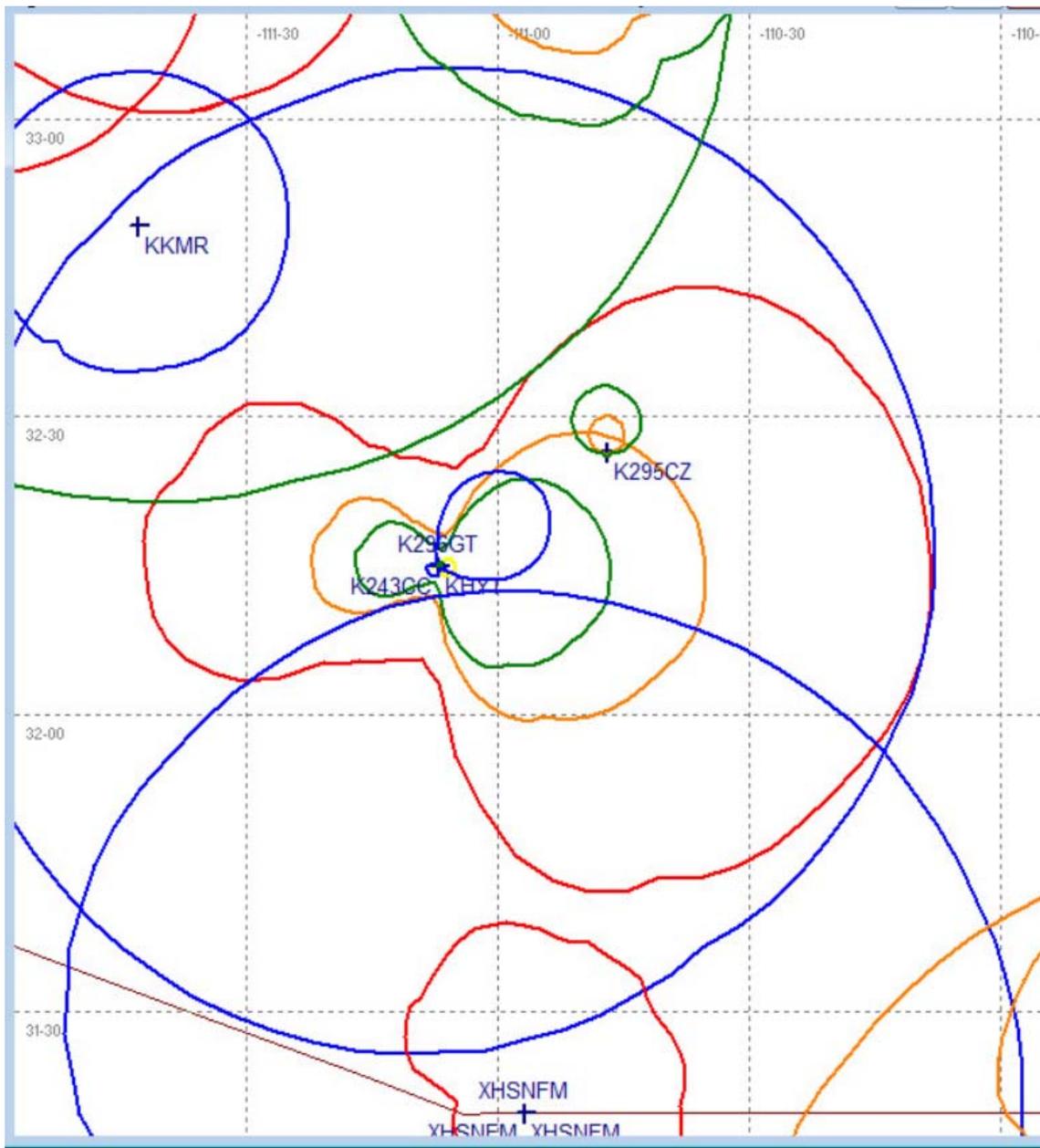


Purpose of Application & Technical Statement

This minor change to the licensed facility requests a new tower location, elevation and antenna at a modified effective radiated power on the licensed operating channel. The translator will repeat KNST (AM) as a fill in translator facility. The maps below will demonstrate compliance with fill-in requirements.

OVERLAP REQUIREMENTS:

The map of contours depicts the proposed allocation situation with respect to all pertinent co and adjacent facilities. All facilities have been depicted utilizing either the maximum ERP or directional pattern data as on file with the commission and 1 degree radial intervals on close in contours in the interest of accuracy. AAT data for the proposed facility was derived from the FCC's 30 second database, *Comstudy*.



