

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
)	
Alaska Communications Internet, LLC)	ET Docket No. 18-282
Petition for Partial Waiver of Section)	
15.407(a)(3) of the Commission's Rules)	

COMMENTS OF GCI COMMUNICATION CORP.

GCI Communication Corp. (“GCI”) submits the following comments in opposition to the Petition for Partial Waiver (the “Petition”) filed by Alaska Communications Internet, LLC (“Alaska Communications”) in the above-referenced proceeding.¹ The Petition asks the Federal Communications Commission (“FCC” or “Commission”) to allow Alaska Communications to deploy and operate Radwin base station radios that employ beamforming technology to emit a series of directional beams that form individual directional connections, sequentially or simultaneously, with individual receivers or groups of receivers at effective isotropic radiated power (“EIRP”) levels that exceed the Section 15.407(a)(3) limits otherwise applicable to point-to-multipoint Unlicensed National Information Infrastructure (U-NII) devices in the 5.725-5.85 GHz band. For the reasons set forth below, GCI urges the Commission to reject the Petition.

GCI, through its subsidiaries, covers more of Alaska’s population through its telecommunications network than any other provider in the State. GCI, like Alaska Communications, provides a wide breadth of coverage across the entire state, particularly in under-or otherwise entirely un-served remote rural areas. GCI’s longstanding familiarity with

¹ Petition for Partial Waiver of Alaska Communications Internet, LLC, ET Docket No. 18-282 (filed September 6, 2018)(the “Petition”).

the unique demands of the Alaskan marketplace and environment contributed to the development and deployment of the largest broadband network in Alaska and provide GCI with a one-of-a-kind understanding of the Petition. While GCI understands and respects Alaska Communications' interest in finding an innovative approach to provide service to unserved Alaskans, the Petition's vague, overly broad request circumvents an existing proceeding on the topic and fails to meet the standard for review. Alaska Communications cannot be allowed to bulldoze the other users in a shared band, effectively turning an unlicensed band into a band "licensed" to one provider via a waiver.

I. The Petition Circumvents FCC Procedure and Oversimplifies FCC Rules

Alaska Communications seeks to obtain a waiver for use of RADWIN U-NII base station radios. RADWIN sought a petition for rulemaking to increase the allowed EIRP levels in the UNII-3 band (the "Radwin Petition").² The Petition circumvents this existing proceeding, in which a variety of parties raised a myriad of concerns.³ NCTA, for example, urged the Commission to carefully evaluate the potential interference impact of the rule changes on widely deployed Wi-Fi operations in the 5 GHz band.⁴ Prior to granting the Petition, the FCC must properly evaluate Radwin's request in a rulemaking proceeding, vetting the concerns raised by Globalstar, Inc., the National Association for Amateur Radio, the National Public Safety

² RADWIN LTD. Petition for Rulemaking Regarding Amendment of Part 15 of the Commission's Rules to Advance Improved Broadband Services in the U-NII-1 and U-NII-3 Bands, RM-11812, at 2, 4 (filed June 18, 2018) ("Radwin Petition"). *See also* Petition at 9-11.

³ *See, e.g.*, Opposition of GlobalStar, Inc., RADWIN LTD. Petition for Rulemaking Regarding Amendment of Part 15 of the Commission's Rules to Advance Improved Broadband Services in the U-NII-1 and U-NII-3 Bands, RM011812 (raising open questions regarding noise floor and the inner workings of nearby bands that need to be resolved prior to grant of ACS's petition).

⁴ Comments of NCTA-The Internet & Television Association Comments on Petition for Rulemaking, RADWIN LTD. Petition for Rulemaking Regarding Amendment of Part 15 of the Commission's Rules to Advance Improved Broadband Services in the U-NII-1 and U-NII-3 Bands, RM011812, at 1 ("[t]he Commission should carefully evaluate the potential interference impact of the rule changes on widely deployed Wi-Fi operations in the 5 GHz band in light of the need for substantial safeguards, and any proposed rule change should exclude simultaneous P2MP transmissions").

