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

In the Matter of	)	
	)	
CHESAPEAKE OPERATING, INC.	)	File Nos. 0005484248, 0005484271
	)	
Applications to Modify Licenses for AMTS Stations WQPY965 and WQPY964	)	
	)	
Request for Waiver of Sections 80.92(a) and 80.385(a)(2) to Allow a Private Land Mobile Radio System on AMTS Spectrum	)	

ORDER

Adopted: July 29, 2014 **Released: July 30, 2014**

By the Deputy Chief, Mobility Division, Wireless Telecommunications Bureau:

1. *Introduction.* On November 8, 2012, Chesapeake Operating, Inc. (Chesapeake) filed the above-captioned applications[1] seeking to modify its geographic licenses for Automated Maritime Telecommunications System (AMTS) Stations WQPY964 and WQPY965 by adding six fixed locations in southwest Texas.[2] Chesapeake also seeks waiver of certain Part 80 rules to allow it to operate a private land mobile radio (PLMR) system on AMTS spectrum.[3] For reasons set forth below, we grant the applications in part but dismiss them with respect to one of the requested locations, and we grant Chesapeake's request for waiver.

2. *Background.* The AMTS service was established to meet the communications needs of vessels on inland waterways,[4] but the Commission's rules now permit AMTS stations to provide service to units on land, including PLMR service.[5] In 2002, the Commission adopted a geographic area licensing approach for AMTS stations.[6]

[1] FCC File Nos. 0005484248, 0005484271 (both filed Nov. 8, 2012, amended Jan. 17, 2013).

[2] Specifically, Dilley, Cotulla, Tilden, Crystal City, and two locations at Carrizo Springs. The same sites are proposed for both licenses, which differ only with respect to which AMTS frequencies they authorize.

[3] Request for Waiver (filed Nov. 8, 2012) (Waiver Request).

[4] *See* Amendment of Parts 2, 81 and 83 of the Commission's Rules to Allocate Spectrum for an Automated Inland Waterways Communications System (IWCS) along the Mississippi River and Connecting Waterways, *Report and Order*, GEN Docket No. 80-1, 84 FCC 2d 875 (1981) (*IWCS Report and Order*).

[5] *See* MariTEL, Inc. and Mobex Network Services, LLC, *Report and Order*, WT Docket No. 04-257, 22 FCC Rcd 8971, 8974-78 ¶¶ 4-10 (2007) (*Flexibility Order*), *on recon., Memorandum Opinion and Order*, 25 FCC Rcd 533 (2010), *aff'd*, *Order on Reconsideration*, 26 FCC Rcd 2491 (2011), *review dismissed*, *Second Memorandum Opinion and Order*, 26 FCC Rcd 16579 (2011).

[6] *See* Amendment of the Commission's Rules Concerning Maritime Communications, *Second Memorandum Opinion and Order and Fifth Report and Order,* PR Docket No. 92-257, 17 FCC Rcd 6685, 6696 ¶ 24 (2002), *erratum*, 19 FCC Rcd 9918 (2004).

3. In establishing rules for AMTS, the Commission considered the potential for interference to television reception, particularly with respect to television Channels 10 and 13, because of the proximity of AMTS frequencies to those channels.[7] An applicant proposing to locate an AMTS station within 169 kilometers (105 miles) of a Channel 13 television station, or within 129 kilometers (80 miles) of a Channel 10 television station, must submit an engineering study demonstrating the means it will use to limit interference to television reception.[8] While geographic licensees generally are authorized to place stations anywhere within their service areas, the Commission requires individual licensing of stations at locations for which the rules mandate submission of an engineering study demonstrating how interference to television reception will be limited.[9]

4. Chesapeake proposes operations within 169 kilometers of Channel 13 Digital Television (DTV) Station KVTV, Laredo, Texas (KVTV).[10] Eagle Creek Broadcasting of Laredo, LLC (Eagle Creek), the licensee of Station KVTV, filed a petition to deny the applications, arguing that Chesapeake's proposed operations will not afford adequate interference protection to television reception.[11]

