

**H.70 Changes to Section 248a,
H.110 Sunset Extension of Section 248a, and
Gov. Scott's \$10 million Budget Request for 20 New Towers**

The PUC has denied only one cell tower in the last decade

My name is Annette Smith. Thank you to the chair and the committee for hearing my testimony today. I am Executive Director of Vermonters for a Clean Environment, a grassroots non-profit formed in 1999 in response to a natural gas power plant and pipeline project proposed for southwestern Vermont. For 23 years VCE has assisted Vermonters in having a say in what goes on in our communities, participating in regulatory processes, and holding corporations accountable for their actions.

Slide #2: In the last few years, a majority of the work that Vermonters have brought to us has been in the area of telecommunications, specifically the siting of towers and antennas. This is one of the most challenging topics we have encountered due to federal preemption contained in the 1996 Telecom Act. This has resulted in a lack of interest from Vermont's legislators, who routinely say "there is nothing we can do." But there is plenty you can do about siting, and now is the time.

We are grateful to this committee for giving me 30 minutes to be heard today. Since 2019, we have had experts in the field waiting in the wings to testify to various legislative committees, including one I hope you will hear from shortly. In addition, four citizens would like the opportunity to testify to this committee – people who have real world experience with this very powerful industry and its impact on our communities. What has happened to them can happen to anybody.

A large part of this issue is the Public Utility Commission process, which has not received attention by legislative committees of jurisdiction.

Slide #3: My testimony today will be divided into three parts:

1. What is happening on the ground with specific sites and companies
2. The history of regulating towers and antennas in Vermont
3. Section 248a and recommendations for changes

High Resolution Version of Slide Deck:

https://vce.org/HE&E_VCE_Section%20248a_14March2023.pdf

1. ON THE GROUND IN VERMONT, WHAT IS HAPPENING?

Slide #4: Since 2019, VCE has been contacted about new towers proposed by companies associated with AT&T, Verizon, and a company new to Vermont, Industrial Tower & Wireless, in these fourteen towns.

Slide #5: Part of the increase in new towers is due to AT&T's tower expansion for its FirstNet contract. A separate company associated with AT&T actually builds the towers.

Slide #6: Another reason for the increase in tower activity is that in the last two years, Industrial Tower & Wireless – a company new to Vermont – has begun permitting towers as part of a statewide network of private radio service it intends to build throughout Vermont. Space is left on the tower for co-location of cell antennas. The PUC has approved two uncontested towers without any assurance that cell service will be sited on these ugly lattice towers.

Slide #7: Industrial is represented by the same attorney that represents Verizon. Consistent with its community-be-damned approach, Industrial Tower & Wireless filed suit against the Public Utility Commission in Federal Court in Dec. 2022¹ and March 2023².

Although Verizon is pursuing new towers, it has not disclosed its tower build-out plans.

And Governor Scott is seeking \$10 million in the budget for 20 new towers throughout Vermont.

Slide #8: I am reminded of the New York Times article from 1998 that quotes Senator Leahy: "I don't want Vermont turned into a giant pincushion with 200-foot towers sticking out of every mountain and valley," he said. That is where we are headed if this legislature does not act now.

Slides #9 – 19: We are seeing proposals for towers to be sited closer to homes, closer to schools and closer to village centers.

¹ <https://vce.org/IndustrialLawsuit1.pdf>

² <https://vce.org/IndustrialLawsuit2.pdf>

Slide #9: Worcester. Proposed less than 350 feet from neighbor's home. A Worcester Select Board member can testify about the role of municipalities and their experience in the Advance Notice phase.

Slide #10: Worcester. Citizen simulation of tower near home to show proximity to neighbor's home. Accurate simulation of height of tower (but not accurate for antennas) as viewed from popular scenic trail.

Slide #11: Chelsea. Less than 500 feet from neighboring homes

Slide #12: Chelsea. About 1000 feet from nearby school and next to recreational trail, it was opposed by school board and town planning commission.

Slide #13: Enosburgh. Visual impact from private properties was not evaluated. Historic Seventh Day Adventist church was not considered in historic evaluation. No PUC site visit. Industrial's simulation does not show full build-out of antennas.

