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ENGINEERING REPORT:

APPLICATION FOR MINOR MODIFICATION
KDLD(FM) CHANNEL 276A, 103.1 MHz
SANTA MONICA, CA

ENTRAVISION HOLDINGS, LLC

JUNE 2003

TABLE OF CONTENTS

1. Purpose of Application

This Engineering Report is part of an application for minor modification of FM station KDLD at Santa Monica, California, by Entravision Holdings, LLC. The proposed operation will be on FM Channel 276A (103.1 MHz) with an effective radiated power of 3.7 kilowatts (5.68 dBk) at an antenna height above average terrain of 82 meters.

The instant application is being filed as part of a contingent application group. The contingent group is comprised of applications for two stations: KDLD 276A Santa Monica and KDLE 276A Newport Beach. These two stations are commonly-owned.

2. Allocation Considerations

Please see Exhibit B-16 for a complete discussion of the allocation considerations for the proposed KDLD facility.

3. Facilities Proposed

a. Facility Description

The proposed operation will be on Channel 276A (103.1 MHz) with an effective radiated power of 3.7 kilowatts. Operation is proposed with an antenna to be mounted on an existing tower in the Baldwin Hills. The FCC Antenna Structure Registration Number for the tower is 1215156.

b. Blanketing Contour

The 115 dBu contour for the proposed facilities extends 758 meters from the tower, based on the calculation methodology shown in §73.318 of the Commission's Rules. Much of the area within the blanketing contour is populated. The height of the proposed antenna above ground and its vertical radiation characteristics should mitigate any adverse effects to nearby residents or other communications facilities. If such adverse effects occur, the applicant will be responsible for their amelioration as prescribed in §73.318, including receiver-induced intermodulation to facilities in existence or authorized or receivers in use prior to grant of this application.