5. Chesapeake is a producer of natural gas that focuses on discovering and developing unconventional natural gas and oil fields onshore in the United States.[12] It acquired AMTS frequencies in nine counties in Texas,[13] and seeks to use the spectrum for a communications system to provide advanced Supervisory Control and Data Acquisition (SCADA) technologies for natural gas exploration and production.[14] Both the master stations and the remote units will operate in simplex mode on the AMTS base and mobile frequencies.[15] As a result, Chesapeake seeks a waiver of Section 80.92(a), which requires Part 80 licensees to monitor a frequency prior to transmitting;[16] and 80.385(a)(2), which divides AMTS spectrum into coast (base) station frequencies and ship (mobile) station frequencies.[17]

6. *Discussion.* Licensed sites. Section 80.215(h)(3) of the Rules provides that if there are at least one hundred residences within both the proposed AMTS station's predicted interference contour and the television station's Grade B contour, the AMTS applicant must (1) show that its proposed site is the only suitable location, (2) develop a plan to control any interference its operations cause within the television contour, and (3) agree to make any necessary adjustments to affected television receivers to

[7] *See IWCS Report and Order,* 84 FCC 2d at 897 ¶ 80.

[8] *See* 47 C.F.R. §§ 80.215(h)(2), 80.475(a)(1).

[9] *See* 47 C.F.R. § 80.385(b).

[10] Each site is also within the relevant distance of at least one other Channel 10 or 13 television station. *See* Interference Mitigation Plan for Affected Sites dated Jan. 15, 2013 (Revised Mitigation Plan) at 10-11. Chesapeake submitted an engineering study with its applications. *See id.*; Interference Mitigation Plan for Affected Sites dated Oct. 30, 2012; Contour Development Description & Methodology Report dated Oct. 19, 2012; Contour Plot Report dated Oct. 19, 2012.

[11] *See* Petition to Deny (filed Jan. 4 2013) (Petition). Chesapeake filed an opposition, *see* Opposition to Petition to Deny (filed Jan. 16, 2013) (Opposition), and Eagle Creek filed a reply, *see* Reply to Opposition to Petition to Deny (filed Jan. 29, 2013) (Reply).

[12] *See* Waiver Request at 1.

[13] FCC File Nos. 0005030298, 0005030305 (filed Jan. 19, 2012).

[14] *See* Waiver Request at 1.

[15] *See id.* at 4. The output power of the base and remote stations will not exceed the 18 watts effective radiated power limit for AMTS mobile units. *See* Opposition at 3-4; *see also* 47 C.F.R. § 80.215(e)(2).

[16] 47 C.F.R. § 80.92(a).

[17] 47 C.F.R. § 80.385(a)(2).

eliminate such interference.[18] Chesapeake asserts that these requirements do not apply here because none of its interference contours overlaps one hundred residences in Station KVTV's protected contour.[19]

7. Eagle Creek maintains there are more than one hundred households in the overlap area of the proposed Cotulla station's interference contour and KVTV's protected contour.[20] Eagle Creek notes that Chesapeake's engineering study departs from the OET Bulletin 69[21] methodology by incorporating a DTV cross-polarization loss factor that artificially and substantially reduces the area considered, and understating the potential interference from Chesapeake's proposed stations under free-space analysis.[22] After reviewing the record, we conclude that there are more than one hundred households in the overlap area of the proposed Cotulla station's interference contour and KVTV's protected contour.[23] Consequently, we find that Chesapeake has failed to meet the requirements of Section 80.215(h)(3) with respect to this station. In particular, Chesapeake has not presented a sufficient plan to control interference to TV reception as required by Section 80.215(h)(3)(ii).[24] In light of this conclusion, we need not address whether Chesapeake's filings adequately address its other obligations under Section 80.215(h)(3).

8. Eagle Creek's own engineering study indicates that there are no residences in the other overlap areas.[25] It argues, however, that the 2010 U.S. Census figures relied upon by Chesapeake likely understate the current number of households in those areas in light of recent population there, and that

[18] *See* 47 C.F.R. § 80.215(h)(3). The Grade B contour was used to define the service area of an analog television station. With the conversion to DTV, the Commission developed the noise limited service contour (NLSC) to approximate the same probability of service as the analog Grade B contour. *See* Avista Corporation, *Order*, 27 FCC Rcd 263, 266 ¶ 7 (WTB MD 2012) (*Avista*), *recon. denied*, *Order on Reconsideration*, 28 FCC Rcd 5258 (WTB MD 2013), *review pending*. In discussing Station KVTV's protected contour herein, we refer to its NLSC.

[19] *See* Revised Mitigation Plan at 8; Opposition at 5.