Slide #14: Enosburgh. PUC and landowner denied a balloon test, so neighbors could not accurately evaluate viewshed impact to prepare their testimony. Neighbor can testify to participation in PUC process and what approval means to hear family with small children – they will have to move.

Slide #15: Ira. Extraordinarily scenic area, majority of homes on historic register.

Slide #16: Ira. Views from private properties near the tower were not evaluated. PUC and landowner denied balloon test, not possible to accurately evaluate viewshed impacts. The PUC did not conduct a site visit.

Slide #17: Warren. High visibility from neighboring property. Landowner who is a lawyer can testify to the challenges with town government in process of updating Land Use Development Regulations including Telecom By-law.

Slide #18: Granville 1. First site negatively impacted numerous private properties on back dirt road. Goal is coverage in Granville Gulf. Neighbor can testify to what has been learned about coverage issues.

Slide #19: Granville 2. First site impacted numerous properties, second site primarily impacts one, resulting in an undue adverse aesthetic impact. New site is opposed by ANR on wildlife issues. [Stop at dogs]

These are only some of the towers that have led Vermonters to come to VCE recently for assistance. Many other towers have been proposed in the same time period -- some dropped, some relocated, some approved.

Slides #20 – 24: We are also being contacted about antennas being added, swapped out, and placed closer to homes. Some examples are canister antennas placed atop utility poles in Chittenden County. These are being installed in other areas of the state, often with no notification to adjoining landowners – who may find an antenna installed 20 feet from their children’s bedroom. Even if notified, there is nothing neighbors can do, nor can they have any say through the PUC process. [Stop at Flynn Theater]

The top three issues of concern that Vermonters raise are:

- Health and Environmental effects of Radio Frequency Radiation.
- Aesthetics.
- Property Values.

Impacts to human health are paramount, but there are also serious concerns about environmental effects, especially the impacts to bees,³ birds and declining insect populations.⁴

The industry’s response to concerns about health and environmental effects is to say there aren’t any, and that their projects meet FCC standards. Dr. Kent Chamberlin⁵ of the University of New Hampshire is the expert I referred to earlier. He served on New Hampshire’s Commission to investigate this issue, and he can confirm what the science clearly shows: that there *are* health effects, that the standards set by the FCC are *not* based on good science, and that U.S. standards – which allow exposures magnitudes higher than in other countries – are *not* protective of public health.⁶ In 2021, the D.C. District Court of Appeals chastised

³ <https://www.beeculture.com/electromagnetic-radiation-part-1/> and <https://www.beeculture.com/electromagnetic-radiation-part-2/>

⁴ <https://www.frontiersin.org/articles/10.3389/fpubh.2022.1000840/full>

⁵ <https://ceps.unh.edu/person/kent-chamberlin>

⁶ https://icbe-emf.org/wp-content/uploads/2022/10/ICBE-EMF-paper-12940_2022_900_OnlinePDF_Patched-1.pdf

the FCC for failing to consider the relevant science, and instructed the agency to consider the science as part of their process to review updating its 1996 standards.⁷

A prudent response by Vermont to the court's ruling would be to establish a moratorium on further deployment of this harmful technology until the FCC completes the court-ordered scientific review. This would no doubt invite litigation by the industry, but, as Vermont did with GMO labeling, it is time for a state to take a stand against this powerful industry and demand that Congress take the muzzle off its citizens so they can protect their health and environment.

Slide #25: The industry claims that RFR exposure is below the standards set by the FCC, but as this sign in the parking lot of the Brattleboro Agway shows, even the inadequate FCC standards may be exceeded. Agway employees are likely routinely exposed to excessive RFR at this location.

HEALTH: When people contact me about a proposed cell tower or antenna and express concerns about living next to one, I have to tell them that they can't talk about the health effects due to the 1996 Telecommunications Act, which prohibits regulatory proceedings from considering "environmental concerns".

Health effects are the number one concern of the people who are reaching out to VCE. We have been aware that some people get sick from RFR emissions since before 2012, when VCE negotiated with the electric utilities to create Vermont's opt out program for smart meters. With increasing exposure from new sources of RFR, health effects are also increasing, as the effects are cumulative.

