

## Technical Exhibit

ONDAS DE VIDA, INC.  
Technical Exhibits in Support of Minor Change to Licensed Facility for K205DZ

CHANNEL 206D  
0.01 kW  
(directional antenna)

20 meters AGL COR  
676 meters HAAT (GLOBE Terrain data)

34 12 48.8 N x 117 29 59.8 W (NAD 27)  
Devore, California

May 10, 2007

### INDEX OF FIGURES AND TABLES

- Figure 1:** Co-Channel Study Analysis  
**Figure 2:** 1<sup>st</sup> Adjacent Channel Study Analysis  
**Figure 3:** 2<sup>nd</sup> and 3<sup>rd</sup> Adjacent Channel Study Analysis  
**Figure 4:** Current and proposed 60 dBu F(50,50) contours
- Table 1:** Channel Study  
**Table 2:** Radiofrequency Electromagnetic Exposure Analysis  
**Table 3:** Height Above Average Terrain along 30-degree radials

ONDAS DE VIDA, INC.  
Technical Exhibits in Support of Minor Change to Licensed Facility for K205DZ

**K205DZ Channel 206D – 89.1 MHz – 0.01 kW - 676 M HAAT – Devore, California**

This Exhibit is in support of the Minor Change to Licensed Facility application by ONDAS DE VIDA, INC. (herein “Applicant”) for changes to K205DZ in Devore, California that will change channel to the first adjacent channel, replace the existing antenna with a directional antenna (Shively 6510-1) and relocate to a different site. Station K205DZ is currently licensed on channel 205D to Devore, California.

The Applicant proposes use of a directional antenna, with a pattern that is fully compliant with the maximum ERP (MERP) values allowed according to 47 C.F.R. Section 74.1235(b)1, based on calculations of all 12, 30-degree radials (Table 3).

**Interference Compliance**

Contour protection, as required by 47 C.F.R. Section 73.1204 to co-channel, first, and second adjacent channels is shown herein and is 100% (Figures 1 - 3). Some contour overlap is predicted to occur between the proposed facility's interfering contour and the protected contour of third adjacent channel KSGN occurs over a small area that is more than 2.5 km separated from the nearest population centroid which contains 2 persons (Figure 3). Therefore this proposal is compliant with the allowance of Rule 74.1204(d). Required spacing with respect to facilities operating on I.F. frequencies is fully compliant with 47 C.F.R. Section 73.207 of the Commission's Rules (Table 1).

**Television Channel 6 Protection**

Section 74.1205 requires that translators proposing operation on Channel 206 not produce an interfering contour that would overlap the protected contour of any TV Channel 6 station within 137 km from the proposed site. Since there are no TV Channel 6 stations within 137 km of the proposed site, this proposal is fully compliant with Section 74.1205 of the Commission's rules.

**Environmental Protection Act / RF Radiation Compliance (Table 2)**

The Rules require that an addition to any multiple use site must not contribute non-ionizing RF Radiation in excess of the total limits for each class of service in either of the two selected environments.

In the case of FM, this limit is 1,000 microwatts for the controlled, or worker environment, or 200 microwatts for the uncontrolled, or public, environment per square centimeter at 2 meters above ground level.

The attached Radiofrequency Electromagnetic Exposure Analysis Table 2 specifically lists all potential sources of radiation and estimates the power density expected to occur at a distance of 10 meters from the base of the tower, the maximum power density expected from each source, the maximum distance from the base of the tower

to the point of maximum power density for each source, and the total worst case (sum of all maximum power densities from all sources, at most distant maximum occurring power density). The power density values are in units of microwatts per square meter at a height of 2 meters above ground level. These levels are also expressed relative to the maximum allowable limit of each of the two environments.

K205DZ proposes to operate at 0.01 kW with its antenna located at 20 meters above ground level. A 1-bay Shively 6810 Series antenna is proposed. At 10 meters from the base of the tower, K205DZ would contribute 0.3 microwatts per square centimeter at 2 meters above ground level. K205DZ would contribute a maximum of 0.43 microwatts per square centimeter at 2 meters above ground level at a point that is 19 meters from the base of the tower.

