

ENGINEERING NARRATIVE
IN SUPPORT OF APPLICATION FOR CONSTRUCTION PERMIT
FOR INCENTIVE AUCTION REASSIGNMENT CHANNEL

Prepared for

AGAPE BROADCASTERS, INC.

KFAM-CD CH 24 Facility ID 59500 15 kW OMNI RC 148 M AMSL

LAKE CHARLES, LOUISIANA

Summary

Agape Broadcasters, Inc. (“ABI”) specifies herein its post-auction CH 24 transmission facilities. The proposed facility is based on continued operation from FCC Tower Registration 1209257 using an Omnidirectional, elliptically polarized, slot antenna for CH 24 operation. At this site and RC AMSL of 148 meters the proposed ERP is 15 kW. The community boundary for Lake Charles, Louisiana is located wholly inside the 49.8 dBu noise limited contour and also the Grade B contour.

Attached herein is the TVStudy version 2.2.2 output which demonstrates that the proposed facility complies with the requirements for expedited processing in that there is no new interference to any station, the proposed population is 98.8 percent of the baseline population and the proposed coverage contour does not exceed the baseline contour.

Environmental

The proposed site is an existing broadcast site and the tower is existing.

The proposed antenna system is existing and consists of an Alive Telecom model ATC-BCE416M-V3-24, elliptically polarized, UHF

TV antenna. The relative field in the elevation pattern across the depression angle range of 20 to 90 degrees does not exceed 0.1 with a radiation center 143 meters above ground. Utilizing formula 10 OF OET Bulletin No. 65, Edition 97-01, a value F of 0.1 has been used to calculate the power density 2 meters above ground. The maximum power density is 0.328 uw/cm squared calculated for an ERP OF 15,000 watts H. polarization and 4,500 watts V. Polarization. This value is 0.09% of the General Population exposure per section 1.1310. 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 Worker Safety Guidelines.

The proposed tower is an existing site with tower, building, access road and power.

OET-69 Bulletin, TVStudy Output

Study created: 2017.07.11 17:28:08

Study build station data: LMS TV 2017-06-21 (6)

Proposal: KFAM-CD D24 DC BL LAKE CHARLES, LA
File number: DTVBL59500
Facility ID: 59500
Station data: User record
Record ID: 64
Country: U.S.

Non-U.S. records included

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
KLPB-TV	D23	DT	LIC	LAFAYETTE, LA	BLEDT20130820AAH	99.3 km
KLTJ	D23	DT	LIC	GALVESTON, TX	BLEDT20110127ACD	223.9
WGMB-TV	D24	DT	BL	BATON ROUGE, LA	DTVBL12520	195.7
KXAS-TV	D24	DT	BL	FORT WORTH, TX	DTVBL49330	435.2
KETH-TV	D24	DT	LIC	HOUSTON, TX	BLEDT20101019ABX	223.9

WLPB-TV	D25	DT	LIC	BATON ROUGE, LA	BLEDT20101201ALR	202.9
KYAZ	D25	DT	BL	KATY, TX	DTVBL31870	224.2

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D24
Mask: Full Service
Latitude: 30 13 16.40 N (NAD83)
Longitude: 93 18 40.90 W
Height AMSL: 148.0 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: Omnidirectional

49.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	142.6 m	47.7 km
45.0	15.0	143.1	47.7
90.0	15.0	145.6	47.9
135.0	15.0	144.6	47.8
180.0	15.0	146.5	47.9
225.0	15.0	144.7	47.8
270.0	15.0	144.0	47.8
315.0	15.0	143.2	47.7

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 144 m

Proposal service area is within baseline plus 1.0%

Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 1585.4 km

Distance to Mexican border: 590.0 km

Conditions at FCC monitoring station: Kingsville TX
Bearing: 236.4 degrees Distance: 541.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 318.8 degrees Distance: 1540.5 km

Study cell size: 2.00 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%

No IX check failures found.

OET-69 Bulletin, TVStudy tvix Output

tvstudy v2.2.1
Database: 127.0.0.1, Study: DTVBL59500, Model: Longley-Rice
Start: 2017.05.09 13:48:21

Study created: 2017.05.09 13:48:06

Study build station data: LMS TV LMS 05042017

Proposal: KFAM-CD D24 DC BL LAKE CHARLES, LA
File number: DTVBL59500
Facility ID: 59500
Station data: User record
Record ID: 17
Country: U.S.