Litigation over health effects is playing out all over the country. One high-profile case is just over the border in Pittsfield, Massachusetts where the Board of Health issued a Cease and Desist Order to Verizon after reports of a wide array of health issues caused by a tower the company erected in 2020.⁸ Verizon responded by suing the town,⁹ after which the Board of Health dropped its order. The health

⁷ <https://ehtrust.org/in-historic-decision-federal-court-finds-fcc-failed-to-explain-why-it-ignored-scientific-evidence-showing-harm-from-wireless-radiation/>

⁸ <https://www.wamc.org/news/2022-02-03/pittsfield-board-of-health-issues-conditional-cease-and-desist-order-to-verizon-over-cell-tower>

⁹ <https://www.legalreader.com/verizon-wireless-sues-pittsfield-ma-cell-tower/>

effects are real: residents opposing the cell tower have gained the support of the Massachusetts Association of Health Boards.¹⁰

AESTHETICS: Given a choice, most people would prefer not to have their views spoiled by a cell tower. Vermont's aesthetics are important. We are genuinely at risk of losing the scenic beauty of Vermont because of the path the telecom industry is currently taking.

Slide #26: Vermont has attempted to address the negative aesthetics of cellular towers and antennas by using fake pine trees, called monopines. However, monopines are made of plastic, and the plastic degrades over time, resulting in the spread of tiny pieces of plastic throughout the environment.

The industry appears to be moving as fast as it can to build out as many towers as possible – perhaps because they know that people are waking up to the dangers of exposure, or perhaps because satellite connectivity will reduce their market share, or because the need for connectivity is being met by fiber to the premises.¹¹

PROPERTY VALUES: People's homes are often their largest asset, but the PUC does not consider whether a cell tower will reduce someone's property value. A lot of people will choose not to live near a cell tower, and it is generally accepted that cell towers reduce nearby property values by about 20%.

The people who lease land for cell towers are often in need of money, which creates an unpleasant social dynamic that is playing out in several of the communities with active cases. Landowners sign leases before the project is made public, and when neighbors speak out in opposition, it is not uncommon for the leasing landowner to become belligerent and aggressive towards their neighbors. This is the last thing the neighbors want.

I hope you will take testimony from Vermonters who are living through this.

¹⁰ https://www.berkshireeagle.com/news/central_berkshires/pittsfield-cell-tower-opponents-find-ally-in-massachusetts-association-of-health-boards/article_d916049c-ad82-11ed-a361-ff9f8dc734c8.html

¹¹ https://vce.org/Witness%20Testimony_Wheeler_FC_2021.03.22.pdf

2. THE REGULATION OF TOWERS AND ANTENNAS IN VERMONT

Hodgepodge of Databases

Slide #27: Vermont's regulation of towers and antennas began with Act 250 in 1970. Before then, any agreements or restrictions surrounding the placement of towers on private property can only be found in land records. Tracing the history of towers and antennas is like a treasure hunt or detective work, as Act 250 is still used by some companies, even though Section 248a came into effect in 2007.

Slide #28: This dual system has resulted in what I refer to as "the Act 250 loophole." Providers have a choice of going through Section 248a or Act 250. If they choose Act 250, jurisdiction attaches only if the structure is 50 feet or taller. So a 49-foot pole can be erected and decked out with lots of antennas, all outside of any regulatory process. An example is this utility pole antenna installation in Marlboro near the school. Section 248a also does not apply to poles lower than 50 feet.

Finding towers and what is attached to them requires searching:

- Act 250 Database¹²
- DPS Map of Vermont towers permitted under Section 248a: 2007 – 2016¹³
- ePUC search 2017 to present¹⁴
- additional resources such as the Vermont Public Wifi map maintained by DPS shows antennas placed outside of any regulatory process,¹⁵ and maps associated with DPS Drive Test Results.¹⁶

State Level Regulation

Vermont is unique in how it regulates telecommunications installations. As far as I know, in all other states it is done through local zoning. We have a system that removes a municipality's authority to regulate the siting of telecommunications equipment, yet siting is one thing that towns and states can play a role in. While carriers cannot be discriminated against and a town can't say no to the deployment of the technology, standards can be put in place to say where it is acceptable, and where it is not. Setbacks, height restrictions, and exclusion of