Telecommunications Council, and NCTA regarding the increased noise floor and the effect of increased EIRP limits on existing operations in the UNII-3 band, as well as any other comments and concerns that may arise in that proceeding.

Alaska Communications oversimplified, and failed to meet, the standard for waiver. The Petition accurately states that the Commission may waive its rules for “good cause shown.”⁵ Such a request “faces a high hurdle even at the starting gate.”⁶ The Petition’s analysis falls flat, inadequately recognizing the complexity of the waiver standard. For example, the Petition states that the UNII-3 band has “few users or potential users of the band” in “rural and Bush areas of Alaska,” without listing any such users or potential users or providing any analysis of whether the Petition would adversely affect other users of the UNII-3 Band.⁷

In Chena Hot Springs, Ninilchik, and the surrounding areas, as well as throughout the State, GCI operates its Turbozone product using the UNII-3 band to provide Wi-Fi, which is available to GCI customers and the public. Throughout the State of Alaska, GCI’s customers have routers, offered by GCI and from third parties, which use the UNII-3 band in their homes for Wi-Fi. Consumer grade signal boosters, used throughout Alaska although not currently approved for use on GCI’s network, also communicate using the UNII-3 band to amplify wireless service in and around a person’s home to improve such service in remote areas.

The FCC “must explain why deviation better serves the public interest and articulate the nature of the special circumstances to prevent discriminatory application and to put future parties on notice as to its operation” in order to grant the Petition.⁸ The UNII- 3 band is used extensively throughout the State of Alaska among a variety of parties and a diversity of uses.

⁵ Petition at 8.

⁶ Part 68 Waiver Requests of Actiontec Elecs., Inc., 15 F.C.C. Rcd. 20419, 20420–21 (2000)

⁷ Petition at 12.

⁸ *Id.*

GCI uses the UNII-3 band, and has testing in place for new and innovative potential products that use this band. AlasConnect raises similar concerns in this proceeding about its existing use of the UNII-3 Band.⁹ Grant of the Petition would adversely impact other operators and their customers, such as GCI and AlasConnect, by interfering with their use of the UNII-3 Band. The Petition would not “better serve the public interest,” and thus the FCC must reject it.

II. The Petition is a Veiled Attempt to License a Shared, Unlicensed Band

The Petition would allow Alaska Communications to deploy and operate Radwin base station radios at EIRP levels above the Section 15.407(a)(3) limits otherwise applicable to point-to-multipoint U-NII-3 devices. The UNII-3 band as used in Alaska is a prime example of how unlicensed, shared use of spectrum works to bring innovative products to rural America from a variety of providers. The Petition’s request for higher power is equivalent to giving them a “megaphone” in a public venue to drown out other speakers. If the Commission values the innovation that the shared and unlicensed nature of this band allows, it will reject this request to effectively license it via a waiver to Alaska Communications’ in the State of Alaska.

The Petition is vague, overly broad, and unfounded. The Public Notice seeks comment on Alaska Communications’ request to “increase the range of its base stations by using antennas with higher gain than Section 15.407(a)(3) allows in order to reach all unserved customers within a 40-mile radius of Chena Hot Springs and Ninilchik from available equipment towers.”¹⁰ A 40-mile radius of those two areas encompasses very large area, including Kenai, Soldotna, Homer, and even the outskirts of Fairbanks, the second largest city in the State. The Public Notice goes on to note that “this increased range is necessary to meet [Alaska Communications’] Connect

⁹ Comments of AlasConnect, Petition for Partial Waiver of Alaska Communications Internet, LLC, ET Docket No. 18-282 (October 16, 2018).

¹⁰ Public Notice at 1.

America Fund (CAF) Phase II broadband commitment,” meaning that this increased power level could be applied across the State.¹¹ GCI is concerned that the Petition has no clear geographic limit. GCI is very concerned about this proposal as applied to the large geographic area surrounding Chena Hot Springs and Ninilchik. GCI is even more concerned if it may be applied across the State of Alaska.