Records before 2017-04-13 excluded if not on baseline channel

Stations potentially affected:

Call	Chan	Svc	Status	City, State	File Number	Distance
KLPB-TV	D23	DT	LIC	LAFAYETTE, LA	BLEDT20130820AAH	99.4 km
KLTJ	D23	DT	LIC	GALVESTON, TX	BLEDT20110127ACD	223.9
WGMB-TV	D24	DT	BL	BATON ROUGE, LA	DTVBL12520	195.7
KXAS-TV	D24	DT	BL	FORT WORTH, TX	DTVBL49330	435.2
KETH-TV	D24	DT	LIC	HOUSTON, TX	BLEDT20101019ABX	223.9
WLPB-TV	D25	DT	LIC	BATON ROUGE, LA	BLEDT20101201ALR	202.9
KYAZ	D25	DT	BL	KATY, TX	DTVBL31870	224.2

No AM stations found within 2.0 km

Record parameters as studied:

Channel: D24
Mask: Stringent
Latitude: 30 13 16.00 N (NAD83)
Longitude: 93 18 41.00 W
Height AMSL: 148.0 m
HAAT: 0.0 m
Peak ERP: 15.0 kW
Antenna: Omnidirectional

49.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	15.0 kW	142.6 m	47.7 km
45.0	15.0	143.1	47.7
90.0	15.0	145.6	47.9
135.0	15.0	144.5	47.8
180.0	15.0	146.5	47.9
225.0	15.0	144.6	47.8
270.0	15.0	144.0	47.8
315.0	15.0	143.2	47.7

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 144 m

Proposal service area is within baseline plus 1.0%

Proposal service area population is more than 95.0% of baseline

Distance to Canadian border: 1585.4 km

Distance to Mexican border: 590.0 km

Conditions at FCC monitoring station: Kingsville TX
Bearing: 236.4 degrees Distance: 541.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 318.8 degrees Distance: 1540.5 km

Study cell size: 2.00 km
Profile resolution: 1.0 points/km

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

Interference to BLEDT20130820AAH LIC, scenario 1

Desired:	Call	Chan	Svc	Status	City, State	File Number	Distance
	KLPB-TV	D23	DT	LIC	LAFAYETTE, LA	BLEDT20130820AAH	
Undesireds:	KFAM-CD	D24	DC	BL	LAKE CHARLES, LA	DTVBL59500	99.4 km
	KFAM-CD	D24	DC	BL	LAKE CHARLES, LA	DTVBL59500	99.4
	KWBJ-CD	D22	DC	LIC	MORGAN CITY, LA	BLDTA20090512AAZ	123.4
	KDCG-CD	D22	DC	LIC	OPELOUSAS, LA	BLDTA20140813AAQ	30.8
	WLAE-TV	D23	DT	BL	NEW ORLEANS, LA	DTVBL18819	227.1
	KSLA	D23	DT	BL	SHREVEPORT, LA	DTVBL70482	304.7
	WWJX	D23	DT	LIC	JACKSON, MS	BLCDT20110824ABD	266.8
	KLTJ	D23	DT	LIC	GALVESTON, TX	BLEDT20110127ACD	321.8
	WGMB-TV	D24	DT	BL	BATON ROUGE, LA	DTVBL12520	96.6
	Service area		Terrain-limited		IX-free, before	IX-free, after	Percent New IX
	24881.7	749,053	24881.7	749,053	24729.3	745,254	24813.5 748,698 -0.34 -0.46
Undesired			Total IX		Unique IX, before	Unique IX, after	
KFAM-CD D24 DC BL			92.3		3,454	92.3	3,454
KFAM-CD D24 DC BL			8.0		10	8.0	10

KDCG-CD D22 DC LIC	8.0	0	8.0	0	8.0	0
WGMB-TV D24 DT BL	52.1	345	52.1	345	52.1	345

Interference to BLEDT20110127ACD LIC, scenario 1
Proposal causes no interference.

Interference to DTVBL12520 BL, scenario 1
Proposal causes no interference.

Interference to DTVBL49330 BL, scenario 1
Proposal causes no interference.

Interference to BLEDT20101019ABX LIC, scenario 1
Proposal causes no interference.

Interference to BLEDT20101201ALR LIC, scenario 1
Proposal causes no interference.

Interference to DTVBL31870 BL, scenario 1
Proposal causes no interference.

Interference to proposal, scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KFAM-CD	D24	DC	BL	LAKE CHARLES, LA	DTVBL59500	
Undesireds:	KLPB-TV	D23	DT	LIC	LAFAYETTE, LA	BLEDT20130820AAH	99.4 km
	WGMB-TV	D24	DT	BL	BATON ROUGE, LA	DTVBL12520	195.7
	KETH-TV	D24	DT	LIC	HOUSTON, TX	BLEDT20101019ABX	223.9
	Service area		Terrain-limited		IX-free	Percent IX	
	7160.4	249,083	7160.4	249,083	7160.4	249,083	0.00 0.00

Coverage Baseline for Post-Auction Table of Allotments

Noise Limited Ter. limited Interfer. Free

59500	BLDTA20120203AAA	KFAM- CD	24	LAKE CHARLES	LA	DC	7533.9	252105	7533.9	252105	7533.9	252105
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Proposed population 98.8 of Baseline.

Conclusion

Based on the information supplied herein, and accompanying application for construction permit, it is believed that the proposed facilities meet all applicable FCC requirements for construction permit.

The foregoing was prepared on behalf of Agape Broadcasters, Inc. by Clarence M. Beverage of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The undersigned certifies, under penalty of perjury, that 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.



By _____

Clarence M. Beverage

for Communications Technologies, Inc.

Marlton, New Jersey

July 11, 2017

