

ENGINEERING STATEMENT
UNIMAS PARTNERSHIP OF PHOENIX AND KTVW LICENSE PARTNERSHIP, GP.
TELEVISION STATIONS KFPH-CD AND KTVW-DT, PHOENIX, AZ
FILE NUMBERS BLDTA-20110405AAY AND BLCDDT-20100818ABA
REQUEST FOR EXPERIMENTAL AUTHORIZATION
FOR OPERATION AS AN ATSC 3.0 "LIGHTHOUSE" AND SIMULCAST STATION

This statement supports an application by Unimas Partnership of Phoenix, licensee of Class A digital television station KFPH-CD ("KFPH"), for an Experimental Authorization to construct and operate an ATSC 3.0 ("3.0") "Next generation" TV "Lighthouse" station. Applicant is also proposing to broadcast its main channel of KFPH-CD on KTVW-DT in an ATSC 1.0 format.

In its Report and Order¹ regarding the use of the "Next Generation" Television Standard, the FCC authorizes permissive use of that standard by television stations subject to the requirements set forth in its Report and Order.

KFPH desires to become the first voluntary "lighthouse" station in the Phoenix, Arizona, television market. In compliance with the R&O, KFPH proposes to partner with television station KTVW-DT (KTVW) to host and simulcast its primary channel programming in the current digital television standard ATSC 1.0 ("1.0"), so that viewers without the ability to receive 3.0 will continue to receive KFPH's primary broadcast service.

KFPH is not proposing to make any changes to its transmitter location, antenna height, antenna pattern or effective radiated power and, therefore, the proposed 3.0 coverage contour will be the same as that of its current 1.0 contour. Referring to the attached coverage map, Figure 1, it shows that the coverage contour of the host simulcast 1.0 station, KTVW, well encompasses the current 1.0 and proposed 3.0 coverage contours of KFPH, and, therefore, satisfies the requirements stated in the R&O² regarding contour overlap. Since KFPH and KTVW are co-located at the same transmission site, KFPH is within the required relocation distance of 30 miles between the two stations.

Referring to the population count comparison, Figure 2, KFPH will not experience a decrease of population with KTVW serving as the simulcast host 1.0 station and satisfies the 95% coverage requirement.³

With no changes of transmission parameters being proposed and the same interference prediction methodology applied to both 1.0 and 3.0 transmissions, no additional interference is predicted to other stations.⁴

With there being full contour overlap and no predicted reduction of population coverage using KTVW as the 1.0 host simulcast station, expedited processing of this application is requested.⁵

¹ Report and Order, FCC 17-158 adopted November 16, 2017 and released November 20, 2017

