer review. And in some cases, those peer reviews that have been conducted, have pointed out flaws in that data.

There is a big problem when I hear, well, gee, the industry paid for a particular study and therefore that study should be discounted. I don't believe that to be, you know, what should happen. Like any other study, whether the industry pays for it or does not pay for it, it, you'd be peer-reviewed. And the results of those peer reviews would tell you whether or not there is validity in the study, whether this study should be questioned further on that. We don't have, and the studies that I've seen, and there's not that many good scientific studies out there. That is, a lot of these articles that we've seen go back and reference either the same studies or they are redone.

Let's go back. It's the fear of change that tends to make us believe that there is a bigger problem out there than I believe that there is. Having the ability, if I own a piece of property and say, you can't generate any RF signal that's going to come across my property, that's just never going to happen. Okay? That's like saying you can't use perfume when the wind is blowing across my property because of the smell the perfume. I mean, this borders on the absurd.

The photo that we saw with the tree and half of the foliage being gone and the cell tower there, I want to tell you that that there was a new cell tower put up and there were two trees next to each other. One of those trees had to be removed for the cell tower to operate properly. And you know what? It looked very much like the picture that we saw. So, you know, a lot of this information I would claim is anecdotal at best. The information needs a good peer review.

Right now, I don't know of any studies that are out there that have been using any of the technology that 5G employs with the beam forming and all that, which would in my opinion, tend to decrease the radiation that's normally being put out there. But we're not there. We're not in a place where we can make a recommendation. And when you have somebody have insurance for this or that, I don't particularly see that one either. I don't see that we have a good scientific basis to make much of a recommendation at all.

Abrami: Thank you, Jim. Here's what we got before us. I think municipalities would be looking for us to give them some guidance. That's at a level that this really plays out at. It's really cell companies coming into a city or a town and saying we want permitting rights to put on top of telephone poles or install new polls or small cells. I think the majority report really has got to focus back on the small cell towers because that's the issue, that's the 5G. And as I've said over and over again, 5G mean something to every cellular company. It is just a concept. Each interacts with 3G and 4G differently. And a lot of its proprietary, so we have no idea what's inside those antennas and how those antennas are configured. What we do know and we can measure once installed, is the power intensity coming out of those towers. But we should say that a town should be able to say yes, we'll allow you to put in a cell tower but want to be able to periodically measure the intensity coming out of those small cell towers. Gary, did you just sign on?

Woods: Yes, I did. I'm in Nashville and I don't know what happened. I saw the notice that Kent put out to start at nine. Then, I got a notice that it was cancelled. My apologies.

Abrami: OK. Well, let me follow through and we will give you a chance to weigh in. Okay?

So, right now the, the standard's at, let's call it ten watts per meter squared is the US standard. But some of the other countries have set the standard much lower than that. Australia is two watts per meter squared. Canada is three watts per meter squared, but we're way up to ten watts per meter squared. So, I would think at the very least, and I don't see why this would be a problem for us to say to the cellular companies yeah, if you install these, a municipality has the right to monitor the intensity coming out. And I don't know why cellular companies would have a problem with that. There's going to be a working group where we'll put it in a recommendation from for the next meeting that we could go one by one and have a discussion around each of these. All of the things that were mentioned today will be grouped and, and then we will have to as a group at our next meeting really have that discussion around each. But for today, we're just talking about ideas.

So again, this comment is for Beth. I don't know, why the cellular company would object to a town being able to measure what's coming out of those towers and having us have that part of the agreement with the town. If those towers are on our end are out of sync with what the standard is, then those towers have to be turned off, something to that effect. So that's just one thought.

