

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of)
ST. CROIX, COUNTY OF) File Nos. 0008220219 and 0008220853
Request For Waiver of Sections 90.20(d)(13))
and 90.20(d)(45) of the Commission’s Rules)

ORDER

Adopted: April 24, 2019

Released: April 25, 2019

By the Chief, Policy and Licensing Division, Public Safety and Homeland Security Bureau:

I. INTRODUCTION

1. St. Croix County, Wisconsin (St. Croix) filed two license applications¹ to add frequency 157.450 MHz as a repeater output channel to the base stations comprising its VHF simulcast Private Land Mobile Radio (PLMR) system.² St. Croix seeks a waiver of Section 90.20(d)(13) so it can deploy frequency 157.450 MHz for base-to-mobile voice communications rather than paging transmissions.³ St. Croix also seeks a waiver of Section 90.20(d)(45) so it can operate on the frequency with a maximum transmitter output power of 100 watts.⁴ For the reasons provided below, we grant the request.

II. BACKGROUND

2. In a statement attached to its applications, St. Croix represents that its simulcast system provides public safety dispatching service for “Fire, Emergency Medical Service (EMS), Rescue and Law Enforcement agencies” within the county and that it needs additional capacity to meet the “current and future communication needs” of its users.⁵ St. Croix asserts that frequency 157.450 MHz is the “best choice” for deploying a new repeater output channel at each of the base stations in its county-wide simulcast system.⁶ It contends that frequency 157.450 MHz is a “currently underutilized” channel in and around the county.⁷ For example, it states it found no other licensee operating on frequency 157.450

¹ See ULS applications nos. 0008220219 and 0008220853, filed May 22, 2018 (St. Croix Applications).

² Id. St. Croix’s simulcast network is licensed under call signs WQZN231 and WQZH562.

³ Waiver Request at 3. See 47 CFR § 90.20(d)(13)(limiting operations on frequency 157.450 MHz to one-way paging communications). See also attachment to St. Croix Applications labeled “Waiver Request” at 3.

⁴ See 47 CFR §90.20(45) (limiting licensees operating on frequency 157.450 MHz to a maximum transmitter output power of 30 watts). St. Croix also seeks a waiver of Section 90.20(d)(30) to operate on frequency 157.450 MHz with a bandwidth less than 25 kHz, but such a waiver is unnecessary because licensees may operate on any channel with less than the maximum permitted bandwidth. See Waiver Request at 3.

⁵ Waiver Request at 1.

⁶ Id. at 2.

⁷ Id.

MHz within 100 miles of the county border.⁸ By contrast, St Croix says all other channels considered in its frequency search reflected “heavier usage.”⁹

3. In support of its waiver request, St. Croix contends there is “no better” or “more suitable” frequency within the Public Safety Pool to “fulfill its public safety mission.”¹⁰ It also argues it would be contrary to the public interest to allow frequency 157.450 MHz to “remain unused while a pressing need for its use exists for alternative types of critical public safety communications.”¹¹

4. St Croix includes with its applications a letter from its frequency coordinator, the International Municipal Signal Association (IMSA), confirming that IMSA recommended frequency 157.450 MHz as the best available frequency for St. Croix’s proposed operation.¹² In its letter, IMSA states: “there are no normally-assignable VHF public safety pool frequencies that can be readily assigned as the fourth simulcast base station frequency to [St Croix].”¹³ IMSA says it analyzed channels from the Public Safety pool but found frequency 157.450 MHz “to be the only frequency available in the VHF public safety pool that can successfully meet frequency coordination methods and reasonable equipment/engineering constraints” for assignment at all eleven fixed locations in St. Croix’s simulcast system.¹⁴

5. The Public Safety and Homeland Security Bureau (Bureau) issued a public notice on October 22, 2018 seeking comment on St. Croix’s applications and waiver request.¹⁵ The Bureau asked for comment from any party that would be adversely affected by St. Croix’s proposal to use frequency 157.450 MHz for voice rather than paging transmissions and to operate at 100 watts transmitter output power.¹⁶ The Bureau received no comments in response to its public notice.

