

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of INTERNATIONAL COMMUNICATIONS NETWORK, INC. ("ICN"), licensee of digital Low Power Television Station KSDY-LD, Channel 50 in San Diego, California, in support of this amendment to its displacement Application for Construction Permit to specify operation on Channel 25 (LMS-0000052238). During the displacement application filing window, two other San Diego area LPTV stations filed for Channel 25. As a result, all three mutually exclusive applications were placed in MX Group 112 by the Commission. A settlement has been reached by the parties and ICN has agreed to specify operation on Channel 31 instead of Channel 25. The instant amendment seeks operation on the new channel. No change in the licensed KSDY-LD site location, effective radiated power, antenna azimuth pattern or antenna height is proposed herein.

It is proposed to utilize the existing broadband directional antenna, which is mounted at the 25-meter level of an existing 45.7-meter communications tower. The proposed effective radiated power for the facility is 15.0 kW in horizontal plane, which is the present power level of KSDY-LD. Exhibit B is a map upon which the predicted 51 dBu service contour is plotted.

Exhibit C is a summary report from a TVStudy interference analysis for the proposed facility. Our study employed both a cell size and increment spacing of 1.0 kilometer. Further the applicant proposes use of a full-service mask filter. The results indicate that the proposed KSDY-LD facility meets the Commission's interference requirements to all full-power and low-power co-channel and adjacent-channel television facilities, except to the recently granted facility of KTCD-LD on Channel 31 in San Diego (LMS-0000053784). That facility is owned by

EXHIBIT A

Entravision Holdings, LLC ("Entravision"), which is also one of the displacement applicants on Channel 25. Part of the settlement agreement that allows KSDY-LD to specify operation on Channel 31 is Entravision's acceptance of interference from the facility proposed herein. Therefore, the interference between these two facilities can be ignored.

A detailed power density calculation is provided in Exhibit D.

Since no change in the overall height or location of the existing KSDY-LD 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 to the nearest airport runway, FCC tower registration is not required for this structure.

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", is centered on the page.