And one that Brandon, I'm going to have you weigh in on too is I looked at the documents that came out from other municipalities of what they've tried to do. One states requiring permittees to defend and indemnify the municipalities from any liabilities arising from installation, operation and maintenance of small cell installations. But why would the cellular industry, if they feel this is safe, not be willing to sign off on a permit that that allows this? Because it's the town that's bringing in the cellular companies and the towns are going to be, why should we have our municipalities be unprotected if there is indeed damage? We, as a commission are hearing both sides of this. And there could be. It's hard to say definitively. We've all heard and I think everybody's kind of agreeing that there's evidence of potential harm. But cellular companies are saying, no, there's no harm. And the FCC saying, no, there's no harm. The FDA says, no, there's no harm. Well good. If there's no harm, then why hold our communities liable for damages? So that's, that's one that I think we should we should be talking about.

I think we should be pressing the FCC. That's my third point. As a statutory commission, as Tom points out, I would just stress with them why are standards set so high? We know there are no biological effects that play into this standard. How can Australia or New Zealand be at .5 watts per meter squared and successfully roll out 5G? They are going to roll it out, I would imagine, with a lot less power intensity. Remember, those towers are going to be at the height of the telephone pole. Most of them are going to be stuck on top of the telephone poles. We also know, as commissioners, that we see the push back going on around the country. You know the industry likes it or not, there are a lot of people looking at this getting the message out that there's this potential danger. So the public is aware of this and there's going to be push back for communities on town selectmen and other boards to deal with this. My fourth point, I agree with some of those that said that we should as one of the recommendations, which is kind

of a neutral recommendation that we would share this with the federal government agencies that a more robust study should be done on 5G. That should be pretty neutral.

Other communities have looked at simple ordinances and loopholes. How many streets are off limits? Now, I don't know how enforceable that one really is. But some communities have that, are trying to do that. Others have mentioned setbacks. I think Dr. Heroux mentioned that. There are towns that are talking about setbacks, a 500 feet from residences, businesses, schools. Again, that's something that that we could talk about. But if it's on top of a telephone pole in front of your house, you walk under the telephone pole and that's where the greatest intensity is going to be right by the pole. That's something that we will address.

Something that came up from the last speaker we had is requiring power density disclosures for renters and buyers, public buildings, locations where general public may go. That's something that I think we should discuss to see if we can make that into a recommendation of some kind. Another community was trying to say, let's have all poles with 5G antenna have warning signs that RF radiation is being emitted above. That's a simple thing. Again, I don't know why the industry would object to that. Some people would want to know that there's RF radiation being emitted above. So those are some of the things that we can look at as a group.

Brandon, in terms of the liability issue, do you have any comment on that?

Garod: What specific liability issue here you're asking about?

Abrami: Well, I'll read it again that some communities are requiring, permittees, meaning the cellular companies, to defend and indemnify the municipality for any liabilities arising from permits and installation, operation and maintenance of small cell installations. The point is to hold the municipality harmless if someone could prove that they were damaged from the small cell towers.

Garod: I think that to the extent that municipalities are making that a condition of receiving a permit, it would be a law or regulation that's specifically preempted by federal law. This is really where the rub is. The communities, the municipalities, the towns, the cities... they're the ones that control the permitting. You have to go through a permitting process and you have to be approved and any law that's passed, that is a barrier to telecommunications coming in that's passed by state, is specifically preempted unless you can meet one of a few carve outs. The carve outs create another barrier. Unless the state has specifically delegated to the towns and municipalities, the ability to regulate telecommunications in any capacity, that doesn't even apply. It's only the state that has the ability to use those carve outs as like a safe haven for a law that serves as a barrier for telecom. And I'm not clear as whether New Hampshire has delegated any of that authority to the municipalities. But there's a lot of litigation since this thing was enacted in 1996 and it's usually a municipality trying to pass something. And the way that the telecom companies are able to beat it is by saying that they're trying to say that it's for public health and safety or for consumer protection, or to protect right of ways. Those are the specific carve-outs. But unless this state has specifically delegated to those communities, you can't even use those carve outs as a defense. I think there's a good chance that it would be preempted. Really, I'm not an expert. That's basically what I've come up with so far.