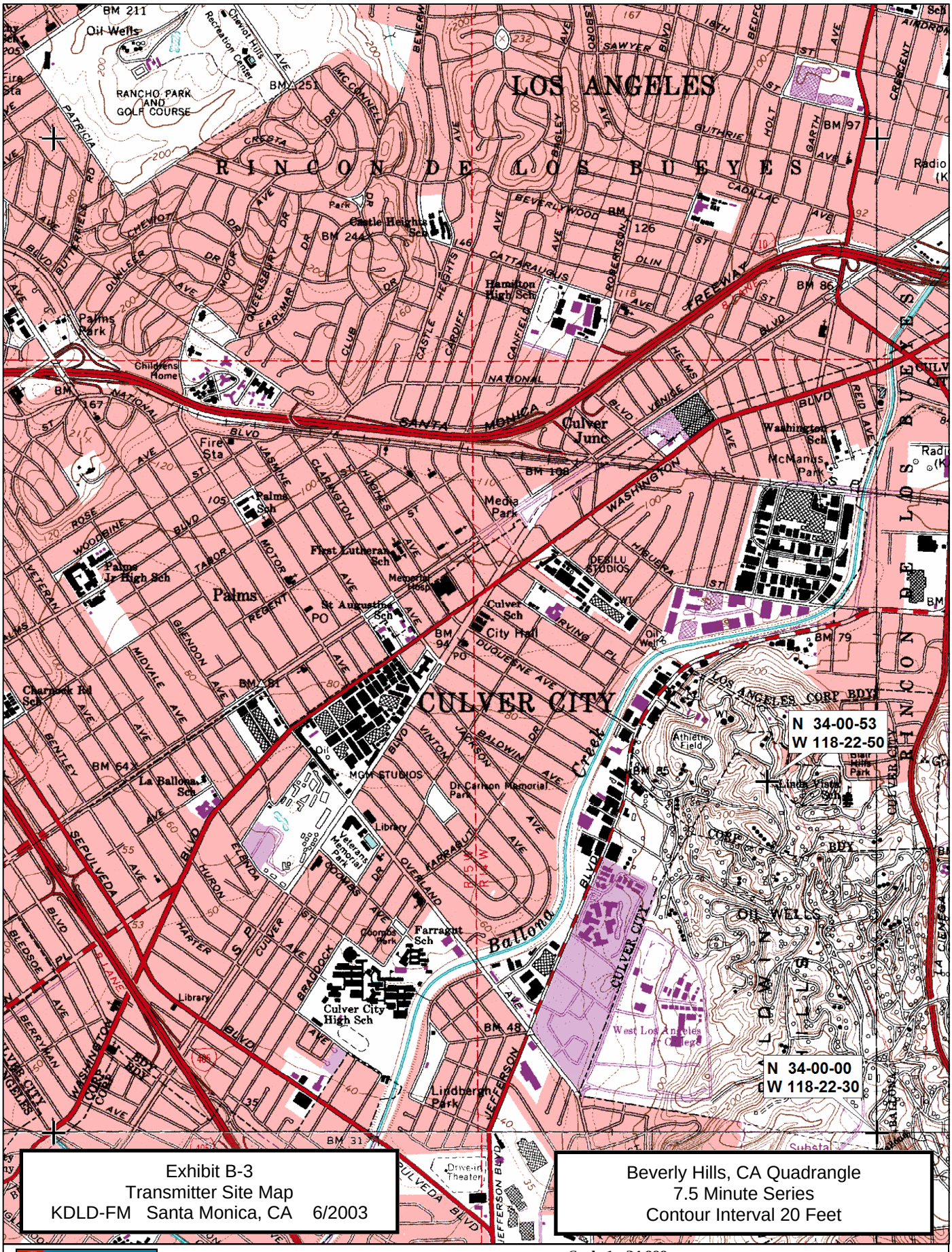


Exhibit B-3
Transmitter Site Map
KDLD-FM Santa Monica, CA 6/2003

Beverly Hills, CA Quadrangle
7.5 Minute Series
Contour Interval 20 Feet

Zoom Level: 13-1 Datum: NAD27

Scale 1 : 24,000
1" = 610 m

TN
MN
13.6°E

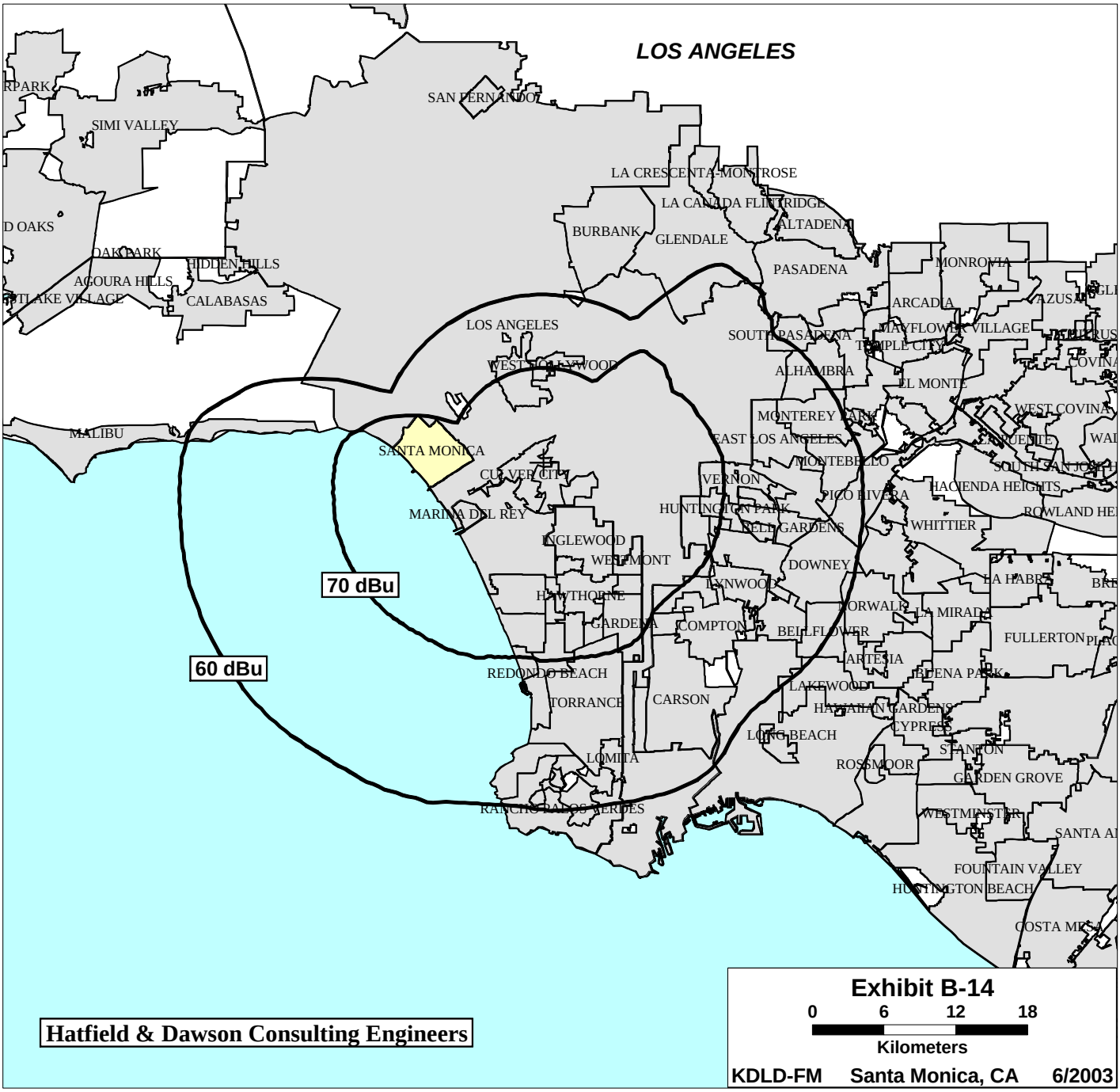

LOS ANGELES
SAN FERNANDO
SIMI VALLEY
LA CRESCENTA-MONTROSE
LA CANADA FLINTRIDGE
BURBANK
GLENDALE
ALTADENA
PASADENA
MONROVIA
ARCADIA
AZUSA
MAYFLOWER VILLAGE
SOUTH PASADENA
TEMPLE CITY
ALHAMBRA
EL MONTE
WEST COVINA
LOS ANGELES
WEST HOLLYWOOD
MONTEREY PARK
EAST LOS ANGELES
MONTEBELLO
SOUTH SAN JOSE
MALIBU
SANTA MONICA
CULVER CITY
VERNON
PICO RIVERA
HACIENDA HEIGHTS
MARINA DEL REY
HUNTINGTON PARK
BELL GARDENS
WHITTIER
ROWLAND HEI
INGLEWOOD
WESTMONT
DOWNEY
LA HABRA
70 dBu
HAWTHORNE
LYNWOOD
NORWALK
LA MIRADA
GARDENA
COMPTON
BELLFLOWER
FULLERTON
60 dBu
ARTESIA
REDONDO BEACH
LAKEWOOD
TORRANCE
CARSON
HAWAIIAN GARDENS
CYPRESS
LONG BEACH
STANTON
LOMITA
ROSSMOOR
GARDEN GROVE
RANCHO PALOS VERDES
WESTMINSTER
FOUNTAIN VALLEY
HUNTINGTON BEACH
COSTA MESA
Exhibit B-14
0 6 12 18
Kilometers
KDLD-FM Santa Monica, CA 6/2003
Hatfield & Dawson Consulting Engineers

Exhibit B-16
KDLD-FM Channel 276A Santa Monica, California
Allocation Study

Background

The attached spacing study shows that the proposed operation meets the co-channel and adjacent channel spacing requirements for Class A stations as prescribed in §73.207 of the Commission's Rules, with the exception of short-spacings to KIIS Channel 274B Los Angeles, KOST Channel 278B Los Angeles, and KDLE Channel 276A Newport Beach. These short-spacings are addressed individually, below.

KIIS Channel 274B Los Angeles & KOST Channel 278B Los Angeles

KDLD operates as a “pre 1964" grandfathered short-spaced station with respect to second-adjacent-channel stations KIIS and KOST. Per §73.213(a)(4) of the Commission’s Rules, there are no distance separation or interference protection requirements with respect to second-adjacent-channel short-spacings that have existed continuously since November 16, 1964. Therefore, no additional study is required with respect to KIIS and KOST.

