

**K234BY**  
**Winston, MT**

Proposed Minor Modification  
of Licensed Translator Facility

**Application Overview:**

The Applicant proposes to modify BLFT-20111024AAP using the following parameters:

**Tech Box:**

Channel:	235
Antenna Coordinates:	N46-29-02, W111-44-36 (NAD 27)
ASRN:	N/A
Tower Site Base AMSL:	1550 m
Overall Tower Height AGL:	7 m
COR AGL:	7 m
ERP:	Horizontally Polarized 0.25 kW
Directional Antenna:	No

**Primary Station and Translator Protected Contour Relationship:**

Exhibit 1 demonstrates that the proposed fill-in translator facility's protected contour is completely encompassed by the protected contour of the primary station being rebroadcast.

**Interference Study (Fully Spaced):**

Exhibit 2 is a contour overlap study demonstrating that the proposed antenna site provides requisite contour protection towards all applications, authorizations, and permits pursuant to Section 74.1204.

### **No Other Co-Located Emitters:**

No other emitters are authorized to use the proposed tower.

### **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 1 wavelength spacing, and the AGL height and ERP proposed in this application, the highest predicted power density 2 meters above ground is less than 46.3% of the Uncontrolled Standard with a Power Density of 92.5 microwatts per square centimeter 2.8 meters from the base of the tower.

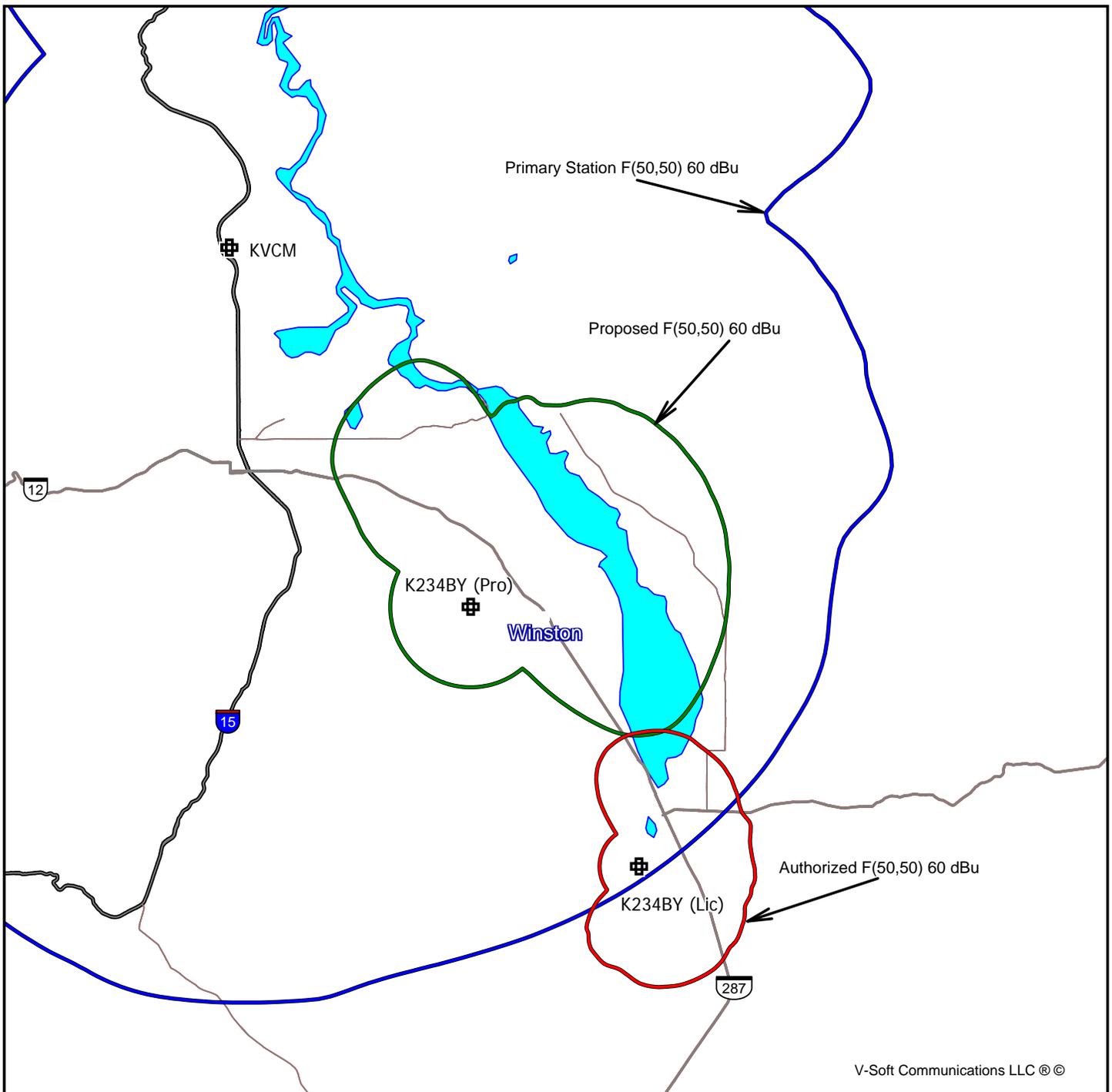
Even though the site will fully comply with the Uncontrolled Site Standards, access to the transmitting site will be restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary,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

