

EXHIBIT 13

Interference Considerations

Introduction

This application for modification of construction permit File Number BPFT-20160728AFO for FM Translator K251CC, Beaumont, California, requests changes in effective radiated power and antenna radiation center height above mean sea level, and a different directional antenna radiation pattern. The translator will be utilized to provide fill-in service for Class C AM station KMET, Banning, California.

No change is proposed in the location of the translator from that specified in the construction permit. For the combination of increased antenna height above ground, changes in the directional antenna pattern, and reduced effective radiated power; the proposed 60 dBu F(50,50) contour will not extend beyond the 60 dBu F(50,50) contour for the facilities authorized in the construction permit.

The geographical coordinates (NAD27) of the proposed FM translator site are as follows:

North latitude 34° 02' 13"
West longitude 116° 58' 07".

At this location the ground elevation is 1467 meters above mean sea level. The translator will operate on Channel 251D, with 7.8 watts effective radiated power.

The proposed operation of K251CC conforms with the requirements of Section 74.1204 of the Commission's Rules for a Class D station on Channel 251 with respect to overlap of predicted contours with the licensed operation of any FM station, LPFM station or FM translator, and the operation of any such facilities specified in a construction permit or pending application, on the same channel, the first adjacent channels, one of the second adjacent channels, and one of the third adjacent channels, as shown in this Exhibit. On the other second adjacent channel and third adjacent channel, the site for the proposed translator is located within the predicted protected contour of an existing FM station. This Exhibit demonstrates that, under Section 74.1204(d) of the Rules, no objectionable interference will be caused to either of these FM stations. The proposed operation of the translator therefore would not result in objectionable interference to any station.

Description of Directional Antenna

The directional antenna for the proposed FM translator is a Shively Labs Model 6025 Antenna, set up for vertical polarization, and oriented so that maximum radiation is in the direction 174 degrees True. This log periodic antenna will be mounted on an existing self-supporting tower, with the radiation center located 48 meters above ground.

EXHIBIT 13 (continued)

Interference Considerations

The values of relative radiation for the horizontal plane radiation pattern for the directional antenna are tabulated in Item 10 of the Tech Box in Section III-A of FCC Form 349 for this application. This data was provided by the antenna manufacturer, Shively Labs.

Allocation Study

The FM stations and FM translators taken into account in the allocation study for this application are listed in Table A of this Exhibit. LPFM stations are at sufficient distances from the proposed translator site so as not to require further study with respect to contour overlap with the proposed operation.

Figure 1A of this Exhibit shows the pertinent predicted contours for the proposed translator and co-channel Class B stations KRXV(FM), Yermo, California; and KXSN(FM), San Diego, California. Figure 1B of this Exhibit shows the pertinent predicted contours for the proposed translator and co-channel FM translators K251AH, Grand Terrace, California; and K251BX, Palm Desert, California.

The pertinent predicted contours for the proposed translator and first-adjacent-channel station KLAX-FM, East Los Angeles, California, on Channel 250B; and FM translator K250BG, Hemet, California, on Channel 250D, are shown in Figure 2 of this Exhibit.

Figure 3 of this Exhibit depicts the location of the proposed translator site with respect to the predicted protected contours of the pertinent FM stations on the second and third adjacent channels. As shown in Figure 3, the proposed site is located within the 54 dBu F(50,50) contours of Class B stations KLYY(FM), Riverside, California, on Channel 248B; and KDES-FM, Cathedral City, California, on Channel 253B.

The potential for interference from the proposed operation of the translator to KLYY(FM) and KDES-FM was evaluated by determining the area within which the ratio of undesired to desired signal between the translator and each of these stations equals or exceeds 40 dB, using free space propagation calculations for the translator signal.

EXHIBIT 13 (continued)

Interference Considerations

With respect to KLYY(FM), the predicted F(50,50) signal of KLYY(FM) at the proposed translator site is 85.7 dBu, and interference would occur where the translator signal is greater than 125.7 dBu (1928 mV/m). In the case of KDES-FM, the predicted F(50,50) signal of KDES-FM at the proposed translator site is 63.4 dBu, and interference would occur where the translator signal is greater than 103.4 dBu (148 mV/m).

