

TECHNICAL NARRATIVE

This Technical Statement and attached exhibits were prepared on behalf of IHM Licenses, LLC, (“IHM”), licensee of station KVDU, Channel 281C, Facility ID No. 34528, Houma, Louisiana with construction permit LMS File Number 0000187347 to operate on Channel 281C, licensed to Gonzales, Louisiana.

This KVDU proposed construction permit modification is being filed as part of a two station group of contingent minor mod applications that also includes commonly-owned WFFX, Channel 279C1, Hattiesburg, MS. The KVDU and WFFX applications are being filed as contingently related applications pursuant to Section 73.3517(e) of the Commission’s rules. As KVDU and WFFX are commonly-owned, there is no coordinated facility modification agreement. Please see the WFFX minor modification application for the specifics of that proposed modification.

IHM seeks to modify KVDU construction permit 0000187347 to operate on Channel 281C3 from a different transmit location, licensed to Gonzales, Louisiana. The proposed KVDU application site is an existing tower registered with Antenna Structure Registration (“ASR”) number 1015906. The coordinates are 30° 23’ 44.7” North Latitude 91° 06’ 15.6” West Longitude (NAD 83). The proposed KVDU facility would operate with 18 kW at 100 meters height above ground level and 101.8 meters HAAT. The KVDU application site channel study shows one short-spacing, to second adjacent full power FM station WNNX, Channel 283A, Jackson, Louisiana. IHM requests Section 73.215 contour protection with respect to WNNX.

The KVDU FCC F(50,50) 70 dBu contour does not reach 80 percent of Gonzales. Therefore, a Section 73.315 Supplemental Showing is included that demonstrates that KVDU reaches 100 percent of Gonzales with a Point-to-Point Version 2 70 dBu mean contour.

A study has been undertaken to show the proposed KVDU facility is in compliance with the Commission's radio frequency emission limits and the results are attached as exhibits.

KVDU CH281C3 Application Site Channel Study

REFERENCE		CLASS = C3 Int = B1					DISPLAY DATES		
30 23 44.7 N.		Current Spacings to 3rd Adj.					DATA	03-27-23	
91 06 15.6 W.		Channel 281 - 104.1 MHz					SEARCH	03-27-23	
----- Channel 281 - 104.1 MHz -----									
Call	Channel		Location			Azi	Dist	FCC	Margin
	Lat.	Lng.	Ant		Power		HAAT		

KVDU	LIC	281C	Houma		LA	143.2	61.2	236.5	-175.3
29 57 13.7	90 43 25.3		CN		100.000 kW		593 M		
Ihm Licenses, LLC					BLH19880224KB				
KVDU	CP	281C	Gonzales		LA	143.3	61.2	236.5	-175.3
29 57 11.0	90 43 26.0		CN		100.000 kW		593 M		
Ihm Licenses, LLC					0000187347				
K279AL	LIC	279D	Baton Rouge		LA	34.4	4.3	40.5	-36.2
30 25 39.7	91 04 44.4		VN		0.019 kW		84 M		
CSN International					BMLFT20160509AAQ				
WNXX	LIC	283A	Jackson		LA	357.0	38.9	41.5	-2.7
30 44 44.7	91 07 32.4		CN		3.000 kW		144 M		
Guaranty Broadcasting Comp					BLH20070702AAN				
Note: Adopt Section 73.215 contour protection with respect to WNXX									
W279DB	LIC	279D	Hammond		LA	77.5	58.9	40.5	18.4
30 30 32.0	90 30 19.0		CN		0.250 kW	0 M			
North Shore Broadcasting,					BLFT20190130ABA				
KQFA-LP	LIC	282L1	Lafayette		LA	258.3	90.1	66.5	23.6
30 13 43.7	92 01 16.4		HN		0.050 kW		50 M		
Lafayette Jesucristo Es Mi					0000111356				
KEZP	ALO	282C3	Bunkie		LA	306.5	123.1	98.5	24.6
31 02 56.7	92 08 34.5				0.000 kW		100 M		
Smg-Alexandria, LLC									
KLWB-FM	LIC-N	279C2	Carencro		LA	266.1	82.7	55.5	27.2
30 20 32.7	91 57 46.4		NCN		10.000 kW		283 M		
Delta Media Corporation					BLH20131101AFX				
WMJU	LIC	282C3	Bude		MS	17.5	135.4	98.5	36.9
31 33 33.6	90 40 26.4		CN		25.000 kW		100 M		
North Shore Broadcasting C					BLH19990916AAL				
K284CU	LIC	284D	Houma		LA	153.8	82.3	40.5	41.8
29 43 48.8	90 43 37.3		CN		0.250 kW	0 M			
Jle, Incorporated					BLFT20180607AAB				
K279CU	LIC	279D	Thibodaux		LA	153.8	82.3	40.5	41.8
29 43 48.8	90 43 37.3		CN		0.250 kW	0 M			
Gap Broadcasting, LLC					BLFT20170313ABM				
KJLO-FM	LIC	281C0	Monroe		LA	339.9	267.9	225.5	42.4
32 39 36.5	92 05 15.5		CN		100.000 kW		310 M		
Holladay Broadcasting Of L					BLH19880812KE				
KEZP	LIC	282C3	Bunkie		LA	303.0	142.6	98.5	44.1
31 05 14.7	92 21 34.5		CN		19.200 kW		114 M		
Smg-Alexandria, LLC					BLH20060119ADJ				

