

EXHIBIT A

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of GILA RIVER TELECOMMUNICATIONS, INC., permittee of digital Low Power Television Station KGRY-LD, Channel 28 in Gila River Indian Community, Arizona, in support of its application for modification of Construction Permit LMS-0000071772 to specify a slightly different tower site and a new antenna make and model. The distance separating the authorized and proposed sites is only 60 meters. It is also proposed herein to operate the station with the ATSC 3.0 transmission standard.

It is proposed to mount a Kathrein circularly-polarized directional panel antenna at the 25-meter level of an existing 43.6-meter communications tower. The proposed effective radiated power for the facility is 15.0 kW in the horizontal and vertical planes. Exhibit B is a map upon which the predicted 51 dBu service contour of the proposed facility is plotted.

Azimuth and elevation pattern data for the proposed Kathrein 4x3 750 10300 antenna is attached as Exhibit C.

Exhibit D is a summary report from a TVStudy interference analysis for the proposed facility. Our study employed a cell size of 1.0 kilometer and an increment spacing of 1.0 kilometer. Further the applicant proposes use of a full-service emission mask filter. The results indicate that the proposed KGRX-LD facility meets the Commission's interference requirements to all full-power and low-power co-channel and adjacent-channel television facilities, except for one. The study shows impermissible interference to analog LPTV station KCOS-LP, Channel 28 in Phoenix, Arizona (BLTTL-19990325JD). However, that station's license expired in 2014 and has not been renewed. In addition, a recent off-air reception test of Channel 28 in Phoenix

EXHIBIT A

reveals that this channel continues to be vacant (meaning KCOS-LP is off the air). Finally, this same argument was proffered in the KGRY-LD original application to move to the South Mountain antenna farm (LMS-0000071772), and the Commission accepted that argument in granting a construction permit to KGRY-LD. Since the instant facility is extremely similar to that authorized in LMS-0000071772, it is respectfully requested that interference to KCOS-LP continue to be ignored.

A detailed power density calculation is provided in Exhibit E.

Since no change in the overall height or location of the existing tower is proposed herein, the Federal Aviation Administration has not been notified of this application. In addition, due to the diminutive height of the tower and its proximity with respect to the nearest airport runways, FCC antenna structure registration is not required. This conclusion is supported by the Commission's TOWAIR program.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read "K. T. Fisher", with a stylized flourish at the end.

KEVIN T. FISHER

February 18, 2021

CONTOUR POPULATION
2018 U.S. CENSUS DATA
4,603,977 (1,840,970 HH)

