

**KUDI**  
**Choteau, MT**  
Proposed Minor Modification  
Of Permitted Facility

**Application Overview:**

KUDI (FCC Facility ID# 176530) proposes to modify its currently Permitted Facilities using the following parameters:

**Tech Box:**

Channel:	204
Class:	A
Antenna Coordinates:	N 47-45-21, W 112-09-42 (NAD 27)
ASRN:	N/A
Tower Height AMSL:	12 m
COR AMSL:	1353 m
COR AGL:	10 m
COR HAAT:	138 m
ERP:	0.325 kW
Directional Antenna:	No

**Antenna Site City-Grade Coverage:**

Exhibit 1 demonstrates that the proposed facility's antenna site provides city grade coverage of KUDI's proposed community of license – Choteau, MT. As can be seen in the Exhibit, 100% of Choteau's community boundaries are encompassed by the F(50,50) 60 dBu

contour of the proposed facility. Also, no major terrain obstructions are located between the antenna site and the community.

### **Interference Study:**

Exhibit 2 is a contour overlap study from the proposed KUDI antenna site. It notes that the proposed KUDI facility's contours would comply with Section 73.509.

### **Downward Radiation Study (FM Model):**

The proposed FM Facility has been evaluated in terms of potential radiofrequency electromagnetic field exposure at ground level in accordance with OET Bulletin No. 65, Evaluating Compliance with FCC Specified Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (OET Bulletin 65, Second Edition 97-01, August, 1997). The Commission's FM Model Power Density Prediction program was employed to determine the Field. Using the Phelps-Dodge "Ring Stub" Worst Case antenna with 2 sections and Full wavelength spacing, and the AGL height and ERP proposed in this application, the highest predicted power density 2 meters above ground is less than 95.0% of the Uncontrolled Standard with a Power Density of 190 microwatts per square centimeter 2.4 meters from the base of the tower.

Even though the site will fully comply with the Uncontrolled Site Standards, access to the transmitting site will be restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency radiation will not exceed the FCC guidelines.