Call	Channel	Location		Azi	Dist	FCC	Margin
Lat.	Lng.	Ant	Power		HAAT		
WJSH	ALO 284A	Folsom		LA 66.7	88.5	41.5	47.0
30 42 28.7	90 15 18.3		0.000 kW		100 M		
North Shore Broadcasting C							
KLCJ	LIC-N 281A	Oak Grove		LA 257.6	195.6	141.5	54.1
30 00 11.8	93 05 05.6	NCN	6.000 kW		94 M		
Delta Media Corporation BLH20170622AAH							
KNEK-FM	LIC 284C3	Washington		LA 272.0	97.1	42.5	54.6
30 25 17.7	92 06 50.4	CN	25.000 kW		100 M		
Radio License Holding Cbc, BLH19960223KB							

KVDU Channel 281C3 Gonzales, Louisiana
FCC Section 73.315 Supplemental Showing
City Grade Coverage of Gonzales

This Supplemental Showing is based upon the standards established in the FCC DA-10-1760 Skytower Communications decision. A supplemental showing using the Point-to-Point Version 2 mean occurrence 70 dBu contour is used to show city coverage of Gonzales, LA. The contour was created using V-Soft Probe Version 4.120a Professional. The specific PTP v2 software settings are listed on the coverage map in the upper left hand corner of the map.

A table is included showing the distances to the FCC 70 dBu contour and PTP v2 mean occurrence 70 dBu contour for sixteen radials between 131 and 146 degrees azimuth that cross over Gonzales. The radials are clearly shown on a separate map included with this exhibit. The supplemental showing clearly establishes that the PTP v2 70 dBu median occurrence contours along the radials that cross the corporate boundaries of Gonzales are more than 10% greater than the FCC F(50,50) 70 dBu contours.

The attached map shows the FCC F(50,50) 60 dBu and 70 dBu contours as well as the PTP v2 70 dBu median occurrence contour. 100 percent of Gonzales is contained in the FCC F(50,50) 60 dBu contour. The PTP v2 70 dBu median occurrence contour reaches 100 percent of the area and population of Gonzales. The PTP v2 70 dBu signal shading shows that 100 percent of the area of Gonzales receives a 70 dBu or greater signal strength. 94.2 percent of the population of Gonzales receives a PTP v2 signal strength of 74 dBu or greater.

Note the Gonzales, LA community boundary shown is from the 2020 Tiger Census data and the population data is also from the 2020 Census.

Therefore, it is believed that the proposed KVDU Channel 281C3 CP modification is in compliance with the Section 73.315 community coverage rules.

KVDU CP Mod

Gonzales, LA
Latitude: 30-23-44.70 N
Longitude: 091-06-15.60 W
ERP: 18.00 kW
HAAT: 101.8 m
Channel: 281
Frequency: 104.1 MHz
AMSL Height: 111.3 m
Elevation: 11.3 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FM PTP v2

Section 73.315 Supplemental Showing

Community Coverage Exhibit
Point-to-Point v2 70 dBu Contour
FCC F(50,50) 60 dBu Contour

