

Congress of the United States
House of Representatives
Washington, DC 20515-3003

195

March 28, 2019

The Honorable Ajit Pai
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Dear Chairman Pai,

I write to you regarding the Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment order, the public health concerns surrounding 5G technologies, questions surrounding the safety measures taken by your agency prior to implementation of this technology and the role of local governments in overseeing deployment and retaining control over infrastructure and rights-of-way in their communities.

As you know, current regulations governing radiofrequency (RF) safety were put in place in 1996 and have not yet been reassessed for newer generation technologies. Currently, the FCC's specific absorption rate (SAR) limits only apply to devices operating at frequencies up to 6.0 GHz. However, 5G technology operates at frequencies at and exceeding 24 GHz, which requires numerous small cell sites to be densely installed close to homes, schools, and workplaces. Despite the close proximity to sensitive areas where these high-band cells will be installed, little research has been conducted to examine 5G safety. The FCC has admitted, "the SAR probe calibration, measurement accuracy, tissue dielectric parameters and other SAR measurement procedures required for testing recent generation wireless devices need further examination".¹

On November 14, 2018 the FCC initiated an auction for 28 GHz and 24 GHz bands.² The deployment of these cells continues today despite little knowledge of the long-term health outcomes of this technology. Lacking existing studies into the human impact of high-band 5G cells, further investigation is needed to ensure that elevated RF levels in new locally deployed small cell sites will not be a health risk to communities on the ground.

As you know, the FCC's Declaratory Ruling on September 26, 2018 made several regulatory changes to local governments' ability to administer the rollout of 5G technology.³ These changes

¹ Federal Communications Commission, Office of Engineering and Technology, Laboratory Division, "SAR Measurement Requirements for 100 MHz TO 6 GHz"

https://apps.fcc.gov/kdb/GetAttachment.html?id=RUMcMDL7fmDLsdRSsbCNoA%3D%3D&desc=865664%20D01%20SAR%20Measurement%20100%20MHz%20to%206%20GHz%20v01r04&tracking_number=28242

² Federal Communications Commission, "AUCTIONS OF UPPER MICROWAVE FLEXIBLE USE LICENSES FOR NEXT-GENERATION WIRELESS SERVICES", Public Notice, FCC-18-109, August 3, 2018,

<https://docs.fcc.gov/public/attachments/FCC-18-109A1.pdf>

³ Federal Communications Commission, "Declaratory Ruling and Third Report and Order", FCC 18-133, September 26, 2018.

include restrictions on how towns and cities review small cell deployment applications, a new “shot-clock” that opens up local governments to lawsuits from 5G providers after 60 days without a final decision on a small cell application, and a cap on the fees that cities can charge for filing deployment applications. A city’s ability to regulate and manage 5G deployment is essential to protecting the health, safety and welfare of its residents.⁴

I have heard from a number of my constituents in Lavallette, New Jersey who are worried about the deployment of small cell 5G networks in their neighborhoods. Specifically, my constituents worry that FCC has failed to thoroughly explore all potential safety concerns regarding 5G technologies for human exposure. They are also concerned that local government possess little power to oversee and influence the deployment process. In order to ensure that my constituents are aptly educated on 5G’s potential impacts on public health, I would appreciate your response to the following questions:

1. What recent, independent scientific studies demonstrate the safety of 5G technologies?
2. Has the FCC or any other agency conducted research into potential long-term health outcomes of repeated exposure to radiofrequencies similar to those present in high-band 5G cells? If so, what were the results of such study?
3. Have any 5G telecommunications service providers conducted studies into the long-term health outcomes of repeated exposure to radiofrequencies similar to those present in high-band 5G cells? If so, what were the results of such study?
4. How are the FCC and 5G service providers working with local governments and municipalities to address citizens’ concerns concerning 5G implementation?
5. What procedure exists for residents to file complaints with the FCC regarding the installation of small cell 5G sites in their neighborhoods?