[20] *See* Chesapeake RF Consultants, LLC, Engineering Statement prepared for Eagle Creek Broadcasting Of Laredo, LLC, attached as an exhibit to the Reply, at 3 (Reply Engineering Statement).

[21] OET Bulletin No. 69, "Longley-Rice Methodology for Evaluating TV Coverage and Interference" (Feb. 6, 2004). The procedure in OET Bulletin 69 is used to determine the predicted geographic area and population served by a TV station. *See* Advanced Television Systems and Their Impact upon the Existing Television Broadcast Service, *Seventh Report and Order and Eighth Further Notice of Proposed Rule Making*, MB Docket No. 87-268, 22 FCC Rcd 15581, 15589 n.35 (2007); *see also Avista*, 27 FCC Rcd at 266 n.21 (citing OET Bulletin 69).

[22] *See* Reply Engineering Statement at 2.

[23] Commission staff verified the accuracy of the Reply Engineering Statement, undertaken with a Longley-Rice analysis pursuant to OET Bulletin 69. Chesapeake and Eagle Creek disagree with respect to the proper desired-to-undesired (D/U) signal ratio for predicting interference to television reception. Chesapeake used the -33 dB D/U ratio employed in another case concerning AMTS interference to digital television reception, *see* Opposition at 6 (citing *Avista*, 27 FCC Rcd at 266 ¶ 6), while Eagle Creek believes a D/U ratio of -26 dB is appropriate because it is the ratio specified in OET Bulletin 69 and 47 C.F.R. § 73.623(c)(2) for first-adjacent interference to a digital television station from an upper-adjacent digital television station, *see* Chesapeake RF Consultants, LLC, Engineering Statement prepared for Eagle Creek Broadcasting of Laredo, LLC, attached as an exhibit to the Petition, at 3-4. We need not resolve this dispute here, however, because there are more than one hundred residences in the overlap area when calculated using either a -26 dB D/U ratio or a -33 dB D/U ratio.

[24] 47 C.F.R. § 80.215(h)(3)(ii). Chesapeake states only that it "has the ability" to maximize the spectral distance between its operations and Channel 13 by operating only on the 219 MHz AMTS frequencies. *See* Opposition at 6-7. Even if we interpret this as a commitment to do so, this plan is inadequate for an AMTS station that is not co-located with the potentially affected television station. *See* Mobex Network Services, LLC, *Order*, 20 FCC Rcd 17959, 17960-61 ¶ 4 (WTB PSCID 2005) (citing Fred Daniel d/b/a Orion Telecom, *Memorandum Opinion and Order*, 14 FCC Rcd 3909, 3911-12 ¶ 7 (WTB PSPWD 1999)), *recon. denied*, *Order*, 22 FCC Rcd 1311 (WTB MD 2007), *recon. denied*, *Memorandum Opinion and Order*, 25 FCC Rcd 3390 (2010).

[25] *See* Reply Engineering Statement at 3.

Chesapeake bears the burden of establishing more current data.[26] We agree with Chesapeake that it was not obligated to undertake such an effort.[27] The Rules do not require any particular means of determining the number of households in the overlap area; using the most current U.S. Census data is a reasonable method, and is preferable to the imprecise anecdotal evidence presented by Eagle Creek.[28]

9. Eagle Creek also argues that Chesapeake should provide information on planned remote transmitters.[29] We agree with Chesapeake that these transmitters, operating under the same power limits and antenna heights as ship stations, do not have to be individually licensed or separately analyzed.[30] The AMTS rules do not require an analysis of ship stations' potential for interference to television reception, and when the Commission amended the AMTS rules to permit service to units on land, it authorized such service to both fixed and mobile units under the same conditions.[31]

10. With respect to the sites other than Cotulla, therefore, we have no basis to find the applications deficient. We accordingly will grant the applications except insofar as they request authority to locate a new station at Cotulla. We remind Chesapeake that AMTS stations are authorized on the condition that no harmful interference will be caused to reception of existing television stations.[32] AMTS licensees are expected to help resolve interference complaints, and must cure any impermissible interference to television reception must cure the problem or discontinue operation of the station.[33]

11. Waiver request. Section 1.925(b)(3) of the Commission's Rules provides that we may grant a waiver if it is shown that (a) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and grant of the requested waiver would be in the public interest; or (b) in light of unique or unusual circumstances, application of the rule(s) would be inequitable, unduly burdensome, or contrary to the public interest, or the applicant has no reasonable alternative.[34]

12. As noted above, Chesapeake proposes to operate in simplex mode with base and remote transmitters using both the base and mobile sides of the channel pair. It requests a waiver of Section

[26] *See* Petition at 5-6.