FMSTUDY.EXE Copyright 2002, Hatfield & Dawson, LLC Version 1.60

SEARCH PARAMETERS FM Database Date: 030605
Channel: 276A 103.1 MHz
Latitude: 34 0 53
Longitude: 118 22 50
Safety Zone: 32 km
Job Title: KDLD 276A Santa Monica

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KHHT	LOS ANGELES		222B	43.000	34-13-36	50.8	37.36	15
LIC	CA	BMLH-921021KA	92.3	887.0	118-03-57		22.36	CLEAR
KIISaux	LOS ANGELES		274B	7.200	34-13-36	50.8	37.36	0
LIC	CA	BLH-841121KR	102.7	860.0	118-03-57		0.00	AUX
KIIS-FM	LOS ANGELES		274B	8.000 DA	34-13-36	50.8	37.36	69
LIC	CA	BLH-5361	102.7	902.0	118-03-57		-31.64	SHORT
NOTE: PRE-1964 GRANDFATHERED SHORT-SPACING, NO SPACING REQUIREMENT								
KIISaux	LOS ANGELES		274B	1.000	34-13-36	50.8	37.36	0
APP	CA	BXPH-030501AAJ	102.7	908.0	118-03-57		0.00	AUX
KXLM	OXNARD		275A	5.500	34-14-12	288.3	79.77	72
LIC	CA	BLH-920624KE	102.9	34.0	119-12-11		7.77	CLOSE
KTPI-FM1	BEAR VALLEY, ETC.		276D	0.180	35-12-00	348.1	134.43	0
LIC	CA	BLFTB-851223TA	103.1	0.0	118-41-08		0.00	BOOST
NEW-T	MUSCOY		276D	0.010 DA	34-12-49	74.5	84.18	0
APP	CA	BPFT-971031TC	103.1	1312.0	117-30-00		0.00	TRANS
KDLE	NEWPORT BEACH		276A	2.000	33-37-55	136.0	59.03	115
LIC	CA	BLH-4773	103.1	91.0	117-56-15		-55.97	SHORT
NOTE: KDLD IS 73.213(A) GRANDFATHERED WITH RESPECT TO KDLE								
KDLD	SANTA MONICA		276A	3.000 DA	34-00-53	0.0	0.00	115
LIC	CA	BLH-850419KR	103.1	81.0	118-22-50		-115.00	SHORT
ABSOLUTE MINIMUM 73.215 SPACING = 92 KM								
KTPI-FM	TEHACHAPI		276A	1.900	35-04-30	0.5	117.62	115
LIC	CA	BLH-921125KC	103.1	176.0	118-22-08		2.62	CLOSE
KVFG	VICTORVILLE		276A	0.250 DA	34-36-44	56.1	120.18	115
CP	CA	BPH-010227AAM	103.1	475.0	117-17-29		5.18	CLOSE
KVFG	VICTORVILLE		276A	0.100	34-36-45	56.1	120.16	115
LIC	CA	BLH-800905AF	103.1	434.0	117-17-31		5.16	CLOSE
KOSTaux	LOS ANGELES		278B	4.200	34-13-32	51.1	37.38	0
LIC	CA	BLH-970324KE	103.5	858.0	118-03-52		0.00	AUX
KOST	LOS ANGELES		278B	12.500	34-13-32	51.1	37.38	69
LIC	CA	BLH-930831KD	103.5	949.0	118-03-52		-31.62	SHORT
NOTE: PRE-1964 GRANDFATHERED SHORT-SPACING, NO SPACING REQUIREMENT								