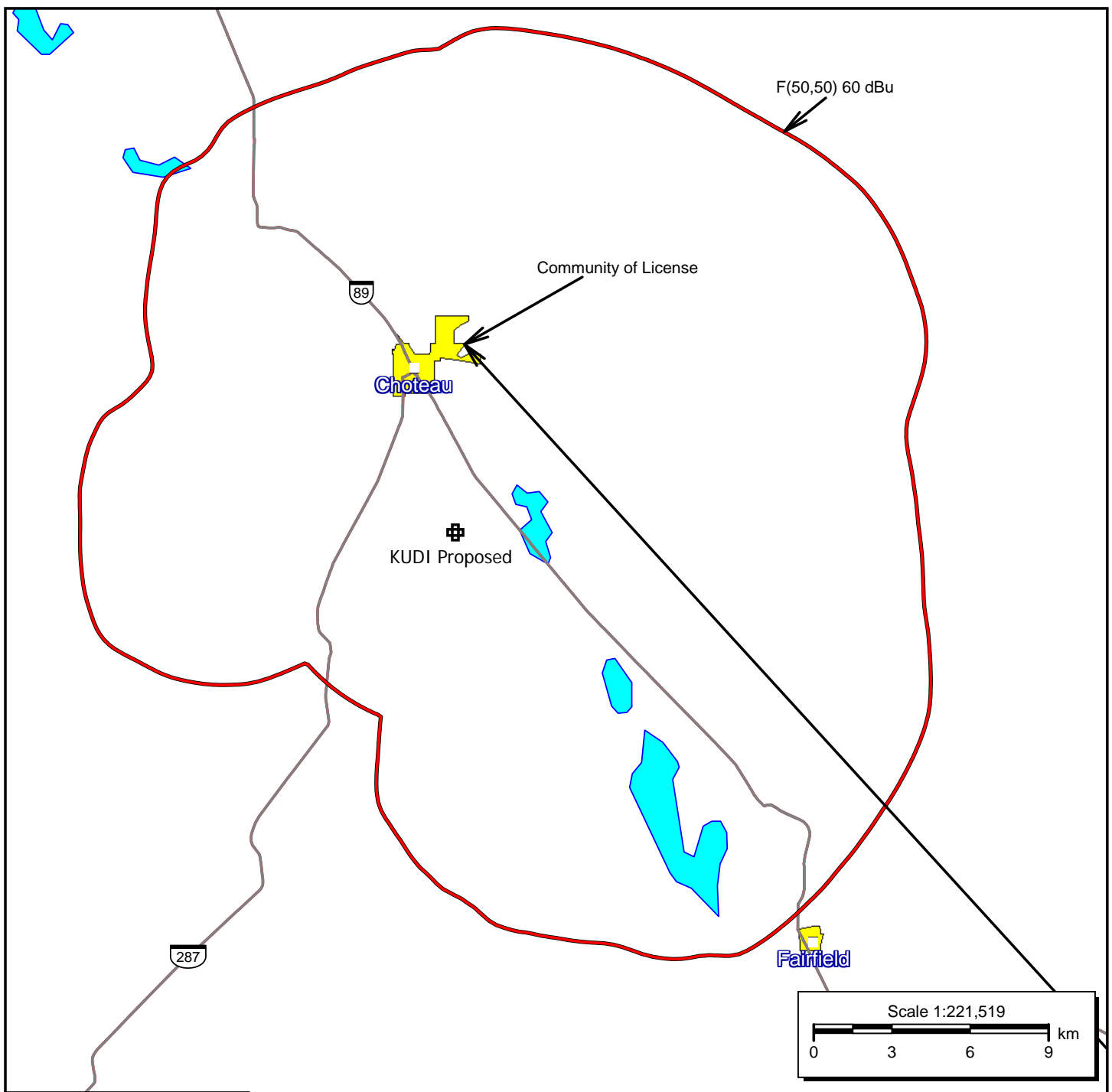
**Existing Tower:**

The proposed facility is exempt from environmental processing because the facility is not located at a location specified in Section 1.1307(a)(1)-(8) of the Commission's Rules and since the tower in question already exists.

# **Exhibit 1**

## **Proposed Antenna Site Contour Map:**

**F(50,50) City-Grade Contour**



**KUDI Proposed**

Mod of BPED20100315AAG  
Channel: 204A  
Frequency: 88.7 MHz  
Latitude: 47-45-21 N  
Longitude: 112-09-42 W  
COR AGL Height: 10.0 m  
COR AMSL Height: 1353.0 m  
Base Elevation: 1343.0 m  
COR HAAT: 138.28 m  
ERP: 0.325 kW  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

## **Exhibit 2**

### **Section 73.509 Contour Overlap Tabulations**

## KUDI(FM) Section 73.509 overlap study

REFERENCE  
47 45 21.0 N.  
112 09 42.0 W.

CH# 204A - 88.7 MHz, Pwr= 0.325 kw, HAAT= 138.3 M, COR= 1353 M  
Average Protected F(50-50)= 16.31 km  
Omni-directional

DISPLAY DATES  
DATA 09-06-12  
SEARCH 09-24-12

CH CITY	CALL	TYPE ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kw) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
204A KUDI Choteau		LIC _CX MT	347.4 167.4	5.79 BLED20090817ACZ	47 48 24.0 112 10 43.0	0.110 -36	19.1 1168	5.8 New Life Assembly Church	-31.5*	-57.1
204A KUDI Choteau		CP _CX MT	356.0 176.0	7.21 BPED20100315AAG	47 49 14.0 112 10 06.0	0.130 13	20.0 1213	6.0 New Life Assembly Church	-31.3*	-56.8
203C1 1397187 Helena		APP DVX MT	186.5 6.4	112.79 BNPED20071022APB	46 44 52.0 112 19 47.0	5.000 584	96.9 2260	65.7 Last Chance Public Radio A	3.1	27.9
204C1 KLKM Kalispell		LIC _CX MT	280.7 99.1	167.28 BLED20101109ACL	48 00 48.0 114 21 55.0	3.300 785	149.1 2052	67.1 Educational Media Foundati	3.6	50.8
205A KGFC Great Falls		LIC _CX MT	117.9 298.5	68.76 BLED20090923AAB	47 27 52.4 111 21 17.8	6.000 74	38.0 1142	24.8 Hi-line Radio Fellowship,	11.2	15.0
06 2 VACANT« Burmis		GR _HN AB	323.7 142.1	247.77 BPFS20080929AIE	49 31 54.0 114 11 37.0	0.170 128	16.5 1474	107.2 234.5R		13.3M
203D K203DQ Great Falls		LIC _C_ MT	118.0 298.6	68.55 BLFT20030723AGV	47 27 52.0 111 21 29.0	0.100 71	12.6 1142	9.0 Edgewater Broadcasting, In	36.4	30.6
06 VACANT« Medicine Hat		GR _HN AB	17.8 198.7	281.78 BPFS20081104AAL	50 09 45.0 110 57 20.0	6.100 203	16.5 957	107.2 234.5R		47.3M
205D K205FH Shelby		LIC _C_ MT	14.9 195.2	86.02 BLFT20100818AAZ	48 30 10.0 111 51 38.0	0.010 5	4.4 1041	3.2 Edgewater Broadcasting, In	62.1	54.0
205D K205FH Shelby		APP _V_ MT	15.1 195.3	86.47 BPFT20120824ACJ	48 30 22.0 111 51 22.0	0.010	4.4 1008	3.2 Edgewater Broadcasting, In	62.6	54.5
06 2C KTVM-TV Butte		LI _HN MT	186.3 6.1	195.52 BLCDT20100629AVB	46 00 27.0 112 26 30.0	19.200 591	16.5 2566	107.2 Bluestone License Holdings	123.6R	71.9M

Terrain database is NGDC 30 SEC , R= 73.215 qualifying spacings or FCC minimum Spacings in KM, M= Margin in KM  
Contour distances are on direct line to and from reference station. Reference zone= , Co to 3rd adjacent.

All separation margins (if shown) include rounding

Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
"\*"affixed to 'IN' or 'OUT' values = site inside protected contour.

« = Station meets FCC minimum distance spacing for its class.