

KJLF(FM)

Butte, MT

Proposed Minor Modification Of Licensed Facility

Application Overview:

While conducting an audit of licensed parameters for KJLF(FM) (FCC Facility ID# 93010), the licensee discovered that the site elevation was inadvertently substituted for the CORAMSL value in application BMPED-20070907AFI and, consequently, licensed in BLED-20080211ADA.

The purpose of the instant application is to correct this error and modify the station license using the following parameters:

Tech Box:

Channel:	213
Class:	C2
Antenna Coordinates:	N46-00-22, W112-26-33 (NAD 27)
ASRN:	N/A
Tower Height AGL:	31 m
COR AMSL:	2505 m
COR AGL:	12 m
COR HAAT:	530 m
ERP:	1 kW
Directional Antenna:	No

Antenna Site City-Grade Coverage:

Exhibit 1 demonstrates that the proposed facility's antenna site provides city grade coverage of KJLF(FM)'s proposed community of license – Butte, MT. As can be seen in the Exhibit, 100% of Butte'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.

Section 73.509 Interference Study:

Exhibit 2 is a contour overlap study from the proposed KJLF(FM) antenna site. It notes that the proposed KJLF(FM) facility's contours do not overlap any other application or authorization.

Section 73.525 Compliance:

There are several considerations outlined in 47 C.F.R. 73.525 for TV channel 6 protection. Outlined below are the various factors as they apply to the proposed operation and KTVM-TV6 Butte, MT.

The proposed NCE facility on Channel 213C2 is located 0.16 km from the transmission facilities of KTVM. Section 73.525(a)(1) requires the minimum distance between a TV-6 and an NCE FM on Channel 213 to be 193 km. Therefore, the proposed NCE FM is shortspaced by 192.84 km. KJLF is essentially co-located under Section 73.525(d) and the Proposed ERP of 1.0 kW (vertical) complies with Section 73.525(d)(1) for Channel 213 since it is less than 38 kW. Also, as will be demonstrated below, the interference area (as predicted by the procedures outlined in 47 C.F.R. 73.525(e)(1)) contains no more than 3,000 persons.

When an applicant wishes to use vertically polarized transmissions only, C.F.R. 74.525(e)(4) limits the vertical ERP to the maximum permissible horizontally polarized ERP multiplied by 40 (if the predicted interference area lies entirely outside the limits of a city of 50,000 persons) or 10 (if not). The proposed horizontally polarized ERP for the proposed facility is 1 kW. Since the predicted interference area lies entirely outside the limits of a city of 50,000 persons, that is multiplied by 40 to obtain the vertical-only ERP of 1 kW specified in this application.

Population in the predicted interference area was determined using the centroid method and the 2014 Census Estimates. The predicted interference contour (of the theoretical horizontal component of 1 kW) is contained within the KTVM-TV6 F(50,50) 90 dBu contour.

The predicted interference contour is determined from 47 C.F.R. 73.599 for channel 213 to be F(50,10) 90.5 dBu. (See Exhibit 4 for a tabulation of the KTVM protected contour values and the corresponding channel 213 interfering contours) Exhibit 4 shows the F(50,50) 90 dBu protected contour for KTVM and the corresponding F(50,10) interfering contour for the proposed channel 213 facility. Additionally shown is a population scattergraph of the area of proposed operation. The total population contained within the interfering contour is zero persons. Therefore, the proposed operation is within the limitations of 47 CFR 73.525(c).

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 1 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 32.0% of the Controlled Standard with a Power Density of 320 microwatts per square centimeter 2.2 meters from the base of the tower.

Even though the site will comply with the Controlled Site Standards by being on a remote mountain top beyond a locked gate, 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.