¹² <https://anrweb.vt.gov/ANR/Act250/default.aspx>

¹³ <https://vtpsd.maps.arcgis.com/apps/webappviewer/index.html>

¹⁴ <https://epuc.vermont.gov/?q=node/87>

¹⁵ <https://vtpsd.maps.arcgis.com/apps/webappviewer/index.html>

¹⁶ <https://publicservice.vermont.gov/telecommunications-and-connectivity/mobile-wireless-drive-test>

specific districts are all possible, but are more challenging in Vermont: the final decisions are made at the state level, and we do not have any state level siting standards.

Slide #29: Municipalities can adopt Telecom By-Laws or Ordinances that are given Substantial Deference by the PUC, though many towns do not have telecom by-laws. Confusion occurs in towns that are aware that the PUC does not consider zoning in Section 248 cases – except the PUC does consider Telecom By-Laws in Section 248a cases. Town Plans, even Enhanced Energy Plans, are often not useful to the PUC because they do not contain the specific language necessary to meet regulatory requirements. The PUC has used its “societal benefits” addition to the Quechee Analysis to overrule findings of undue adverse aesthetic impacts in several tower cases. The result is that town volunteer boards are confused and overwhelmed. We are seeing the stresses on Select Boards and Planning Commissions in every town we work in. In some cases, updating Land Use Development Regulations that include Telecom By-laws is resulting in hiring outside consultants who are, for some unknown reason, removing height restrictions and other protections that existed in prior By-laws.

The way Vermont regulates the telecom industry is resulting in powerlessness on the part of towns and Vermonters who are particularly affected by proposals, discord on the town level between people who want better cell service and the people who are negatively affected, and a legalistic regulatory process at the PUC that is limited, extremely difficult and expensive for the public to participate in. The industry is demanding permits issued within 150 days of filing an application, which is nearly impossible for the PUC to do if the case is contested.

Neighbors can get standing on aesthetics and orderly development, but not on coverage. Towns can get standing on all issues but rarely choose to engage in the PUC’s process. Relationships with leasing landowners often result in town board members declining to get involved in any way. Municipalities can ask the Department of Public Service to hire an RF engineer to evaluate the applicant’s claims of coverage areas, but in our experience the work of experts hired by the DPS has been discredited by experts found by citizens. It is common for town board members to say “there's nothing we can do, it’s decided at the state level.”

3. SECTION 248A AND RECOMMENDATIONS FOR CHANGES

In recent years we have made efforts to be heard by the Vermont legislature. In 2019, the Senate Finance Committee heard some testimony, and the Senate Health & Welfare Committee initially agreed and then declined to hear testimony. We also attempted to be heard in House Energy & Technology. Three times, Frank Clegg, former CEO of Microsoft Canada, has been waiting in the wings to testify to Vermont legislative committees about safe technology, and was never scheduled.

In 2019, the legislature asked the Vermont Department of Health to report on the possible health consequences from exposure to RFR. Its report acknowledged potential harmful effects and stated “this reinforces efforts in public health to minimize the dose to RFR, especially to children.”¹⁷ Nonetheless, lots of antennas have been put on school buildings since then.

In 2020, in response to our attempts to update Section 248a to address the changing technology, especially small cells closer to people’s homes, the legislature required the PUC to review the law and report back. The PUC’s report was all of two pages and was, in my extensive experience with the PUC, the biggest kick in the gut I have been dealt.¹⁸ Among other things, DPS and VCE recommended closing the Act 250 loophole. The PUC blew us off in a cavalier way, ignored our requests for better notification and other reasonable changes, and said no changes were necessary.

