

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

In the Matter of)
)
Amendment of Section 73.622(i),) MB Docket No. 21-9
Post-Transition Table of DTV Allotments,) RM-11872
Television Broadcast Stations)
(Tulsa, Oklahoma))

REPORT AND ORDER
(Proceeding Terminated)

Adopted: September 15, 2021

Released: September 16, 2021

By the Chief, Video Division, Media Bureau:

I. INTRODUCTION.

1. The Video Division, Media Bureau (Bureau), has before it a Notice of Proposed Rulemaking¹ issued in response to a Petition for Rulemaking filed by KTUL Licensee, LLC (Licensee), the licensee of KTUL (ABC), channel 10, Tulsa, Oklahoma (Tulsa). The Licensee has requested the substitution of UHF channel 14 for VHF channel 10 in the DTV Table of Allotments.²

2. The Licensee filed comments in support of the petition, as required by the Commission's rules,³ reaffirming its commitment to apply for channel 14. The Land Mobile Communications Council (LMCC) filed opposition comments,⁴ to which the Licensee filed a reply.⁵ For the reasons set forth

¹Amendment of Section 73.622(i), Post-Transition Table of DTV Allotments, Television Stations (Tulsa, Oklahoma), MB Docket No. 21-9, Notice of Proposed Rulemaking, 36 FCC Rcd 157 (Vid. Div. 2021) (NPRM).

² As noted in the NPRM, on April 13, 2017, the Commission completed the incentive auction and broadcast television spectrum repacking authorized by the Spectrum Act, and the post-incentive auction transition period ended on July 13, 2020. The Bureau will amend the rules to reflect all new full power channel assignments in a revised Table of Allotments, but because the Table has not yet been amended, the Bureau has continued to refer to the Post-Transition Table of DTV Allotments, 47 CFR § 73.622(i) (2018), for the purpose of this proceeding. See NPRM, 36 FCC Rcd at 157, n.1.

³ 47 CFR §§ 1.415, 1.419; see also Buffalo, Iola, Normangee, and Madisonville, Texas, MB Docket No. 07-729, Report and Order, 24 FCC Rcd 8192, 8194, para. 9 (Aud. Div. 2009). Comments of KTUL Licensee, LLC (filed Apr. 7, 2021) (Licensee Comments).

⁴ Opposition Comments of The Land Mobile Communication Council (filed Apr. 9, 2021) (LMCC Opposition).

⁵ Reply Comments of KTUL Licensee, LLC (filed Apr. 26, 2021) (Reply). LMCC filed an ex parte letter in response to the Licensee's Reply. Letter from David D. Smith, President, to Marlene H. Dortch, Secretary, FCC, MB Docket No. 21-9 (filed Apr. 30, 2021) (LMCC Ex Parte).

below, we believe that the Licensee's proposal complies with all pertinent technical rules and that the public interest would be served by substituting channel 14 for channel 10 at Tulsa, Oklahoma. Accordingly, we will substitute channel 14 for channel 10 in the DTV Table of Allotments as requested.

II. BACKGROUND.

3. In the *NPRM*, the Bureau stated that substituting channel 14 for channel 10 at Tulsa warrants consideration. The Licensee explained that the channel substitution would permit KTUL to better serve its viewers, who have experienced reception problems with VHF channel 10.⁶ According to the Licensee, KTUL, as a VHF channel station, has a long history of dealing with severe reception problems, exacerbated by the analog to digital conversion.⁷ In addition, operation on channel 14 would not result in any predicted loss of television service to KTUL viewers, and would result in a substantial increase in signal receivability for KTUL viewers.⁸ The Licensee further stated that with respect to operations on channel 14 and nearby land mobile services, it determined that it can install the appropriate mask filter and antenna needed to avoid interference to land mobile operations.⁹

4. In its Opposition,¹⁰ LMCC states that it represents at least 140 Public Safety (PS) and Industrial/Business (I/B) systems whose UHF operations are authorized pursuant to sections 90.20 and 90.35 of the Commission's rules (rules),¹¹ and which provide essential services to the community.¹² LMCC states that there are "well over 100 land mobile systems authorized within 40 miles of KTUL's site" that could be impacted by KTUL's proposed operation on channel 14,¹³ and opposes the proposed channel substitution because it believes that KTUL's operation on channel 14 at an effective radiated power (ERP) of 1000 kW "poses an unacceptably high risk of causing harmful interference to protected land mobile operations [under section 73.687(e)(4) of the Commission's rules]."¹⁴ LMCC proposes that

⁶ *NPRM*, 36 FCC Rcd at 157, para. 2.

