

TECHNICAL EXHIBIT  
APPLICATION FOR MODIFICATION OF LICENSE  
FCC FILE NO. BPTTA-20030122ADP  
FACILITY ID 2739  
CLASS A STATION KFPH-CA  
PHOENIX, ARIZONA  
CH 35(Z) 150 KW (MAX-DA)

Technical Narrative

The technical exhibit of which this narrative is part supports an application for modification of the license of Class A station KFPH-CA on channel 35 at Phoenix, Arizona, FCC File No. BPTTL-20030122ADP. Specifically, the purpose of this instant application is to change the location of the transmitting site, increase the effective radiated power (ERP) from 50 kW to 150 kW, increase the antenna radiation center height above mean sea level (RCAMSL) from 835 meters to 860 meters, and change the orientation of the directional antenna from 0° to 15° true. No other changes are proposed, including change in channel (35), frequency offset designation (Z) or community of license (Phoenix). As detailed below, this application is considered a "minor change" in facilities pursuant to Section 73.3572.

The proposal would not be subject to environmental processing in accordance with Section 1.1306. It is proposed to side-mount the directional antenna on an existing 86 meter supporting structure (Antenna Structure Registration Number 1065157). It is believed that the instant application conforms with all other applicable rules and regulations of the Federal Communications Commission.

US-Mexican TV Agreement Compliance

The proposed KFPH-CA transmitter site is located 174 kilometers from the closest point of the US-Mexican border. The US-Mexican TV agreement specifies that notification (coordination) is not required if the ERP for LPTV stations located between 100-320 km of the Mexican border does not exceed 10 kW. Figure 1 is a map, which depicts the proposed KFPH-CA transmitter site and circle having a radius 320 km centered on the KFPH-CA site. As shown on Figure 1, the US-Mexican border is

located within 320 km across the arc of azimuths from 133° clockwise to 258° true. Therefore, Mexican coordination is not required if the KFPH-CA ERP does not exceed 10 kW across the arc of azimuths (133°-258° true) towards that portion of the US-Mexican border located within 320 km of the proposed site.

Figure 2 is a polar graph depicting the ERP (in dBk) for the herein proposed KFPH-CA operation. As indicated, the maximum ERP is 7.7 kW (8.9 dBk) towards the portion of the Mexican border located within 320 kilometers of the KFPH-CA site. Therefore, the proposed operation will not require Mexican coordination.

#### TV Broadcast Analog Protection

A study has been conducted using the provisions of Section 74.705 which indicates that the proposed KFPH-CA operation will not create prohibited interference to other existing, authorized or proposed NTSC full-power stations with the exception of the operations of KPAZ-TV on channel 21 at Phoenix, Arizona, KTVW-TV on channel 33 at Phoenix, Arizona, and KDTP on channel 39 at Phoenix, Arizona. Therefore, waiver of Section 74.705 is requested with respect to KPAZ-TV, KTVW-TV, and KDTP. Justification for the waiver request is provided below.

Station KTVW operates on a second lower adjacent channel to the proposed KFPH-CA operation and KDTP operates on a fourth upper adjacent channel to the proposed KFPH-CA operation. Section 74.705 specifies a minimum distance separation of 32 kilometers towards KTVW-TV and KDTP for Class A stations operating in excess of 50 kW, whereas the actual distance to the KTVW-TV and KDTP operations is less than 32 kilometers. Therefore, the proposed KFPH-CA operation will be short-spaced to the KTVW-TV and KDTP operations.

The 32 kilometer separation requirement between second adjacent (KTVW-TV) and fourth adjacent (KDTP) channel full service NTSC and LPTV stations is designed to prevent "cross

modulation" and "intermodulation" interference. In cross modulation interference, the modulation of the undesired channel is superimposed on the modulation of the desired channel. The potential for cross modulation interference was analyzed based on OET Bulletin No. 69<sup>1</sup> which indicates that the KFPH-CA proposal complies with the FCC's 0.5% interference threshold towards KPAZ-TV.<sup>2</sup> The results of the OET Bulletin No. 69 study are attached as Figure 3.