Abrami: I agree that the state legislature would have to enable the municipalities to do that. Is that what you're saying?

Garod: If there was a specific delegation from the state of New Hampshire to the municipalities to be able to regulate telecommunications coming in, in any capacity, then the municipalities would have to show that any regulation that they passed, which served as a barrier to telecommunications coming in, fits one of the few carve outs under the Telecommunications Act of 1996. And in trying to find a good case to use as a standard, it's almost never been done.

Abrami: Ok, well, so that's why we have the AG's office is represented to give us those insights.

Sherman: Brandon, I have a question for you from what you said. Why do the telecommunications industries have to come in and get a permit if everything is federal? On what basis could a town deny a permit? So in other words, is the permitting process just a rubber stamp? If you don't permit, they're going to take you to court. You know, they can come in any way with or without a permit with or without municipal law, with or without state law. Is there anything that a municipality can do to stop the installation of these antennae and 5G technology?

Garod: To answer your first question, which I believe was, why would they need a permit? They might not under every circumstance. But imagine what the companies are trying to do is come into a town and build several new towers, to build several new receiver or to build infrastructure they would have to apply to the town for, you know, building permits or in order to do construction within the town. There are laws that determine what sort of process you have to go through in order to be able to come into the town and build something. If there is a specific limitation on telecommunications, being able to do that, that is passed by the town...that's specifically what is preempted by federal law. Because federal law determines when telecommunications can come in and what they can do. So it's frustrating because you would think that at the municipal level that would be who is in the best position to determine what's best for your individual town. I think what I can say for certain, I don't know if there's anything that can be done, but what definitely can't be done is any sort of regulation that amounts to any sort of barrier to telecom coming into the town and installing new infrastructure.

Sherman: So the follow-up would be if a town doesn't want 5G, they just deny the permit.

Garod: Well, I think you have to have a basis to do it. I'm not a local government guy, so I don't know.

Ricciardi: I can answer the question what Senator Sherman was asking. So the reason there is a permitting process is each town has zoning laws in place. And the telecommunications company, when they come into your town and they want to put a cellphone tower, they do have to show that there is a need and that this is the only location and that they checked everywhere else. So it does go before our zoning board here in Bedford. Everybody's zoning has different regulation. The zoning we have in place is not a barrier to the telecommunications, but it is definitive things that we have put in place that are allowable by law. So for example, we have the 750 foot setback from any residential neighborhood in our town now and was put before the voters and voted on. So there are things like that that you can do. The other thing that you can do that is legal, that we have just completed is a "wires and poles" town

ordinance. So we did not single out the telecommunications. We did not say this is just to keep the rules in place for them, but it is all utilities, wires, and poles. And in that section, there are some very strict but allowable bylaw criteria. If 5G were to come and it's beyond our control because the FCC, so we put allowable things in place. And when you do this, you're protecting the residents of your town. But you're making it more difficult, but it's across the board for all utilities. So by not singling out, then it can't be done. Anyone on our commission, and your towns, I'd be happy to provide a copy of what we just completed.

Abrami: Okay. Well, that that's something that I think would be helpful and that, you know, I think you have some specific recommendations that we're going to vet as a group in the next couple of weeks. Ken, do you have another leading question? I think Beth wants to respond. Would you mind if Beth responds?