44444 END OF FM SPACING STUDY FOR CHANNEL 276 44444

"Pre 1964" Grandfathered Short-Spacing Between KDLD Channel 276A Santa Monica and KDLE Channel 276A Newport Beach

Cochannel stations KDLD Santa Monica and KDLE Newport Beach operate as "pre 1964" grandfathered short-spaced stations covered by §73.213(a) of the Commission's Rules. The contingent applications being filed for these two stations propose to increase their distance separation from 59 km[1] to 70 km. Transmitting facilities have been designed which will ensure that the proposals comply with §73.213(a)(2) of the Commission's Rules with respect to the areas and population subject to interference. This rule states:

> *For co-channel and first-adjacent channel stations, a showing that the public interest would be served by the changes proposed in an application must include exhibits demonstrating that the total area and population subject to co-channel or first-adjacent channel interference, caused and received, would be maintained or decreased. In addition, the showing must include exhibits demonstrating that the area and the population subject to co-channel or first-adjacent channel interference caused by the proposed facility to each short-spaced station individually is not increased. In all cases, the applicant must also show that any area predicted to lose service as a result of new co-channel or first-adjacent-channel interference has adequate aural service remaining. For the purpose of this section, adequate service is defined as 5 or more aural services (AM or FM)*.

The attached map exhibits titled "Licensed Interference Areas" and "Proposed Interference Areas" depict the KDLD/KDLE licensed and proposed interference areas. Interference area calculations have been made using the contour ratio method described in §73.213(a)(1) of the Commission's Rules.

The following tables list the land areas and populations (2000 Census block centroids) subject to interference from the licensed and proposed facilities:

---

[1]KDLD and KDLE are believed to be the two most-egregiously short-spaced Class A FM stations in the United States.

Licensed Facilities	Population	Land Area
KDLD Received Interference	1,475,272	389 km²
KDLE Received Interference	504,289	196 km²
Total	1,979,561	585 km²

Proposed Facilities	Population	Land Area
KDLD Received Interference	642,413	234 km²
KDLE Received Interference	341,133	191 km²
Total	983,546	425 km²

These figures demonstrate that the proposed facilities will result in a decrease in the total area and population subject to co-channel interference.

New Interference Areas: Grant of the KDLD and KDLE applications will result in the creation of some new areas subject to co-channel interference within the two stations' 60 dBu contours.

KDLD: As demonstrated on the attached map exhibit titled "KDLD Received Interference Areas", all new KDLD received interference areas will be located outside the licensed KDLD 60 dBu contour. In other words, none of the "new" KDLD received interference area currently receives service from KDLD. Therefore, no areas which presently receive interference-free service from KDLD will lose service as a result of the proposed KDLD and KDLE modifications.

KDLE: The attached map exhibit titled "KDLE Received Interference Areas" depicts the new area of received interference for KDLE. Certain other areas are either a) within the licensed KDLE interference-free limit but outside the proposed KDLE 60 dBu contour, or b) within the proposed KDLE interference area but outside the licensed KDLE 60 dBu contour. §73.213(a)(2) states, in part:

In all cases, the applicant must also show that any area predicted to lose service as a result of new co-channel of first-adjacent-channel interference has adequate aural service remaining.