Intermodulation interference results from the combination of the proposed KFPH-CA channel 35 and KTVW-TV channel 33 signals, and the combination of the proposed KFPH-CA channel 35 and KDTP channel 39 signals (visual carriers only) in a receiver to generate a signal, which falls within the pass-band of a "desired" third signal. For the KFPH-CA channel 35/KTVW-TV channel 33 combination, the desired signal will not be either channel 35 or channel 33, and for the KFPH-CA channel 35/KDTP channel 39 combination the desired signal will not be either channel 35 or channel 39. For the KFPH-CA channel 35/ KTVW-TV channel 33 combination, the intermodulation products fall on channels 31 and 37 (channel 37 reserved for radio astronomy). For the KFPH-CA channel 35/KDTP channel 39 combination, the intermodulation products fall on channels 31 and 43. If there are viewable signals on those channels in the vicinity of the proposed KFPH-CA channel 35 service area there will be a potential for interference. Our studies indicate that there are no viewable full-service NTSC signals on these channels in the area and, therefore, interference is not likely to occur.

Station KPAZ-TV operates on the 14<sup>th</sup> channel below the proposed KFPH-CA operation. This is a UHF "sound image" taboo. Based on the provisions of the OET-69 Bulletin as permitted by FCC rules [Section 74.705(e)], it is believed that KFPH-CA's

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<sup>1</sup> The du Treil, Lundin & Rackley, Inc. NTSC/ DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 2 km was employed. An Alpha based processor computer system was employed. The results have been found to be in very close agreement with the results of the FCC implementation of OET Bulletin No. 69.

<sup>2</sup> The FCC permits a 0.5% "rounding allowance" for such calculations (see paragraphs 78 of MM Docket No. 00-10).

proposed operation complies with the FCC's interference criteria towards KPAZ-TV. Specifically, calculations have been made using the procedures outlined in the FCC's OET-69 Bulletin and a 1 square kilometer grid. The results of the OET Bulletin No. 69 towards KPAZ-TV are tabulated on Figure 3 and, as indicated, the KFPH-CA proposal complies with the FCC's 0.5% interference threshold towards KPAZ-TV.

#### LPTV/TV Translator, Class A and Digital Class A Protection

A study has been conducted which indicates that the KFPH-CA proposal will not create prohibited interference to other existing, authorized or proposed LPTV/TV translator, Class A or digital Class stations with the exception of a pending application for a new LPTV station on channel 35 at Prescott, Arizona (BNPTT-20000830AYG). However, based on the provisions of the OET-69 Bulletin as permitted by FCC rules [Section 74.707(e)] it is believed that KFPH-CA's proposed operation complies with the FCC's interference criteria towards the Prescott channel 35 application. Specifically, calculations have been made using the procedures outlined in the FCC's OET-69 Bulletin and a 1 square kilometer grid. The results of the OET Bulletin No. 69 re tabulated on Figure 3 and, as indicated, the proposal complies with the FCC's 0.5% interference threshold.

#### DTV Station Protection

With respect to the digital television (DTV) assignments and allotments on channels 34, 35, and 36, interference calculations have been made using the procedures outlines in the FCC's OET-69 Bulletin towards the DTV operations of KTVW-TV on DTV channel 34 at Phoenix, Arizona, KGUN on DTV channel 35 at Tucson, Arizona, and KPNX on DTV channel 36 at Mesa, Arizona. The results of the OET Bulletin No. 69 interference analysis towards KTVW-TV, KGUN, and KPNX are summarized in Figure 4. As indicted on Figure 4, the proposed KFPH-CA operation complies with the FCC's 0.5% "rounding allowance" for such calculations.

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Land Mobile Station Protection

The proposed KFPH-CA operation does not cause interference to land mobile radio stations (LMRS).