⁷ *Id.*

⁸ *Id.*

⁹ *NPRM*, 36 FCC Rcd at 158, para. 3; *see also* Licensee's Rulemaking Petition at 3 and Engineering Exhibit at 6. In its Rulemaking Petition (LMS File No. 0000127897), the Licensee stated it would use a Dielectric mask filter and submitted data from Dielectric (the antenna mask filter manufacturer), and Rhode & Schwartz (the transmitter manufacturer), demonstrating the effectiveness of the filter in suppressing potential interference to land mobile operations. *See* Reply at 3 and n.7.

¹⁰ LMCC states that it is a non-profit association of organizations representing users of land mobile radio systems, providers of land mobile service, and manufacturers of land mobile equipment. LMCC Opposition at 2.

¹¹ 47 CFR §§ 90.20 (Public Safety Pool), 90.30 (Industrial/Business Pool). These rules list the various entities eligible to hold licenses in the Pools and permissible services, as well as frequencies available for their use, including the frequency band for full power television operations on channel 14 (470-476 MHz).

¹² LMCC Opposition at 2-3.

¹³ *Id.* at 1-2.

¹⁴ 47 CFR § 78.687. LMCC states that it has reported interference problems that have arisen from the Post-Transition Table of Allotments to the Commission. *See* Opposition at Attachment A: Letter from Klaus Bender, President, Land Mobile Communications Council, to Thomas Reed, Special Attorney Advisor, WTBS, FCC (dated Nov. 25, 2020) (reporting that the "DTV Resolution" Task Force, organized by LMCC, requests that the

(continued....)

the Commission “investigate whether alternative UHF channels are viable substitutes for channel 10 in the Tulsa market,” specifically, channels 18, 19 and 20.¹⁵

5. LMCC expresses concern about potential interference to land mobile operations.¹⁶ LMCC believes that while installing filtering, as the Licensee proposes, may be effective at preventing out-of-band emissions (OOBE) issues, it will have no impact on the receiver desensitization it expects will occur from the Licensee’s proposed operation at 1000 kW.¹⁷ Finally, LMCC proposes that if the Bureau grants the Licensee’s proposed channel substitution, it should require the Licensee to designate “a ‘stop buzzer’ contact, which it claims is typically required for experimental authorizations so that interference can be reported 24/7 to an individual with the ability to stop the testing until the matter is addressed.”¹⁸

6. In its Reply, the Licensee asserts that “the Commission has long understood that with proper filtering, land mobile facilities and Channel 14 television stations can coexist on a non-interfering basis,” and that “LMCC requests that the Commission impose a draconian approach to manage potential interference which is wholly inconsistent with the Commission’s rules and precedents, and seeks to rectify prospective interference issues which are unlikely to arise and which, if they did arise, could be addressed through well-established technical resolutions and longstanding FCC rules and policies.”¹⁹ The Licensee asserts that it is clear from the plain language of section 73.687(e)(4)(ii) of the rules²⁰ that once a channel 14 permittee has performed the required pre-operational steps - as the Licensee has pledged to do, including installing filters, taking other precautions to avoid land mobile interference, and making outreach efforts to local operators - its obligation is to co-operate with land mobile operators to resolve interference issues that may arise that are caused by the Station after it begins operations.²¹ With respect to LMCC’s assertion that the Commission should identify an alternative UHF channel for KTUL to use,

Commission: (1) remind television stations repacked to channel 14 in the incentive auction of their need to comply with section 73.687(e)(4)(ii) of the rules; (2) take prompt action when a low power television station is causing interference to a land mobile system; and (3) consider certain actions to address the Task Force’s concerns about co-channel interference from television stations on channel 14 to T-Band systems that are utilizing both T-Band channels and channels in the television channel 14 frequency band). This letter is not pertinent here considering that the Licensee has fully expressed its awareness of and its intent to comply with section 73.687(e)(4)(ii) vis-à-vis land mobile systems and there are no T-band facilities operating in the vicinity of Tulsa.

