

**Technical Report  
Long Form Application for New Translator  
BNPFT-20030313ATY**

This technical report has been developed in support of a long form application for the new translator, FCC file no. BNPFT-20030313ATY, at Buffalo, WY. A change to channel 290 from 287 and change in tower site is requested. The facility will serve as a fill-in for KLQQ 285C0 at Sheridan, WY, facility I.D. 165310.

The following exhibits are provided in support of the form 349 application:

- E-1 Channel Overlap Study
- E-2 60 dBu Coverage within KLQQ and Overlap to the Current Facility

**Overlap Study:**

An overlap study is shown in exhibit E-1 which shows no interference overlap to any other facilities. **It is noted that a concurrent application is to be filed to relocate and change the Buffalo, WY 293 to channel 240 which will eliminate any interference between them.**

**Antenna System:**

The translator will be located at an existing tower at a COR AGL of 10 meters, using a single bay Shively 6812B nondirectional antenna, and operate at 0.250 kW ERP at coordinates:

44-20-54N 106-41-30W (NAD 27).

# Charles M. Anderson Associates

---

Broadcast Consultants  
1519 Euclid Avenue  
Bowling Green, KY 42103

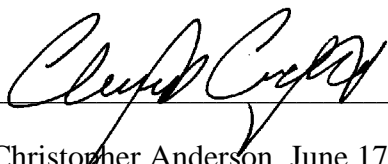
Exhibit E-2 shows the 60 dBu contour plot will be completely contained within the 60 Bu contour of KLQQ as well as overlap to the short form application facility's 60 dBu contour.

## **RF Exposure Calculation:**

The RF contribution from the 0.250 kW facility was evaluated using the Commission's FMMODEL program. The RF contribution from a height of 2 meters above ground was calculated to be  $55.6 \mu\text{Watts/cm}^2$  at a distance of 8 meters from the tower. Additional FR contributions on this tower come from booster facilities for KYTI, KLQQ, and KZWY. Their combined RF contributions were previously calculated to be  $0.053 \mu\text{Watts/cm}^2$  for a total of  $55.7 \mu\text{Watts/cm}^2$  for all four, which is well below the  $200 \mu\text{Watts/cm}^2$  permissible for general public exposure.

## **Conclusion:**

It is concluded that the minor modification of the proposed BNFT-20030313ATY facility complies with all Commission policies and rules.

  
\_\_\_\_\_  
Christopher Anderson June 17, 2008  
andersce@yahoo.com

© 2008 Charles M. Anderson Associates

E-1 Overlap Study

REFERENCE		CH# 290D - 105.9 MHz, Pwr= 0.25 kW, HAAT= 30.0 M, COR= 1439 M							DISPLAY DATES	
44 20 54.0 N.		Average Protected F(50-50)= 7.1 km							DATA 06-14-08	
106 41 30.0 W.		Omni-directional							SEARCH 06-17-08	
-----										
CH	CALL	TYPE ANT	AZI.	DIST	LAT.	Pwr(kW)	INT(km)	PRO(km)	*IN*	*OUT*
CITY		STATE	<--	FILE #	LNG.	HAAT(M)	COR(M)	LICENSEE	(Overlap in km)	
-----										
287D	651583	APP C	324.4	0.15	44 20 58.0	0.250	1.1	7.1	-8.05*	-8.05*
Buffalo		WY	144.4	BNPFT20030313ATY	106 41 34.0		1449	Lovcom, Inc.		
293D	652158**	APP C	324.4	0.15	44 20 58.0	0.250	1.1	7.1	-8.05*	-8.05*
Buffalo		WY	144.4	BNPFT20030313ATS	106 41 34.0		1449	Lovcom, Inc.		

\*\*A concurrent application for the Buffalo,WY 263D New Translator is to be filed moving it to channel to 240 and relocated to a new tower site which will eliminate this interference.

291C1	KXXL	LIC C	97.2	98.98	44 13 50.0	100.000	77.7	48.1	14.15	40.68
Moorcroft		WY	278.1	BLH20080403ABM	105 27 45.0	120	1542	Family Voice Communication		
290D	K288FZ	CP DC	312.3	45.44	44 37 20.0	0.250	11.8	3.2	26.56	18.50
Sheridan		WY	132.0	BPFT20071102ASQ	107 06 57.0		2352	Lovcom, Inc.		
287C1	1235138	RSV	93.4	89.92	44 17 40.0	100.000	9.7	70.3	73.15	18.54
Sleepy Hollow		WY	274.2		105 34 01.0	299	1712	Robert R. Rule		
292D	K292DZ	LIC DHN	330.4	29.07	44 34 32.0	0.135	0.2	4.0	21.81	23.97
Sheridan		WY	150.3	BLFT19880627TC	106 52 22.0	-55	1538	James & Susan Noga		
288D	K288FZ	LIC DC	312.3	45.44	44 37 20.0	0.010	0.0	0.8	38.34	43.52
Sheridan		WY	132.0	BLFT20070131AFH	107 06 57.0		2352	Lovcom, Inc.		
287C1	1234797	APP NCX	92.5	99.18	44 18 10.0	100.000	4.7	43.2	87.41	54.86
Sleepy Hollow		WY	273.4	BMPH20080213AHK	105 27 00.0	82	1492	Robert R. Rule		
290C1	KPBR	LIC CX	315.3	207.72	45 39 31.0	100.000	138.2	40.7	62.47	143.29
Joliet		MT	133.9	BLH20060712AEX	108 34 14.0	134	1251	Connoisseur Media, Llc		
292C	NEW	CP CX	226.4	145.63	43 26 18.0	50.000	9.6	73.2	128.93	71.28
Shoshoni		WY	45.5	BNPH20060310AAB	107 59 46.0	586	2512	Cochise Broadcasting Llc		

-----  
Terrain database is USGS 03 SEC Distance + R = 73.215 or FCC spacings in KM, Distance + M = Margin in KM  
Contour distances are on direct line to and from reference station. Reference Zone = 2. With 3rd Adj Channels.  
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.

# E-2 New Translator At Ch. 290 60 dBu Contour Plot

## New Translator at Ch. 290

BNPFT20030313ATY  
Latitude: 44-20-54 N  
Longitude: 106-41-30 W  
ERP: 0.25 kW  
HAAT: 30.0 m  
Channel: 290  
Frequency: 105.9 MHz  
RCAMSL Height: 1439.0 m  
Site Elevation: 1429.0 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

(c) Copyright 2008, Anderson Communications, LLC

