

KQEO-FM1

Pocatello

Proposed Minor Modification
of Permitted Booster Facility

Application Overview:

The Applicant proposes to modify BNPFTB-20081007AKK using the following parameters at the new community of license of Pocatello, ID:

Tech Box:

Channel:	296
Antenna Coordinates:	N42-50-55, W112-26-45 (NAD 27)
ASRN:	N/A
Tower Site Base AMSL:	1428 m
Overall Tower Height AGL:	21 m
COR AGL:	19 m
ERP:	2.2 kW
Directional Antenna:	Yes - see Exhibit 4

Primary Station and Booster Protected Contour Relationship:

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

Interference Study:

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 with the exception of co-channel translator K296EA Pocatello.

K296EA has been granted a displacement permit to change channels to Channel 233 pursuant to BPFT-20100510AVD. The licensee of K296EA has informed the applicant that it will either cease operations or implement its construction permit immediately prior to the instantly proposed facility commencing operations. As such, the applicant would not object to having such a special operating condition placed on the requested permit.

Co-Located Directional Emitter:

The proposed facility will be mounted above the permitted facilities of KSNA-FM1 on the same tower. KSNA-FM1 will utilize a directional antenna from Shively Labs. The instant directional pattern proposed for KQEO-FM1 will also utilize a directional Shively Antenna. As such, Shively Labs designed the KSNA-FM1 directional pattern with the future KQEO-FM1's feedline passing through its aperture. The KSNA-FM1 construction permit was granted on May 10, 2011, and will be constructed the week of May 16. When it is constructed, the feedline for the instantly proposed facility will be installed and capped off until the KQEO-FM1 antenna is installed once the instantly requested permit is granted. As such, the installation of the proposed KQEO-FM1 antenna above the recently permitted KSNA-FM1 antenna with its feedline passing through the KSNA-FM1 aperture will have no effect on the KSNA-FM1 directional pattern as it was considered in KSNA-FM1's pattern creation and, in fact, is relied upon.

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 Shively 6810 antenna for KQEO-FM1 with 2 sections and 0.5 wavelength spacing, and the AGL height and ERP proposed in this application, the highest predicted power density 2 meters above ground is less than 21.4% of the Uncontrolled Standard with a Power Density of 42.8 microwatts per square centimeter 31 meters from the base of the tower.

Using the Shively 6810 antenna for KSNA-FM1 with 2 sections and 0.5 wavelength spacing, and the AGL height and ERP permitted in BMPFTB-20110330ACI, the highest predicted power density 2 meters above ground is less than 36.7% of the Uncontrolled Standard with a Power Density of 73.35 microwatts per square centimeter 23.6 meters from the base of the tower.

By simply summing the highest predicted power density 2 meters above ground, the result is less than 58.1% of the Uncontrolled Standard with a Power Density of 116.15 microwatts per square centimeter from 23.6 to 31 meters from the base of the tower. Therefore, the proposed facility in addition to the permitted KSNA-FM1 facility will comply with the Uncontrolled Standard.