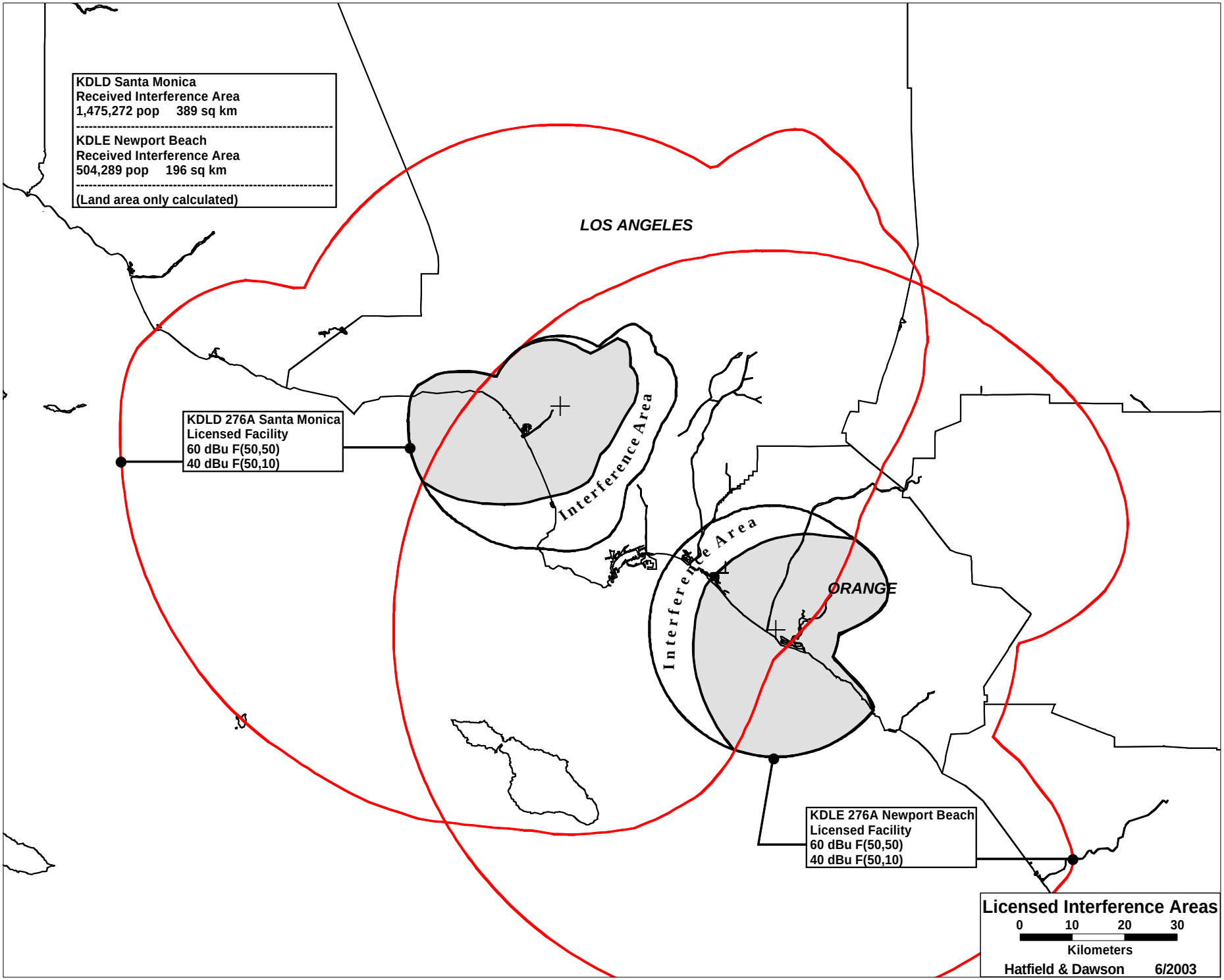
This rule is not applicable to the areas described above. Case "a" describes areas where there is a loss of service due to a shift in service area from the licensed KDLE facility as compared with the proposed KDLE facility, associated with a transmitter site change. The loss of service in case "a" is not due to new interference. Case "b" describes "new" interference areas which do not presently receive service from KDLE. Thus, there is no actual loss of service in case "b".

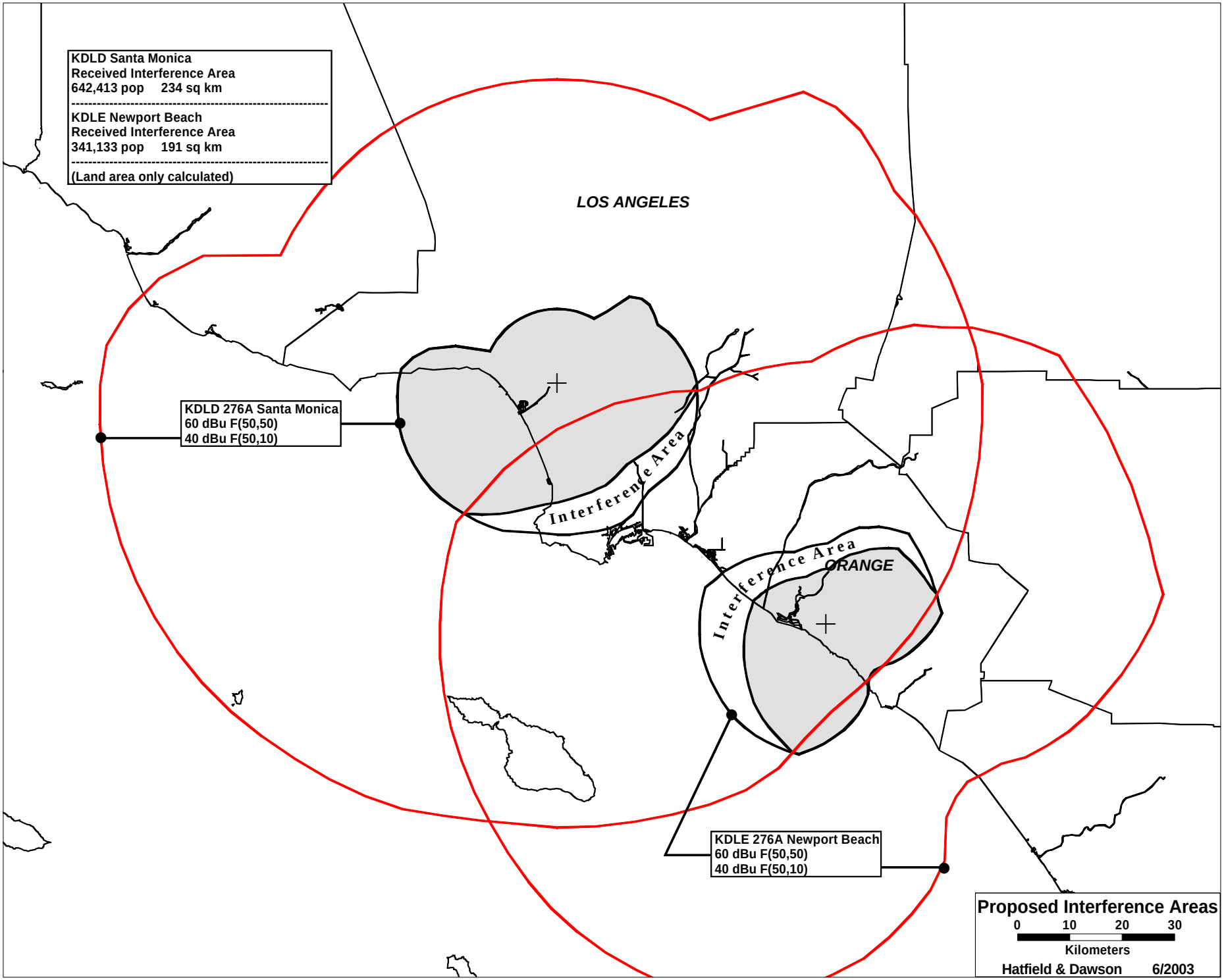
It is not believed necessary to include case "a" areas in evaluation of remaining aural service. Nevertheless, for the sake of a complete record an evaluation has been made of the aural services remaining in the "true" new interference area and the case "a" area. The following stations provide service to 100% of this combined area:

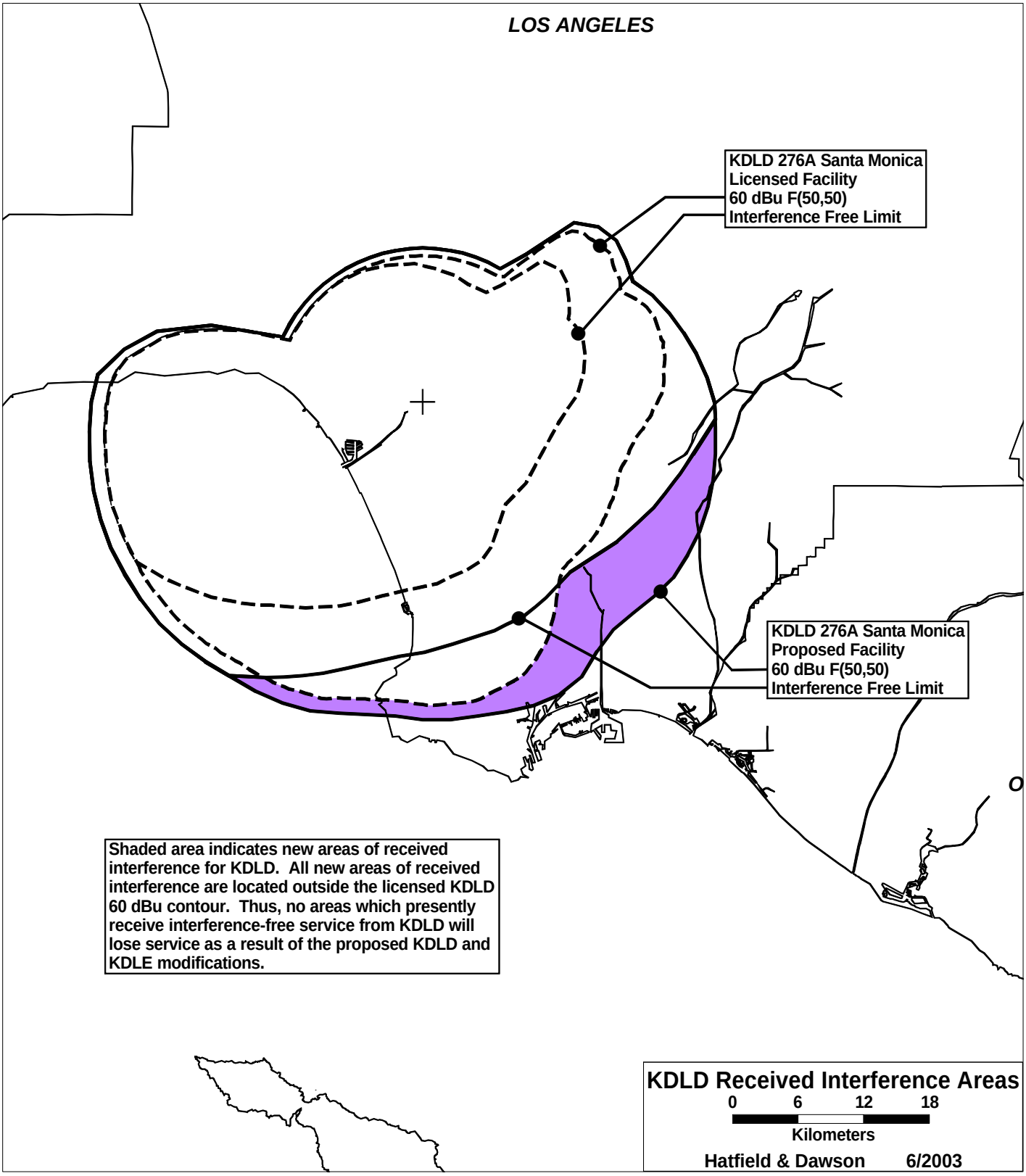
KFI	640 kHz	Los Angeles	(Class A 0.5 mV/m)
KNX	1070 kHz	Los Angeles	(Class A 0.5 mV/m)
KPFK	214B	Los Angeles	
KUSC	218B	Los Angeles	
KHHT	222B	Los Angeles	
KCBS	226B	Los Angeles	
KTWV	234B	Los Angeles	
KLOS	238B	Los Angeles	
KWIZ	244A	Santa Ana	
KLSX	246B	Los Angeles	
KLAX	250B	East Los Angeles	
KYSR	254B	Los Angeles	
KKLA	258B	Los Angeles	
KOLA	260B	San Bernardino	
KRTH	266B	Los Angeles	
KSCA	270B	Glendale	
KIIS	274B	Los Angeles	
KOST	278B	Los Angeles	
KBIG	282B	Los Angeles	
KMZT	286B	Los Angeles	
KPWR	290B	Los Angeles	
KALI	292A	Santa Ana	
KLVE	298B	Los Angeles	

In addition, numerous other AM and FM stations provide service to portions of the “true” new interference area and the case “a” area. The entire combined area will remain well-served, with in excess of five aural services remaining.