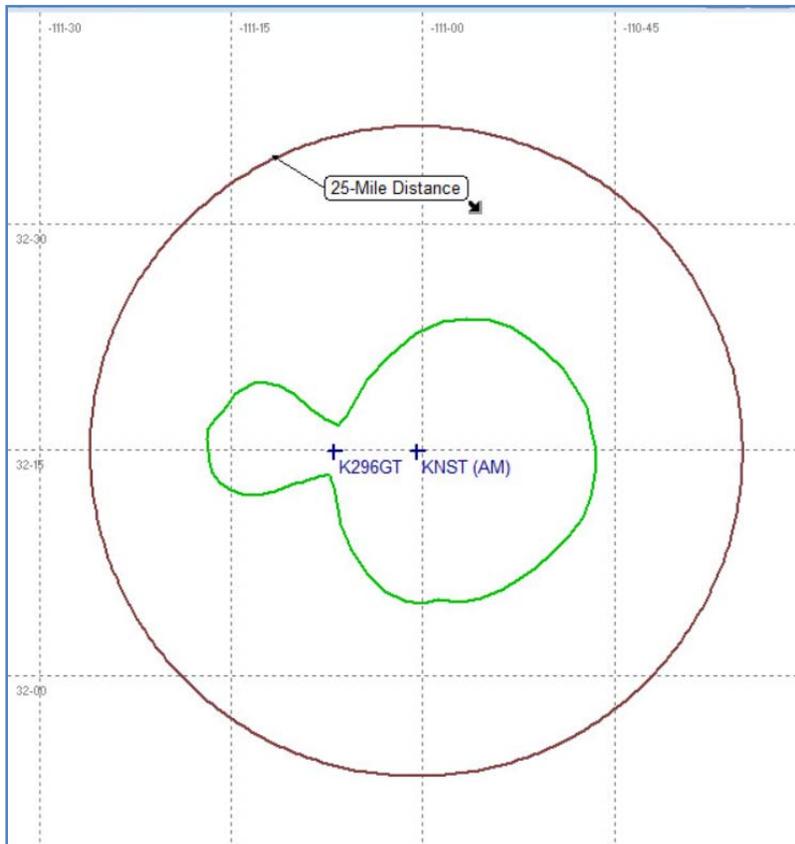
As seen on the map of contours, channel 296-D is operable at the proposed location with the following facility notes:

- In compliance with 47 CFR 74.1204(g) the proposed facility operates at an effective radiated power which is over 100 watts, therefore protection to intermediate frequency facilities has been calculated and meet all mileage separation requirements.
- Overlap to K295 translator is received-only interference and is not calculated
- The proposed location is within the protected 60dbu (50,50) contour of second -adjacent station KHYT (FM) channel 298C and second-adjacent translator facility K294CR, both located mere meters away on adjacent towers in the multiple tower farm array. An interference analysis would be conducted based on the u/d ratio of +40 dB at the proposed site and both adjacent channel facilities would have very high signal levels at the proposed translator site. The free space distance to the corresponding interference contour in a worse-case scenario utilizing a single dipole antenna would be mere meters from the aperture of the proposed antenna. Even with an antenna height of only 27.2 meters above ground, this interfering contour cannot come in contact with the general public at any point.

Based on this showing, a waiver of section 74.1204 is requested in accordance with Living Way Ministries, Inc. (FCC 08-242) on the basis of zero population in the area of interference. It should be noted that should any actual real world interference occur, the applicant acknowledges that it will promptly suspend operation of this translator in accordance with 47 CFR. 74.1203.

PRIMARY STATION:

The translator proposes to provide fill-in service for AM station KNST, FACID 53589, owned by iHM Licenses, LLC. The applicant herein has obtained written permission to specify this AM station as primary on the application and it meets the requirements for fill-in service as seen on this map:



iHeartMedia
Troy Langham

K296GT at 1218277 Scala CA2-CP DA

Radio By Grace, Inc.