In order to ensure accurate and swift communication of information to my constituents regarding this issue, I respectfully request a prompt response to these questions.

I look forward to hearing from you on this important matter.

Sincerely,



Andy Kim
Member of Congress

CC: The Honorable Michael O’Rielly, Commissioner, Federal Communications Commission
The Honorable Jessica Rosenworcel, Commissioner, Federal Communications Commission
The Honorable Brendan Carr, Commissioner, Federal Communications Commission
The Honorable Geoffrey Starks, Commissioner, Federal Communications Commission

<https://docs.fcc.gov/public/attachments/FCC-18-133A1.pdf>

⁴ City of Philadelphia Law Department, “Comments of the City of Philadelphia”, September 19, 2018

[https://ecfsapi.fcc.gov/file/109192671202479/City%20of%20Philadelphia%20Comments%20to%20Draft%20Declaratory%20Ruling%20and%20Third%20Report%20and%20Order%20\(WT%2017-79%3B%20WC%2017-84.pdf](https://ecfsapi.fcc.gov/file/109192671202479/City%20of%20Philadelphia%20Comments%20to%20Draft%20Declaratory%20Ruling%20and%20Third%20Report%20and%20Order%20(WT%2017-79%3B%20WC%2017-84.pdf)



FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON

OFFICE OF
THE CHAIRMAN

April 30, 2019

The Honorable Andy Kim
U.S. House of Representatives
1516 Longworth House Office Building
Washington, D.C. 20515

Dear Congressman Kim:

Thank you for your correspondence concerning radiofrequency (RF) issues and for sharing your views about the potential impact of 5G deployment on RF exposure. Please be assured that the Federal Communications Commission places a high priority on the safety of wireless services and devices and relies upon verified engineering and scientific data as we carry out our mission.

As an initial matter, the FCC relies on the expertise of health and safety agencies and organizations with respect to appropriate levels of RF exposure. Our current RF exposure limits incorporate recommendations from the U.S. Environmental Protection Agency, the U.S. Food and Drug Administration, and other federal health and safety agencies. And these limits are derived from exposure limits recommended by the Institute of Electrical and Electronics Engineers, Inc. and the National Council on Radiation Protection and Measurements. Both these institutions have extensive experience and knowledge in RF-related issues and have spent a considerable amount of time evaluating published scientific studies that can inform appropriate exposure limits.

Importantly, the FCC has an ongoing rulemaking related to this matter. Specifically, the FCC adopted a Report and Order, Further Notice of Proposed Rulemaking, and Notice of Inquiry in 2013. The Report and Order resolved several issues related to measurements and exemptions raised, reevaluating some and modifying them to reflect the latest information available and usage and deployment patterns. The Further Notice of Proposed Rulemaking sought comment on further changes to our rules. And the Notice of Inquiry sought public input on whether our basic RF exposure limits should be revisited. The record in the proceeding is voluminous, with over one thousand filings (totaling more than 20,000 pages). FCC staff is considering all of this evidence as it determines whether and in what way changes to our rules in this area should be made.

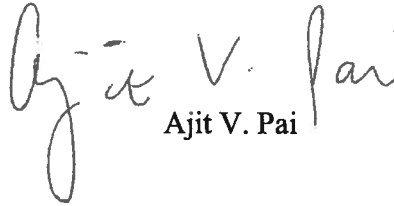
I also would note that we have sponsored groups of congressional staffers at our Columbia, Maryland testing facilities to see and speak with our engineers and technicians as they operate the RF testing equipment to ensure proper compliance with engineering standards. Earlier this year, more than 20 staffers attended our program and we hope to have another group

Page 2—The Honorable Andy Kim

visit this coming summer. My staff would be happy to invite your staff to our next scheduled program.

Please let me know if I can be of further assistance.

Sincerely,

A handwritten signature in cursive script that reads "Ajit V. Pai". The signature is written in dark ink and is positioned to the left of the printed name.

Ajit V. Pai