Minor Change Application

Figure 5 depicts the authorized and herein proposed 74 dBu contours for KFPH-CA. As indicated, the proposed 74 dBu contour encompasses a portion of the authorized 74 dBu contour. Therefore, the proposed modification is considered a "minor" change in facilities pursuant to Section 73.3572.

Environmental Considerations

The proposed KFPH-CA LPTV facilities were evaluated in terms of potential radiofrequency radiation exposure at ground level in accordance with OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation." The calculated power density at the base of the tower was calculated using the appropriate equation on Page 13 of the Bulletin. Using a greater than expected vertical relative field value of 0.15, a maximum visual effective radiated power of 150.0 kilowatts and 10 percent aural power, the calculated power density at 2 meters above ground level at the base of the tower is 0.018 milliwatt per square centimeter ( $\text{mW}/\text{cm}^2$ ), or 4.5 percent of the Commission's recommended limit applicable to general population/uncontrolled exposure areas ( $0.40 \text{ mW}/\text{cm}^2$  for TV channel 35). Therefore, based on the new responsibility threshold of 5%, the proposal will comply with the new RF emission rules. Furthermore, as this is a multi-user site, measurements will be made to substantiate compliance with the RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, as this is a multi-user site, an agreement will be in effect in the event that workers or other authorized personnel enter the restricted

area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

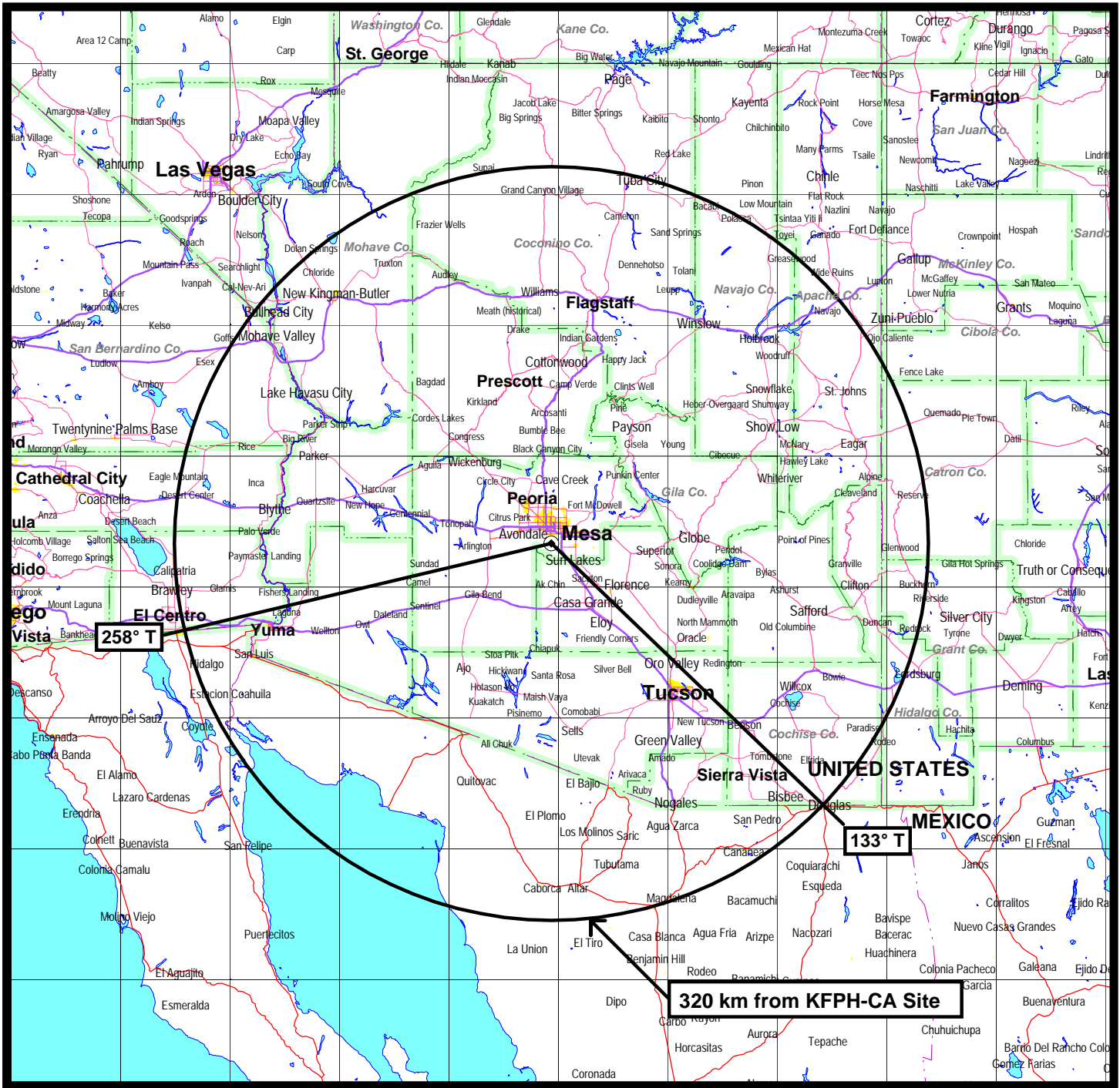
In addition, it appears that the existing tower is otherwise excluded from environmental processing as it complies with all the criteria for such an exclusion in Section 1.1306.

