

Broadcast Consultants  
1519 Euclid Avenue  
Bowling Green, KY 42103

**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 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*
287D Buffalo	651583	APP C WY	324.4	0.15	44 20 58.0 106 41 34.0	0.250	1.1	7.1 1449 Lovcom, Inc.	-8.05*	-8.05*
293D Buffalo	652158**	APP C WY	324.4	0.15	44 20 58.0 106 41 34.0	0.250	1.1	7.1 1449 Lovcom, Inc.	-8.05*	-8.05*

\*\*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.

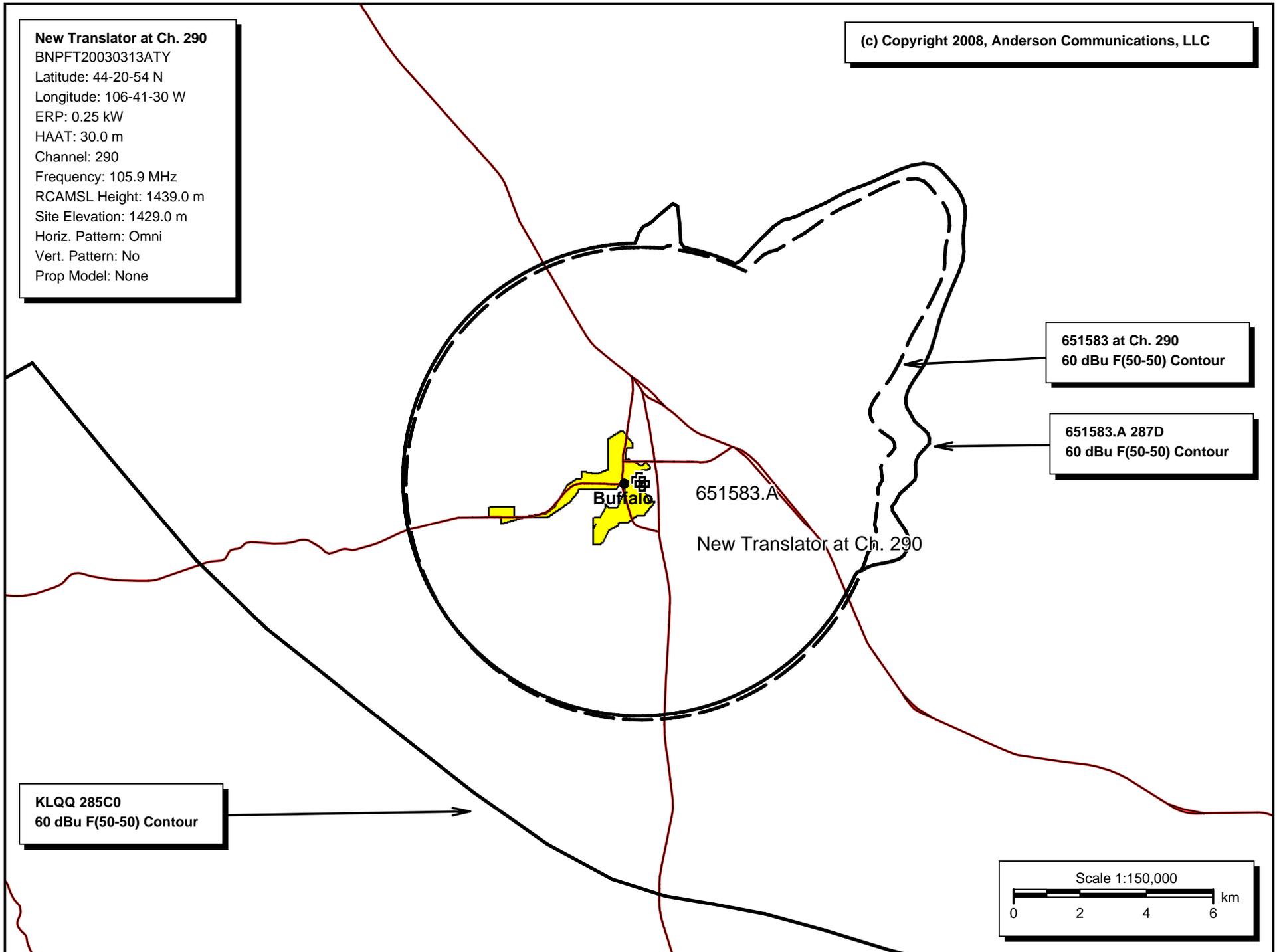
291C1 Moorcroft	KXXL	LIC C WY	97.2	98.98	44 13 50.0 105 27 45.0	100.000 120	77.7	48.1 1542 Family Voice Communication	14.15	40.68
290D Sheridan	K288FZ	CP DC WY	312.3	45.44	44 37 20.0 107 06 57.0	0.250	11.8	3.2 2352 Lovcom, Inc.	26.56	18.50
287C1 Sleepy Hollow	1235138	RSV WY	93.4	89.92	44 17 40.0 105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

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

(c) Copyright 2008, Anderson Communications, LLC

**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



651583 at Ch. 290  
60 dBu F(50-50) Contour

651583.A 287D  
60 dBu F(50-50) Contour

KLQQ 285C0  
60 dBu F(50-50) Contour

651583.A  
New Translator at Ch. 290