Conclusion: The preceding analysis demonstrates that the proposed modifications of KDLD and KDLE are in full compliance with the provisions of §73.213(a)(2) with respect to the interference areas. There is a reduction in the total interference area and population, as well as a reduction in the interference area and population for each station individually.


KDLD Santa Monica
Received Interference Area
1,475,272 pop 389 sq km
KDLE Newport Beach
Received Interference Area
504,289 pop 196 sq km
(Land area only calculated)
LOS ANGELES
KDLD 276A Santa Monica
Licensed Facility
60 dBu F(50,50)
40 dBu F(50,10)
Interference Area
Interference Area
ORANGE
KDLE 276A Newport Beach
Licensed Facility
60 dBu F(50,50)
40 dBu F(50,10)
Licensed Interference Areas
0 10 20 30
Kilometers
Hatfield & Dawson 6/2003


KDLD Santa Monica
Received Interference Area
642,413 pop 234 sq km
KDLE Newport Beach
Received Interference Area
341,133 pop 191 sq km
(Land area only calculated)
LOS ANGELES
KDLD 276A Santa Monica
60 dBu F(50,50)
40 dBu F(50,10)
Interference Area
Interference Area
ORANGE
KDLE 276A Newport Beach
60 dBu F(50,50)
40 dBu F(50,10)
Proposed Interference Areas
0 10 20 30
Kilometers
Hatfield & Dawson 6/2003


LOS ANGELES
KDLD 276A Santa Monica
Licensed Facility
60 dBu F(50,50)
Interference Free Limit
KDLD 276A Santa Monica
Proposed Facility
60 dBu F(50,50)
Interference Free Limit
Shaded area indicates new areas of received interference for KDLD. All new areas of received interference are located outside the licensed KDLD 60 dBu contour. Thus, no areas which presently receive interference-free service from KDLD will lose service as a result of the proposed KDLD and KDLE modifications.
KDLD Received Interference Areas
0 6 12 18
Kilometers
Hatfield & Dawson 6/2003

