

**K02RA-D MINOR MODIFICATION TO CONSTRUCTION PERMIT FOR CH 2 3 kW DIRECTIONAL
FACILITY ID 187583 BNPDL-20100610AFB
BEAUMONT, TEXAS
ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS
APRIL 2019**

K02RA-D is authorized for operation on CH 2. This application proposes a minor change to those CP facilities, BNPDL-20100610AFBk02ra-d. The proposed facility qualifies as a minor change as there is no change in channel of operation, there is significant overlap of the present and proposed LPTV service contours and the proposed site is 3.1 kilometers from the CP site in compliance with 74.787 (b) (iii). FCC TVStudy software was utilized to determine the interference levels associated with the proposed K02RA-D facility and they are pasted in below.

The applicant proposes herein to move to FCC Tower registration ASR 1050149. The proposed antenna system consists of a PSI Custom C.Pol. panel antenna system with 0.5 degree of beam tilt. The maximum relative field in the elevation pattern across the depression angle range of 30 to 90 degrees is less than 0.5 with a radiation center 76 meters above ground. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 0.5 has been used to calculate the power density 2 meters above ground. The maximum power density is 9.15 uw/cm squared calculated for an ERP of 3,000 watts H. polarization and 3,000 watts V. polarization. This value is 4.57% of the Public Exposure MPE per section 1.1310. Based on this analysis it is believed that the proposed facility follows OET-65 Guidelines.

The applicant will reduce power or cease transmission as required to meet FCC OET-65 Guidelines.

The proposed tower is existing along with the transmitter building, access road and power.

Below is a copy of the TVStudy interference analysis for CH 26 based on the facilities described above with the antenna orientation of 200 degrees true. As can be seen at the conclusion of the report there is no impermissible ISIX interference. It is believed that the proposed facility provides full protection to other television facilities based on the following:

TVStudy Report: Proposed facility

Study created: 2019.04.16 18:01:03

Study build station data: LMS TV 2019-04-14

Proposal: K02RA-D D2 LD CP BEAUMONT, TX
File number: BNPDL20100610AFB
Facility ID: 187583
Station data: User record
Record ID: 208
Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K02QB	N2-	TX	LIC	ALEXANDRIA, LA	BLTVL20080125ADH	206.1 km
No	KSFV-LD	D2	LD	LIC	DALLAS, TX	BLANK0000001483	388.8
No	K48NY-D	D2	LD	APP	GAINESVILLE, TX	BLANK0000054277	421.7
No	KNCD-LP	N2z	TX	LIC	Lufkin, TX	BLTVL19930430IA	180.5
No	KZHO-LD	D3	LD	CP	HOUSTON, TX	BLANK0000054252	127.0
No	K03IT-D	D3	LD	CP	ORANGE, TX	BNPDVL20100611AAA	42.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D2
Mask: Full Service
Latitude: 30 5 2.10 N (NAD83)
Longitude: 94 5 58.00 W
Height AMSL: 82.0 m

HAAT: 0.0 m
Peak ERP: 3.00 kW
Antenna: PSI CUSTOM 0.0 deg
Elev Pattn: Generic
Elec Tilt: 0.50

43.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	3.00 kW	79.2 m	44.2 km
45.0	3.00	77.6	43.9
90.0	3.00	79.2	44.2
135.0	3.00	79.7	44.3
180.0	3.00	78.7	44.1
225.0	3.00	76.9	43.7
270.0	3.00	73.4	43.0
315.0	3.00	73.7	43.1

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 77 m

Distance to Canadian border: 1639.7 km

Distance to Mexican border: 534.1 km

Conditions at FCC monitoring station: Kingsville TX
Bearing: 232.4 degrees Distance: 471.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 320.9 degrees Distance: 1503.3 km

Study cell size: 1.00 km
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

---- Below is IX received by proposal BNPDVL20100610AFB ----

Proposal receives 2.21% interference from scenario 1
No IX check failures found.

TVix

tvstudy v2.2.5 (4uoc83)
Database: 127.0.0.1, Study: BNPDL20100610AFB #299, Model: Longley-Rice
Start: 2019.04.16 18:01:03

Study created: 2019.04.16 18:01:03

Study build station data: LMS TV 2019-04-14

Proposal: K02RA-D D2 LD CP BEAUMONT, TX
File number: BNPDL20100610AFB
Facility ID: 187583
Station data: User record
Record ID: 208
Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	K02QB	N2-	TX	LIC	ALEXANDRIA, LA	BLTVL20080125ADH	206.1 km
No	KSFW-LD	D2	LD	LIC	DALLAS, TX	BLANK0000001483	388.8
No	K48NY-D	D2	LD	APP	GAINESVILLE, TX	BLANK0000054277	421.7
No	KNCD-LP	N2z	TX	LIC	Lufkin, TX	BLTVL19930430IA	180.5
No	KZHO-LD	D3	LD	CP	HOUSTON, TX	BLANK0000054252	127.0
No	K03IT-D	D3	LD	CP	ORANGE, TX	BNPDL20100611AAA	42.8

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D2
Mask: Full Service
Latitude: 30 5 2.10 N (NAD83)
Longitude: 94 5 58.00 W
Height AMSL: 82.0 m
HAAT: 0.0 m
Peak ERP: 3.00 kW

Antenna: PSI CUSTOM 0.0 deg
Elev Pattn: Generic
Elec Tilt: 0.50

43.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	3.00 kW	79.2 m	44.2 km
45.0	3.00	77.6	43.9
90.0	3.00	79.2	44.2
135.0	3.00	79.7	44.3
180.0	3.00	78.7	44.1
225.0	3.00	76.9	43.7
270.0	3.00	73.4	43.0
315.0	3.00	73.7	43.1

Database HAAT does not agree with computed HAAT
Database HAAT: 0 m Computed HAAT: 77 m

Distance to Canadian border: 1639.7 km

Distance to Mexican border: 534.1 km

Conditions at FCC monitoring station: Kingsville TX
Bearing: 232.4 degrees Distance: 471.3 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 320.9 degrees Distance: 1503.3 km

Study cell size: 1.00 km
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%
Maximum new IX to LPTV: 2.00%

Interference to proposal scenario 1
2.21% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	K02RA-D	D2	LD	CP	BEAUMONT, TX	BNPDVL20100610AFB	
Undesireds:	K03IT-D	D3	LD	CP	ORANGE, TX	BNPDVL20100611AAA	42.8 km
	Service area			Terrain-limited		IX-free	Percent IX
	6026.4	399,912		6026.4	399,912	5850.0	391,072
							2.93
							2.21
Undesired				Total IX		Unique IX	Prcnt Unique IX
K03IT-D D3 LD CP				176.4	8,840	176.4	8,840
							2.93
							2.21

The foregoing was prepared on behalf of SagamoreHill of Beaumont, LLC by Clarence M. Beverage of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements she believes them to be true and correct.



Clarence M. Beverage
for Communications Technologies, Inc.
Marlton, New Jersey
April 17, 2019

K02RA PROPOSED CH 2 3 kW OMNI BEAUMONT, TEXAS