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February 19, 2003

Figure 1



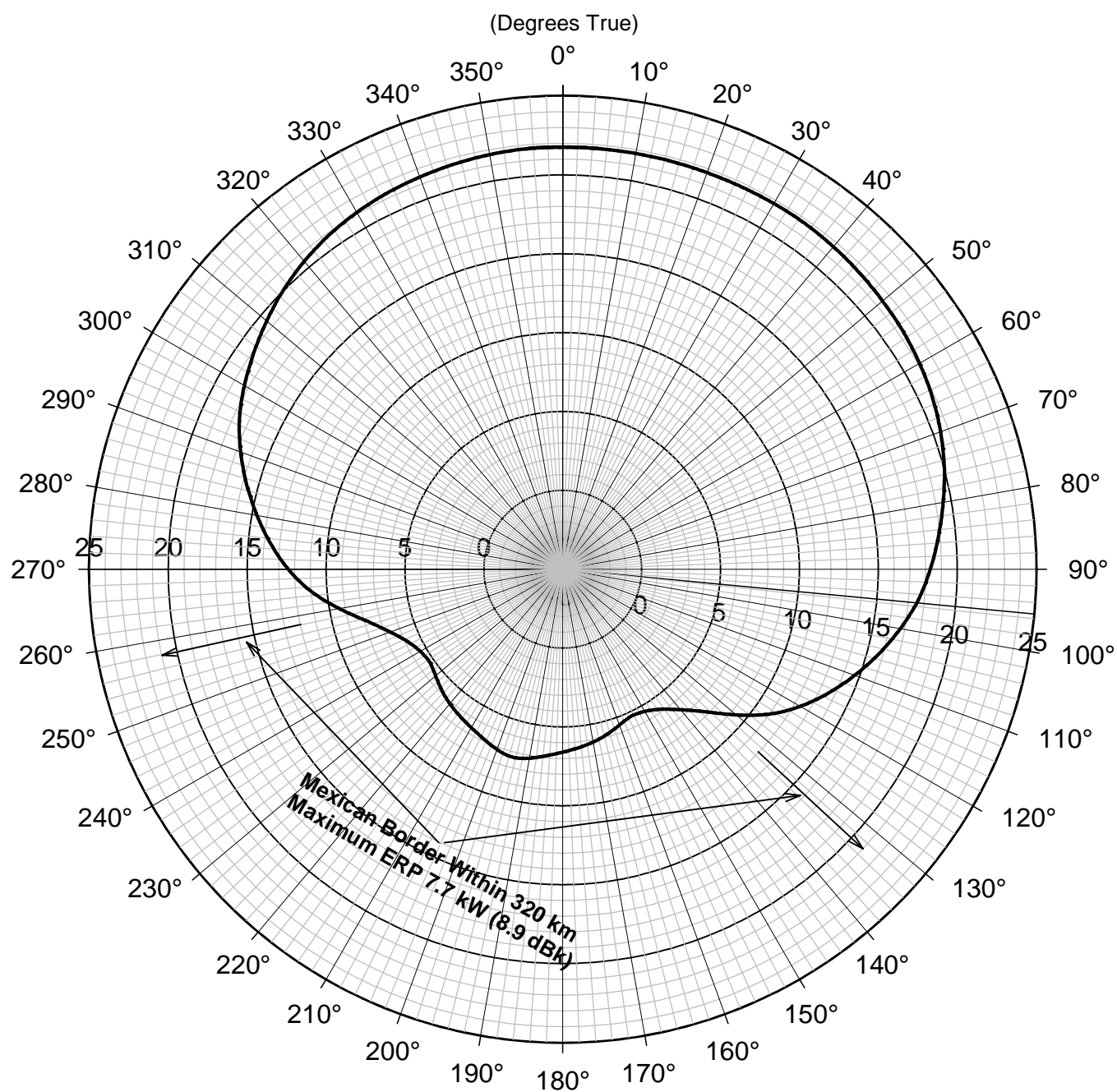
100 0 100 200 300 400 500 600  
Kilometers

