

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of:)
)
Wireless Telecommunications Bureau Seeks) WT Docket No. 15-300
Comment on AT&T Request for Waiver to)
Permit Power Spectral Density Model for 800)
MHz Cellular Operations in Eight Markets in)
Kentucky and Tennessee)

**COMMENTS OF
THE NATIONAL PUBLIC SAFETY TELECOMMUNICATIONS COUNCIL**

The National Public Safety Telecommunications Council (NPSTC) submits these Comments in response to the Commission’s Public Notice in the above-captioned proceeding concerning AT&T’s request for waiver to operate with a Power Spectral Density of up to 250 watts/MHz in non-rural areas and 500 watts/MHz in rural areas.¹ AT&T has requested a grant of its waiver request pending the outcome of a related rulemaking proceeding which proposes changes to the rules for the cellular service.² NPSTC recommends the Commission address changes to a cellular service power limit rules through the rulemaking proceeding and not through waiver requests. However, should the Commission decide to grant AT&T’s waiver request, NPSTC urges that the waiver include conditions similar to those the Commission attached to previous grants in Missouri and Kansas, plus a condition requiring AT&T to compensate public safety entities for their time and expenses involved in investigating and resolving any interference that occurs.

¹ Public Notice DA 15-1397, WT Docket No. 15-300, released December 11, 2015.

² Report and Order and Further Notice of Proposed Rulemaking, Amendment of Parts 1 and 22 of the Commission’s Rules with Regard to the Cellular Service, Including Changes in Licensing of Unserved Areas, WT Docket No. 12-40, Released November 10, 2014.

The National Public Safety Telecommunications Council

The National Public Safety Telecommunications Council is a federation of public safety organizations whose mission is to improve public safety communications and interoperability through collaborative leadership. NPSTC pursues the role of resource and advocate for public safety organizations in the United States on matters relating to public safety telecommunications. NPSTC has promoted implementation of the Public Safety Wireless Advisory Committee (PSWAC) and the 700 MHz Public Safety National Coordination Committee (NCC) recommendations. NPSTC explores technologies and public policy involving public safety telecommunications, analyzes the ramifications of particular issues and submits comments to governmental bodies with the objective of furthering public safety telecommunications worldwide. NPSTC serves as a standing forum for the exchange of ideas and information for effective public safety telecommunications.

The following 16 organizations participate in NPSTC:

- American Association of State Highway and Transportation Officials
- American Radio Relay League
- Association of Fish and Wildlife Agencies
- Association of Public-Safety Communications Officials-International
- Forestry Conservation Communications Association
- International Association of Chiefs of Police
- International Association of Emergency Managers
- International Association of Fire Chiefs
- International Municipal Signal Association
- National Association of State Chief Information Officers
- National Association of State Emergency Medical Services Officials
- National Association of State Foresters
- National Association of State Technology Directors
- National Council of Statewide Interoperability Coordinators
- National Emergency Number Association
- National Sheriffs' Association

Several federal agencies are liaison members of NPSTC. These include the Department of

Homeland Security (the Federal Emergency Management Agency, the Office of Emergency Communications, the Office for Interoperability and Compatibility, and the SAFECOM Program); Department of Commerce (National Telecommunications and Information Administration); Department of the Interior; and the Department of Justice (National Institute of Justice, CommTech Program). In addition, Public Safety Europe is also a liaison member. NPSTC has relationships with associate members, the Canadian Interoperability Technology Interest Group (CITIG) and the Utilities Telecom Council (UTC), and affiliate members: the Alliance for Telecommunications Industry Solutions (ATIS), Open Mobile Alliance (OMA), Telecommunications Industry Association (TIA), and TETRA Critical Communications Association (TCCA).

