April 26, 2021

Chair Miguel Santiago
California Assembly Committee on Communications and Conveyance
State Capitol, Room 6027
Sacramento, California 95814

RE: AB 537 & Cell Tower Fire Risks

Dear Chair Santiago & Committee Members:

I am writing in strong opposition to AB 537 which will be heard before your Committee on Wednesday, April 28. I’m deeply disturbed about the three (3) wireless bills speeding their way through your committees, SB 556, SB 378 and AB 537. All three do not deliver what they promise, they overreach in favor of the telecom industry and they compromise the safety of all Californians. I fear you have severely underestimated the fire risk posed by the rapid buildout of a fire-prone infrastructure. AB 537 usurps local control and leaves California more vulnerable than ever to fire in a record-setting year for drought that is expected to bring one of the worst fire seasons California has ever seen. What is the point?

These three bills combined promise to close the Digital Divide yet they do no such thing. You say these bills are needed because of the pandemic and the need for increased telecommunication in multiple capacities, yet 5G is not ready for voice except for a few exclusive users, it does not facilitate and enhance Internet connections, and it does not close the Digital Divide. Broadband wired to the premises is safe, secure, and will bridge the Digital Divide.

As a utility and fire safety consultant, I am shocked to see Sacramento taking local control away from cities and counties throughout California. Local governments are responsible for the health, safety and well-being of the residents. AB 537 eliminates critical parts of the permitting processes local governments rely on to create the safety necessary for their unique environments.

I have worked to create local zoning ordinances since 2002, most recently with San Diego County, the city of Encinitas, and the city of Malibu. I have specifically been asked to create fire safety language for the cities of Encinitas and Malibu. Only the leaders of the cities could fully appreciate their unique risks. Nowhere is this more true than with fire. For example, we banned cell towers in the three highest risk fire zones in Encinitas. That forced some cell towers into residential areas, but it was necessary because these three areas are extremely difficult for firefighters to access and could risk fire growing out of control throughout San Diego County.
I’m working in Malibu at the request of Mayor Mikke Pierson and the residents of the city. The last two Malibu fires were triggered by telecommunications engineering errors. Collectively over 1 million acres burned and well over $6 billion in damages occurred. AB 537 will make the fire risk so much greater for all the cities whose residents depend upon local governance, local control and local safety strategies to minimize the fire risk as much as is humanly possible. If you pass AB 537 with its “deemed approved” requirements, you will be condemning California to fire as we have never seen it before.

I was the first opposition witness to testify last Monday, April 19, before the Committee on Energy, Utilities and Communications regarding SB 556. I was alarmed when the bill’s author, Sen. Dodd, turn to Verizon’s Rudy Reyes to offer answers to some of the senators’ concerns regarding cell tower fires. Mr. Reyes is Verizon’s West Region VP & Associate General Counsel. If he didn’t know the answers to the fire concerns, he should have indicated as such, the staff could have unmuted me, and I would have given the senators honest answers. If legislators want to protect their constituents, they should demand to know the truth. Verizon’s Mr. Reyes did not provide accurate answers. The irony is that Verizon is partially responsible for at least one of the two fires in Malibu over the last 15 years.

To summarize and augment my concerns from my testimony before the Committee on Energy, Utilities and Communications, cell tower fires do occur. The more cell towers we have, the greater the risk. All cell towers are electrical devices, and every electrical device will fail. It is the job of the professional engineer to make sure that every electrical device fails as safely as possible, i.e. does not cause a fire. In working on local zoning ordinances in California, our team (a California-licensed Subject Matter Expert in electric fire safety, an attorney with decades of telecom/utility experience, and myself) discovered exemptions for telecom to fundamental electrical codes at the federal, state, and county level. In other words, telecom is policing telecom when it comes to their electric fire safety.

CELL TOWER FIRES ARE ELECTRICAL FIRES: Here is what happens when a cell tower catches on fire. Electrical fires cannot be fought through conventional means. That means the firefighters can arrive on scene and do nothing except put short bursts of water on the surrounding area. They cannot touch a blazing cell tower with water because to do so is to risk electrocution. The fire department will call the utility company to cut the power. How these fires are fought is determined by local fire departments and therefore placement of these towers must be determined at the local level, not in Sacramento.

Some fire departments will allow their firefighters to access a main power shut off, but there is liability that goes along with that. Most of the firefighters I interviewed specifically related to fighting cell tower fires said they are trained to let a cell tower fire burn itself out while they wait for utilities to cut the power. Imagine a 5G cell in somebody's front yard or attached to the light post at the corner of a property. Imagine a Santa Ana wind with 50, 60, 70 mile an hour gusts. It takes the utilities 10 to 30 minutes on a good day to get the power shut off. It can take up to two hours if distribution and/or transmission lines are attached to the same monopole.

VERIZON VP & ASSOC GEN COUNSEL INCORRECTLY RESPONDED TO FIRE RISK CONCERNS: Some senators were concerned about the fire risks and asked for clarification
following my testimony. Sen. Dodd, SB 556’s author, selected Verizon’s Rudy Reyes, Esq. to answer Sen. Eggman’s fire questions. Here were some of his responses:

1) Verizon's Mr. Reyes: "There will be less fire risk with 5G because there will be fewer towers".

Absolutely not true. There is risk to every single wireless communications facility whether it is 2G, 3G, 4G or 5G. Mr. Reyes' statement that there will be a reduction in fires due to a reduction in towers, to me, is an acknowledgment that telecom knows they have a fire problem with some of their macro towers. Every 4 to 5 small cells needs a macro tower to power them. The fire risks will be far greater. The more wireless communications facilities you have, the greater the fire risk. No single cell tower – macro, micro, small cell or wireless antenna – is immune from these risks of fire because they are all electrical devices.