Cooley: Yeah, I think the only thing I'd add to Denise's comments in terms of what a locality can do, technically, every locality should be complying with the FCC order that went into effect in January of 19. There could also be state laws as well. We've got 29 states and Puerto Rico that have passed laws that also need to be in compliance with their state law. But in terms of what Denise already outlined, localities also have say over aesthetics. In the FCC order, so long as aesthetics are reasonable, objective, and non-discriminatory. And that's what Denise was talking about when she was saying all utilities in the right away. That's the nondiscriminatory part. So in terms of an ordinance, that's also what you can outline is if everything in the right away is green, then we needed to be green and things like that. So just to piggyback off of what Denise outlined, that's how the process works. You do need to get a building permit. You can't just go in and build. Local governments also have the ability to deny a permit on the basis of public safety issues. So for example, if you're doing sidewalk work and the sidewalk is no longer wide enough for wheelchair that can be denied under ADA compliance. Public safety can also circumstance can also be where if a small cell would impede the vision of a driver around learner or a traffic light, things like that. So there's a process passing ordinances helpful to outline where control is retained in terms of the build out, but we'd also be happy to work with you. There are other communities in New Hampshire that have also passed small cell ordinances that we'd be happy to share. So thank you Rep. Abrami for allowing me to comment.

Wells: Looking at this as a physicist, it seems to me that there is an artificial distinction made between different types of RF emitters when in fact RF differs only in intensity and frequency and polarization and so forth. I'd like to see if we could get someone to look into why telecom is subjected one set of standards where say in FCC Class D, broadcast transmitter is limited to a certain number of megawatts per square meter at the property line. And so I think that this is something to look into. Why is there an inconsistency in what the power levels are allowed to be because the power levels on 5G are astronomically higher than they are for broadcast.

Abrami: We will see what we can do there. Ken, thanks. Gary, what we've been doing is everybody's been chiming in with some thoughts and potential recommendations to get the juices flowing here.

Woods: I have some thoughts thinking more as a physicist and where we are and our understanding of some of the basic processes or lack of understanding of the basic processes are, to me still troublesome. I tried to think of this in a number of dimensions. One of which is what I call the sort of the “arc of understanding”. This is a little bit of sidebar, but hopefully it'll all come together in a second. When we looked about the human body, we had gross anatomy, the dissected anatomy, microscopic anatomy, cellular anatomy, chemical anatomy, synthetic biology. Then we focus down and then we've got the genetic code with at all we got all the answers now. Well now we don't have all the answers even though you have the genetic code. We know there's now epigenetics and we're learning more as we go along. To me, we're at the sort of the almost gross anatomy levels with microwaves. We're still talking about the impact from what we call a bulk material, irradiate a mouse total and see what happens. And it doesn't give us an understanding of the potential mechanisms.

You say, well, why do we need to understand the mechanisms? Well, let's give an example of a tornado. Sort of normal atmospheric conditions exist and all of a sudden a tornado appears because you've got a very confluence of a lot of factors that come into play that can create an isolated event. And we see that in a variety of things where seemingly normal processes result in a very abnormal event. And we know how to look at that. Chaos theory from a mathematical perspective has done that. And I'm sure Dr. Chamberlain probably teaches courses on for what are called Fourier transforms, where you'd take seemingly very, very benign smooth waves, you put them together and you get this big spike. So these things that occur and we're at that point, from my perspective, of beginning to understand the confluence of these things at the molecular level. And so this arc of understanding has not come down far enough for my perspective, for me to feel comfortable.

And I think there is a line in the Cyprus thing that I thought sort of synthesized my thoughts. And it said “that the potential aggregation and dynamic interaction with other signals”. I think that's really crucial for us to understand. It's not just 5G coming in. And our last speaker talked about precursors, which is sort of the same sort of thing. You have a signal coming in and then it turns out it interacts and creates a different signal. And we'd make use of this in biology already in orthopedics. Being a retired orthopedic surgeon, we use magnetic pulsed impulses to enhance bone healing. And that's you're creating a field at the molecular level. Because we know our bone is basically what's called a piezoelectric material and it depends on electrical currents to do its job and stay strong. That's why you go up in space. You don't have gravity, that piezoelectric phenomenon doesn't exist. And you'd have bone loss. But that's an example of the kinds of interactions.