Computations show that, for operation at 7.8 watts effective radiated power and assuming uniform radiation from the proposed translator in all directions in the horizontal plane, interference to KDES-FM would not extend beyond a distance of 132 meters from the translator antenna.

The map of Figure 4 of this Exhibit is a USGS 7-1/2-minute topographic map showing the vicinity of the proposed FM translator site. Figure 4 depicts the proposed translator site and a circle drawn at a radius of 0.132 kilometer from the proposed antenna system. The part of the map showing the contour overlap has been compared with up-to-date aerial photography from the Google Earth website for accuracy.

The location of the proposed FM translator is in an area of mountainous terrain. There are no residences or occupied buildings, and no paved roads, within the 0.132-kilometer-radius circle. This application conforms with the requirements of Section 74.1204(d) of the Commission's Rules, as the area within the circle is unpopulated; and operation of the proposed FM translator therefore would not result in objectionable interference to either KLYY(FM) or KDES-FM.

Under Section 74.1204(g) of the Commission's Rules, the proposed translator is not subject to intermediate frequency separation requirements, because the maximum effective radiated power is less than 100 watts.

The site for the proposed FM translator is located within 320 kilometers of the U.S.-Mexico border. With respect to the requirements of Section 74.1235(d) of the Commission's Rules, the proposed translator site is 165 kilometers, or more than 125 kilometers, from the international border. The maximum distance to the 60 dBu F(50,50) contour for the proposed translator is 13.1 kilometers, and the contour therefore does not fall within 116.3 kilometers of the border.

From a review of the pertinent FM assignments and allotments in Mexico, the proposed translator conforms with the distance separations set forth in Section 73.207(b)(3) of the Commission's Rules for a Class A station in the United States and the stations in Mexico.

EXHIBIT 13 (continued)

Interference Considerations

The predicted contours shown in this Exhibit were determined in accordance with the requirements of Section 73.313 of the Commission's Rules, from computerized calculations based on the NGDC 30-second terrain database, and Figures 1 and 1a of Section 73.333 of the Rules. Distances to the contours were calculated at azimuthal increments of one degree.

Fred W. Volken
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Sierra Madre, California

EXHIBIT 13 (continued)

Interference Considerations

TABLE A

Station Facilities

	Channel and Class	Station and Location, Status, File Number	Geographical Coordinates	Facilities	
				Effective Radiated Power and Antenna	Antenna Height Above Average Terrain (meters)
Co-Channel Stations	251D	Proposed K251CC, Beaumont, CA	N 34° 02' 13" W 116° 58' 07"	0.0078 kW Directional	-----
	251D	K251CC, Beaumont, CA Construction permit BPFT-20160728AFO	N 34° 02' 13" W 116° 58' 07"	0.01 kW Directional	-----
	251B	KRXV(FM), Yermo, CA License BMLH-20040914AAI	N 34° 59' 43" W 116° 50' 15"	1.55 kW Nondirectional	695
	251B	KXSN(FM), San Diego, CA License BLH-20010719AAK	N 32° 50' 17" W 117° 14' 57"	26.5 Nondirectional	209
	251D	K251AH, Grand Terrace, CA License BLFT-19970929TH	N 34° 01' 20" W 117° 17' 46"	0.008 kW Directional	-----
	251D	K251BX, Palm Desert, CA License BLFT-20181214AAQ	N 33° 48' 08" W 116° 13' 30"	0.158 kW Directional	-----

EXHIBIT 13 (continued)

Interference Considerations

TABLE A (continued)

Station Facilities

	Channel and Class	Station and Location, Status, File Number	Geographical Coordinates	Facilities	
				Effective Radiated Power and Antenna	Antenna Height Above Average Terrain (meters)
First Adjacent Channel Stations	250B	KLAX-FM, East Los Angeles, CA License BLH-19971231KC	N 34° 09' 49" W 118° 11' 44"	33.0 kW Directional	184
	250D	K250BG, Hemet, CA License BLFT-20150120AIP	N 33° 49' 49" W 116° 57' 11"	0.01 kW Directional	-----
Second and Third Adjacent Channel Stations	248B	KLYY(FM), Riverside, CA License BLH-19951215KD	N 34° 14' 04" W 117° 08' 24"	72.0 kW Directional	557
	253B	KDES-FM, Cathedral City, CA License BLH-20170612ABB	N 33° 51' 58" W 116° 26' 03"	38.0 kW Nondirectional	171