2) I revealed to the committee that telecom had been involved in the ignition of the last two major Malibu fires. In 2007 three telecoms (including Verizon) overloaded a single utility pole owned by SCE. That pole snapped in the wind and the telecoms ignited the dry grass below. Malibu Canyon Fire burned over 900,000 acres. In 2018, there were two ignition points for the devastating Woolsey Fire that took out over 400 homes in Malibu and cost $6 billion in damages. There are a number of Malibu residents who still do not even have permits to rebuild their homes. This city and its residents are traumatized by Woolsey.

Verizon's Mr. Reyes had the following response to the Malibu fires, "They were a long time ago." & "The CPUC solved the problem."

This is an appalling response. I do not know if Verizon was the carrier that caused the Woolsey Fire, but we do know there is a telecom component to the ignition of the fire. We could not get access to any details because the fire investigation became a criminal investigation and thus the file is closed to the public and FOIA. A long time ago? Tell that to the residents of Malibu. Tell that to the people who could not flee their neighborhoods because the 3 routes of exit were blocked by traffic or fire. They fled into the ocean with their terrified children, dogs and horses. Three people were burned to death trying to flee in their cars. A "long time ago", Mr. Reyes?

Regarding the CPUC, the communications problem the CPUC is actually correcting has nothing to do with the cause of either the Malibu Canyon or Woolsey Fires. Hundreds of residents in Malibu lost their homes because the promised communication from cell towers was absent. Edison cut the power because of the Santa Anas, and because 88% of 911 calls come in on cellular devices, the vast majority of people calling the fire department for help could not get a call out on their cell phones. Without backup batteries, towers with no power do not work. The carriers took backup batteries out of their cell towers because they are expensive. The CPUC is making the carriers put those backup batteries or an equivalent back in. But structural and electrical engineering problems with the carriers appear to be the cause of both Malibu Canyon Fire and the Woolsey Fire. When the criminal investigation on the Woolsey Fire has been completed, we will know exactly what started it.
3. Verizon's Mr. Reyes said, "California residents will be safer because it will be easier to call 911."

No. This is a distortion of what's really going on. I will repeat that the 5G buildout does very little to facilitate voice except for a few select customers who are paying more; it's a complicated explanation but the majority of the bandwidth will facilitate a small number of people in the beginning. So overall the 5G buildout that is being offered in this bill is not for enhanced or improved voice communication. Let's talk a little bit about cell towers in the midst of a crisis. I gave the example above of the residents desperately trying to call 911 when their houses were on fire and they couldn't get a call out because the power had been cut, and thus the towers did not work.

The CPUC fix has nothing to do with the cause of either the Malibu Canyon or the Woolsey fires. But the CPUC is addressing the carrier's failure to back up their own cell towers. What the CPUC mandated is that as of January 2021 all the carriers had to have a backup plan in place. Right now the CPUC is reviewing those plans and as of January 2022, every single cell tower – macro, micro, small cell & antenna – will have to have 72-hour backup when the power is cut. The letters opposing the backup communication "Resiliency Plan" that have been submitted by the carriers and the CTIA, the lobbying arm of the telecommunications industry, are very interesting to read. No one opposed the Resiliency Plan more than telecom. Yet Mr. Reyes claims with 5G everyone will be safer because they will be able to 911? False. The ability to call 911 when the power is cut will soon be thanks to the California Public Utilities Commission (CPUC), not to telecom. Perhaps telecom never should have cut costs by doing away with backup batteries in the first place.

It is ironic that Verizon's lobbyist Mr. Reyes was asked for answers to my statements that cell towers were fire risks. Every response he gave was inaccurate. I would like to have had rebuttal time and told the senators that on April 8, 2021 it was announced that 2.5 million Verizon hotspots, many of which went to schools and families for remote connectivity, have been recalled as fire risks.

WHITE PAPER: Along with electrical engineer Tony P. Simmons, PE, I have written a white paper on cell tower fires for the Malibu Mayor, City Council and Planning Commission. They are trying to be proactive about stopping cell tower fires in their fire prone city. Mr. Simmons and I have been consulting with them for nine months. AB 537 eliminates the opportunity for this sort of local attention to fire prevention.

SETBACKS: One of the things Mr. Simmons and I emphasized was the need for local control in determining setbacks. When these cell towers catch fire, and some of them will, they will be blazing in people's front yards if we can't control the placement at the local level. Families need room to escape; schoolchildren need space and time to escape the inevitable fires that will occur in cell towers. Each city/county in the state has its own fire risks. Only the localities know which parts of their cities are the most fire prone and the hardest for firefighters to access. Sacramento does not. Cell tower placement on a "one-size-fits-all" mandatory basis is a recipe for disaster.
INSURANCE/LIABILITY: The telecom industry fails to adequately insure the cities against the cost of these fires. Telecom says they are self-insured but most of the time they go into the cities with shell corporations that have no assets and so they may pay out a few million dollars but that is a tiny drop in a vast ocean. They will declare bankruptcy for that LLC and move on to the next city & repeat the same process. What is the cost-benefit ratio of building out an infrastructure that does not close the Digital Divide and brings us more fire risk and infinitely more financial risk & liability to the cities and to the state???

If you have any questions, please feel free to contact me directly.

Respectfully,

[Signature]

SUSAN FOSTER
Utility & Fire Prevention Consultant
Medical Writer
Honorary Firefighter, San Diego Fire Department
susan.foster04@gmail.com