Smith and Fisher, LLC

PROPOSED CH. 28
51 DBU CONTOUR

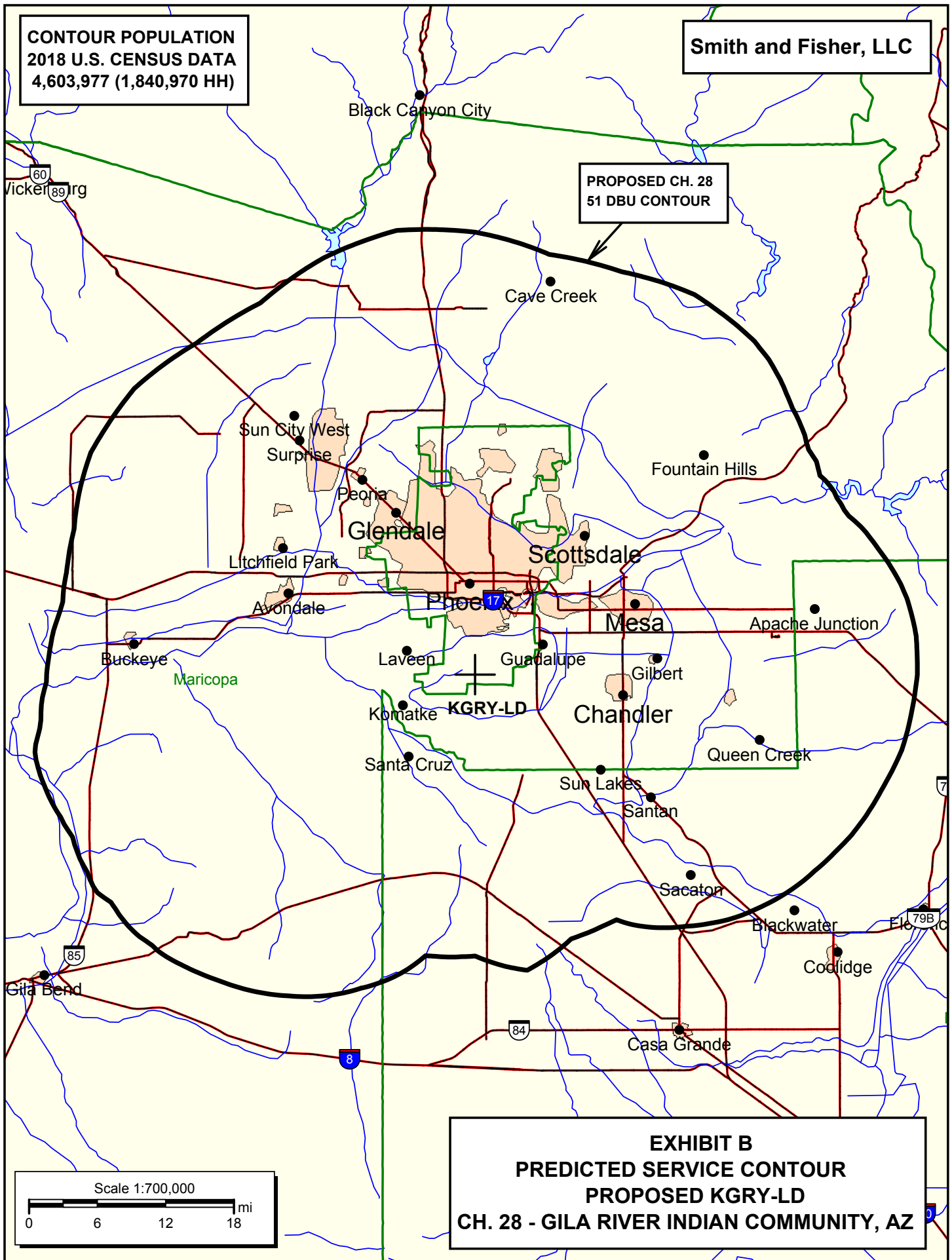
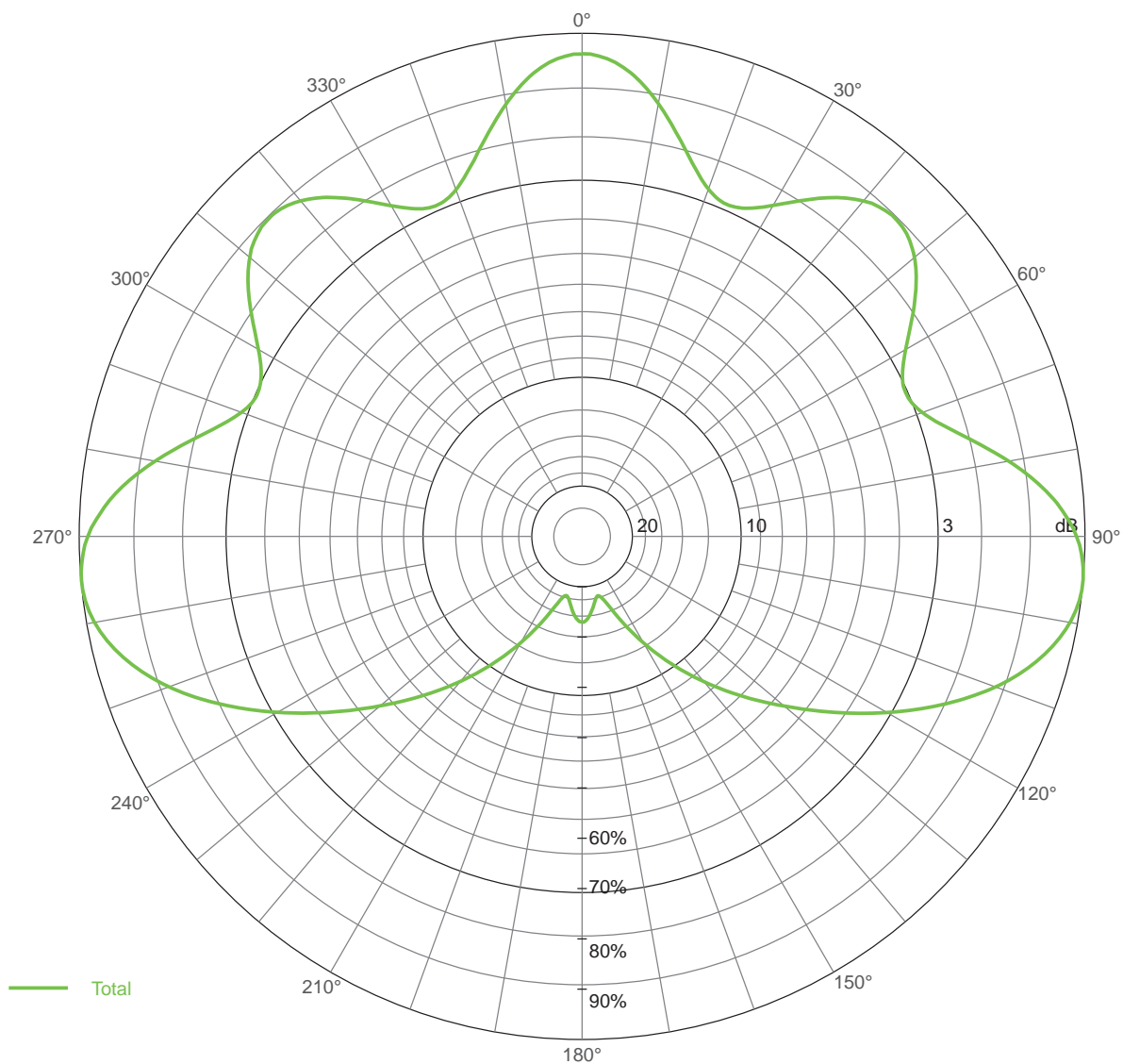