REFERENCE CH# 296D - 107.1 MHz, Pwr= 0.25 kW DA, HAAT= 579.7 M, COR= 1350 M DISPLAY DATES
32 14 56.40 N. Average Protected F(50-50)= 31.65 km DATA 10-24-22
111 07 00.50 W. Standard Directional SEARCH 10-25-22

CH	CALL	TYPE	ANT	AZI	DIST	LAT	PWR(kw)	INT(km)	PRO(km)	"IN"	"OUT"
CITY		STATE		<--	FILE #	LNG	HAAT(M)	COR(M)	LICENSEE	(Overlap	in km)
298C	KHYT	LIC	_CN	0.0	0.00	32 14 56.20	92.000	14.0	93.2	-27.1*	-93.4*
Tucson		AZ		73.5	BLH199601116K	111 07 01.30	620	1392	Radio License Holding Cbc,		
296D	K296GT	CP	_CN	97.6	22.22	32 13 20.30	0.050		---	Reference---	
Tucson		AZ		277.7	0000120105	110 52 57.30		857	Radio By Grace, Inc.		
296D	K296GT	STA	DVN	88.2	14.48	32 15 11.20	0.002		---	Reference---	
Mt Lemmon		AZ		268.2	0000199306	110 57 46.30		736	Radio By Grace, Inc.		
296D	K296GT	LIC	DVN	88.2	14.48	32 15 11.20	0.002		---	Reference---	
Mt Lemmon		AZ		268.2	BLFT20170901AAZ	110 57 46.30		736	Radio By Grace, Inc.		
294D	K294CR	LIC	DCN	48.4	0.04	32 14 57.30	0.067	0.0	2.2	-18.1*	-2.5*
Tucson		AZ		228.4	BLFT20170221AAX	111 06 59.30		1341	Radio By Grace, Inc.		
295D	K295CZ	CP	DCN	55.6	38.11	32 26 31.20	0.001	0.8	0.4	15.3	4.1
Marana		AZ		235.8	BNPFT20180418ABE	110 46 53.30		2766	Kasa Radio Hogar, Inc.		
296C3	KVVA-FM	LIC	_CN	340.6	141.17	33 26 44.10	17.000	118.8	46.7	10.5	50.1
Apache Junction		AZ		160.3	BLH20130315ABB	111 37 21.40	124	651	Entravision Holdings, LLC		
294C	XHSNFM	LIC	DHN	171.0	103.33	31 19 51.40	20.000	6.1	92.0	87.1	11.2
Nogales		SO		351.1		110 56 47.30	150	1416			
294C	XHSNFM	ALO	___	171.0	103.33	31 19 51.40	100.000	15.5	92.0	77.7	11.2
Nogales		SO		351.1		110 56 47.30	600	1866			
296C2	KVVA-FM	CP	NCN	324.0	149.58	33 20 00.20	2.050	119.8	47.6	20.2	64.9
Sun Lakes		AZ		143.4	BPH20190723AAO	112 03 51.50	508	880	Entravision Holdings, LLC		
296B	AL07449	ALO	___	210.1	198.79	30 41 50.40	50.000	137.7	65.0	48.1	68.3
Caborca		SO		29.5		112 09 31.40	150	150			
295C	AL05233	ALO	___	135.1	210.37	30 53 59.40	100.000	138.0	92.0	49.1	82.7
Fronteras		SO		315.9		109 33 34.20	600	690			

Terrain database is USGS 03 SEC , R= 73.215 qualifying spacings or FCC minimum spacings in KM, M= Margin in KM
Contour distances are on direct line to and from reference station. Reference zone= West Zone, Co to 3rd adjacer
All separation margins (if shown) include rounding.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
"*"affixed to 'IN' or 'OUT' values = site inside restricted contour.

K296GT.C

11-01-2022

RMS(V)= .433

Graph is Relative Field

Azi	Field	dBk	kw
000	0.181	-20.867	0.008
010	0.157	-22.103	0.006
020	0.142	-22.975	0.005
030	0.134	-23.479	0.004
040	0.190	-20.446	0.009
050	0.329	-15.677	0.027
060	0.528	-11.568	0.070
070	0.718	-8.898	0.129
080	0.866	-7.270	0.187
090	0.952	-6.448	0.227
100	1.000	-6.021	0.250
110	0.952	-6.448	0.227
120	0.866	-7.270	0.187
130	0.718	-8.898	0.129
140	0.528	-11.568	0.070
150	0.329	-15.677	0.027
160	0.190	-20.446	0.009
170	0.134	-23.479	0.004
180	0.142	-22.975	0.005
190	0.157	-22.103	0.006
200	0.181	-20.867	0.008
210	0.187	-20.584	0.009
220	0.171	-21.361	0.007
230	0.140	-23.098	0.005
240	0.123	-24.222	0.004
250	0.135	-23.414	0.005
260	0.160	-21.938	0.006
270	0.182	-20.819	0.008
280	0.193	-20.309	0.009
290	0.182	-20.819	0.008
300	0.160	-21.938	0.006
310	0.135	-23.414	0.005
320	0.123	-24.222	0.004
330	0.140	-23.098	0.005
340	0.171	-21.361	0.007
350	0.187	-20.584	0.009

