

**Protecting Public Power Communications Systems in the 6 GHz Spectrum Band**

1 Electric utilities typically own and operate their own communications systems (wireline and wireless) for  
2 mission-critical operations throughout the electric system. These private communications networks are  
3 designed to remotely control and monitor transmission, generation, and distribution assets to ensure the  
4 safe and reliable delivery of power to homes, businesses, and communities. Many electric utilities,  
5 including public power utilities, rely on the 6 gigahertz (GHz) band of spectrum for wireless  
6 communications to operate their critical electric infrastructure. In 2020, the Federal Communications  
7 Commission (FCC or Commission) adopted a rule to allow the operation of unlicensed devices in this  
8 band despite the strong concerns of radio frequency interference to critical infrastructure communications  
9 using the band. Since the 2020 Report and Order, the Commission has adopted two more orders which  
10 further expanded unlicensed operations in the 6 GHz band, and it has issued various waivers to further  
11 facilitate unlicensed operations in the band, as well.

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13 Electric utilities are subject to mandatory reliability standards issued by the North American Electric  
14 Reliability Corporation (NERC) and enforced by the Federal Energy Regulatory Commission (FERC).  
15 They rely on their communications systems to ensure their compliance with these reliability standards.  
16 Any delay or degradation of communications signals on communication systems used by electric utilities  
17 in the 6 GHz band could lead to the disruption of power delivery and/or threaten the safety of workers and  
18 customers. Thus, utility communications must not experience harmful interference from unlicensed  
19 devices in the 6 GHz band and must maintain communications reliability to ensure the safe, reliable, and  
20 secure delivery of electric power and to comply with the FERC/NERC reliability standards.

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22 In October 2018, the FCC issued a Notice of Proposed Rulemaking (NPRM) to open the 6 GHz band to  
23 unlicensed spectrum sharing. The FCC stated in the NPRM, “proposed rules will allow a valuable  
24 spectrum resource to be more intensively used to benefit consumers while allowing the existing licensed  
25 uses of the 6 GHz band to continue uninterrupted.” To address interference concerns, the FCC proposed  
26 use of an “automated frequency coordination (AFC)” system to mitigate any potential interference. AFC  
27 is a technology that has not yet been shown under real-world conditions to protect licensed users in the  
28 band from harmful interference by unlicensed devices. Many commenters in the proceeding, including the  
29 American Public Power Association (APPA) and other electric, gas, and water utility trade associations  
30 expressed strong opposition to allowing unlicensed operations in the band. In addition, the Department of  
31 Energy, FERC, and members of Congress expressed their concerns to the Commission on the potential  
32 impacts of unlicensed devices on critical utility communications networks and asked the Commission to

33 conduct real-world testing of AFC technology before allowing spectrum sharing in the band.  
34 Unfortunately, the FCC adopted the order, ignoring the concerns of industry and other regulators. Further,  
35 the Commission has allowed the operation of hundreds of millions of devices that utility studies have  
36 shown cause interference.

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38 **NOW, THEREFORE, BE IT RESOLVED:** That the American Public Power Association (APPA) has  
39 serious concerns with the Federal Communications Commission’s (FCC or Commission) policies  
40 allowing unlicensed devices to operate in the 6 gigahertz (GHz) spectrum band that can cause harmful  
41 interference to licensed private utility communications networks that are used to control and monitor  
42 transmission, generation, and distribution assets to ensure the safe and reliable delivery of power to  
43 homes, businesses, and communities; and

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45 **BE IT FURTHER RESOLVED:** That APPA believes the FCC must continue to conduct real-world  
46 testing of automated frequency coordination (AFC) technology to ensure unlicensed devices operating in  
47 the 6 GHz band do not cause harmful interference to licensed utility communications networks operating  
48 in the band; and

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50 **BE IT FURTHER RESOLVED:** That APPA would oppose future orders issued by the Commission that  
51 would further expand the operation of unlicensed devices in the 6 GHz band without demonstrating  
52 harmful interference to utility communications in real-world conditions will not occur.