¹⁵ LMCC Opposition. at 1; *see also id.* at 3-4.

¹⁶ *Id.* at 3.

¹⁷ *Id.* at 4.

¹⁸ *Id.* at 5.

¹⁹ Reply at 1-2. The Licensee asserts that LMCC’s “approach would require the Station to abruptly cut off ABC Network and local programming to the Station’s viewers without warning, based on an unsubstantiated complaint of minor or even negligible interference to any land mobile facility.” *Id.* at 4. The Licensee also observes that LMCC cites no case in which the Commission has imposed the sort of immediate shut-down remedy LMCC proposes, *id.* at 5, and argues that the remedy LMCC advances is inconsistent with section 73.687 of the rules, which may not be modified or amended absent a notice and comment rulemaking proceeding. *Id.* at 8-9.

²⁰ 47 CFR § 73.687(e)(4)(ii).

²¹ Reply at 4-5. The Licensee also pledges to reiterate those commitments in its application for a construction permit if channel 14 is allotted to Tulsa. *Id.* at 5, n.12.

the Licensee's Engineering Consultant states that his office, "on behalf of the KTUL licensee has already searched the UHF spectrum for any other viable channel and there is none."²²

7. The Licensee also states that its affiliated stations have considerable experience operating television stations on channel 14, and submitted the declaration from the Vice President of Engineering of the Licensee's parent company, stating that with respect to the six channel 14 facilities the company has operated, "in no case has there been any known instances of interference to land mobile operations" and "the stations involved . . . have always been willing to work with land mobile operators to ensure that no interference has occurred."²³ The Licensee also provided technical information regarding the common use of band stop filters by land mobile systems to deal with desensitization and intermodulation interference,²⁴ and points out that LMCC does not dispute that the use of filters at the television station's transmitter site effectively deal with potential OBEE issues.²⁵

8. In its *Ex Parte* filing, LMCC asserts that the Licensee "misstates the LMCC's recommendation and understates the challenge of adopting KTUL's proposed solution for land mobile receiver desensitization."²⁶ LMCC questions the Licensee's statement that there are no other "technically feasible" channels for it to use and "urges the FCC to conduct its own assessment of Tulsa channel availability prior to taking action in this proceeding."²⁷ It also clarifies that it only suggested a "stop buzzer" contact during the interference testing period when, it states, KTUL would not be authorized to transmit programming until it provided evidence of no interference, and thus, the public would not be at risk of losing ABC network service.²⁸ LMCC affirms its Opposition was primarily focused on the "likelihood of front end overload of land mobile receivers," and that while LMCC and its members "are fully aware of band stop filters, it does not consider [these filters] a viable solution in a situation like this where a large number of systems and even larger numbers of associated mobiles and portables are involved."²⁹ LMCC concludes that "KTUL should be required to address the land mobile interference

²² Reply, Exhibit A (Engineering Statement Regarding LMCC Opposition) at 2.

²³ Reply at 7; Exhibit B (Declaration of Harvey Arnold) at 1. *See also* Exhibit A at 4-5 (providing technical information regarding the six stations the Licensee's affiliates or parent company have operated, and affirming the absence of any complaints of interference to land mobile systems during the television stations' operations) and 6 (asserting there are currently over 40 full power television stations operating on channel 14 and that "the Commission understands that with proper filtering, land mobile facilities and Channel 14 television stations can co-exist on a non-interfering basis.").

²⁴ Reply, Exhibit A at 2-3.

²⁵ Reply at 5-6 and n.14; Exhibit A at 2, 4-5.

²⁶ *Ex Parte* at 1.

²⁷ *Id.* at 2.