Epigenomic part is another example. And a lot of these processes, and we touched on this very briefly when the issue of proton tunneling came up. That's at an extraordinarily low energy level and secondary internal processes make that occur and change all the time. And we know that things, simple, things like the configuration of an enzyme is a configuration of proteins in general. It is highly dependent on these hydrogen bonds, which are susceptible to proton tunneling. And as a consequence, all these processes we have, we really don't have an idea of how these work and some of the secondary processes. We're back up the “arc of understanding” at the bulk material level. And until we can get further down. And we will eventually, but to me, we're not there yet. So I just wanted to offer that as a concern, At least from my perspective, a concern of where we are in terms of the science. And I'll leave it at that.

Abrami: That said. We don't know what we don't know. Thank you for dialing in from your vacation. Everybody's had a chance to weigh in. And what let's talk about next steps here. What I mentioned, the last meeting, I think we should form a work group to take these ideas. I asked for volunteers. I got Representative Wells, Dr. Chamberlin, Denise Riccardi, Carol Miller, Dr. Heroux, and myself that will meet as a work group, to at least put some ideas on paper. We threw a lot of the ideas around here today. We have to do, as a group is take each one of those ideas and see if it will pass muster as a recommendation in our report. And so that's what I think what we'll do. I will work with those people and set up a meeting to do that and then maybe have to meet once or twice before our next meeting. We're running out of time now. We have three months left. I did say I was going to try to follow up to see if we get an extension on the date, but because we go to the next Legislature, I think they really want us to have our report out by November first. So that's what we'll continue to shoot for. So any objection to what I just said? I think that we've got a small work group that will work on this and put recommendations on paper and will get that out to everybody.

And at the next meeting we'll go through each one of those and have a discussion around each one of those to see if there's support for it or not support for it. And having the discussion, some of the discussions we just had, the science discussions, but also the legal discussions as to what we can make work for municipalities. What message we want to send to the federal government about this delegation or other ways.

Sherman: I just wanted to remind everybody, you know many of us have served on many commissions and committees. And I believe if there is a dissenting view to whatever the majority wants, there is the capacity for Minority Report. Is that not correct?

Abrami: That's correct.

Sherman: So I'm just saying that not because I'm encouraging a Minority Report, but because for people who haven't served on commissions or members of the public, the goal is to reach some level of consensus, but perhaps not unanimity. And, and so we may end up with two reports and that's just the way Commissions work.

Abrami: Yes. I think I mentioned that the past. Yes. That's the way commissions work. Okay. Which brings us to Denise. I want you to just weigh in a little bit on the lack of the response to nonresponse response we got from the FDA.

Riccardi: So I sent several questions to the FDA and the National Cancer Institute regarding answers that are very important to this commission and our decision making. The questions were ignored at first. After I kept at it, I got a response that was not an answer to the question. I point blank, asked and numbered the questions and said we need an answer to each question not linked to their website that we already know that we already have. That's very frustrating. And that was the situation on both counts with the FDA and the National Cancer Institute. So I tried to reach our United States senators offices and finally yesterday I spoke with a staff member in constituent services. And I have forwarded our questions to that office. And I feel at this point, it's going to take our U.S. senator to insist they answer the questions. And I find it very telling that they don't want to answer them. We are a

commission with a very important task and I don't understand why they want to answer these questions. I'll give you an example. I'll read one of my questions. The FDA is aware that cell phones violate the FCC SAR limits at body contact on high power. The FDA has written that because it's safety factor and that's what they do. What is the safety factor for SAR the FDA relies on and at what SAR level above the FCC limits will the FDA intervene? So they have written that that it is not safe on body contact, but then they don't do anything about it. And why will they answer one simple question? That's just an example. So that's where we're at. I'm still waiting.

Abrami: Tom, I'm going to ask you to help us out with that and try to get maybe Senator Shaheen or someone to help us out with that.

Sherman: I am happy to.

Ricciardi: It's her office that I spoke with. It wouldn't hurt to have you follow up as well.

Sherman: I can call their state directors. I reached out to them about the FCC and we didn't get anywhere. It's not because they didn't try but because they didn't get a response. It's frustrating.