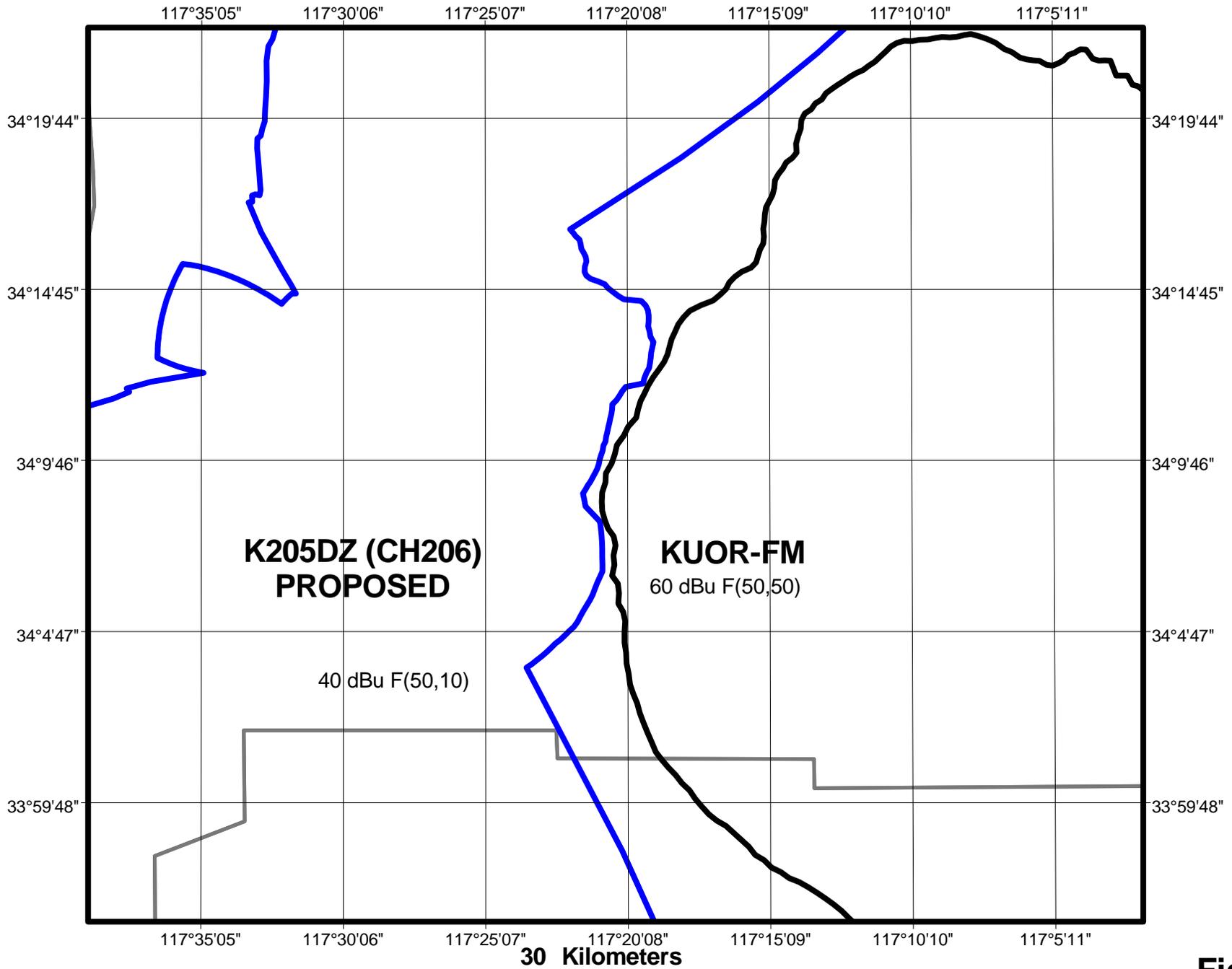
Considering all current and proposed facilities operating from the proposed site, the total contribution of all potential sources of radiation at 10 meters from the base of the tower (controlled environment) is less than 0.3 microwatts per square centimeter at 2 meters above ground level which is less than 0.1% of the ANSI limit for the controlled environment.

For the uncontrolled environment, the sum of all individual source maximum power densities is 0.43 microwatts per square centimeter at 2 meters above ground level. This represents a worst-case power density level that is less than 0.22% of the ANSI limit for the uncontrolled environment.

Given that access within 10 meters to the site is restricted by a locked fence, and given that no more than 0.43 microwatts per square centimeter at 2 meters above ground level is predicted to occur at any point beyond 19 meters from the base of the tower, the total radiation contributed by K205DZ would be less than the ANSI limit for all points in both the controlled and the uncontrolled environments. Therefore, this proposal is fully compliant with the provisions of OST Bulletin #65 as recently amended.