Alaska Communications’ request is not simple, nor is the equipment with which such request would be put to use. As NCTA points out in response to the Radwin Petition, “[p]oint-to-multipoint base stations that transmit multiple *simultaneous* directional beams, including sectorized antennas like Radwin equipment, can be deployed to cover up to 360 degrees. In this configuration, the interference potential of the device may more closely resemble an omnidirectional antenna, rather than the narrow, directional beams associated with fixed point-to-point systems.”¹² But, even with a point-to-multipoint directional antenna, “[a]llowing such high power operations without appropriate limits presents a significant threat of harmful interference . . .” to incumbent operations.¹³ Granting the Petition will cause uncertainty in this band resulting in users exiting the band, a detriment to innovative services being brought to Alaskans via the UNII-3 band. Operations in the 5 GHz band, like other unlicensed technologies, drive economic growth, “contributing \$525 billion to the U.S. economic in 2017.”¹⁴ Alaska deserves the same opportunity for such growth via a competitive, shared 5 GHz band, not one dominated by (and effectively licensed to) one carrier, Alaska Communications.

¹¹ *Id.*

¹² NCTA Radwin Comments at 2.

¹³ NCTA Radwin Comments at 4.

¹⁴ NCTA Radwin Comments at 5, citing Raul Katz, A 20178 Assessment of the current & Future Economic Value of Unlicensed Spectrum in the United States 1 (Apr. 2018), http://wififorward.org/wp-content/2018/06/WFF_Katz_Economic_Report_2018.pdf.

Alaska Communications argues that it needs the requested waiver to fulfill its Connect America Fund Phase II (“CAF II”) obligations, because any other method of bringing broadband to unserved areas in the State of Alaska is cost prohibitive.¹⁵ GCI understands that providing broadband service to Alaska is particularly challenging. Such challenges include “its remoteness, lack of roads, challenges and costs associated with transporting fuel, lack of scalability per community, satellite and backhaul availability, extreme weather conditions, challenging topography, and short construction season.”¹⁶ GCI must utilize a variety of technologies in order to provide dependable services. This includes using fixed wireless broadband systems in the 5.725-5.85 GHz band in conjunction with its terrestrial mobile networks and fixed satellite service. GCI operates in unison with competitors in the UNII-3 band.

The UNII-3 GHz band provides an unfettered, shared band for Wi-Fi networks and services, which would be hampered, disrupted and ultimately destroyed if the Petition is granted. Unfortunately, the waiver requested is not a suitable solution for Alaska Communications. Rather, the \$19.6 million annually that Alaska Communications and its affiliates have accepted through CAF II will need to be put towards purchasing licensed spectrum at auction or on the secondary market and/or building new towers to use with such spectrum or for use of the UNII-3 band at the allowed EIRP levels.

¹⁵ See ACI Petition at 3-8.

¹⁶ *Connect America Fund; Universal Service Reform – Mobility Fund; Connect America Fund - Alaska Plan*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 10139, 10162, ¶ 72 (2016) (“*Alaska Plan R&O*”)(citing *Connect America Fund et al.*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Rcd 17663, 17829, ¶ 507 (2011) (“*USF/ICC Transformation Order*”), *aff’d sub nom. FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014)).

Grant of the Petition would deem the UNII-3 Band Alaska Communications' exclusive band in the State of Alaska, completely altering the nature of this shared, unlicensed band. Alaska Communications failed to meet the standard for a waiver in this case. And, a proceeding already exists to examine the potential increased EIRP levels to be used with Radwin equipment. The Commission must reject the Petition.

A handwritten signature in black ink, appearing to read "Kara Leibin Azocar", with a long horizontal flourish extending to the right.

Chris Nierman
Kara Leibin Azocar
GCI COMMUNICATION CORP.
1900 L St., NW, Suite 700
Washington, DC 20036

October 22, 2018