²⁸ *Id.*

²⁹ *Id.* For example, LMCC states that because KTUL would be operating at 1000 kW, a "sharp cutoff" filter would be required to be installed by land mobile systems, which would significantly reduce "the received power at the antenna getting to the receivers" and that land mobile systems "do not add these filters routinely for just that reason." *Id.* It also complains, *inter alia*, that "many hundreds" of land mobile radios would have to be retrofitted with filters and questions who would be responsible for the cost of the filters and the installation. *Id.*

concerns through on-air testing and should not be granted programming authority until the land mobile interference question is fully resolved.”³⁰

III. DISCUSSION.

9. We conclude that the Licensee’s proposal to substitute channel 14 for channel 10 at Tulsa, Oklahoma meets the Commission’s technical and interference rules, and that grant would serve the public interest. While LMCC states that it is concerned that there will be interference to large numbers of land mobile systems within 40 miles of the channel 14 proposed transmission site, we find those concerns unavailing. As the Commission pointed out in the *Land Mobile Interference Order*, “[t]he vast majority of these interference cases occur where the land mobile base receiver is within 8 kilometers (5 miles) of the TV transmitter site” and “[o]ur experience has also been that the few instances of reported interference where the separation was greater than 8 km have been readily resolved by the installation of appropriate filters.”³¹ The Commission also recognized that use of band-stop filters at the land mobile receiver is an effective procedure to reduce interference caused by receiver desensitization,³² and section 73.687(e)(4)(ii) specifically requires a television permittee to “correct a desensitization problem if its occurrence can be directly linked to the start of the TV operations and the land mobile station is using facilities with typical desensitization rejection characteristics.”³³

10. LMCC, in effect, asks that the Bureau refuse to permit the use of channel 14 in the Tulsa area. In the *Land Mobile Interference Order*, however, the Commission refused to adopt separation distances that would effectively preclude new television service on channel 14.³⁴ With respect to LMCC’s request that the Bureau find an alternative channel for KTUL, the Licensee states that it has made a diligent search and there is no “other channel available in the Tulsa market to which it is technically feasible for the Station to move.”³⁵ If LMCC believes there is another in-core UHF channel available for the Licensee’s use at its current site, it should have made a counterproposal with the requisite engineering.³⁶

³⁰ *Id.* at 4.

³¹ *Land Mobile Interference Order*, 6 FCC Rcd at 5150, para. 11. We also note that land mobile systems do not solely operate on spectrum that is adjacent to channel 14, see 47 CFR §§ 90.20, 90.30, so many are unaffected by channel 14 television operations. KTUL’s tower is located more than 5 miles from the southeast border of Tulsa, and LMCC has not identified any land mobile systems in the vicinity which are operating on the frequency band adjacent to television channel 14.

³² *Land Mobile Interference Order*, 6 FCC Rcd at 5151, para. 18. See also Reply at 6 (“The Licensee recognizes its obligation under the Commission’s rules to correct a desensitization problem which may arise after Station operations commence . . .”) and Exhibit A at 2-3 (describing use of “band-stop” filters between the land mobile antenna and the receiver’s RF input to avoid front-end overload and desensitization, as well as potential intermodulation interference).

³³ 47 CFR § 73.687(e)(4)(ii).

³⁴ *Land Mobile Interference Order*, 6 FCC Rcd at 5149-50, paras. 6-11. In addition, as the Licensee points out, there are a significant number of full power television stations licensed on channel 14. Reply, Exhibit A at 6.

³⁵ Reply at n.10 and Exhibit A at 2.

³⁶ We note, LMCC generally, without any technical analysis, suggested that the Commission should examine the use
(continued....)