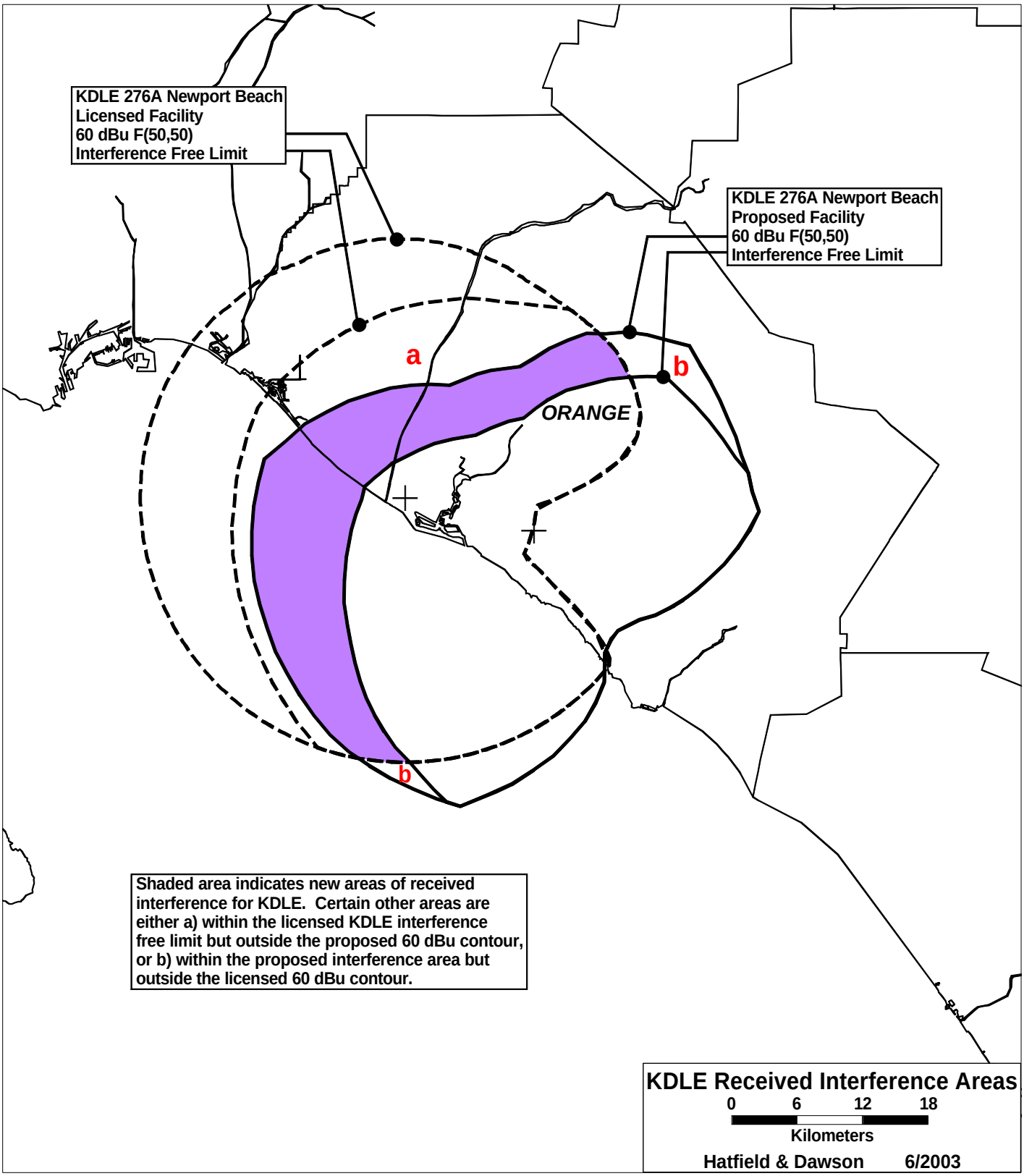

KDLE 276A Newport Beach
Licensed Facility
60 dBu F(50,50)
Interference Free Limit
KDLE 276A Newport Beach
Proposed Facility
60 dBu F(50,50)
Interference Free Limit
a
b
ORANGE
b
Shaded area indicates new areas of received interference for KDLE. Certain other areas are either a) within the licensed KDLE interference free limit but outside the proposed 60 dBu contour, or b) within the proposed interference area but outside the licensed 60 dBu contour.
KDLE Received Interference Areas
0 6 12 18
Kilometers
Hatfield & Dawson 6/2003

Exhibit B-17
KDLD-FM Channel 276A Santa Monica, California
NIER Analysis

Facilities Proposed

The proposed operation will be on Channel 276A (103.1 MHz) with an effective radiated power of 3.7 kilowatts. Operation is proposed with an antenna to be mounted on an existing tower in the Baldwin Hills. The FCC Antenna Structure Registration Number for the tower is 1215156.

NIER Calculations

Study of the area within 1000 meters of the proposed site reveals no other likely sources of non-ionizing radiation. Thus, the ground level NIER values near the base of the proposed structure are believed to be negligible. Precise calculations are made only with regard to the levels from this proposal.

The power density calculations shown below were made using the techniques outlined in the EPA report titled: *An Engineering Assessment of the Potential Impact of Federal Radiation Protection Guidance on the AM, FM, and TV Broadcast Services* (Gailey & Tell, April, 1985). All calculations contained herein are based on the measured element patterns for the antenna, and follow the procedure shown in the Gailey and Tell report. The patterns were identified by applying the procedure outlined in the report to the measurement data contained in the report titled: *Element Pattern Measurements on FM Antennas* (EPA-520/ 6-85-107, June 1985).

"Ground level" calculations in this report have been made at a reference height of 2 meters above ground to provide a worst-case estimate of exposure for persons standing on the ground in the vicinity of the tower. Equation #1, contained in the Gailey & Tell report and shown below, was used to calculate the ground level power density figures from each antenna.

$$S(\mu W/cm^2) = \frac{33.40981 \times AdjERP(Watts)}{D^2}$$

Where: *AdjERP(Watts)* is the maximum lobe effective radiated power times the element pattern factor times the array pattern factor.

D is the distance in meters from the center of radiation to the calculation point.

It is not known at this time what type of antenna will be used for the proposed KDLD facility. Therefore, calculations of the power density produced by the KDLD antenna system have been made using the above formula, presuming that the antenna will radiate 7400 Watts (3700 Watts H + 3700 Watts V) straight down. The results indicate a maximum ground level power density of 162.5 FW/cm², 16.3% of 1000 FW/cm^2 (the FCC standard for controlled environments) and 81.3% of 200 FW/cm^2 (the FCC standard for uncontrolled environments). This is a worst-case figure. The actual ground level power densities from any antenna likely to be used will be lower.

Public access to the site is restricted and the antenna tower is posted with warning signs. Pursuant to OST Bulletin No. 65, all station personnel and contractors are required to follow appropriate safety procedures before any work is commenced on the antenna tower, including reduction in power or discontinuance of operation before any maintenance work is undertaken.

The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency radiation in excess of FCC guidelines.

AM Station Protection

The proposed KDLD facility is not located within 0.8 kilometers of any non-directional AM facility. The proposed KDLD facility is, however, located within 3.2 kilometers of the following directional AM facilities:

KABC	Night	790 kHz	Los Angeles
KHJ	Night	930 kHz	Los Angeles (Lic + CP)
KTYM	Day	1460 kHz	Inglewood
KTYM	Night	1460 kHz	Inglewood

Nevertheless, no adverse effects are expected to be caused to the directional patterns of the listed AM stations. The proposed KDLD facility will operate from an existing tower, the very tower, in fact, from which the licensed KDLD facility operates. The height of the KDLD antenna will not be changed. Therefore, it is respectfully requested that the construction permit for KDLD not be conditioned with respect to KABC, KHJ, and KTYM.