

K07AAJ-D MINOR MODIFICATION OF CONSTRUCTION PERMIT CH 7 0.1 kW NON-DIRECTIONAL  
BAKERSFIELD, CALIFORNIA  
ENGINEERING NARRATIVE AND RF RADIATION ENVIRONMENTAL ANALYSIS  
MARCH 2023

**Proposed Change in Facilities**

K07AAJ-D is an LPTV DTV facility authorized in file number BNPDTL-20090825APG. The proposed facility is believed to qualify as a minor change:

The applicant proposes herein to specify a rooftop location on a two story structure. The site change and proposed facilities are believed to comply with FCC policy and rules based on the following:

The proposed CH 7 LPTV protected contours have an area of common overlap as depicted on Figure 1 attached.

The proposed site is located a distance of 12.54 kilometers (7.8 miles) from the CP site coordinates in compliance with rule section 74.787 (b) (iii).

The proposed antenna system consists of a Sangamo Model 9700, Omni antenna, horizontally polarized without beam tilt. The antenna radiation center is 11.6 meters (38 feet) AGL. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 1.00 has been used to calculate the power density 2 meters above ground. The maximum power density is 36.2 uw/cm squared calculated for an ERP of 100 watts H. polarization. This value is 18.2% of the Public Exposure MPE per section 1.1310. RF Power density inside the structure will not exceed 200 microwatts per centimeter squared. Based on this analysis it is believed that the proposed facility is in compliance with OET-65 Guidelines.

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

The proposed building is an existing structure 7.62 meters (25 feet) in height with a 4 meter mast (13 feet) for a total height of 11.6 meters (38 feet). The ground elevation is 123.1 meters (404 feet) AMSL. FCC Towair analysis yields the following message:

**Structure does not require registration. The structure meets the 6.10-meter (20-foot) Rule criteria.**

### **Your Specifications**

Below is a copy of the TVStudy interference analysis for CH 7 based on the facilities described above. As can be seen at the conclusion of the report there is no impermissible caused interference. It is believed that the proposed facility provides full protection to other television facilities.

### **TVStudy Report**

Study created: 2023.03.24 12:19:49

Study build station data: LMS TV 2023-03-21

Proposal: NEW D7 LD CP BAKERSFIELD, CA  
File number: BNPDTL20090825APG  
Facility ID: 181741  
Station data: User record  
Record ID: 1240  
Country: U.S.

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
Yes	KAIL	D7	DT	LIC	FRESNO, CA	BLANK0000203129	191.9 km
Yes	KABC-TV	D7	DT	LIC	LOS ANGELES, CA	BLANK0000058534	155.0
Yes	KABC-TV	D7	DT	CP	LOS ANGELES, CA	BLANK0000187418	155.0
No	KOTR-LD	D7	LD	CP	MONTEREY, CA	BLANK0000122307	266.9

No	KOTR-LD	D7	LD	LIC	MONTEREY, CA	BLDV20140916ABL	287.3
No	KZTC-LD	D7	LD	LIC	SAN DIEGO, CA	BLANK0000063297	324.1
No	KRON-TV	D7	DT	LIC	SAN FRANCISCO, CA	BLANK0000212229	404.0
No	K07AAN-D	D7	LD	LIC	SANTA MARIA, CA	BLANK0000193084	141.0
No	KLAS-TV	D7	DT	LIC	LAS VEGAS, NV	BLANK0000112828	365.5
Yes	K08PT-D	D8	LD	LIC	BAKERSFIELD, CA	BLANK0000164558	27.1
No	KFLA-LD	D8	LD	LIC	LOS ANGELES, CA	BLANK0000010497	155.0
No	KTAV-LD	D8	LD	APP	Los Angeles, CA	BLANK0000054684	118.4
No	KSBW	D8	DT	LIC	SALINAS, CA	BLCDT20090901ACY	269.9
No	KZDF-LD	D8	LD	LIC	SANTA BARBARA, CA	BLANK0000001085	117.1
No	KKDJ-LD	D8	LD	LIC	SANTA MARIA, CA	BLANK0000152363	117.1
No	KKDJ-LD	N8z	TX	LIC	SANTA MARIA, CA	BLTVL20070508AAI	117.1

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D7  
Mask: Full Service  
Latitude: 35 22 32.00 N (NAD83)  
Longitude: 119 1 50.70 W  
Height AMSL: 134.7 m  
HAAT: 0.0 m  
Peak ERP: 0.100 kW  
Antenna: omni  
Elev Pattern: Generic

48.0 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.100 kW	-87.8 m	13.4 km
45.0	0.100	-43.2	13.4
90.0	0.100	-33.9	13.4
135.0	0.100	17.8	13.4
180.0	0.100	24.7	13.4
225.0	0.100	24.2	13.4
270.0	0.100	21.9	13.4
315.0	0.100	11.9	13.4