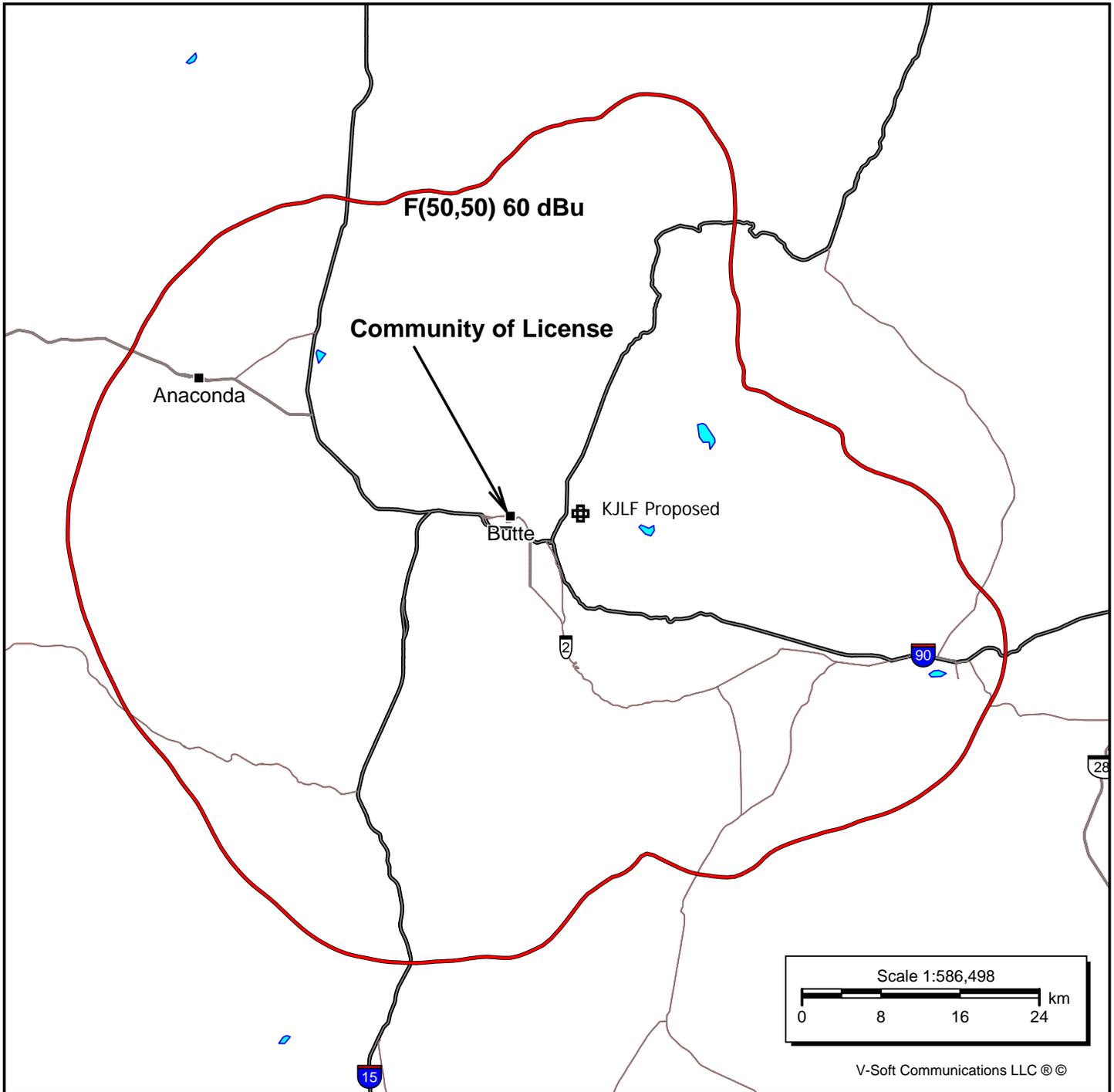
Existing Tower:

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



KJLF Proposed

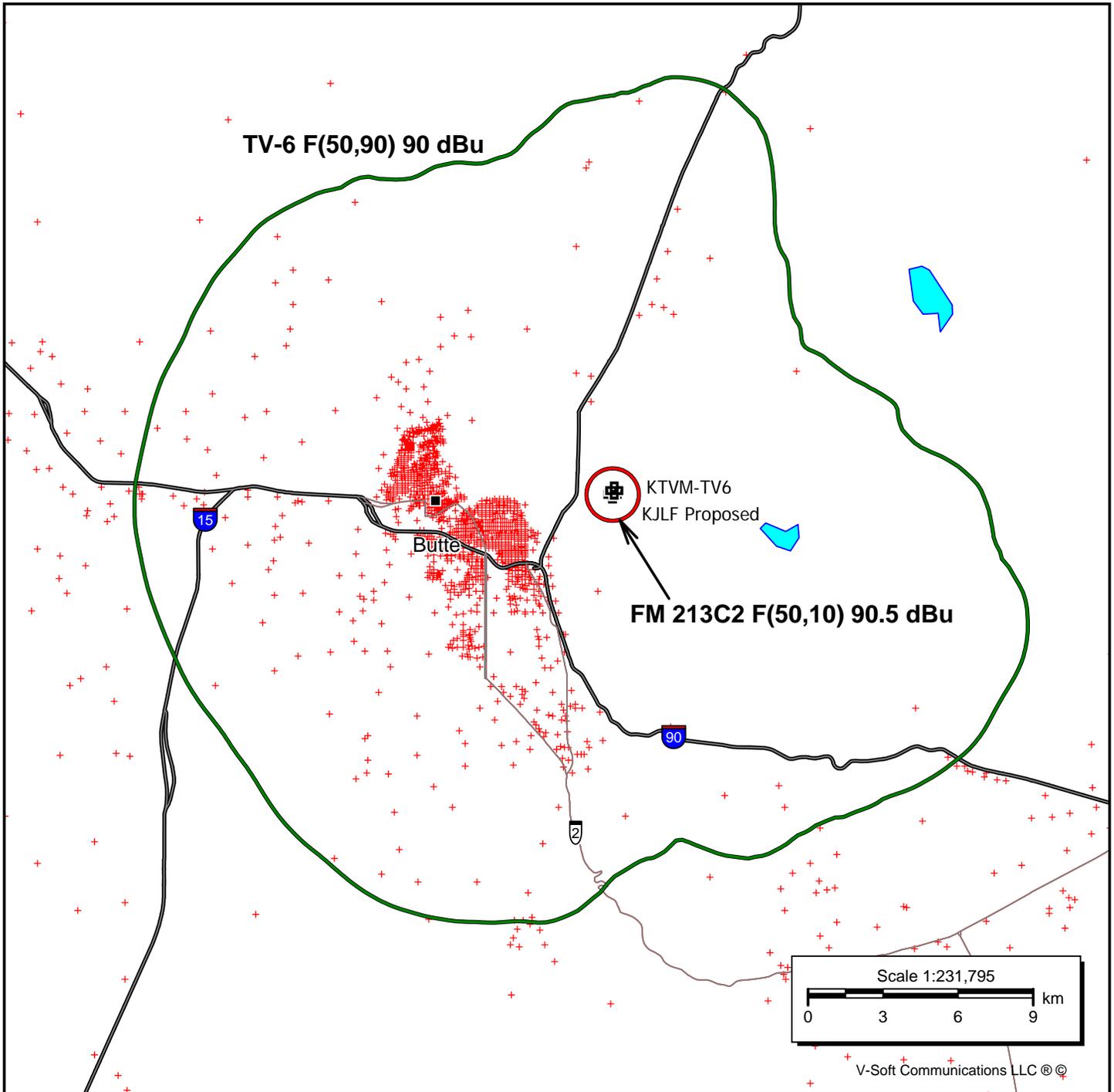
Correction
Channel: 213C2
Frequency: 90.5 MHz
Latitude: 46-00-22 N
Longitude: 112-26-33 W
COR AGL Height: 12.0 m
COR AMSL Height: 2505.0 m
Base Elevation: 2493.0 m
COR HAAT: 530.38 m
ERP: 1.00 kW
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: None

