

# United States Senate

WASHINGTON, DC 20510

November 5, 2019

The Honorable Ajit Pai  
Chairman  
Federal Communications Commission  
445 12<sup>th</sup> Street SW  
Washington, DC 20554

Dear Chairman Pai:

As the Federal Communications Commission (FCC or Commission) reviews public comments on its Notice of Proposed Rulemaking to allow the use of unlicensed technologies to expand wireless broadband access in the 6 GHz spectrum band, we ask for your thorough and thoughtful review of the proposal to protect critically important incumbent users. We ask that you assure the continued reliability of these uses, and not allow unlicensed use of the band unless FCC rules ensure protection against harmful interference to the microwave facilities that these industries depend on for critical services.

Since the FCC first proposed opening the band to unlicensed use in October 2018, we have heard from critical infrastructure industries (CII) of all kinds, including electric, water, and natural gas utilities. These entities are concerned that the proposal does not protect their mission-critical systems located in the band from harmful interference caused by unlicensed use. As these entities provide critical, life-sustaining services, it is essential that the FCC protects these industries from harmful interference and continues to reserve the band for these licensed operations if the Commission cannot ensure such protection.

Most recently, the Department of Energy's Assistant Secretary Bruce Walker has written you, Acting National Telecommunications and Information Administration Administrator Diane Rinaldo, and NTIA Deputy Administrator of the Office of Spectrum Management Peter Tenhula regarding the Department's concerns about this proceeding noting that "secure communications is a mission critical operational function for the energy and water industries and must be protected." DOE respectfully requests "consideration of other spectrum bands (outside of the 6 GHz) that could be utilized to increase public WiFi capabilities and not risk interference and thus the reliability of our Nation's power and water industries." Given the importance of these industries, DOE goes so far as to request "dedicated spectrum" for these industries.

Electric, water, and natural gas utilities use the 6 GHz band for mission-critical communications, including routine reliability monitoring, emergency response, storm restoration, and situational awareness. The 6 GHz band is well-suited to provide utilities and other CII with the long-distance, high-speed communications these essential services require. Harmful interference to these systems reduces a utility's ability to respond to problems or abnormalities on their grids, reducing their situational awareness and potentially compromising reliability. If this band can no longer be relied upon for these functions, this would be akin to removing a tried and tested tool from a utility's toolbox to manage reliability and resilience of the grid.

Although the FCC has proposed a mitigation tool to protect these and other CII from harmful interference, this tool has not been tested and remains theoretical. Given the criticality of electricity, water, and natural gas services to our economy and lifestyles, it is bad policy to put these systems at risk. Utilities already plan their systems to withstand all kinds of hazards, including high-risk, low-probability events. The 6 GHz band is a major part of our utilities' playbook for responding to these challenges, and this proposal puts this playbook at risk unless you can ensure protection from harmful interference.

As this rulemaking proceeds, we encourage the FCC to ensure that incumbent CII will be protected from harmful interference before taking further action. Doing so requires sufficient, rigorous testing of the proposed mitigation measures before any final decision is made.<sup>1</sup> The FCC should only open the band to wireless broadband services if it determines that mitigation mechanisms will succeed, and it should insist that any particular mitigation approach be submitted for certification to the FCC before it is allowed to operate.

We are well aware of the need to make more spectrum available to meet our nation's wireless needs. Spectrum is a finite resource and we appreciate the Commission's continued efforts to make efficient and effective use of this resource. However, the Commission must ensure it will protect the CII users in the 6 GHz band before moving forward, as many of these CII incumbents do not have alternatives to the band. The proponents of opening the band do have numerous alternative bands to promote wireless development.

As this proceeding demonstrates, the FCC's spectrum policies can have a profound impact on industries outside the Commission's typical purview. It is imperative that the FCC take a broader view of its decisions to ensure that our most critical industries are not harmed.

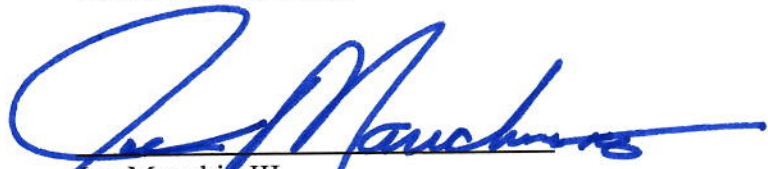
Thank you, and we look forward to your response.

Sincerely,

  
James E. Risch  
United States Senator

  
Mike Crapo  
United States Senator

  
Mazie K. Hirono  
United States Senator

  
Joe Manchin III  
United States Senator


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<sup>1</sup> September 3, 2019 Letter from Bruce Walker Assistant Secretary for the Office of Electricity at the United States Department of Energy to Federal Communications Commission Chairman Ajit Pai, 6 GHz





David A. Perdue  
United States Senator



Shelley Moore Capito  
United States Senator



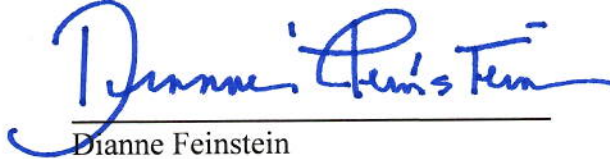
James M. Inhofe  
United States Senator



James Lankford  
United States Senator



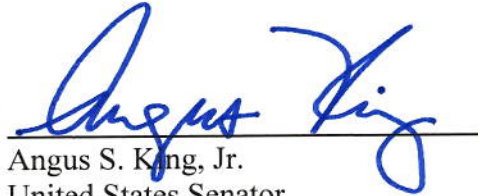
Kevin Cramer  
United States Senator



Dianne Feinstein  
United States Senator



John Kennedy  
United States Senator



Angus S. King, Jr.  
United States Senator

cc: Honorable Michael O'Rielly  
Honorable Brendan Carr  
Honorable Jessica Rosenworcel  
Honorable Geoffrey Starks