## MEXICAN ALLOCATION STUDY

STATION KFPH-CA  
PHOENIX, ARIZONA  
CH 35

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



DIRECTIONAL ANTENNA RADIATION PATTERN

(DBK)

STATION KFPH-CA

PHOENIX, ARIZONA

CH 35 150 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida



OET-69 NTSC/LPTV INTERFERENCE CAUSED STUDY

CELL SIZE : 2.00  
Using offset in determining thresholds  
Per 6th Report & Order and FCC OET-69 Bulletin

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KPAZ-T 33-20-02 112-03-42 21(Z) 1290.000 kw 844 m 50.0 % 62.4 dBu  
PHOENIX AZ 18889 2200 FCC NTSC BL: 2212448 FCC IX POP%: 0.0  
LIC BLCT19930715KF

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	24150.35	2212446
not affected by terrain losses	19111.12	2193595

\*\*\*\*\*

KFPH 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7  
PHOENIX AZ

PROPOSED

1.00	1.00	1.00	0.98	0.95	0.90	0.82	0.72	0.62	0.50	0.39	0.29
0.20	0.16	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.16	0.15	0.16
0.20	0.29	0.39	0.50	0.62	0.72	0.82	0.90	0.95	0.98	1.00	1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -25.00

	Area	Pop
Interference	12.11	1( 0.0%)

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KTVW-T 33-20-00 112-03-46 33(Z) 2290.000 kw 879 m DA 50.0 % 63.6 dBu  
PHOENIX AZ 17534 2195 FCC NTSC BL: 2211234 FCC IX POP%: 0.9  
LIC BLCT19971110KF

0.97	0.98	0.99	1.00	1.00	0.98	0.97	0.95	0.92	0.90	0.86	0.82
0.75	0.66	0.56	0.45	0.37	0.35	0.38	0.43	0.47	0.48	0.46	0.41
0.35	0.33	0.36	0.45	0.56	0.66	0.75	0.81	0.86	0.90	0.93	0.95

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	22708.71	2212555
not affected by terrain losses	17859.56	2193970

\*\*\*\*\*

KFPH 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7  
PHOENIX AZ

PROPOSED

1.00	1.00	1.00	0.98	0.95	0.90	0.82	0.72	0.62	0.50	0.39	0.29
0.20	0.16	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.16	0.15	0.16
0.20	0.29	0.39	0.50	0.62	0.72	0.82	0.90	0.95	0.98	1.00	1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -29.00