EXHIBIT 13 (continued)
Interference Considerations
FIGURE 1A
Co-Channel Interference Considerations

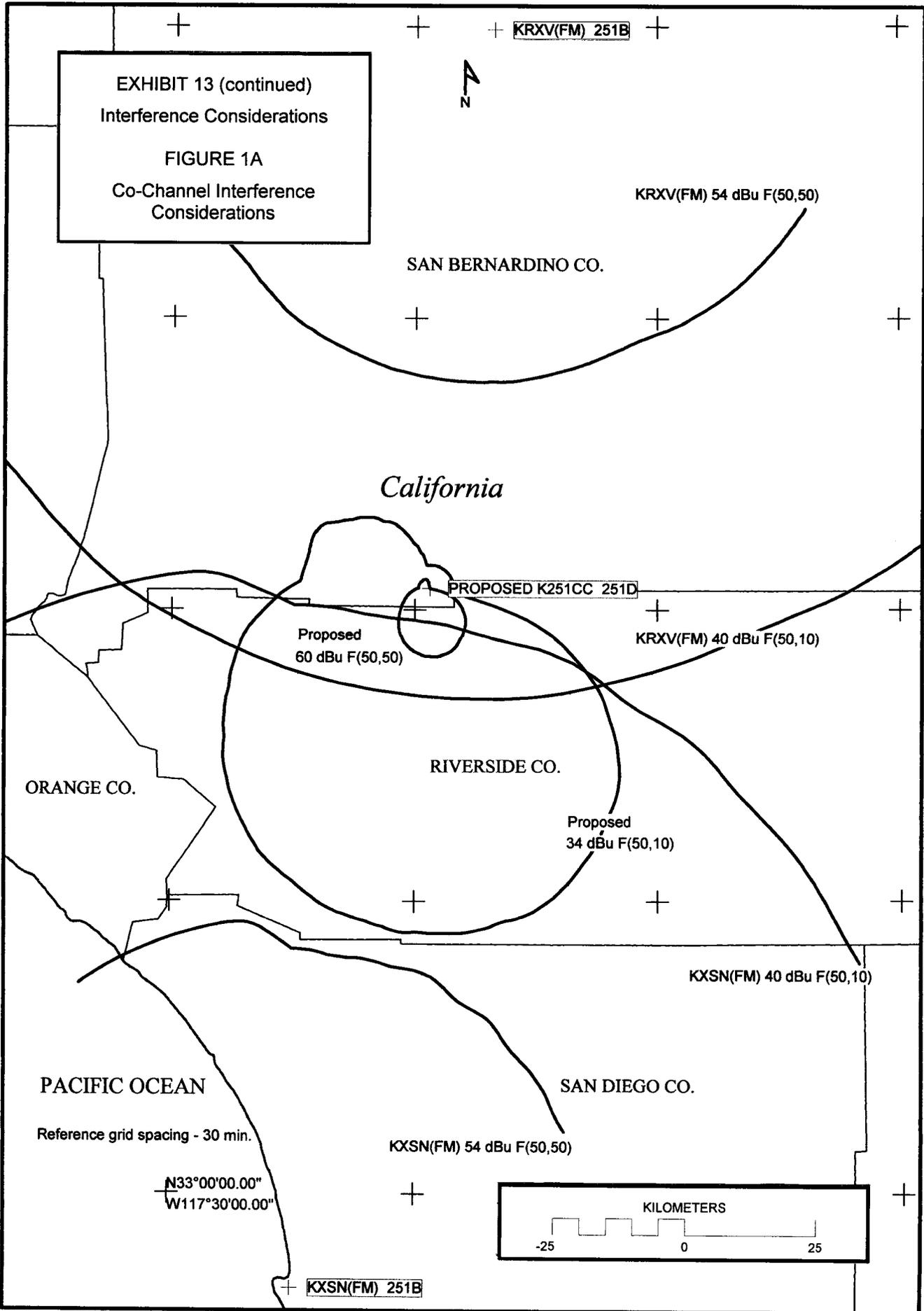


EXHIBIT 13 (continued)
Interference Considerations

FIGURE 1B