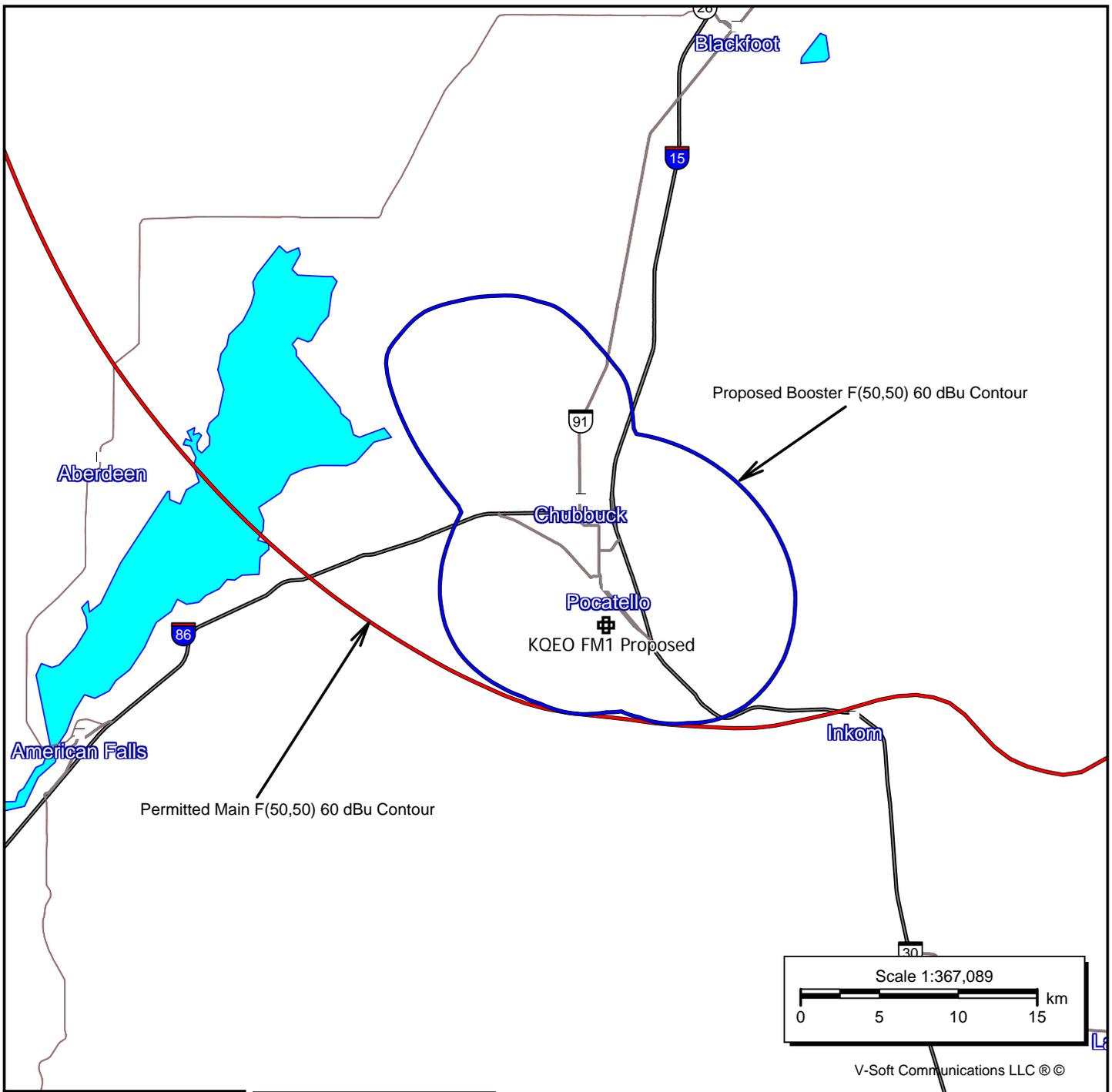
Even though the site will fully comply with the Uncontrolled Site Standards, access to the transmitting site will be restricted and appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction or shut down of power if necessary,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

Existing Tower:

The proposed tower already exists and the proposed facility will not pose any environmental or historical impact on NEPA/SHPO.

Exhibit 1

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



KQEO FM1 Proposed
 (Proposed)
 Channel: 296D
 Frequency: 107.1 MHz
 Latitude: 42-50-55 N
 Longitude: 112-26-45 W
 COR AGL Height: 19.0 m
 COR AMSL Height: 1447.0 m
 Base Elevation: 1428.0 m
 COR HAAT: -190.2 m
 ERP: 2.20 kW
 Horiz. Pattern: Directional
 Vert. Pattern: No
 Prop Model: None

KQEO.C
 BPH20080331AKU
 Channel: 296C1
 Frequency: 107.1 MHz
 Latitude: 43-21-06 N
 Longitude: 112-00-29 W
 COR AGL Height: 49.0 m
 COR AMSL Height: 1789.0 m
 Base Elevation: 1740.0 m
 COR HAAT: 193.0 m
 ERP: 100.00 kW
 Horiz. Pattern: Omni
 Vert. Pattern: No
 Prop Model: None

Exhibit 2

Section 74.1204 Interference Tabulations

KQEO-FM1 Pocatello, ID

Section 74.1204 Contour Overlap Tabulations

REFERENCE
42 50 55.0 N.
112 26 45.0 W.