Background

On December 1, 2015, AT&T filed a request for a waiver of Section 22.913 of the Commission's rules to permit the use of Power Spectral Density ("PSD") measurements in complying with the Commission's radiated power limits, for certain 800 MHz band Cellular Service operations in eight markets in Kentucky and Tennessee. AT&T requested the waiver, pending the outcome of the ongoing rulemaking proceeding to modify the rule. As part of its waiver request, AT&T proposed a PSD limit of 250 watts/MHz in non-rural areas and 500 watts/MHz in rural areas. In issuing the Public Notice seeking comment on the AT&T waiver request, the Commission notes that AT&T included a study that "purports to show that implementing PSD-based power limits in the Cellular Service would not cause harmful interference to public safety deployments."³ The Commission seeks comment on the AT&T

³ Public Notice at page 1.

waiver request, "...particularly with respect to any potential adverse impact on public safety operations in the adjacent bands ..."⁴

The related Further Notice of Proposed Rulemaking (FNPRM), yet to be resolved, addresses multiple technical issues surrounding power limits for 800 MHz band cellular systems and the potential for interference to public safety operations in adjacent spectrum. Central to the discussion are proposals to increase power levels in rural areas, to implement power spectral density (PSD) limits and/or to incorporate power flux density (PFD) limits in the vicinity of cellular base stations. Questions are also on the table whether power limits should be applied per emission or channel, per transmitter, per sector, or for the entire cellular base station, and whether power limits should be based on average or peak values.

NPSTC notes that this is the third waiver request from AT&T which seeks to use power spectral density limits in advance of the outcome of the related FNPRM.⁵ The three requests are very similar in nature; the first request for four areas in Missouri; the second request for seven areas in Kansas and this latest third request for 8 areas in Kentucky and Tennessee. In essence, both the current and previous waiver requests appear to be aimed at circumventing the Commission's decision-making process in the related rulemaking proceeding.

On October 2, 2015, the Commission granted the waiver request filed by AT&T to operate under a Power Spectral Density (PSD) model with increased power levels in certain Missouri counties covering four cellular markets.⁶ A similar grant was issued subsequently for certain markets

⁴ Public Notice at page 2.

⁵ NPSTC Comments to the previous waiver request for four cellular markets in Missouri were submitted April 30, 2015 in response to Public Notice DA 15-431, WT Docket No. 15-86, released April 10, 2015. Similarly, NPSTC submitted Comments to the previous waiver request for 7 cellular markets in Kansas were submitted July 1, 2015 in response to Public Notice DA 15-691, WT Docket No. 15-130, released June 11, 2015.

⁶ Commission letter to Robert Vitanza, Esq. of AT&T Services, DA 15-1122, dated October 2, 2015.

in Kansas.⁷ The Commission's waiver decisions noted NPSTC's comments and stipulated specific conditions as part of the waiver grants. In doing so, the Commission stated "...the conditions we impose will help ensure that public safety systems and neighboring Cellular licensees will be protected from increased harmful interference from AT&T's operations using the PSD model."⁸ While the conditions were not identical to the ones NPSTC had requested, they did address notification up-front to public safety 800 MHz licensees within 113 km of the relevant AT&T sites and immediate action that must be taken should AT&T receive an interference complaint from an 800 MHz Public Safety licensee.

NPSTC Recommendations

In its reply comments to the FNPRM, NPSTC recommended the Commission adopt a PFD limit to help control the ground-level signal in the vicinity of cellular towers.⁹ It is generally in the vicinity of cellular towers that public safety and other land mobile operations have the greatest potential to suffer from interference from the 800 MHz band cellular service. While not recommending a specific PFD, NPSTC noted the limit should be sufficient to minimize the risk of interference to public safety mobiles and portables in the vicinity of cellular base stations.

As noted above, the rulemaking proceeding has a significant degree of complexity surrounding the specification of PFD or PSD limits, beyond merely the numerical limit value. These include issues of whether power limits should be applied per emission or channel, per transmitter, per sector, or for the entire cellular base station, and whether power limits should be based on average or peak values.

⁷ Commission letter to Robert Vitanza, Esq. of AT&T Services, DA 15-1482, dated December 22, 2015.

⁸ Waiver grant letter to AT&T Services at page 6.

⁹ NPSTC Comments in WT Docket No. 12-40, dated February 20, 2015.