III. DISCUSSION

6. To obtain a waiver of the Commission’s Rules, a petitioner must demonstrate either that (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the present case, and that a grant of the waiver would be in the public interest;¹⁷ or (ii) in view of unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.¹⁸ We conclude St. Croix’s request for wavier of Section 90.20(d)(13) should be granted under the second prong of the waiver standard and its request for a waiver of Section 90.20(d)(45) should be granted under the first prong of the waiver standard.

⁸ St. Croix claims that the closest licensee operating on frequency 157.450 MHz is Pine River, Minnesota which operates on the frequency under call sign WQAJ381, 105 miles from the St. Croix County border. *Id.*

⁹ *Id.*

¹⁰ Waiver Request at 3.

¹¹ *Id.*

¹² See attachment to St. Croix Applications labeled “IMSA - Coordinator Statement” (IMSA Statement).

¹³ *Id.* at 1.

¹⁴ *Id.* at 2. IMSA says its analysis of the four best alternative channels to frequency 157.450 MHz revealed that each alternative caused co-channel or adjacent-channel interference concerns relative to incumbent licensees. *Id.* at 1.

¹⁵ *The Public Safety and Homeland Security Bureau Seeks Comment on Two Applications and a Waiver Request Filed by the County of St. Croix, Wisconsin to Use a Paging-Only Channel for Non-Paging Repeater Output Communications*, Public Notice, DA 18-1076 (PSHSB 2018).

¹⁶ *Id.* at 2.

¹⁷ 47 CFR § 1.925(b)(3)(i).

¹⁸ 47 CFR § 1.925(b)(3)(ii).

7. The Commission allocated frequency 157.450 MHz for limited area, hospital one-way paging systems.¹⁹ The Commission made this frequency available exclusively for paging communications because paging transmissions were found to be disruptive to voice communications on regular two-way channels.²⁰ The Commission envisioned medical paging operations in the Special Emergency Radio Service shifting to frequency 157.450 MHz if harmful interference occurred to voice operations on other VHF channels.²¹ To limit the possibility of interference to licensees operating on adjacent channels and to promote frequency reuse, the Commission limited paging operations on frequency 157.450 MHz to a maximum transmitter output power of 30 watts.²² The Commission believed this power level appropriate to accommodate the coverage needs of most hospital campuses.²³

8. *Section 90.20(d)(13)*: In this instance we find St. Croix has no reasonable alternative to deploying frequency 157.450 MHz as an additional repeater output channel if it is to increase the capacity of its simulcast PLMR network. In reaching our conclusion, we find particularly persuasive the statement from St. Croix's frequency coordinator indicating that 157.450 MHz is the best available Public Safety Pool channel for St. Croix to increase capacity since no other VHF Public Safety Pool channel satisfies "frequency coordination methods" and "reasonable equipment/engineering constraints" at all eleven sites in St. Croix's system.²⁴

9. Furthermore, staff performed a database search of licensees operating on frequency 157.450 MHz and found no other licensee operating on the channel within 180 kilometers of the border of St. Croix County.²⁵ As such, St. Croix's proposal to deploy frequency 157.450 MHz as a repeater output channel for voice communications will likely have no negative impact on any licensee currently using the frequency 157.450 MHz for paging operations. We also note that no party objected to St. Croix's applications or waiver request.

10. We find it unduly burdensome for St. Croix to either forego increasing the capacity of its network or for it to deploy a channel which is less than optimal from an interference or engineering perspective when Public Safety Pool frequency 157.450 MHz is available for use and capable of meeting its capacity needs.²⁶ Therefore, we grant St. Croix's request for waiver of Section 90.20(d)(13) and allow it to use frequency 157.450 MHz for voice communications.