CH# 296D - 107.1 MHz, Pwr= 2.2 kW DA, HAAT= -190.2 M, COR= 1447 M
Average Protected F(50-50)= 12.28 km
Standard Directional

DISPLAY DATES
DATA 05-09-11
SEARCH 05-10-11

CH CITY	CALL	TYPE STATE	ANT STATE	AZI <--	DI ST FILE #	LAT LNG	PWR(kW) HAAT(M)	INT(km) COR(M)	PRO(km) LICENSEE	*IN* (Overlap in km)	*OUT*
296C1 Idaho Falls	KQEO	CP	_CX ID	32.3 212.6	66.3 BPH20080331AKU	43 21 06.0 112 00 29.0	100.000 193	172.2 1789	72.6 Sandhill Media Corporation	-118.2*	-53.4*
296C1 Idaho Falls	KQEO	LIC	NC_ ID	30.3 210.7	89.6 BLH20030408ABD	43 32 33.0 111 53 04.0	82.000 182	165.1 1730	68.9 Sandhill Media Corporation	-87.8*	-26.4
296D Pocatello	K296EA	LIC	DHN ID	89.7 269.8	6.9 BLFT19891220TH	42 50 56.0 112 21 43.0	0.051 444	27.6 2080	6.4 Frandsen Media Company LLC	-32.7*	-44.2
296D Blackfoot	KQEO-FM1	CP	_C_ ID	10.0 190.0	36.0 BNPFTB20081007AKK	43 10 04.0 112 22 08.0	0.950	35.0 1398	10.0 Sandhill Media Corporation	-11.3	-21.1
296D Soda Springs, Etc.	K296AQ	LIC	_CN ID	111.1 291.6	67.0 BLFT145	42 37 48.0 111 41 00.0	0.109 328	71.4 2148	22.5 Caribou County Tv	-15.2*	5.5
298D Pocatello	K298BE	LIC	_V_ ID	216.1 36.1	5.5 BLFT20110119ADR	42 48 30.0 112 29 09.0	0.010 584	0.2 2204	14.6 University Of Utah	-1.1*	-10.0*
294D Pocatello	630188	APP	_V_ ID	216.3 36.2	5.5 BNPFT20030310AXY	42 48 31.0 112 29 09.0	0.010 523	0.2 2143	14.0 Calvary Chapel Of Twin Fal	-1.1*	-9.4*
293D Pocatello	632862	APP	_C_ ID	216.3 36.2	5.5 BNPFT20030317ACZ	42 48 31.0 112 29 09.0	0.008 529	0.2 2149	13.1 Bible Broadcasting Networ	-1.1*	-8.4*
294D Pocatello	645774	APP	_C_ ID	6.0 186.0	12.2 BNPFT20030317MFD	42 57 28.0 112 25 49.0	0.250 30	1.1 1506	9.5 Idaho Wireless Corporation	-3.5*	1.1
295C Brigham City	KEGH	LIC	NCX UT	171.5 351.6	119.5 BLH20021009AAU	41 47 03.0 112 13 55.0	81.000 660	115.6 2145	78.1 Slc Divestiture Trust Li (-1.6	33.6
296C Woodruff	AL2534	RSV-A	___ UT	150.2 331.1	244.0 RM11363	40 56 07.0 111 00 03.0	100.000 600	215.8 3127	102.2 21.0	117.9	
296C Woodruff	KEGH	CP	_HX UT	150.9 331.8	250.5 BPH20080328AAL	40 52 16.0 110 59 43.0	89.000 647	214.5 3330	101.5 Slc Divestiture Trust Li (28.9	125.2
294C Hailey	KYUN	LIC	NC_ ID	289.6 108.5	147.1 BLH20061103AAJ	43 16 45.0 114 09 14.0	100.000 481	12.6 2000	86.8 Locally Owned Radio, Lic	123.5	58.7

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), Beam tilt (Y, N, X)
"*" affixed to 'IN' or 'OUT' values = site inside protected contour.

Exhibit 4

Proposed Directional Pattern Azimuth Tabulations

Antenna Pattern

Pre-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	1.0
10.0	1.0
20.0	1.0
30.0	1.0
40.0	1.0
50.0	1.0
60.0	1.0
70.0	1.0
80.0	0.98
90.0	0.93
100.0	0.868
110.0	0.78
120.0	0.68
130.0	0.56
140.0	0.434
150.0	0.344
160.0	0.258
170.0	0.206
180.0	0.204
190.0	0.218
200.0	0.238
210.0	0.258
220.0	0.282
230.0	0.328
240.0	0.402
250.0	0.49
260.0	0.59
270.0	0.678
280.0	0.748
290.0	0.806
300.0	0.85
310.0	0.904
320.0	0.964
330.0	1.0
340.0	1.0
350.0	1.0

Rotation Angle = 0