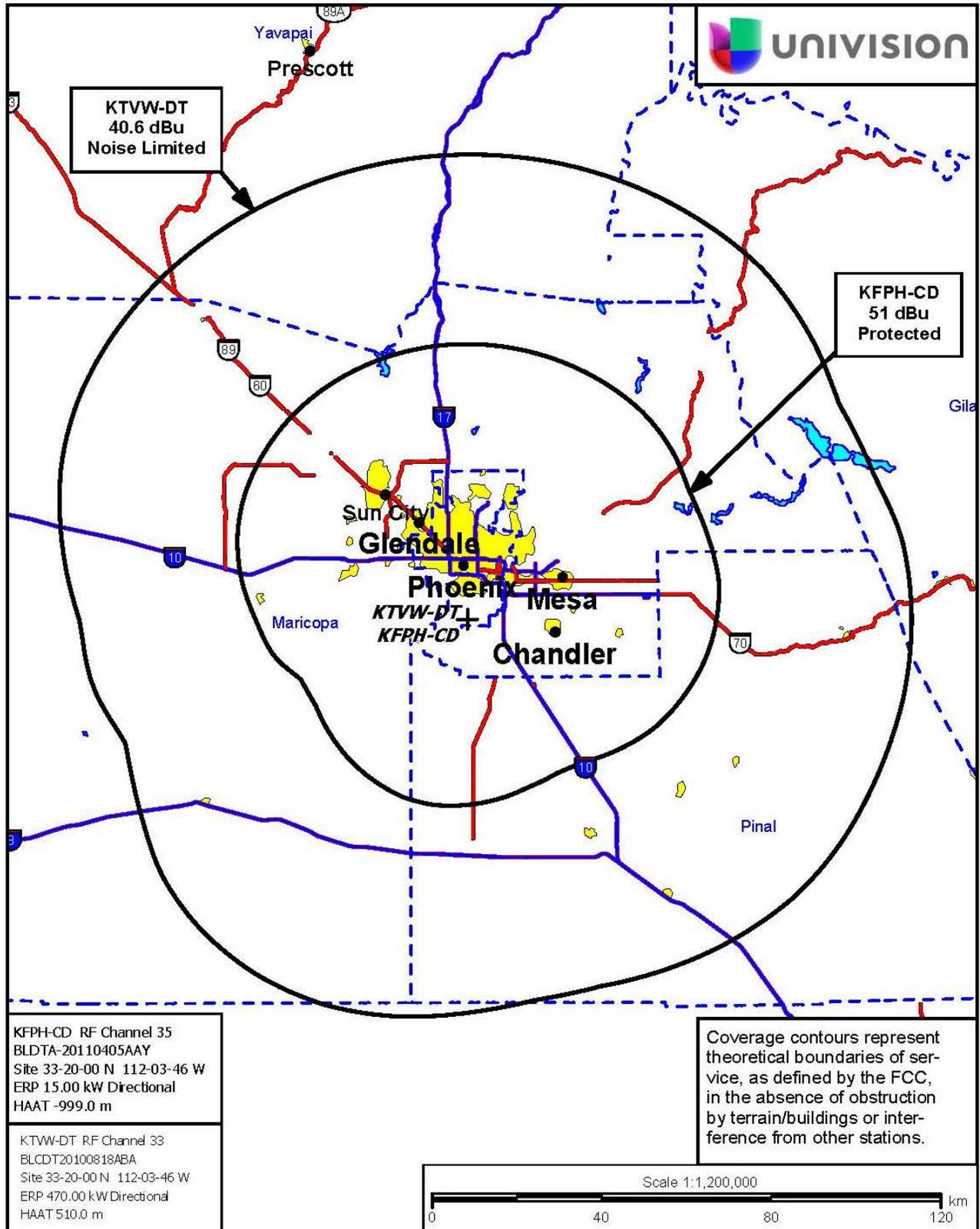
² See paragraph 28 of the Report and Order

³ See paragraph 30 of the Report and Order

⁴ See paragraphs 102 and 103 of the Report and Order

⁵ See paragraph 30 of the Report and Order

Figure 1
KTVW-DT & KFPH-CD Coverage Contours



**Figure 2
Population Count Comparison**

		KFPH-CD		KTVW-DT			
		INSIDE NOISE LIMITED CONTOUR					
State	County	Population	Households	Population	Households	Population Difference	
ARIZONA	Gila	0	0	2,613	1,384	+2,613	N/A
ARIZONA	Maricopa	3,777,715	1,398,848	3,815,193	1,410,929	+37,478	+0.99%
ARIZONA	Pima	0	0	6	2	+6	N/A
ARIZONA	Pinal	193,829	67,834	348,885	114,076	+155,056	+80.00%
ARIZONA	Yavapai	0	0	6,414	2,904	+6,414	N/A
Total:		3,971,544	1,466,682	4,173,111	1,529,295	+201,567	+5.08%
		INSIDE CONTOUR NOT TERRAIN LIMITED					
		Population	Households	Population	Households	Population Difference	
ARIZONA	Gila	0	0	203	93	+203	N/A
ARIZONA	Maricopa	3,706,408	1,370,181	3,804,672	1,408,876	+98,264	+2.65%
ARIZONA	Pima	0	0	6	2	+6	N/A
ARIZONA	Pinal	171,787	60,711	348,696	113,986	+176,909	+102.98%
ARIZONA	Yavapai	0	0	6,230	2,819	+6,230	N/A
Total:		3,878,195	1,430,892	4,159,807	1,525,776	+281,612	+7.26%
		INSIDE CONTOUR INTERFERENCE FREE					
		Population	Households	Population	Households	Population Difference	
ARIZONA	Gila	0	0	203	93	+203	N/A
ARIZONA	Maricopa	3,673,253	1,356,817	3,804,672	1,408,876	+131,419	+3.58%
ARIZONA	Pima	0	0	6	2	+6	N/A
ARIZONA	Pinal	171,787	60,711	348,692	113,984	+176,905	+102.98%
ARIZONA	Yavapai	0	0	6,230	2,819	+6,230	N/A
Total:		3,845,040	1,417,528	4,159,803	1,525,774	+314,763	+8.19%