Abrami: So if, if the commission doesn't mind, you all remember Theodora from Environmental Health Trust. She had reached out to me about the FCC and if you don't mind if we give it a few minutes and then Beth, if there's anybody on this that from the industry that wants to respond, we will give them that opportunity as well. So if you don't mind, we'll have Theodora spend a few minutes. We have about a half hour left.

Scarato: Thank you so much. I had sent over and just wanted to make everyone aware of the documentation that I received from the EPA with a lot of questions. Their response to my questions was that the EPA's last review was in 1984 in terms of biological effects and they gave they cited that you should all have a copy of the questions and the answers. Just to go over what the EPA said. I said what's the research? Has EPA reviewed the research on damaged memory? They say they don't have a funded mandate for radio frequency matters. And in regards to the birds, bees, and trees, what's really important is that the limits were not set of course for birds, bees or trees and the EPA seem to confirm that in the answers that they sent. Also in regards to the safety factor, I would note that I think this is a really important question, so I'm glad it's being asked because it said that there's a 50 time safety factor. But when it comes to phones against the body, is certainly couldn't possibly be a 50 times safety factor for that in terms of the heating effect. So want to make sure you have that as well as the scientific letters that were sent to the FDA in regards to their report, their literature review on only cancer. They didn't look at other end points comprehensively. And you'll notice that Dr. Albert Manville, the former fish and wildlife lead, who is now retired, wrote stating that the current FDA statement is irresponsible, unfounded, and sets a dangerous precedent and so on. But please take a look at those letters that were sent by the scientists regard to the FDA. So thank you.

Abrami: Thank you. I think I did send that out to everybody. And if I recall, each response to each one of those was "that's not our mandate"Something like that. Is that correct? Right. So we have got it because Congress has mandated us look at this, something to that effect. Again, next steps are going to

be getting the working together a couple of times. In terms of the next meeting, we could try to put a stake in the ground and come up with a date while everybody's on the Zoom meeting here. Are people on vacation? Are they staying local? August 28th? Who cannot make August 28th at 09:00 AM? Brandon can't. I want to make sure the Working Committee has enough time to do what they have got to do.

Sherman: I'm on vacation on the 28th, but I can do it anyway. I could do Monday, the 31st if that worked. I don't mind dialing in. It's no problem.

Okay. Okay. How about Monday the 31st? Anybody can't make money to 31st? Okay, why don't we save that date, the 31st at 9 am. I'm going to reach out to the folks who volunteered and we'll come up with some dates for us to get together in between. So well, we've got about 25 minutes. Is there any other general discussion we would like to engage in? If not, I'd like to open this up to any other folks on the on the Zoom meeting that our guests, if they'd like to weigh in. I would allow that now because we have time. Does anybody else want to weigh in? Questions? Comments? suggestions?

Bloede: Yes. Oh, can I speak? I am Paul Bloede from Coloradans for Safe Technology. We had a meeting recently, Zoom meeting with an attorney that I wonder if your organization is familiar with this national level Attorney. His name is Julian Gresser. And he had a lot of comments about the legal state around the country of this whole issue and I thought he was very incisive and we have a transcript now with his presentation to us, we have that transcript just from last week as a PDF file. I didn't know if that would be of interest. How I could get that file to any of you, should that be of interest?

Abrami: Can you get that to me?

Bloede: Yes. Do you have an email address?

Abrami: Yes. Use abrami.nhrep@gmail.com.

Bloede: Yes, definitely. I will get that out to you. I think you will find it interesting hopefully.

Abrami: I'll get it out the others. Okay, thank you. Cece?

Doucette: Thank you Rep Abrami. When I first started investigating the wireless radiation issue, I thought as soon as we saw that it's especially harmful to children, that my school would have jumped up immediately and shut off the wifi in schools.

Abrami: Cece, why don't you back up and explain your involvement in this.

