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ENGINEERING REPORT

KWCX-FM, Tanque Verde, AZ, Site-move Minor change to CP (285A)

ENGINEERING STATEMENT

The Applicant proposes a site-move of 0.95 kilometers East of the authorized site of BPH-20180709AFH.

Figure EE1 is a map showing compliance with the Section 73.315 community of license service requirement. More than 99 percent of the population of Tanque Verde, AZ is included within the proposed 70 dBu F50,50 service contour.

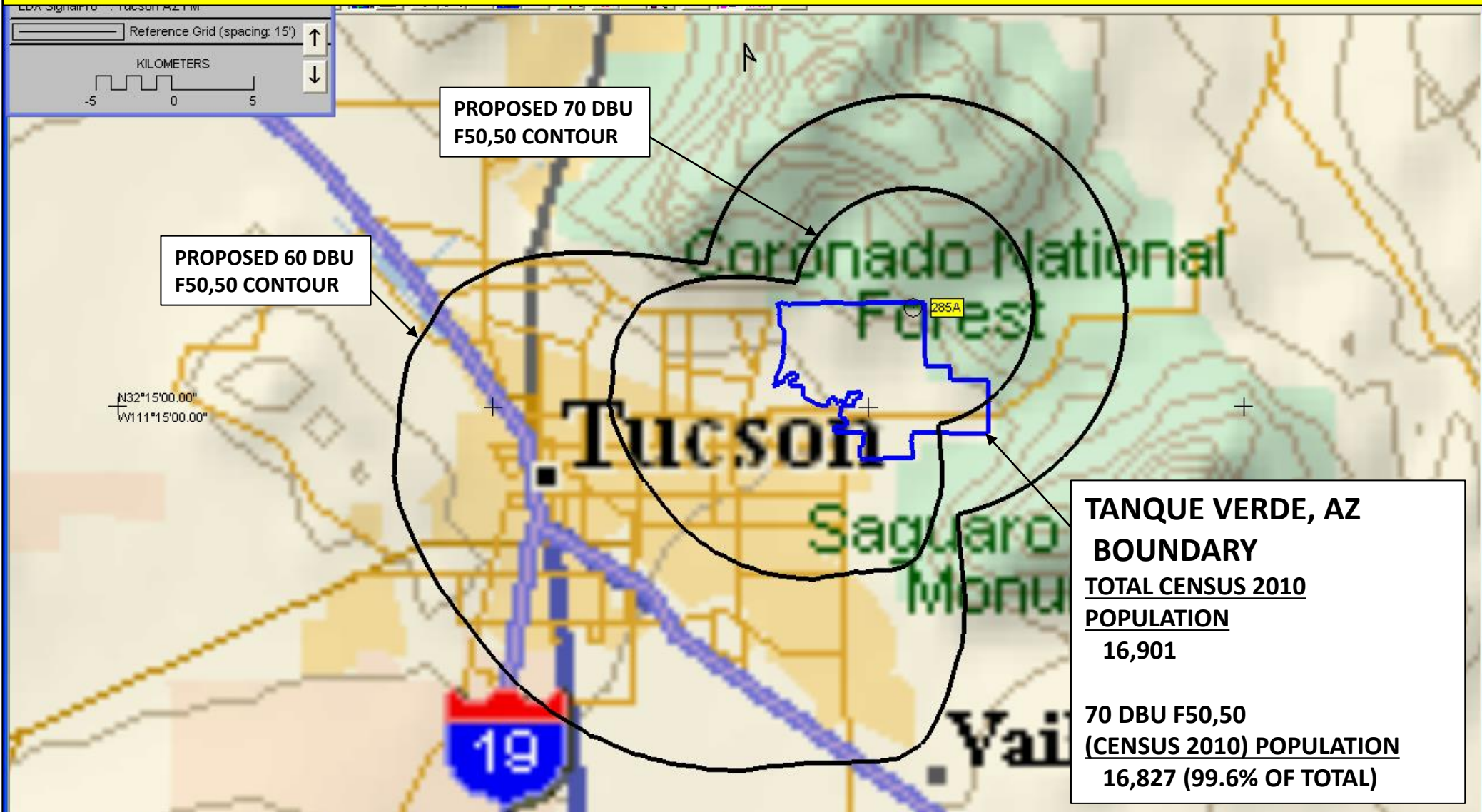
Figure EE2 is a Section 73.207 separation requirement table. All required separations are met with the exception of KZLZ(FM), Casas Adobes, AZ 287C3 – a short-spacing of 4.08 kilometers. A Section 73.215 study of KZLZ is included with this application.

Figure EE3 is a Section 73.215 short-spacing map that shows contour non-overlap between the protected and interference contours of KWCX-FM and KZLZ(FM). It is noted that these co-owned FM stations are contingent FM facilities (as previously proposed to establish their current CP facilities). A Section 73.215 status is to continue with KWCX-FM (and for KZLZ); therefore, the actual facilities are used for the contours determined for this Section 73.215 study.