	Area	Pop
Interference	0	0

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**NEW 34-29-25 112-32-00 35(-) 3.900 kw 2177 m DA 50.0 % 73.7 dBu**

**PRESCOTT AZ**

**APP BNPTT20000830AYG**

1.00	0.98	0.91	0.82	0.72	0.62	0.52	0.44	0.38	0.32	0.28	0.24
0.20	0.17	0.13	0.10	0.10	0.13	0.15	0.13	0.10	0.10	0.13	0.17
0.20	0.24	0.28	0.32	0.38	0.44	0.52	0.62	0.72	0.82	0.91	0.98

Ref Az: 30.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	749.8544	43072
not affected by terrain losses	616.8157	36289

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**KFPH 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7**

**PHOENIX AZ**

**PROPOSED**

1.00	1.00	1.00	0.98	0.95	0.90	0.82	0.72	0.62	0.50	0.39	0.29
0.20	0.16	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.16	0.15	0.16
0.20	0.29	0.39	0.50	0.62	0.72	0.82	0.90	0.95	0.98	1.00	1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 28.00

Interference	Area	Pop
	0	0

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**KDTP 33-20-01 112-03-45 39(Z) 1070.000 kw 856 m DA 50.0 % 64.1 dBu**

**PHOENIX AZ**

**LIC BLET20010205ABS**

1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	21574.34	2211523
not affected by terrain losses	16539.12	2188353

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**KFPH 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7**

**PHOENIX AZ**

**PROPOSED**

1.00	1.00	1.00	0.98	0.95	0.90	0.82	0.72	0.62	0.50	0.39	0.29
0.20	0.16	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.16	0.15	0.16
0.20	0.29	0.39	0.50	0.62	0.72	0.82	0.90	0.95	0.98	1.00	1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 9999.00

Interference	Area	Pop
	0	0

**Summary of Calculations**

Facility	Channel	Type	Baseline	Permissible	IX	%Base
KPAZ-T, PHOENIX, AZ	21	TV	2212448	0.5	1	0.00 <sup>1</sup>
KTVW-T, PHOENIX, AZ	33	TV	2211234	0.5	0	0.00
NEW, PRESCOTT, AZ	35	TV	2211234	0.5	0	0.00
KDTP, PHOENIX, AZ	39	TV	2211234	0.5	0	0.00

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<sup>1</sup> Includes the effects of “masking” by other DTV and NTSC stations.

# OET-69 DTV INTERFERENCE CAUSED STUDY

CELL SIZE : 2.00  
Using offset in determining thresholds  
Per 6th Report & Order and FCC OET-69 Bulletin

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KTVW-T 33-20-00 112-03-46 34(N) 200.000 kw 879 m DA 90.0 % 40.7 dBu  
PHOENIX AZ 18050 2198 DTVSERVICE: 2198000 NTSCSERVICE: 2195000  
CP BPCDT19991022ABK

0.97	0.99	1.00	1.00	1.00	0.99	0.97	0.95	0.92	0.90	0.86	0.82
0.75	0.66	0.56	0.45	0.37	0.35	0.38	0.43	0.47	0.48	0.46	0.41
0.35	0.33	0.36	0.45	0.56	0.66	0.75	0.81	0.86	0.90	0.93	0.95

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	27827.80	2223275
not affected by terrain losses	22514.01	2218269

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KFPH 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7  
PHOENIX AZ  
PROPOSED

1.00	1.00	1.00	0.98	0.95	0.90	0.82	0.72	0.62	0.50	0.39	0.29
0.20	0.16	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.16	0.15	0.16
0.20	0.29	0.39	0.50	0.62	0.72	0.82	0.90	0.95	0.98	1.00	1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -49.00