11. The Licensee has committed to perform the steps required by the rule to address interference. Specifically, Section 73.687(e)(4)(ii) of the rules provides, in part, that a television permittee on channel 14 must take steps prior to construction to identify potential interference to normal land mobile operation of a protected land mobile facility³⁷ that could be caused by television emissions outside the authorized channel, land mobile receiver desensitization, or intermodulation.³⁸ These steps include installing filters and taking other precautions as necessary.³⁹ In addition, Section 73.687(e)(4)(ii) requires the permittee to submit evidence that no interference is being caused before the station is permitted to transmit programming pursuant to sections 73.1615 and 73.1620 of the rules.⁴⁰ Section 73.687 also describes the responsibilities of the television station to resolve interference issues once it commences operations and the need for the station and the land mobile system to cooperate to resolve any problems arising from the television station operation.⁴¹ The Licensee has committed to perform the steps

of channels 18, 19 or 20 instead. LMCC Opposition at 1, 3-4. The burden for conducting such an analysis falls on LMCC as part of a counter proposal, not the Commission. *See, e.g., Amendment of Section 73.622(b), Table of Allotments, Digital Television Broadcast Stations (Macon, Georgia)*, MM Docket No. 01-1, Report and Order, 17 FCC Rcd 2081, 2082, para. 4 (VSD 2002) (“Counterproposals must be technically and procedurally correct when initially filed and may not be amended at a later date.”). In any event, we note that one of the channels proposed by LMCC is already licensed to KQCW-DT, channel 20, Muskogee, Oklahoma, which is in the Tulsa Designated Market Area, with a transmission site slightly east of Tulsa. Channel 18 or 19 would also cause impermissible interference to other stations. In addition, using the Commission’s *TVStudy* software and the cell size and terrain settings used by the Licensee in its proposal, channel 18 would interfere with KSNF, channel 17, Joplin, Missouri; KUTU-CD, channel 17, Tulsa; KFSM-TV, channel 18, Fort Smith, Arkansas; and KOPX-TV, channel 18, Oklahoma City, Oklahoma, while channel 19 would interfere with KFSM-TV; KYTV, channel 19, Springfield, Missouri; KAUT-TV, channel 19, Oklahoma City; and KQCW-DT.

³⁷ A “protected land mobile facility” is a receiver that is intended to receive transmissions from licensed land mobile stations within the frequency band below 470 MHz, as relates to television operations on channel 14, and is associated with one or more land mobile stations for which a license has been issued by the Commission, or a proper application has been received by the Commission prior to the date of the filing of the TV construction permit application. 47 CFR § 73.687(e)(4)(i).

³⁸ 47 CFR § 73.687(e)(4)(i)-(ii). *See also Resolution of Interference Between UHF Channels 14 and 69 and Adjacent-Channel Land Mobile Operations*, MM Docket No. 87-465, Report and Order, 6 FCC Rcd 5148, 5153, para. 28 (1991) (*Land Mobile Interference Order*). Channel 69 spectrum is no longer allocated for television use. *See Reallocation of Television Channels 60-69, the 746-806 MHz Band*, ET Docket No. 97-152, Report and Order, 12 FCC Rcd 22953 (1998).

³⁹ 47 CFR § 73.687(e)(4)(i)-(ii).

⁴⁰ 47 CFR §§ 73.1615 (Operation during modification of facilities), 73.1620 (Program Tests). Because we are at the stage of amending the DTV Table of Allotments and an application for a construction permit for channel 14 has not yet been submitted, we need not address LMCC’s interpretation of section 73.687(e)(4)(ii), which is more appropriately considered in connection with a construction permit application. Similarly, to the extent LMCC argues that the Bureau should require a “stop buzzer” contact during the Section 73.1610 testing period, *see* LMCC *Ex Parte* at 2, this is a matter more appropriately addressed when considering a construction permit application. In any event, we expect the Licensee will work promptly to resolve any interference during the Section 73.1610 period. Based on our experience that licensees and land mobile operators have successfully cooperated during the Section 73.1610 testing period, we see no need to adopt the “stop buzzer” contact proposal based on the record here. *See* KUTL Reply at 4 (“committing to perform outreach to potentially affected land mobile facilities to identify and resolve any interference issues which may arise”).