EXHIBIT B
PREDICTED SERVICE CONTOUR
PROPOSED KGRY-LD
CH. 28 - GILA RIVER INDIAN COMMUNITY, AZ

Azimuthal Pattern (polar-linear)

Subject to alternation



Antenna, Order No. 75010300

Panels per Bay: 3

Frequency: 557 MHz

Azimuthal Directivity: 2.83 dB

Directivity: 12.06 dBd

No.	Azimuth [°]	Radius [mm]	Offset [mm]	Power	Phase [°]
1	270	290	0	1	0
2	0	290	0	1	0
3	90	290	0	1	0

simulation with typical exactness of +/- 8% of max signal

KATHREIN

Edge Networks

Phoenix

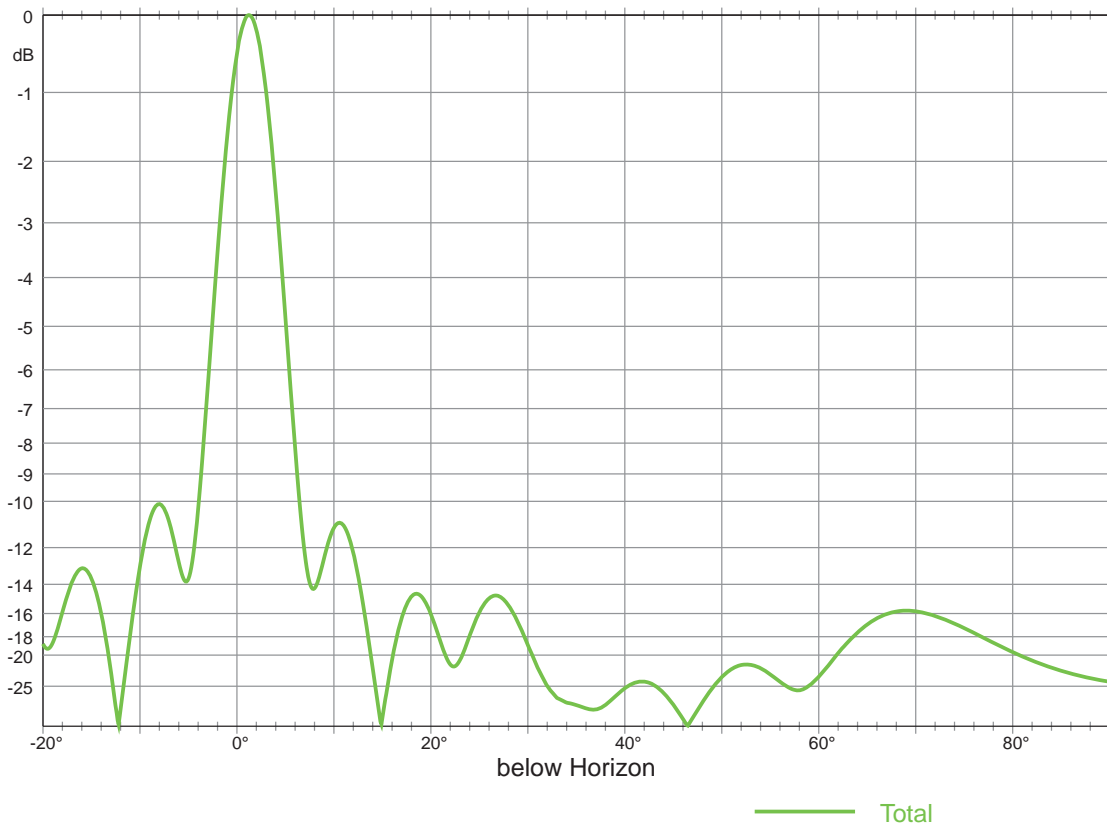
Date: 2021.01.07

KBU mj

4x3 750 10300 C-pol / H+V MIMO Array

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Elevation Pattern (cartesian-linear)



Antenna, Order No. 75010300

Number of Bays: 4

Frequency: 557 MHz

Elevation Directivity: 9.22 dBd

Directivity: 12.06 dBd

Downtilt: 1.2°

Compensation: 34.22 %

No.	Vert. Distance [mm]	Power	Phase [°]
4	3450	1	68.7
3	2300	1	17.7
2	1150	1	0
1	0	1	16.6

EXHIBIT D

TVSTUDY INTERFERENCE ANALYSIS RESULTS
 PROPOSED KGRY-LD
 CHANNEL 28 – GILA RIVER INDIAN COMMUNITY, ARIZONA

Study created: 2021.02.19 10:07:08

Study build station data: LMS TV 2021-01-18

Proposal: KGRY-LD D28 LD CP GILA RIVER INDIAN CO, AZ

File number: BLANK0000071772

Facility ID: 187710

Station data: User record

Record ID: 970

Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K21GE	N21-	TX	LIC	CAMP VERDE, AZ	BLTT20040830AAI	127.7 km
No	KTVW-CD	D27	DC	LIC	FLAGSTAFF/DONEY PARK, AZ	BLDTA20140421ACI	188.9
No	K27KS-D	D27	LD	LIC	GLOBE/MIAMI, AZ	BLDTT20130312ACC	111.0
No	K16EO-D	D27	LD	LIC	ORO VALLEY/TUCSON, AZ	BLANK0000067692	159.0
Yes	KASW	D27	DT	LIC	PHOENIX, AZ	BLANK0000106570	0.3
Yes	KASW	D27	DD	CP	PHOENIX, AZ	BLANK0000116045	0.3
No	DDKDFQ-LP	D27z	LD	APP	PRESCOTT, AZ	BLANK0000052540	150.6
No	KYPO-LP	N27	TX	LIC	TACNA, AZ	BLTTL20080818AAL	156.2
Yes	K38AI-D	D28	LD	LIC	COTTONWOOD, AZ	BLANK0000062884	150.6
No	K28CW-D	D28	LD	LIC	FLAGSTAFF, AZ	BLDTT20120731ACI	216.4
No	K28PO-D	D28	LD	LIC	LAKE HAVASU CITY, AZ	BLANK0000071726	255.1
Yes	KCOS-LP	N28-	TX	LIC	PHOENIX, AZ	BLTTL19990325JD	43.3
Yes	K28QP-D	D28	LD	CP	SALOME, AZ	BNPDTL20100514AEQ	133.5
No	K28MN-D	D28	LD	CP	SAN SIMON, AZ	BNPDTL20100504AMT	289.6
No	K28QO-D	D28	LD	CP	SENTINEL, AZ	BNPDTL20100510AAS	118.6
No	K28OY-D	D28z	LD	LIC	SIERRA VISTA, AZ	BLANK0000081217	285.3
Yes	KUAS-TV	D28	DT	LIC	TUCSON, AZ	BLEDT20030115ABS	158.9
No	K28FM	N28z	TX	LIC	YUMA, AZ	BLTTL20001006AAL	224.1