Co-Channel Interference
Considerations

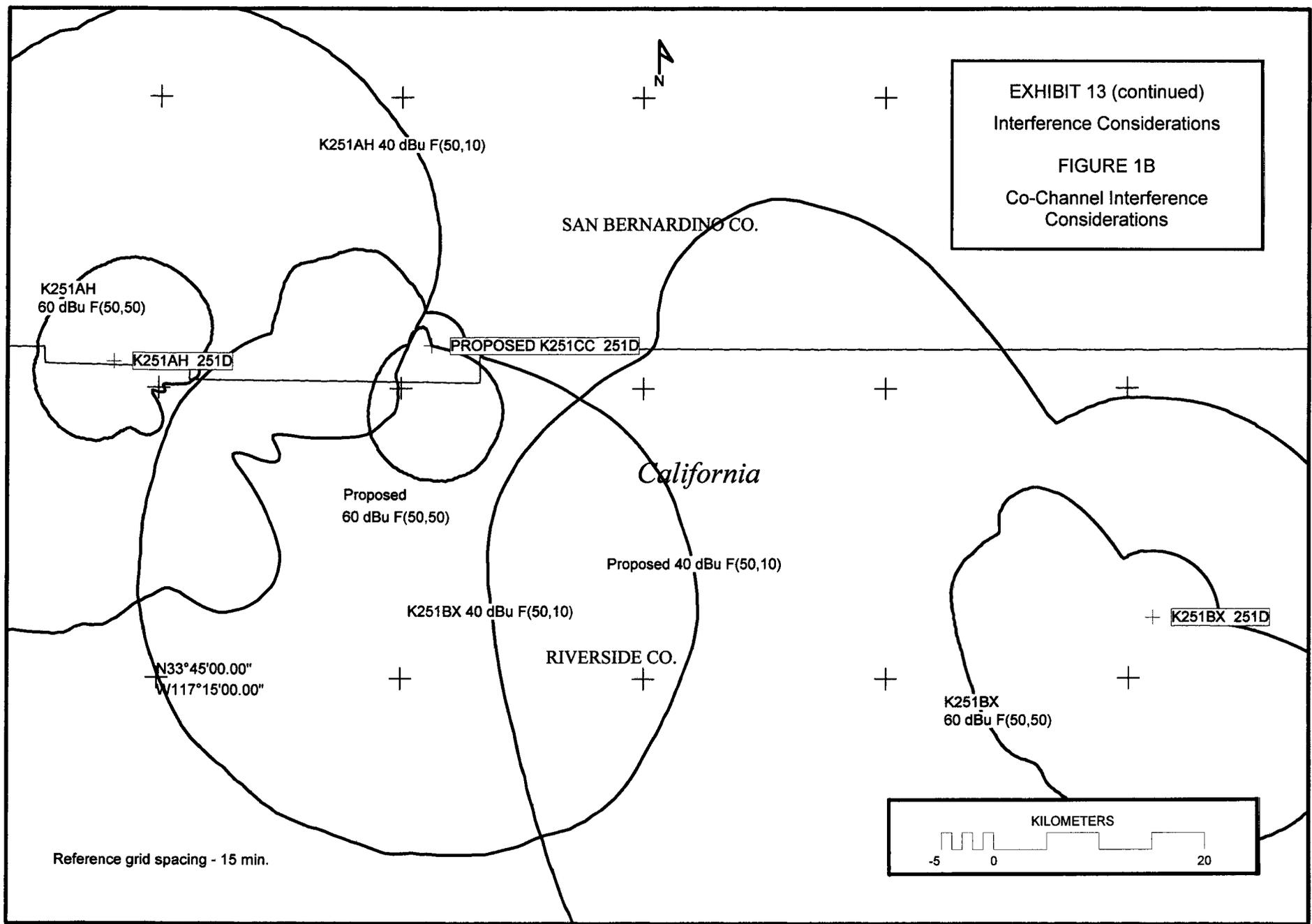


EXHIBIT 13 (continued)
 Interference Considerations
 FIGURE 2
 First Adjacent Channel
 Interference Considerations