Other nearby states have been more proactive. In 2019, the New Hampshire legislature established a Commission to Study the Environmental and Health Effects of Evolving 5G Technology. Their Final Report contains 15 recommendations that serve as excellent guidance to Vermont’s legislature for consideration as you review updating Section 248a.¹⁹

¹⁷ <https://legislature.vermont.gov/assets/Legislative-Reports/RFR-Report-12.23.19.pdf>

¹⁸ <https://legislature.vermont.gov/assets/Legislative-Reports/Act-25-Legislative-Report-10-1-20-v3.pdf>

¹⁹ <https://www.gencourt.state.nh.us/statstudcomm/committees/1474/reports/5G%20final%20report.pdf>

Slide #30: In Maine this year, the legislature is considering requiring a study of the effects of 5G Technology on Bird, Bee and Insect Populations and the Effects of Long-term Exposure on Children.²⁰

Recognizing that H.110 is a “must-pass” bill that must be voted out of your committee in time to cross over to the Senate, the question is how will we ever take the time to address the issues that are overwhelming Vermonters when faced with this technology build-out?

One suggestion is to extend Section 248a for one year. This would put it back on the track of the biennium, which the latest three-year extension disrupted. Now that you are aware that there are issues to be addressed, Section 248a could be made a priority in the beginning of the second half of this biennium.

In the interim, create a stakeholder group of DPS, PUC, VCE and AT&T to work on updating the PUC process and recommend changes to Section 248a.

Slide #31: Specific changes we recommend to Section 248a and the PUC’s process and rules for new towers, existing structures hosting antennas, and new antennas:

- Require the landowner to be a co-applicant, as is standard in Act 250.
- Add the Vermont Department of Health to receive required notification of applications.
- Change the Advance Notice Period to 120 days: “(e) Notice. Not less than **120 days** prior to filing...” so towns have time.
- Require notification to towns and townwide notification via Front Porch Forum and posting in local locations of towers being proposed, before leases are finalized, in the Advance Notice period, identifying the specific location with street address (not just latitude and longitude).
- Add notice to adjacent landowners within a mile to the current notice to adjoining owners for proposed tower sitings.
- Require Advance Notices to contain propagation maps and simulations (only AT&T does this already).

²⁰ <https://legislature.maine.gov/billtracker/#Paper/HP0466?legislature=131>

- Require applicants for new towers to provide simulations at full build-out of all possible antennas, in order for aesthetic and RFR issues to be properly considered.
- Require projects that require back-up generators to identify alternatives to the 20 – 30 kW fossil fuel generators that are now common.
- Require annual fuel consumption and GHG emissions disclosure with application and reported annually.
- Require propagation maps to show the difference in capacity from existing to proposed new coverage.
- Change how historic areas and structures are evaluated to include views of the proposed tower from the historic areas and structures.
- Require the PUC to conduct a public hearing, site visit with balloon test (or drone hovering) after party status determinations are made.
- Allow all parties to submit testimony and ask questions about coverage.

Slide #32

- Eliminate pre-filed testimony, discovery and cross-examination-only evidentiary hearings.
- If a hearing is requested, require the applicant and the other parties to submit expert reports or other documentary materials as exhibits in advance of the hearing with direct live testimony with cross-examination, similar to the Act 250 District Commission process.
- Change the standard with respect to Municipal & Regional Plans/Recommendations: “Unless there is good cause to find otherwise, substantial deference **SHALL** be given to the plans of the affected municipalities and regions.”
- Require all ground or tower-space leases on towers that are subject to PUC jurisdiction to be filed in the land records.
- Require applicants for new additional or swapped antennas to evaluate the total RF exposure.
- Require all telecommunications sites to file annual reports of RFR emissions at specific distances for the purpose of monitoring for compliance with current and future FCC RF emissions limits.
- Eliminate the exemption for new support structures less than 50 feet in height.²¹

²¹ <https://macmtn.com/>

- For *de minimus* small cell installations, require notification to all property owners within 500 feet.
- Enable public input into small cell locations and require providers to identify alternative sites.
- Establish setbacks for towers from adjoining property lines, similar to solar setbacks already in place. The NH Commission determined that 500 meters (1640 feet) is a safe distance).
- Create a searchable statewide database and map that combines Act 250, PUC and ePUC Section 248a cases.

The changes I have proposed involve serious effort on your part. It is not easy to challenge the powerful telecom industry. But if you care about the future of Vermont, now is the time to take action.

Thank you for hearing my testimony. I would be glad to answer questions.

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