Database HAAT: 0 m    Computed HAAT: -8 m

Distance to Canadian border: 1475.6 km

Distance to Mexican border: 341.6 km

Conditions at FCC monitoring station: Livermore CA

Bearing: 317.8 degrees    Distance: 356.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 62.3 degrees    Distance: 1318.7 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 BNPDTL20090825APG -----

Proposal receives 44.89% interference from scenario 1

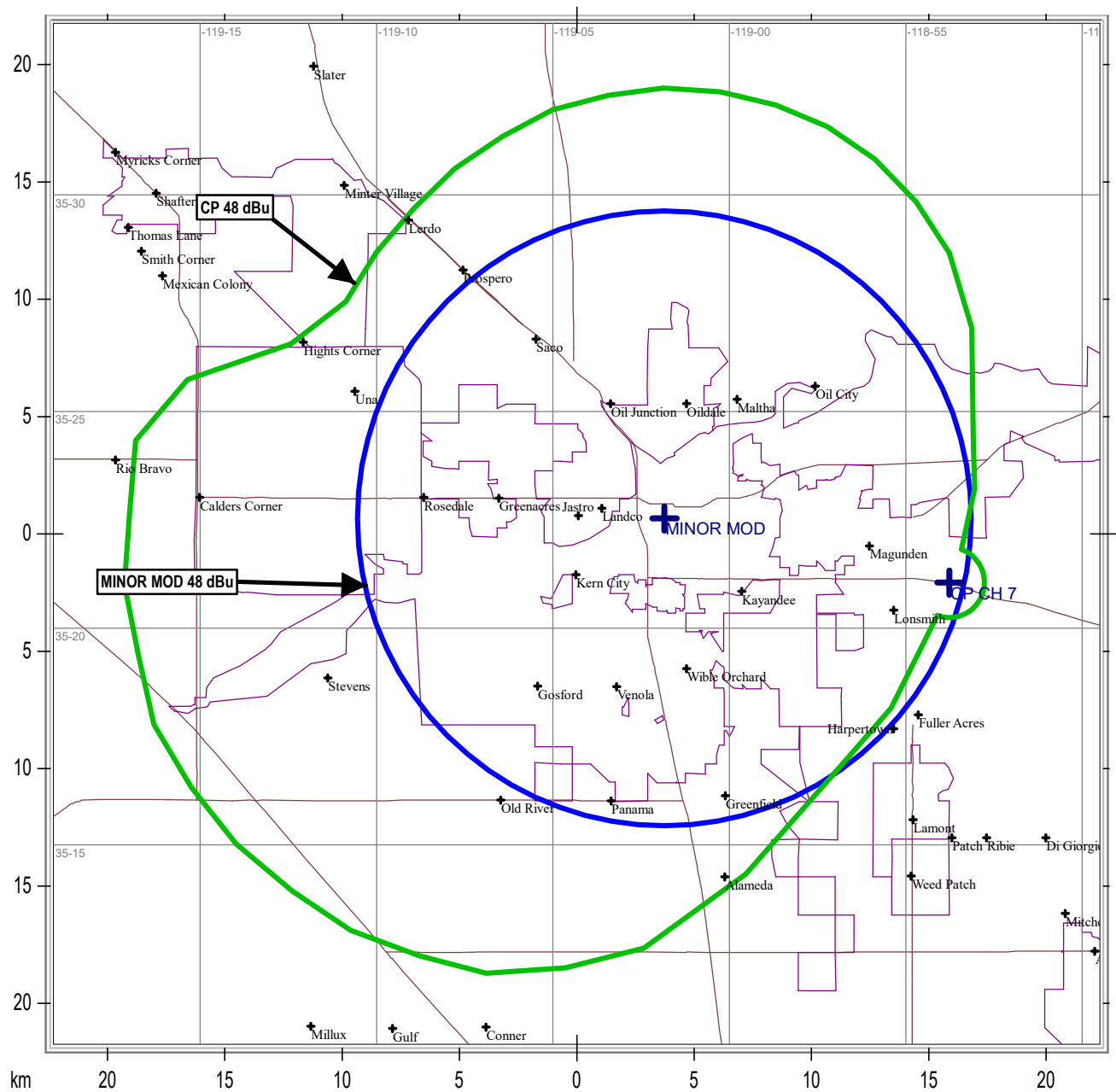
No IX check failures found.

The foregoing was prepared on behalf of Roseland Broadcasting, Inc. by Clarence M. Beverage of *Communications Technologies, Inc.*, Medford, 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 he believes them to be true and correct.



Clarence M. Beverage  
for Communications Technologies, Inc.  
Medford, New Jersey  
March 24, 2023

## K07AAJ-D MINOR MOD AND CURRENT CP FACILITIES BAKERSFIELD, CALIFORNIA



Communications Technologies, Inc. Medford, New Jersey

County Borders    City Borders    Highways    Lat/Lon Grid