Exhibit 2

Section 73.509 Contour Overlap Tabulations

Exhibit 4

TV Channel 6 Compliance



KJLF Proposed

Correction
 Channel: 213C2
 Frequency: 90.5 MHz
 Latitude: 46-00-22 N
 Longitude: 112-26-33 W
 COR AGL Height: 12.0 m
 COR AMSL Height: 2505.0 m
 Base Elevation: 2493.0 m
 COR HAAT: 530.38 m
 ERP: 0.025 kW
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: None

KTVM-TV6

Channel: 6 2C
 Frequency: 85.0 MHz
 Latitude: 46-00-27 N
 Longitude: 112-26-30 W
 COR AGL Height: 53.3 m
 COR AMSL Height: 2566.3 m
 Base Elevation: 2513.0 m
 COR HAAT: 591.3 m
 ERP: 19.20 kW
 Horiz. Pattern: Omni
 Vert. Pattern: Yes
 Elec Tilt: 0.0
 Prop Model: None

Population Report

Station: KJLF Proposed (213)
 Contour: FCC F(50-10) 90.50 dBu (FCC HAAT)
 Population Database: 2014 US Census Estimate
 Total Population: 0
 Housing Units: 0
 Coverage Area: 3 sq. km

Channel-Six TV Protection Study

KTVM-TV LI 06 2C Dom 19.200 kW 591 m HAAT THN Non-DA
Butte MT 2566.0 m COR AMSL -
Lat= 46 00 27.0, Lng= 112 26 30.0

Fac ID# 18066 BLCDDT20100629AVB
Direct line HAAT Grade B, 47 dBu= 116.25 km & Grade A= 61.74 km

Distance from reference to Grade B = -116.08 km

Cutoff Dist from Full Service or Class CA= 193

Maximum Co-located power= 38 kW

KTVM-TV Signal Contour at Reference location = 135.3 dBu

Add 6 dB to TV Contour if within angle.

TV/FM D to U values.

47.0	69.5	55.0	68.7	63.0	70.2	71.0	74.9	79.0	81.2	87.0	87.9
48.0	69.3	56.0	68.8	64.0	70.7	72.0	75.6	80.0	82.0	88.0	88.7
49.0	69.0	57.0	68.8	65.0	71.1	73.0	76.4	81.0	82.8	89.0	89.6
50.0	68.8	58.0	68.9	66.0	71.7	74.0	77.2	82.0	83.7	90.0	90.5
51.0	68.8	59.0	69.0	67.0	72.2	75.0	78.0	83.0	84.5	91.0	90.5
52.0	68.7	60.0	69.3	68.0	72.8	76.0	78.8	84.0	85.3	92.0	90.5
53.0	68.7	61.0	69.5	69.0	73.5	77.0	79.6	85.0	86.2	93.0	90.5
54.0	68.7	62.0	69.8	70.0	74.2	78.0	80.4	86.0	87.0	94.0	90.5