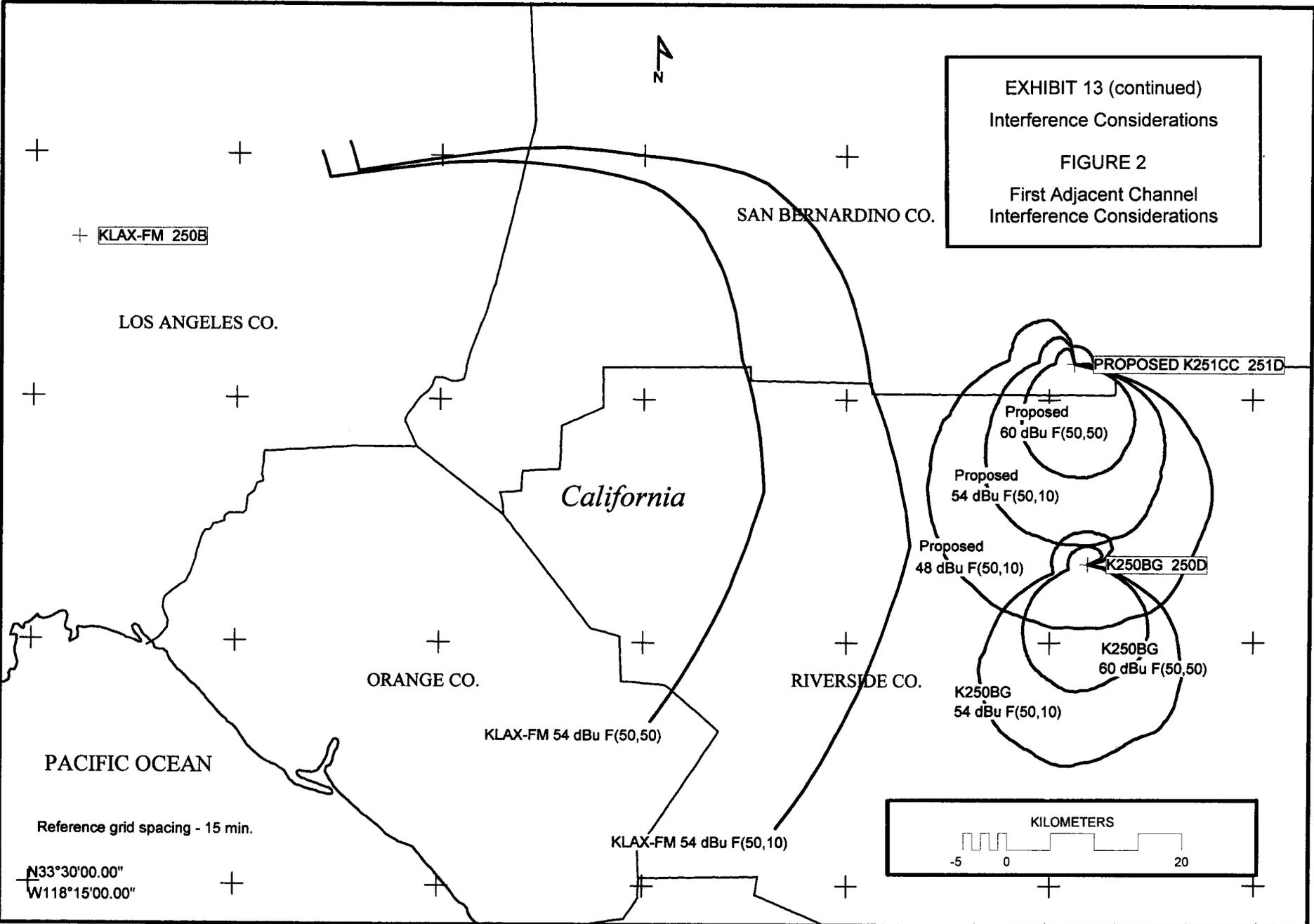


EXHIBIT 13 (continued)
Interference Considerations
FIGURE 3
Second and Third Adjacent
Channel Interference
Considerations