⁴¹ 47 CFR § 73.687(e)(4)(i); *Land Mobile Interference Order*, 6 FCC Rcd at 5153-54, para. 29.

required by the rule and its construction permit, if granted, will have the standard condition requiring it to do so.⁴² Thus, we find no basis for denying the Licensee's request that we substitute channel 14 for channel 10 at Tulsa.⁴³

12. As proposed, channel 14 can be substituted for channel 10 at Tulsa, Oklahoma, in compliance with the principal community coverage requirements of section 73.625(a) of the Rules,⁴⁴ at coordinates 35-58-08.0 N and 95-36-56.0 W. In addition, we find that this channel change meets the technical requirements set forth in sections 73.616 and 73.623 of the rules with the following specifications:⁴⁵

| <u>City and State</u> | <u>DTV Channel</u> | <u>DTV Power (kW)</u> | <u>Antenna HAAT (m)</u> | <u>DTV Service Pop.</u> |
|-----------------------|--------------------|-----------------------|-------------------------|-------------------------|
| Tulsa, Oklahoma | 14 | 1000 | 578 | 1,517,424 |

13. In view of the foregoing, we conclude that the Licensee's proposal to substitute channel 14 for channel 10 at Tulsa, Oklahoma meets the Commission's technical and interference rules, and that grant would serve the public interest.

IV. ORDERING CLAUSES.

14. Accordingly, **IT IS ORDERED**, That the Opposition Comments of The Land Mobile Communication Council **ARE HEREBY DENIED**.

15. Pursuant to the authority contained in sections 4(i), 5(c)(1), 303(g) and (r) and 307(b) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 155(c)(1), 303(g), (r), and 307(b), and sections 0.61, 0.204(b) and 0.283 of the Commission's rules, 47 CFR §§ 0.61, 0.204(b), and 0.283, **IT IS FURTHER ORDERED**, That effective 30 days after the date of publication of this Report and Order in the Federal Register, the DTV Table of Allotments, Section 73.622(i) of the Commission's rules, 47 CFR § 73.622(i), **IS AMENDED**, with respect to the community listed below, to read as follows:

⁴² The Bureau places the following condition on every channel 14 television construction permit: "During equipment tests, authorized by Section 73.1610 of the Commission's Rules [47 CFR § 73.1610], the permittee shall take adequate measures to identify and substantially eliminate objectionable interference which may be caused to existing land mobile radio facilities in the 460 to 470 MHz band. Documentation that objectionable interference will not be caused to existing land mobile radio facilities shall be submitted along with the request for Program Test Authority. Program tests shall not be commenced under Section 73.1620(a) of the Commission's Rules and may only be started after specific authority is granted by the Commission. An application for a license must be filed within 10 days after the start of program tests."

⁴³ While the Licensee contends that the channel substitution would benefit ATSC 3.0 reception in addition to ATSC 1.0 reception, *NPRM*, 36 FCC Rcd at 157, n.2 and Comments at 1-2, we do not find the Licensee's arguments concerning ATSC 3.0 reception to be a controlling factor in our decision, especially given the early stages of deployment and limited availability of consumer devices.

⁴⁴ 47 CFR § 73.625(a).

⁴⁵ 47 CFR §§ 73.616, 73.623.

City and StateChannel No.

Tulsa, Oklahoma

8, *11, 14, 22, 45, 47, 49

16. **IT IS FURTHER ORDERED**, That within 30 days of the effective date of this Order, KTUL Licensee, LLC shall submit to the Commission a minor change application for a construction permit (Form 2100, Schedule A) specifying channel 14 in lieu of channel 10.

17. **IT IS FURTHER ORDERED**, That pursuant to section 801(a)(1)(A) of the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A), the Commission **SHALL SEND** a copy of the Order to Congress and to the Government Accountability Office.

18. **IT IS FURTHER ORDERED**, That should no petitions for reconsideration, applications for review, or petitions for judicial review be timely filed, MB Docket No. 21-9, RM-11872 **SHALL BE TERMINATED** and its docket closed.

19. For further information concerning the proceeding listed above, contact Joyce L. Bernstein, Video Division, Media Bureau, (202) 418-1647, Joyce.Bernstein@fcc.gov.

FEDERAL COMMUNICATIONS COMMISSION

Barbara A. Kreisman
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