Doucette: Okay. I spent several years at Ashland Public Schools in Massachusetts doing fundraising for what we kept hearing our kids would need to succeed in the world. And that was basically the 21st century classroom, which is an industry campaign to introduce wireless into our school systems. And I had spent many years doing fundraising because our town didn't have the budget for that. I started looking and an engineer friend of mine tipped me off that there could be harm. So I started my investigation and I came up with a few studies that were saying no harm. I didn't understand at that point that "no harm" is not the same thing as "safe", right? So I started looking a little bit deeper and

then I start finding peer-reviewed studies all over the world showing great biological effects. And the set of studies that got me on my feet were the sperm studies, where they've taken male human sperm and expose it to a laptop with the antennas on. And it changed the DNA, it slowed the motility in it cause far fewer sperm to be viable in just four hours of exposure.

We had just bought my youngest daughter a laptop going into high school. And of course she's using it right on top of her reproductive organs. So that was the day that I got involved in this. I have helped introduce legislation here in Massachusetts and I wish we were as swift as New Hampshire is. My bill has been in play for six years. There are others on the utility smart meters that had been in play for eight years. But even during this pandemic and the racial justice movement that's happening, our legislature is finally advancing three of our bills, so we're hopeful that that will happen here.

Early on in my journey, others who talked to me about legal action and I don't know anything about that. I didn't want to see lawsuits come into play. I just wanted us to do the right thing and especially protect our children. But then I got to listen to a conversation with somebody who was referencing Martin Luther King Jr. And what MLK was teaching us is that in order for important societal changes to happen, it happens through three channels. 1. The public gets educated and speaks up and thank you to Deb Hodgdon for being the catalyst in New Hampshire who then spoke to Rep Abrami, who then drove down to my kitchen table here in Massachusetts. We had a long conversation about wireless. 2. There is legal action that happens to hold those who have infringed upon our rights, accountable. 3. Public policy ultimately catches up with the science or whatever else the issue is. So as much as it makes me uncomfortable to think about legal action, it's part of how change happens.

So to our Attorneys General, I hope you will look at this as seriously as you looked at tobacco and do the right thing, reach out to your colleagues and other states, get this conversation going. My understanding is the industry has already set aside billions for the lawsuits that are going to happen. But we cannot afford to continue to expose our children even during this pandemic, handing out hot spots without any information on how to use technology safely. So I implore you as a mother, as a woman who fell down this rabbit hole which I never wished to be in. But once you know the harm, you can't "un-know" it. And we have to use every resource that is available to us to start protecting our children, especially right now. So thank you for your time. I hope the commission will report out favorably something that we can hold up with pride and say, thank you to New Hampshire for being our nation's leader. And then we can follow suit in our states too.

Abrami: Thank you, Cece. Is there anybody else that would like to weigh in at all? Okay. I don't see any. I guess we will be adjourning. We will see everybody on August 31st at 9. And then, in the meantime the subgroup will be meeting. Did I mention that we're recording the meeting? I thank everybody for your time. Thank you to those who have tuned in from afar. Those on the Working Group, I will get an email later today with some dates that we can get together. Okay. Is there a Motion to adjourn?

Woods: I was the latest but I will make a motion to adjourn.

Abrami: motion to second by Carol. Without objection, we're adjourned.

V. Next meeting via Zoom: August 31st 9-11

Meeting Adjourned at 10:43 am

Text chat during Zoom meeting:

00:30:12 Bruce L. Cragin: ???

00:30:45 Bruce L. Cragin: ???

00:41:30 Bruce L. Cragin: Yes bring back Swanson!