In its reply comments to the FNPRM, NPSTC also recommended retaining the current interference reporting and mitigation process contained in Parts 22.970-22.973 of the cellular service rules. Further, should interference situations occur despite technical rules adopted in this proceeding, cellular operators need to work cooperatively and expeditiously with impacted public safety entities to eliminate the interference. Finally, in its Reply Comments, NPSTC advised that even when steps are taken to mitigate interference after-the-fact, public safety can incur significant unfunded costs in the process of working with a cellular licensee to investigate and resolve the situation. Accordingly, NPSTC recommended amending Part 22 of the rules to specify that cellular licensees be held responsible for legitimate costs incurred by Part 90 licensees in the process of interference abatement.

NPSTC recommends the Commission deny AT&T's waiver request and take the same action on any similar waiver request that might be submitted during the pendency of the rulemaking proceeding. Given the technical complexity of issues in the FNPRM, the real concern about potential interference to public safety systems from the 800 MHz band cellular service and the need for new rules to ensure Part 90 licensees are fairly compensated for expenses incurred as part of investigating and resolving interference from cellular service operations, NPSTC recommends against jumping ahead of rulemaking process with such waivers.

However, should the Commission decide to grant AT&T's waiver request despite these concerns, NPSTC recommends the waiver be conditioned similarly to the waiver grant the Commission provided AT&T for four market areas in Missouri, plus an added condition that AT&T must compensate Part 90 licensees for expenses incurred as part of investigating and resolving interference from cellular service operations. Following is a summary of the conditions the Commission attached to the waiver grants for four market areas in Missouri and seven market areas in Kansas , which address both notification to Public Safety licensees before AT&T deployment and

actions which must be taken following deployment should Public Safety licensees report interference.¹⁰

- Before operating at the increased power limit, AT&T must provide a minimum of 30 days written advance notice to any 800 MHz PS licensee within 70 miles of the proposed AT&T station;
- The notice must contain a description of the station's location and contact information so that the public safety entity can notify AT&T of any interference;
- The public safety licensee can request additional information about the proposed base station such as coordinates and HAAT;
- Any 800 MHz PS licensee operating within 70 miles can file an objection to AT&T use of the higher power levels by informing AT&T in writing and filing a written objection with the FCC;
- At all times while operating at the increased power limit, AT&T must have express written consent or non-objection from all 800 MHz PS licensees within 70 miles of any station operating at a higher power level; and
- If AT&T receives an interference complaint from a public safety licensee, it must immediately mitigate the interference or if AT&T is determined to be the cause of the interference, cease operation until the interference is remedied.

NPSTC prefers the Commission await the outcome of the rulemaking proceeding instead of granting waivers on the power level issues. Preventing interference upfront instead of resolving it after-the-fact is far preferable, especially for public safety communications where disruptions can be life-threatening. Going forward, preventing interference at the outset will be especially important in an environment where the Commission plans to make some reductions in field office facilities and staff. Should the Commission decide to grant AT&T's waiver request despite these concerns, the conditions above would provide public safety licensees advance notification and some assurance of relief if interference occurs.

¹⁰ The actual full text of these conditions which should be carried over to any waiver grant for the requested markets in Kentucky and Tennessee appear in the October 2, 2015 waiver grant letter on pages 7 and 8.

Conclusion

NPSTC appreciates the Commission's consideration of the potential for interference to public safety operations as it addresses AT&T's request for waiver of the rules. This is the third waiver requests AT&T has submitted in an apparent attempt to jump ahead of the related rulemaking process. NPSTC recommends the Commission deny AT&T's request and any similar waiver requests that may be filed during the rulemaking. In NPSTC's view, issues surrounding cellular service power limits should be resolved in the ongoing rulemaking proceeding, not in advance through the waiver process.

However, should the Commission decide to grant AT&T's request for waiver in certain markets in Kentucky and Tennessee, NPSTC urges that the waiver include specific conditions similar to those the Commission attached to the previous grants for certain markets in Missouri and Kansas, plus a condition requiring AT&T to compensate public safety entities for their time and expenses involved in investigating and resolving any interference that occurs.

Ralph A. Haller, Chairman



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