SMITH AND FISHER

No	KESQ-TV	D28	DT LIC	PALM SPRINGS, CA	BLANK0000078362	408.8
No	K28LK-D	D28	LD CP	SILVER CITY, NM	BLANK0000126118	359.9
No	K28LK-D	D28	LD LIC	SILVER CITY, NM	BLANK0000106677	359.9
No	K28EU-D	D28	LD LIC	LAUGHLIN, ETC., NV	BLDTT20120319ADY	325.2
No	K40AD-D	D29	LD LIC	COTTONWOOD, ETC., AZ	BLANK0000062886	150.6
Yes	KTAZ	D29	DT LIC	PHOENIX, AZ	BLANK0000064009	0.5
No	KPCE-LP	D29-	LD CP	TUCSON, AZ	BLANK0000122634	148.1
No	KPCE-LP	N29-	TX LIC	TUCSON, AZ	BLTTL20080605AAT	149.6

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D28

Mask: Full Service

Latitude: 33 19 57.30 N (NAD83)

Longitude: 112 3 57.00 W

Height AMSL: 832.7 m

HAAT: 0.0 m

Peak ERP: 15.0 kW

Antenna: KGRY-LD Panel Antenna 0.0 deg

Elev Pattn: Generic

Elec Tilt: 0.50

50.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	11.4 kW	493.1 m	63.7 km
45.0	9.67	455.0	61.5
90.0	14.6	447.6	63.7
135.0	1.45	473.9	50.5
180.0	0.277	488.2	40.9
225.0	5.62	494.2	59.4
270.0	11.1	439.6	61.7
315.0	9.96	506.7	63.3

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 475 m

Distance to Canadian border: 1741.3 km

**Proposal is within coordination distance of Mexican border

Distance to Mexican border: 175.8 km

Conditions at FCC monitoring station: Douglas AZ

Bearing: 131.3 degrees Distance: 304.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 36.8 degrees Distance: 967.4 km

Study cell size: 1.00 km

Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

**IX check failure to BLTTL19990325JD LIC scenario 1, 96.14% interference caused

**IX check failure to BLTTL19990325JD LIC scenario 2, 96.14% interference caused

POWER DENSITY CALCULATION

PROPOSED KGRY-LD
CHANNEL 28 – GILA RIVER INDIAN COMMUNITY, ARIZONA
[MODIFICATION OF LMS-0000071772]

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kW (H, V), an antenna radiation center 25 meters above ground, and the specific elevation pattern for the proposed Kathrein 4x3 750 10300 antenna, maximum power density two meters above ground of 0.042 mW/cm^2 is calculated to occur 8 meters north-northwest of the base of the tower. Since this is only 2.3 percent of the 1.85 mW/cm^2 reference for controlled environments (areas without access to the public) surrounding a facility operating on Channel 28 (554-560 MHz) and since the South Mountain antenna farm is considered to be a controlled area from an RF exposure standpoint, a grant of this proposal may be considered a minor environmental action with respect to public and occupational exposure to non-ionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing radiation.