Environmental Statement

The Applicant proposes using an “EPA Type 1” four-bay, halfwave spaced antenna (such as a Nicom BKG-88, four-bay, HW spaced omni antenna). Based on the FCC’s FM Model calculator, from a radiation centerline of 11.6 meters AGL, the RF electromagnetic field (EMF) at two meters above ground level is calculated as 135.2 uW/cm-squared. This value is below the 200 uW/cm-squared allowed standard for FM. (Note that the home on the property of the proposed antenna is a one-story rambler-style home.) Warning signs will be posted near the 46-foot long vertical supporting pole of the transmit antenna to warn of the radiation hazard near the antenna.

FIGURE EE1 – MAP SHOWING SECTION 73.315 COMPLIANCE



SECTION 73.207 SEPARATION STUDY**PROJECT: KWCX-FM, TANQUE VERDE, AZ, 285A FROM PROPOSED SITE****STUDY COORDINATES: N 32-18-23.0; W 110-43-12.0 (N D-M-S; W D-M-S)**

Call Docket	Class Channel	Frequency Service FacilityID	Status ERP	City DA?	State HAAT	Country RCAMSL	File Number RCAGL
Latitude	Longitude	ASRN	Dist(km)	Dist(mi)	Azimuth		

KXZK 283 A FM 104.5 MHz LIC VAIL AZ US 0000114003
 - 164116 .3 kW 14. m 1076. m 42. M
 N 32 0 58.2 W 110 41 47.2 32.26 km 20.04 mi 176.06°
 COCHISE BROADCASTING LLC
Section 73.207 Requirement: 31 km 1.26 km CLEAR

KZZP 284 C FM 104.7 MHz CP MESA AZ US 0000123815
 - 47742 100. kW 506. m 874. m 78. m
 N 33 20 3.7 W 112 3 41.2 1308803 169.63 km 105.41 mi 312.72°
 IHM LICENSES, LLC
Section 73.207 Requirement: 165 km 4.63 km CLEAR

KZZP 284 C FM 104.7 MHz LIC MESA AZ US BLH-6100
 - 47742 100. kW 472. m 829. m 42. m
 N 33 20 4.1 W 112 3 37.5 167.57 km 105.37 mi 312.75°
 IHM LICENSES, LLC
Section 73.207 Requirement: 165 km 2.57 km CLEAR

KWCX-FM 285 A FM 104.9 MHz CP TANQUE VERDE AZ US BPH-20180709AFH
 - 72659 3. kW -253. m 1014. m 8. m
 N 32 18 30.2 W 110 43 47.3 0.95 km 0.59 mi 283.57°
 KZLZ, LLC
Section 73.207 Requirement: 115 km -114.05 km SHORT
NOTE: Facility that is being modified by this filing.

KWCX-FM 285 C2 FM 104.9 MHz LIC WILLCOX AZ US BLH-20001114AAD
 - 72659 0.73 kW DA 968. m 2459. m 55. m
 N 32 13 1.2 W 109 36 28.2 105.26 km 65.41 mi 95.13°
 KZLZ, LLC
Section 73.207 Requirement: 115 km -9.74 km SHORT
NOTE: This is the license for the Facility that is being modified by this filing.

XHNIFM 286 B FM 105.1 MHz LIC NOGALES SO MX
 - 95117 50. kW 150. m 0. m 0. m
 N 31 19 49.0 W 110 56 42.0 110.3 km 191.0°
Section 73.207 Requirement: 105 km 5.3 km CLEAR
NOTE: Since the KWCX-FM proposal has a maximum ERP of 3 kW' 105 km is the applicable separation requirement.

SECTION 73.207 SEPARATION STUDY**PROJECT: KWCX-FM, TANQUE VERDE, AZ, 285A FROM PROPOSED SITE****STUDY COORDINATES: N 32-18-23.0; W 110-43-12.0 (N D-M-S; W D-M-S)**

Call	Channel	Class	Frequency	Status	City	State	Country	File Number
Docket	FacilityID	Service	ERP	DA?	HAAT	RCAMSL	RCAGL	
Latitude	Longitude			ASRN	Dist (km)	Dist (mi)	Azimuth	
Licensee/Permittee								

KZLZ 287 C3 FM 105.3 MHz CP CASAS ADOBES AZ US BPH-20180709AFI
 - 36022 0.58 kW DA 581. m 1350. m 27. m
 N 32 14 56.3 W 111 7 0.4 1218277 37.92 km 23.56 mi 260.39°
 KZLZ, LLC

Section 73.207 Requirement: 42 km -4.08 km SHORT**NOTE: A Section 73.215 showing of protection is included with this filing. Also, a license-to-cover was recently submitted for this CP facility.**

KZLZ 287 C3 FM 105.3 MHz LIC CASAS ADOBES AZ US BLH-20110322ABK
 - 36022 0.58 kW DA 581. m 1350. m 27. m
 N 32 14 56.3 W 111 7 0.4 1218277 37.92 km 23.56 mi 260.39°
 KZLZ, LLC

Section 73.207 Requirement: 42 km -4.08 km SHORT**NOTE: This facility has been superseded by the above facility.**

Study Complete

FIGURE EE3 – MAP SHOWING SECTION 73.215 COMPLIANCE