	Area	Pop
Interference	0	0

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DKTVWT 33-20-00 112-03-46 34(0) 80.300 kw 879 m DA 90.0 % 40.7 dBu  
PHOENIX AZ 18050 2198 DTVSERVICE: 2198000 NTSCSERVICE: 2195000  
DTVALT DTV ALLOTMENT

0.96	0.99	1.00	1.00	1.00	0.97	0.96	0.93	0.91	0.87	0.81	0.74
0.65	0.56	0.45	0.35	0.26	0.21	0.23	0.25	0.30	0.34	0.34	0.33
0.28	0.26	0.27	0.34	0.46	0.57	0.68	0.77	0.82	0.87	0.91	0.95

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	22535.24	2211631
not affected by terrain losses	18344.42	2205789

\*\*\*\*\*

KFPH 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7  
PHOENIX AZ  
PROPOSED

1.00	1.00	1.00	0.98	0.95	0.90	0.82	0.72	0.62	0.50	0.39	0.29
0.20	0.16	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.16	0.15	0.16
0.20	0.29	0.39	0.50	0.62	0.72	0.82	0.90	0.95	0.98	1.00	1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -49.00

Interference	Area	Pop
	0	0
*****		
DKGUN 32-24-54 110-42-59 35(0) 233.200 kw 2670 m DA 90.0 % 40.7 dBu		
TUCSON AZ 33741 686 DTVSERVICE: 686000 NTSCSERVICE: 701602		
DTVALT DTV ALLOTMENT		
0.93 0.91 0.88 0.85 0.82 0.81 0.81 0.80 0.80 0.80 0.83 0.87		
0.90 0.93 0.93 0.91 0.89 0.87 0.84 0.82 0.81 0.79 0.78 0.81		
0.88 0.94 0.96 1.00 1.00 1.00 1.00 1.00 0.99 0.97 0.96 0.94		

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	48545.65	881541
not affected by terrain losses	34188.61	692543

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KFPH 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7
PHOENIX AZ
PROPOSED
1.00 1.00 1.00 0.98 0.95 0.90 0.82 0.72 0.62 0.50 0.39 0.29
0.20 0.16 0.15 0.16 0.17 0.18 0.19 0.18 0.17 0.16 0.15 0.16
0.20 0.29 0.39 0.50 0.62 0.72 0.82 0.90 0.95 0.98 1.00 1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

Interference	Area	Pop
	805.67	918 (0.13%)

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KGUN 32-24-53 110-42-58 35(N) 480.000 kw 2660.2 m DA 90.0 % 40.7 dBu
TUCSON AZ 33741 686 DTVSERVICE: 686000 NTSCSERVICE: 701602
CP BPCDT19991021ACH
0.83 0.79 0.77 0.76 0.77 0.78 0.80 0.81 0.81 0.80 0.77 0.72
0.67 0.61 0.55 0.50 0.47 0.45 0.45 0.45 0.47 0.50 0.53 0.58
0.64 0.70 0.77 0.84 0.90 0.95 0.99 1.00 1.00 0.97 0.93 0.88

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	Area	Pop
within Noise Limited Contour	50744.66	887775
not affected by terrain losses	36142.09	706068

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KFPH 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7
PHOENIX AZ
PROPOSED
1.00 1.00 1.00 0.98 0.95 0.90 0.82 0.72 0.62 0.50 0.39 0.29
0.20 0.16 0.15 0.16 0.17 0.18 0.19 0.18 0.17 0.16 0.15 0.16
0.20 0.29 0.39 0.50 0.62 0.72 0.82 0.90 0.95 0.98 1.00 1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: 2.00

<b>Interference</b>	<b>Area</b> 921.97	<b>Pop</b> 2033(0.29%)
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DKPNX 33-20-00 112-03-48 36(0) 843.900 kw 900 m DA 90.0 % 40.8 dBu  
MESA AZ 32650 2225 DTVSERVICE: 2225000 NTSCSERVICE: 2221000

DTVALT DTV ALLOTMENT

0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
0.97	0.97	0.97	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.97
0.97	0.97	0.97	0.97	0.97	0.97	0.98	0.99	1.00	0.99	0.99	0.99