Further to the requirements and intentions of the FCC, K205DZ will post appropriate signs at entrances to the property, on the walls and doors of buildings containing transmitters, and on fences warning the public and workers of the potential hazard.

K205DZ will require that the power to the antenna be reduced as necessary to accommodate workers or will discontinue operation, if necessary, for this purpose.



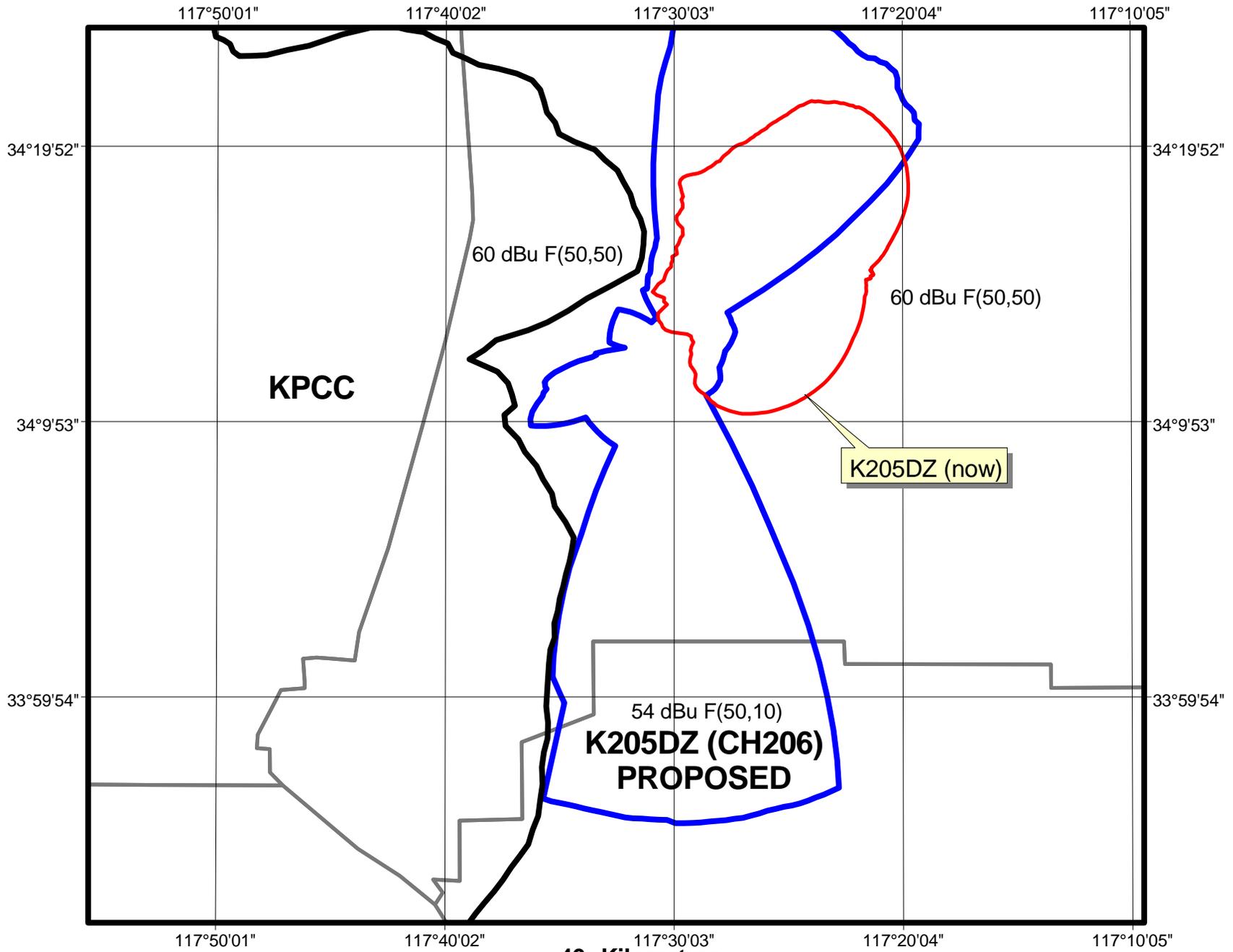
0  30 Kilometers

**Figure 1**

**K205DZ (CH206), DEVORE, CA: MINOR CHANGE TO A LICENSED FACILITY**  
**Co-Channel Study**

[www.radiodataservices.com](http://www.radiodataservices.com)