00:43:58 Cece Doucette: Hawaii County Council just passed their 5G ban

00:45:51 Bruce L. Cragin: Ha

00:50:10 EH Trust: There have been attempts to overturn the Telecom Act section 704. Some links her e<https://ehtrust.org/policy/the-telecommunications-act-of-1996/>

00:51:17 christine.melkonian: YES, to public awareness

00:54:54 Cece Doucette: It was our state attorneys general banding together and suing the tobacco industry that finally brought the toxic effects mainstream. Perhaps the Commission can recommend that NH lead an effort for attorneys general to band together on wireless too, which if successful, would help to provide the funding to put safe, fast, sustainable technology in place. I believe NH still receives funding from the tobacco industry lawsuit today.

01:01:20 EH Trust: Also the Telecom Act Research continues to show effects from power lines. See studies here <https://ehtrust.org/science/research-on-magnetic-fields-extremely-low-frequency-electromagnetic-fields-cancer-and-miscarriage/>

01:02:08 EH Trust: Many countries have protective limits in regards to power lines, over a dozen. They set limits at the level linked to cancer in children. But the US has no limit at all. <https://ehtrust.org/policy/international-policy-actions-on-wireless/>

01:02:29 Bruce L. Cragin: Exactly, Sen. Gray. So much fearmongering.

01:03:56 EH Trust: Two published studies by the Ramazzini Institute “Carcinogenic Synergism of S-50 Hz MF Plus Formaldehyde in Rats” (2016) and “Life-span exposure to sinusoidal-50 Hz magnetic field and acute low-dose γ radiation induce carcinogenic effects in Sprague-Dawley rats” (2016) found that ELF exposed rats had statistically significant increased incidence of several type of malignant tumors when combined with a known carcinogen.<http://onlinelibrary.wiley.com/doi/10.1002/ajim.22598/full>

01:04:44 Bruce L. Cragin: And here comes some more ^^^

01:12:17 Bruce L. Cragin: Re. A., you're hearing ONE sde, not both.

01:33:08 Bruce L. Cragin: Physicians are not physicists.

01:33:27 Ken Wells: Bruce: This one is

01:33:48 Bruce L. Cragin: You, Ken? or Gary?

01:34:08 Ken Wells: Dr. Woods

01:34:35 Bruce L. Cragin: Thabk you. I will contact him.

01:37:54 Bruce L. Cragin: <http://bobpark.physics.umd.edu/WN10/wn121010.html>

01:39:17 Bruce L. Cragin: Sorry, I meant <https://quackwatch.org/related/signs/>

01:44:10 Bruce L. Cragin: <https://americanbeejournal.com/why-we-shouldnt-fear-5g/>

01:45:48 EH Trust: The FDA scientists letters are found here <https://ehtrust.org/doctors-slam-fda-report-on-cell-phones-cancer-and-health-effects/>

01:46:04 EH Trust: Dr. Manville <https://ehtrust.org/press-statement-from-dr-albert-manville-on-the-fda-report-on-cell-phone-radiation-2/>

01:46:38 EH Trust: The EPA letter can be found here <https://ehtrust.org/epa-birds-bees-trees-5g-wireless-effects/>

01:47:05 Bruce L. Cragin: "FDA scientists" or activist scientists?

01:47:24 EH Trust: The letter from scientists to the FDA.

01:47:42 Bruce L. Cragin: Yes that's more honest.

01:47:49 EH Trust: NIH scientists, experts internally signed, several on the world health organization emf group

01:50:20 EH Trust: Several of the scientists are expert advisors to the World Health organization who are asking the FDA to retract their flawed report on the studies.

01:54:13 christine.melkonian: YES

01:54:20 Bruce L. Cragin: I give up. You people are just lost. The idea that a commission of legislators has the scientific capability to meaningfully question the standards is ridiculous.

01:54:26 EH Trust: Resources on Wi-Fi in School <https://ehtrust.org/wifi-in-schools-tool-kit/>

01:55:14 Ken Wells: Aug 31 at 9am

01:55:47 christine.melkonian: Thank you so much

01:56:28 Cece Doucette: Thank you to the commission members and others, please feel free to reach out if there is anything I may help with. c2douce@gmail.com