(316.0 1.00)(317.0 1.00)

Ref Az: 0.0

Using DEFAULT vertical antenna pattern

	<b>Area</b>	<b>Pop</b>
within Noise Limited Contour	41590.05	2236602
not affected by terrain losses	32892.48	2225426

\*\*\*\*\*

KFPX 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7  
PHOENIX AZ

PROPOSED

1.00	1.00	1.00	0.98	0.95	0.90	0.82	0.72	0.62	0.50	0.39	0.29
0.20	0.16	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.16	0.15	0.16
0.20	0.29	0.39	0.50	0.62	0.72	0.82	0.90	0.95	0.98	1.00	1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00

<b>Interference</b>	<b>Area</b> 0	<b>Pop</b> 0
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KPNX2 33-20-00 112-03-48 36(N) 1000.000 kw 891.2 m 90.0 % 40.8 dBu  
MESA AZ 32650 2225 DTVSERVICE: 2225000 NTSCSERVICE: 2221000

CP MOD BMPCDT20000501ACV

Using DEFAULT vertical antenna pattern

	<b>Area</b>	<b>Pop</b>
within Noise Limited Contour	42656.18	2238916
not affected by terrain losses	33736.50	2225807

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KFPX 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7  
PHOENIX AZ

PROPOSED

1.00	1.00	1.00	0.98	0.95	0.90	0.82	0.72	0.62	0.50	0.39	0.29
0.20	0.16	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.16	0.15	0.16
0.20	0.29	0.39	0.50	0.62	0.72	0.82	0.90	0.95	0.98	1.00	1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00

	<b>Area</b>	<b>Pop</b>
<b>Interference</b>	<b>0</b>	<b>0</b>

\*\*\*\*\*

KPNX 33-20-00 112-03-48 36(N) 819.000 kw 891 m 90.0 % 40.8 dBu  
 MESA AZ 32650 2225 DTVSERVICE: 2225000 NTSCSERVICE: 2221000  
 LIC BLCDT20000628AEW  
 Using DEFAULT vertical antenna pattern

	<b>Area</b>	<b>Pop</b>
within Noise Limited Contour	41299.45	2235528
not affected by terrain losses	32650.31	2224430

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KFPHP2 33-20-00 112-03-46 35(Z) 150.000 kw 860 m DA 10.0 % 73.7

PHOENIX AZ  
 CP BPTTL19991104AAX

1.00	1.00	1.00	0.98	0.95	0.90	0.82	0.72	0.62	0.50	0.39	0.29
0.20	0.16	0.15	0.16	0.17	0.18	0.19	0.18	0.17	0.16	0.15	0.16
0.20	0.29	0.39	0.50	0.62	0.72	0.82	0.90	0.95	0.98	1.00	1.00

Ref Az: 15.0

Using DEFAULT vertical antenna pattern

D/U Baseline: -48.00

	<b>Area</b>	<b>Pop</b>
<b>Interference</b>	<b>0</b>	<b>0</b>

### Summary of Calculations

Facility	Channel	Type	Baseline	Permissible	IX	%Base
KTVW-T, PHOENIX, AZ	34	DTV	2198000	0.5	0	0.00
DKTVWT, PHOENIX, AZ	34	DTV	2198000	0.5	0	0.00
DKGUN, TUCSON, AZ	35	DTV	701602	0.5	918	0.13 <sup>1</sup>
KGUN, TUCSON, AZ	35	DTV	701602	0.5	2033	0.29 <sup>1</sup>
DKPNX, MESA, AZ	36	DTV	2225000	0.5	0	0.00
KPNX2, MESA, AZ	36	DTV	2225000	0.5	0	0.00
KPNX, MESA, AZ	36	DTV	2225000	0.5	0	0.00

<sup>1</sup> Includes the effects of "masking" by other DTV and NTSC stations.

Figure 5