**K205DZ (CH206), DEVORE, CA: MINOR CHANGE TO A LICENSED FACILITY**  
**1st Adjacent Channel Study**

**Figure 2**



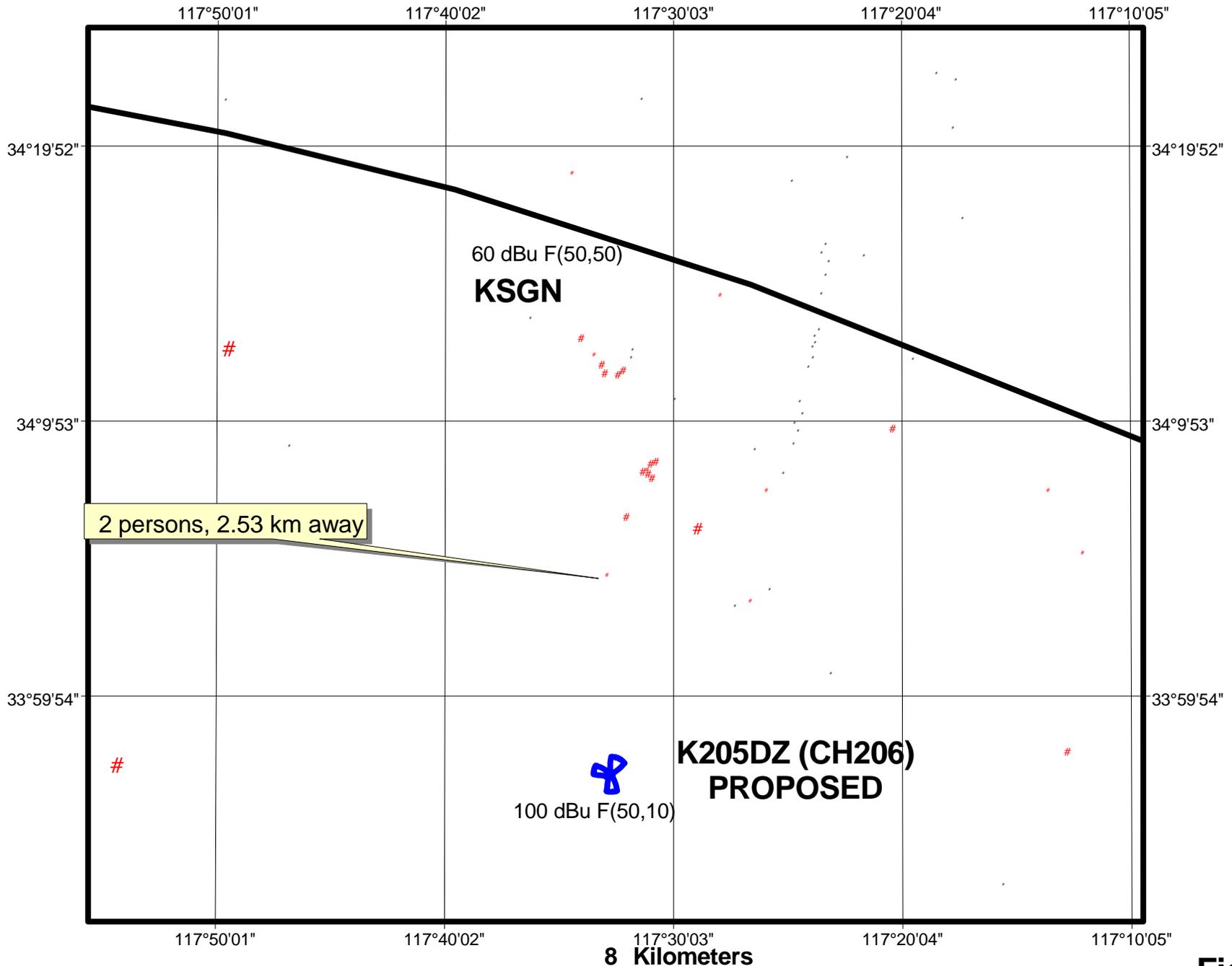
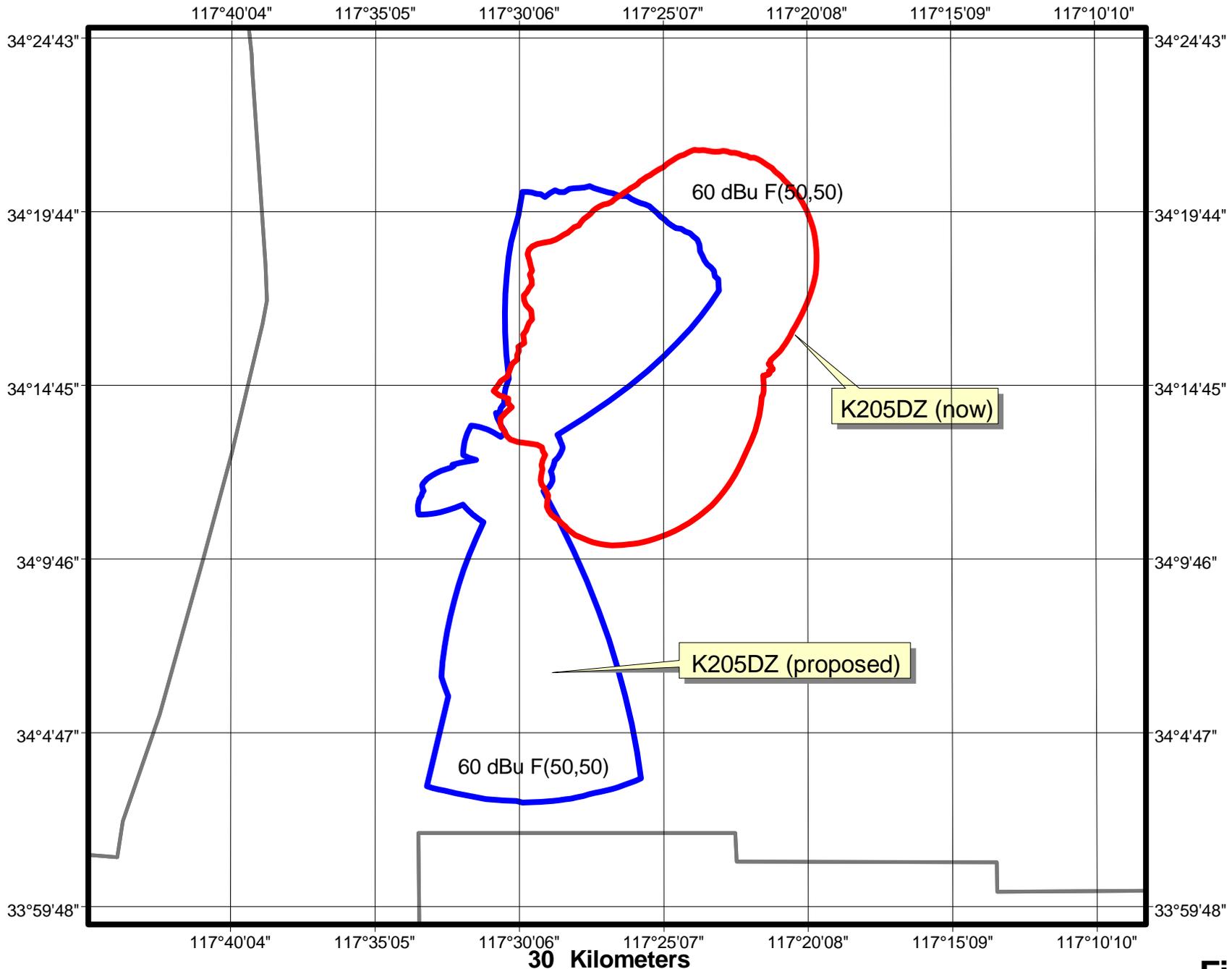