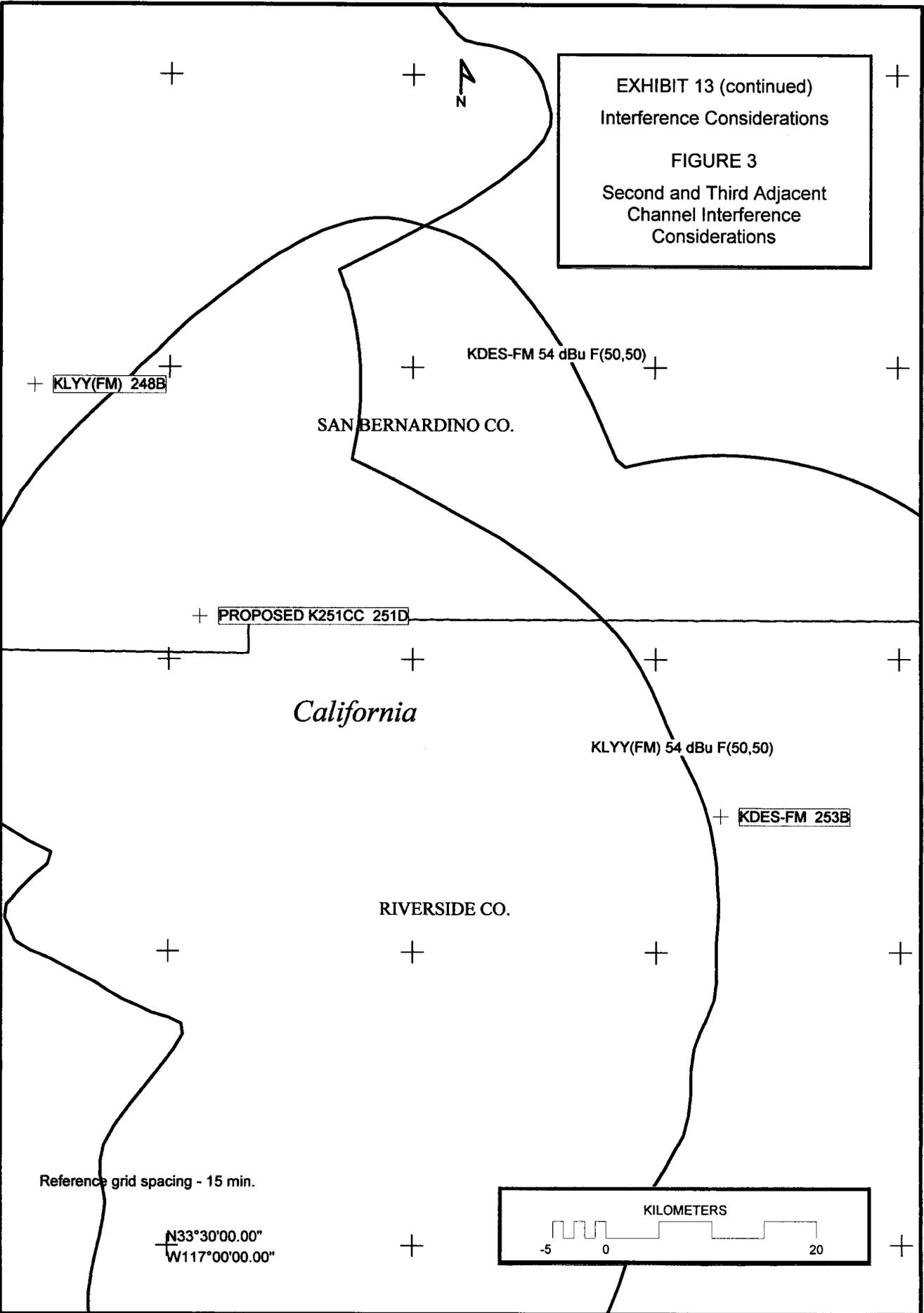
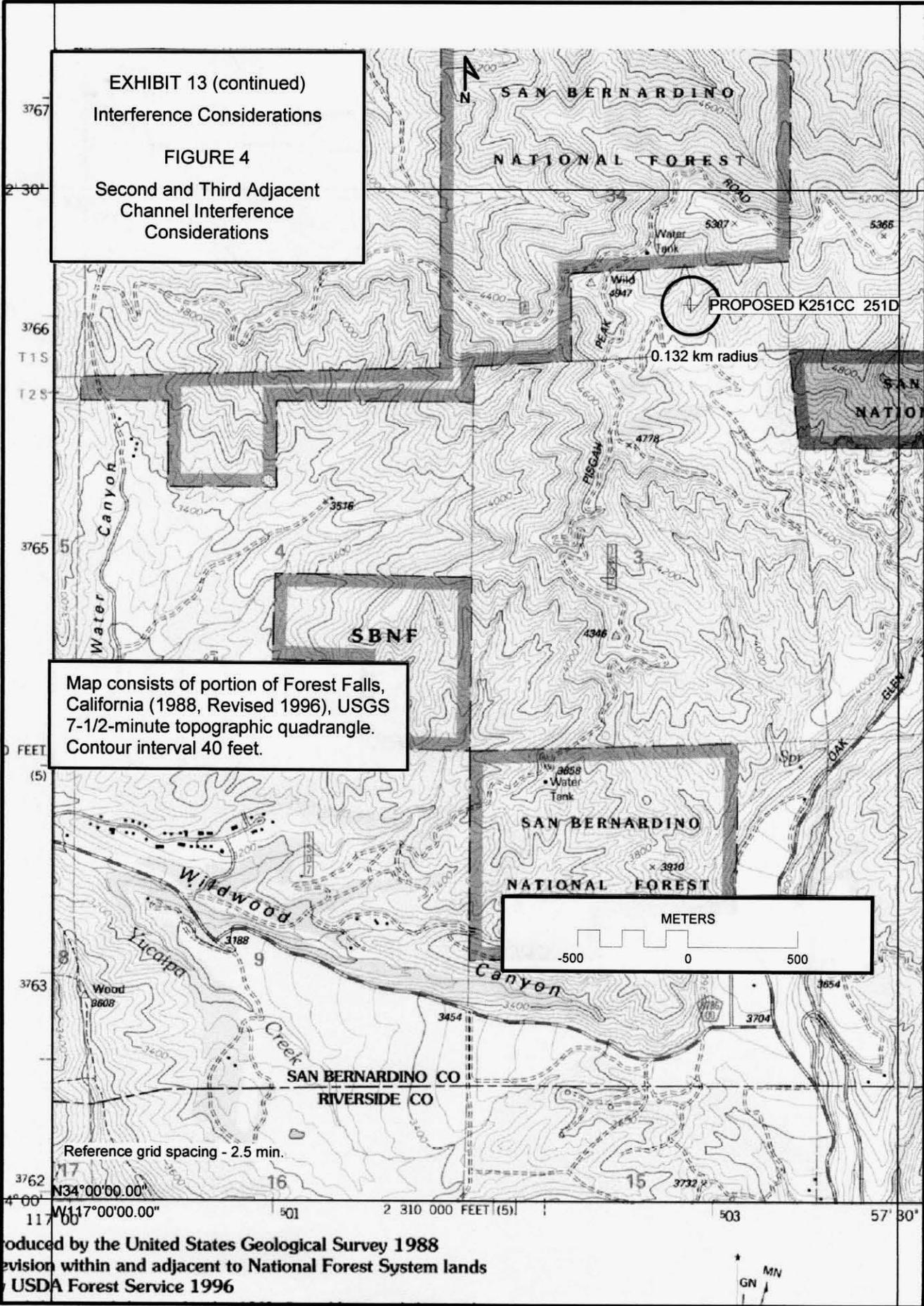


EXHIBIT 13 (continued)
 Interference Considerations
 FIGURE 4
 Second and Third Adjacent
 Channel Interference
 Considerations



Map consists of portion of Forest Falls, California (1988, Revised 1996), USGS 7-1/2-minute topographic quadrangle. Contour interval 40 feet.