KEVIN T. FISHER

December 13, 2018

**CONTOUR POPULATION  
2015 U.S. CENSUS DATA  
1,879,231 (683,835 HH)**

**Smith and Fisher, LLC**

**PROPOSED CH. 35  
51 DBU CONTOUR**

**KSDY-LD**

**EXHIBIT B  
PREDICTED SERVICE CONTOUR  
PROPOSED KSDY-LD STA  
CH. 31 - SAN DIEGO, CALIFORNIA**

Scale 1:500,000

0 4 8 12 mi



TVSTUDY INTERFERENCE ANALYSIS RESULTS  
 PROPOSED KSDY-LD  
 CHANNEL 31 – SAN DIEGO, CALIFORNIA

Study created: 2018.12.13 07:21:19

Study build station data: LMS TV 2018-10-28

Proposal: KSDY-LD D31 LD APP SAN DIEGO, CA

File number: BLANK0000052238

Facility ID: 56830

Station data: User record

Record ID: 375

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	KODG-LD	N17z	TX	LIC	PALM SPRINGS, CA	BLTTL20001219ABP	139.6 km
No	K17GJ-D	N17-	TX	LIC	Twentynine Palms, CA	BLTT20080902AED	170.2
No	K30GU	D30	LD	CP	MORONGO VALLEY, CA	BDFCDTT20120110ADL	156.4
No	K30GU	N30	TX	LIC	MORONGO VALLEY, CA	BLTT20021211AAS	156.4
No	KXLA	D30	DT	CP	RANCHO PALOS VERDES, CA	BLANK0000026148	199.8
No	KSGA-LD	D30	LD	LIC	SAN BERNARDINO, CA	BLANK0000029861	199.7
No	KPBS	D30	DT	LIC	SAN DIEGO, CA	BLEDT20011203CEP	0.2
No	K31GZ-D	D31	LD	LIC	LAKE HAVASU CITY, AZ	BLDTT20130308ABQ	318.2
No	KPPX-TV	D31	DT	LIC	TOLLESON, AZ	BLANK0000035245	459.9
No	KBTF-CD	D31	DC	LIC	BAKERSFIELD, CA	BLDTA20100921ABW	342.4
No	KBTF-CD	D31	DC	CP	BAKERSFIELD, CA	BLANK0000035951	347.0
No	K31FE	N31-	TX	LIC	BLYTHE, CA	BLTT20011203AMO	259.6
Yes	KCBS-TV	D31	DT	CP	LOS ANGELES, CA	BLANK0000034593	200.5
Yes	KTLA	D31	DT	LIC	LOS ANGELES, CA	BLCDT20050713ACE	199.8
No	K31HY-D	D31	LD	LIC	NEEDLES, ETC., CA	BLDTT20130308ACE	351.6
No	NEW	D31	LD	APP	PALM SPRINGS, CA	BNPDTL20090825BLV	134.1
No	KRET-CD	D31	DC	LIC	PALM SPRINGS, CA	BLDTA20140702ADK	138.1
No	K31MB-D	D31	LD	LIC	RIDGECREST, CA	BLANK0000004746	332.0
Yes	KTCD-LP	D31+	LD	CP	SAN DIEGO, CA	BLANK0000053784	34.9
No	KBAB-LD	D31	LD	CP	SANTA BARBARA, CA	BLANK0000052475	345.9
No	K31AD	N31	TX	LIC	VICTORVILLE, ETC., CA	BLTT19900108IL	215.2
No	NEW	D31	LD	APP	WINTERHAVEN, CA	BNPDTL20100510AAI	184.8

No	K31MF-D	D31	LD CP	YUCCA VALLEY, CA	BNPDTL20100512AFR	149.6
No	KDOC-TV	D32	DT LIC	ANAHEIM, CA	BLCDT20060626ACV	199.8
No	NEW	D32	LD APP	DESERT CENTER, CA	BNPDTL20100514ACN	156.1
No	KNLA-CD	D32	DC CP	LOS ANGELES, CA	BLANK0000034575	200.5
No	K32EM-D	N32	TX LIC	MORONGO VALLEY, CA	BLTTL19970721JS	156.4
No	K32EM-D	D32	LD LIC	MORONGO VALLEY, CA	BLANK0000004554	156.4
No	KRMV-LD	D32	LD APP	WALNUT, CA	BLANK0000054815	144.2
No	KSCD-LP	N38-	TX LIC	BIG BEAR LAKE, CA	BLTTL20080630ADI	167.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D31  
Mask: Full Service  
Latitude: 32 41 47.10 N (NAD83)  
Longitude: 116 56 12.00 W  
Height AMSL: 806.0 m  
HAAT: 0.0 m  
Peak ERP: 15.0 kW  
Antenna: SBP-UPSL (ID 93394) 240.0 deg  
Elev Pattn: Generic

50.4 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.002 kW	642.2 m	14.7 km
45.0	0.002	536.0	13.8
90.0	0.002	400.1	11.8
135.0	0.002	280.3	10.1
180.0	1.18	643.3	52.8
225.0	12.1	676.6	68.8
270.0	7.56	719.1	66.6
315.0	0.212	639.7	42.0

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 567 m

Distance to Canadian border: 1811.3 km

\*\*Proposal is within coordination distance of Mexican border

Distance to Mexican border: 16.2 km

Conditions at FCC monitoring station: Douglas AZ

Bearing: 99.0 degrees Distance: 698.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 48.3 degrees Distance: 1329.4 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 BLANK0000053784 CP scenario 1, 27.33% interference caused

---- Below is IX received by proposal BLANK0000052238 ----

Proposal receives 16.90% interference from scenario 1

POWER DENSITY CALCULATION

PROPOSED KSDY-LD  
CHANNEL 31 – SAN DIEGO, CALIFORNIA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this San Diego facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 15.0 kW, an antenna radiation center 25 meters above ground, and assuming a vertical relative field value of 10 percent at the steeper elevation angles for the existing panel antenna, maximum power density two meters above ground of  $0.0095 \text{ mW/cm}^2$  is calculated to occur near the base of the tower. Since this is only 2.5 percent of the  $0.38 \text{ mW/cm}^2$  reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 31 (572-578 MHz), a grant of this proposal may be considered a minor environmental action with respect to public 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.