[27] *See* Opposition at 9.

[28] We note that the Commission itself uses 2010 U.S. Census data to calculate the population in television stations' coverage areas. *See* Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, *Report and Order*, GN Docket No. 12-268, FCC 14-50, ¶¶ 148-49 (rel. June 2, 2014).

[29] *See* Petition at 6-7.

[30] *See* Opposition 9-10.

[31] *See* Amendment of the Commission's Rules Concerning Maritime Communications, *Second Report and Order and Second Further Notice of Proposed Rule Making*, PR Docket No. 92-257, 12 FCC Rcd 16949, 16964-65 ¶ 25 (2007) (permitting AMTS base stations to serve, *inter alia*, fixed units on land, provided that such units are used under the same power limitations as marine radios and their antennas are not mounted higher than those on vessels).

[32] 47 C.F.R. § 80.215(h).

[33] 47 C.F.R. § 80.215(h)(4).

[34] 47 C.F.R. § 1.925(b)(3); *see also WAIT Radio v FCC*, 418 F. 2d 1153, 1159 (D.C. Cir. 1969). In addition, when the Commission amended its rules to permit AMTS stations to provide private correspondence service to units on land, it stated that the following factors would be considered in evaluating waiver requests: (a) whether the applicant will provide priority to maritime communications, (b) the distance of a proposed land mobile radio operation from the nearest navigable waterways, (c) the magnitude of divergence sought from specific Part 80 technical requirements, (d) whether alternative spectrum that could accommodate the proposed PLMR or other land mobile radio service is unavailable or unsuitable for that purpose, and (e) whether grant of the waiver would benefit public safety or homeland security (including support of critical infrastructure). *See Flexibility Order*, 22 FCC Rcd at 8986-87 ¶ 26.

80.385(a)(2), which provides separate AMTS coast station and ship station transmit channels.[35] In the ship transmit portion, Chesapeake will restrict the power levels to those permitted for ship stations in Section 80.215(h)(5)(i), thereby providing protection against interference to maritime operations. Additionally, remote terminals will employ directional antennas such that Chesapeake's operations will not exceed the permitted signal strength at the border of the licensed geographic area.[36] Because the proposed configuration will not affect other licensees any more than compliant base and mobile stations, we conclude that a waiver of this requirement is warranted.[37]

13. Chesapeake also requests a waiver of Section 80.92(a), which requires monitoring prior to transmitting, because its system is configured to transmit only broadband data, and cannot support voice communications.[38] Chesapeake argues that monitoring the frequencies prior to transmitting is incompatible with the operation of a simplex SCADA system and unnecessary because Chesapeake is authorized for an exclusive geographic area license.[39] We agree that a waiver of this requirement is warranted under the circumstances presented.[40] Chesapeake's proposed use of the AMTS frequencies does not jeopardize the maritime community's ability to meet its operational, safety and security communications needs, and permitting the use of the subject frequencies for PLMR operations will promote the efficient use of AMTS spectrum and serve the public interest by supporting critical energy exploration operations. We therefore waive this requirement.

14. Accordingly, IT IS ORDERED, pursuant to Sections 4(i) and 303(i) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 303(i), and Section 1.925 of the Commission's Rules, 47 C.F.R. § 1.925, that the Request for Waiver filed by Chesapeake Operating, Inc. on November 8, 2012, IS GRANTED; and applications FCC File Nos. 0005484248 and 0005484271 SHALL BE GRANTED IN PART with respect to locations 1, 2, 4, 5, 6, and DISMISSED IN PART with respect to location 3, consistent with this *Order* and the Commission's Rules.

15. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's Rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Scot Stone
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[35] *See* Waiver Request at 5.

[36] *Id.*

[37] *See* PHI Service Co., *Order*, DA 14-965, ¶ 8 (WTB MD rel. July 7, 2014) (*PHI*).

[38] *See* Waiver Request at 4.

[39] *See id.* at 3.

[40] *See PHI*, DA 14-965 at ¶ 7; Vermont Transco LLC, *Order*, 26 FCC Rcd 8820, 8822 ¶ 6 (WTB MD 2011).