Figure 3





**K205DZ (CH206), DEVORE, CA: MINOR CHANGE TO A LICENSED FACILITY**  
**Existing and Proposed 60 dBu F(50,50) Coverage**

**Figure 4**



**Table 1**

**K205DZ Minor Change to Licensed Facility (change to 1st Adj. Channel 206)  
Channel Study**

Chan	Class	Call Letters	Type	Status	City	State	Country	Owner	Distance (km)	Bearing TO (deg)	Req. Dist. (km)	Clearance (km)
203 A		KHMS	FM	LIC	VICTORVILLE	CA	US	FAITH COMMUNICATIONS CORPORATI	48.2	23.6	26.8	21.4
204 A		KSPC	FM	LIC	CLAREMONT	CA	US	POMONA COLLEGE RADIO STATION	23.5	235.5	13.3	10.2
204 A		NEW	FM	APP	BIG BEAR CITY	CA	US	COMMUNITY PUBLIC RADIO, INC.	59.0	85.7	5.7	53.3
<b>205 D</b>		<b>K205DZ</b>	<b>FX</b>	<b>LIC</b>	<b>DEVORE</b>	<b>CA</b>	<b>US</b>	<b>ONDAS DE VIDA, INC.</b>	<b>13.5</b>	<b>69.9</b>	<b>16.4</b>	<b>-2.9</b>
205 D		K205BH	FX	LIC	VICTORVILLE	CA	US	GOOD NEWS RADIO	33.2	85.9	4.2	29.1
205 A		KUCI	FM	LIC	IRVINE	CA	US	REGENTS OF THE UNIVERSITY OF CAL	70.6	206.7	21.0	49.6
205 A		KRTM	FM	LIC	TEMECULA	CA	US	PENFOLD COMMUNICATIONS, INC.	89.3	158.2	51.9	37.4
206 A		KUOR-FM	FS	LIC	REDLANDS	CA	US	UNIVERSITY OF REDLANDS	35.5	118.7	28.4	7.1
206 A		KUOR-FM	FM	LIC	REDLANDS	CA	US	UNIVERSITY OF REDLANDS	41.6	92.5	41.0	0.6
206 D		K206AA	FX	LIC	LAGUNA BEACH	CA	US	SOUTH ORANGE COUNTY COMMUNIT	77.2	197.7	65.0	12.2
206 B		KODV	FM	APP	BARSTOW	CA	US	ONDAS DE VIDA NETWORK, INC.	94.1	26.4	79.0	15.1
206 A		KODV	FM	LIC	BARSTOW	CA	US	ONDAS DE VIDA NETWORK, INC.	94.1	26.4	78.0	16.1
207 B		KPCC	FM	LIC	PASADENA	CA	US	PASADENA AREA COMMUNITY COLLE	52.2	271.8	44.5	7.7
208 B1		KXRD	FM	LIC	VICTORVILLE	CA	US	EDUCATIONAL MEDIA FOUNDATION	48.2	23.3	19.1	29.1
209 A		KSGN	FM	LIC	RIVERSIDE	CA	US	GOOD NEWS RADIO	19.8	95.1	40.0	-20.1
260 B		KOLA	FM	LIC	SAN BERNARDINO	CA	US	INLAND EMPIRE BROADCASTING CORI	33.7	144.5	15.0	18.7
260 B		KOLA	FA	USE	SAN BERNARDINO	CA	US		34.0	144.1	15.0	19.0

**This Minor Change to Licensed Facility Application proposes a change from Channel 205 to 1st Adjacent Channel 206.**

**Table 2.**

**Radiofrequency Electromagnetic Exposure Analysis for K205DZ**

Source	Height AGL(m)	Antenna type	Bays	Horizontal ERP (kw)	Vertical ERP (kw)	<b>Power Density <math>\mu\text{W}/\text{cm}^2</math> at 2 meters AGL</b>					
						at 10 meters distance	% controlled environment limit (1000 $\mu\text{W}/\text{cm}^2$ )	Max. PD	% uncontrolled environment limit (200 $\mu\text{W}/\text{cm}^2$ )	Distance to maximum PD (m)	
<b>K205DZ</b>	<b>20</b>	<b>Shiv 6810</b>	<b>1</b>	<b>0.01</b>	<b>0.01</b>	<b>0.3000</b>	<b>0.03000%</b>	<b>0.4300</b>	<b>0.2150%</b>	<b>19</b>	<b>(proposed)</b>
						0.3000	0.03000%	0.4300	0.2150%	19	

The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments).

Calculations made using FCC FM Model v2.10 Beta

**Table 3.**

**K205DZ Minor Change to Licensed Facility  
Channel Study**

<b>Radial (deg.)</b>	<b>GLOBE 1 km (30 sec) radial HAAT (m)</b>	<b>MERP per FCC 73.1235(b)1 (watts)</b>
0	601	10
30	686	10
60	622	10
90	982	10
120	1120	10
150	1184	10
180	1250	10
210	1172	10
240	800	10
270	-138	10
300	-446	10
330	187	10