11. *Section 90.20(d)(45)*. Having granted St. Croix a waiver to use frequency 157.450 MHz for voice communications, we now turn to its request to operate on the frequency with an output power

¹⁹ *Amendment of Parts 2 and 89 to Allocate 157.450 MHz to the Special Emergency Medical Radio Service for Medical Paging Systems in Hospitals*, Docket No. 19643, RM-1884, Memorandum Opinion and Order and Notice of Proposed Rulemaking, 38 FCC 2d 147, 149 para. 6 (1972); *Amendment of Subpart P, Part 89 of the Commission's Rules (Eligibility of Comprehensive Health Services)*; *Amendment of Parts 2 and 89 of the Commission's Rules to Allocate 157.450 MHz to the Special Emergency Radio Service for Medical Paging Systems in Hospitals*; *Amendment of Parts 2 and 89 of the Commission's Rules and Regulations Relating to Communications for Emergency Medical Services*, Docket 19576 RM-2017; Docket 19643; Docket 19880, Report and Order, 47 FCC 2d 676, 687 para. 36 (1974).

²⁰ *Id.*

²¹ *Id.*

²² *Id.*

²³ *Id.*

²⁴ IMSA Statement at 2.

²⁵ Bureau staff performed a ULS search of licensees operating on frequency 157.450 MHz in both Wisconsin and Minnesota.

²⁶ St. Croix is licensed under call sign WZC738 to operate on frequency 157.450 MHz for paging operations but says it no longer needs the channel for "campus medical paging purposes." Waiver request at 2.

greater than 30 watts. Here we find the underlying purpose of Section 90.20(d)(45) would not be served by application to the present case. As noted above, the purpose of limiting licensees to 30 watts transmitter output power when operating on frequency 157.450 MHz is to reduce the possibility of paging operations causing interference to voice communications on adjacent channels and to promote reuse of the channel. We find the purpose of the restriction does not apply in this case.

12. First, St. Croix intends to use frequency 157.450 MHz for voice rather than paging communications. Therefore, we see little risk of interference to adjacent-channel users from St. Croix's proposal to operate at 100 watts transmitter output power on the channel for voice communications. We note St. Croix's frequency coordinator confirmed the channel satisfies frequency coordination standards at all eleven sites in St. Croix's network.²⁷ We also note St. Croix is already authorized to operate at 100 watts transmitter output power on each of its currently licensed channels without any apparent impact to adjacent-channel users.²⁸

13. Second, we believe St. Croix's operation at 100 watts output power will have little impact on the ability of other licensees to reuse frequency 157.450 MHz for paging operations. Although St. Croix increases the size of its composite contour footprint by operating its base station at 100 watts rather than 30 watts transmitter output power, frequency 157.450 MHz continues to remain available for licensing in most counties outside St. Croix in Wisconsin and neighboring Minnesota.²⁹

14. *Public Interest.* Finally, we find granting St. Croix a waiver of Sections 90.20(d)(13) and 90.20(d)(45) to be in the public interest so St. Croix can add additional capacity to its simulcast network in order to meet the communication needs of the "Fire, Emergency Medical Service (EMS), Rescue and Law Enforcement agencies" which rely on its network for their first responder communications.³⁰

IV. ORDERING CLAUSES

15. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and 303(c) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(c), and Section 1.925 of the Commission's rules, 47 CFR § 1.925, that the waiver request associated with ULS File Nos. 0008220219 and 0008220853 filed by the County of St. Croix, Wisconsin, IS GRANTED and the associated applications SHALL BE PROCESSED accordingly.

²⁷ IMSA Statement at 1.

²⁸ See call signs WQZN231 and WQZH562. Bureau staff is aware of no interference issues stemming from St. Croix's current operations.

²⁹ St. Croix increases the size of its network's composite 21 dBu F(50,10) contour footprint approximately twenty percent by operating its base stations at 100 watts rather than 30 watts transmitter output power. At the increased power, St. Croix's composite 21 dBu F(50,10) contour overlaps completely or partially eleven adjacent counties in Wisconsin and twelve adjacent counties in Minnesota. Nonetheless, frequency 157.450 MHz remains unlicensed in 58 of the 60 counties in Wisconsin and 70 of the 75 counties in Minnesota outside St. Croix's composite contour footprint.

³⁰ Waiver Request at 1.

16. This action is taken under delegated authority pursuant to Section 155(c) of the Communications Act of 1934, as amended, 47 U.S.C. § 155(c) and Sections 0.191 and 0.392 of the Commission's rules, 47 CFR §§ 0.191, 0.392.

FEDERAL COMMUNICATIONS COMMISSION

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