### **Existing Structure:**

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 mounting structure in question already exists.

# **Exhibit 1**

**Primary Station Protected Contour  
vs.  
Proposed Translator Protected Contour**



**K234BY (Pro)**

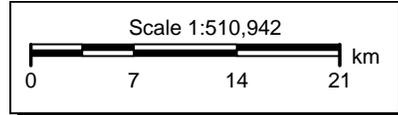
Channel: 235D  
 Frequency: 94.9 MHz  
 Latitude: 46-29-02 N  
 Longitude: 111-44-36 W  
 COR AGL Height: 7.0 m  
 COR AMSL Height: 1557.0 m  
 Base Elevation: 1550.0 m  
 COR HAAT: -29.34 m  
 ERP: 0.25 kW  
 Horiz. Pattern: Omni  
 Vert. Pattern: No  
 Prop Model: None

**K234BY (Lic) (Licensed)**

BLFT20111024AAP  
 Channel: 234D  
 Frequency: 94.7 MHz  
 Latitude: 46-16-40 N  
 Longitude: 111-33-01 W  
 COR AGL Height: 10.0 m  
 COR AMSL Height: 1522.0 m  
 Base Elevation: 1512.0 m  
 COR HAAT: 0.0 m  
 ERP: 0.015 kW  
 Horiz. Pattern: Omni  
 Vert. Pattern: No  
 Prop Model: None

**KVCM (Primary)**

BLED20060327AFZ  
 Channel: 276C1  
 Frequency: 103.1 MHz  
 Latitude: 46-46-07 N  
 Longitude: 112-01-21 W  
 COR AGL Height: 50.0 m  
 COR AMSL Height: 1538.0 m  
 Base Elevation: 1488.0 m  
 COR HAAT: 235.0 m  
 ERP: 30.00 kW  
 Horiz. Pattern: Omni  
 Vert. Pattern: No  
 Prop Model: None



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# **Exhibit 2**

## **Section 74.1204 Interference Tabulations**

K234BY Section 74.1204 Overlap Tabulation Study

REFERENCE  
46 29 02.0 N.  
111 44 36.0 W.

CH# 235A - 94.9 MHz, Pwr= 0.25 kW, HAAT= -29.3 M, COR= 1557 M  
Average Protected F(50-50)= 7.09 km  
Omni-directional

DISPLAY DATES  
DATA 11-22-11  
SEARCH 12-05-11

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DIST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT* (in km)
234D Townsend	K234BY	LIC_V_	MT	147.1 327.2	27.3 BLFT20111024AAP	46 16 40.0 111 33 01.0	0.015 1522	8.0	5.7 Hi-line Radio Fellowship,	12.3	11.5
235C Missoula	KYSS-FM	LIC_CX	MT	290.4 108.8	182.3 BLH20060912ABJ	47 01 57.0 113 59 30.0	63.000 729	173.1 2312	75.5 Townsquare Media Missoula	202.5R	-20.2M
236C1 Bozeman	KMMS-FM	LIC_CY	MT	142.8 323.5	112.7 BLH19860825KA	45 40 24.0 110 52 02.0	100.000 238	91.5 2097	61.4 Townsquare Media Bozeman L	14.2	41.2
238C Butte	KMBR	LIC_CN	MT	225.7 45.2	75.5 BLH19800128AE	46 00 29.0 112 26 30.0	50.000 555	6.7 2544	56.7 Ccr-butte Iv, Lic	88.5R	-13.0M
234D Mcqueen	K234AT	LIC_V_	MT	225.7 45.2	75.5 BLFT20070621AAI	46 00 29.0 112 26 30.0	0.250 545	25.7 2524	17.3 Ccr-butte Iv, Lic	42.7	48.1
233C1 Great Falls	KMON-FM«	LIC_CY	MT	17.1 197.5	122.8 BLH19970418KC	47 32 19.0 111 15 41.0	100.000 151	7.6 1211	60.9 Ccr-great Falls Iv, Lic	74.5R	48.3M

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.  
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, \_= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)  
« = Station meets FCC minimum distance spacing for its class.