Point-to-Point V2 70 dBu

Baton Rouge

+ KVDU CP Mod

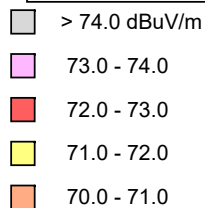
Gonzales

Hammond

ette

Laplace

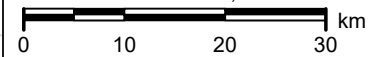
PTP v2
Signal Strength



FCC F(50,50) 60 dBu

HORIZON
BROADCAST SOLUTIONS

Scale 1:750,000



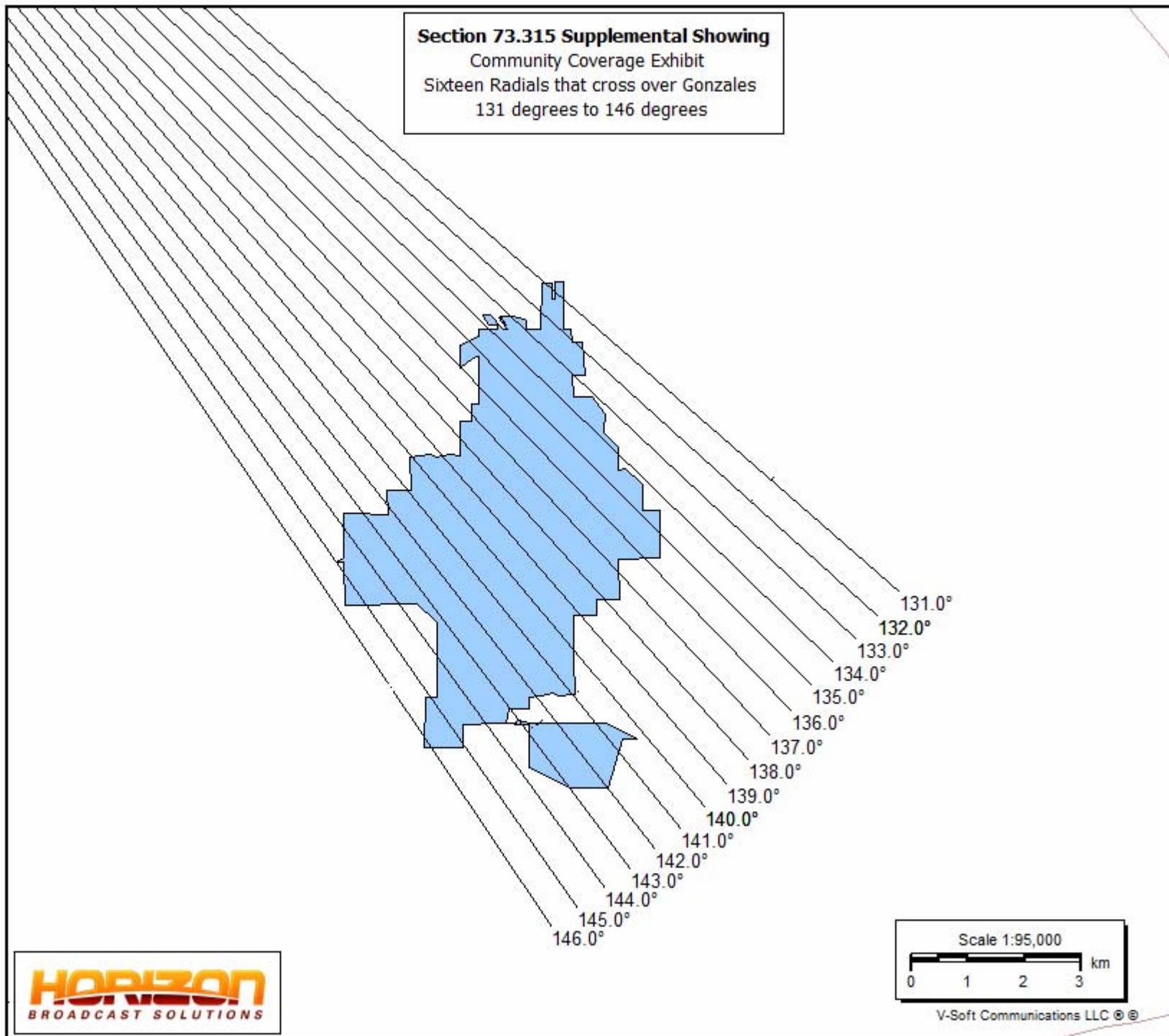
V-Soft Communications LLC ©

KVDU CP Mod

Gonzales, LA
Latitude: 30-23-44.70 N
Longitude: 091-06-15.60 W
ERP: 18.00 kW
HAAT: 101.8 m
Channel: 281
Frequency: 104.1 MHz
AMSL Height: 111.3 m
Elevation: 11.3 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: Longley-Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 9.1 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast

Section 73.315 Supplemental Showing

Community Coverage Exhibit
Sixteen Radials that cross over Gonzales
131 degrees to 146 degrees



HORIZON
BROADCAST SOLUTIONS

Scale 1:95,000
0 1 2 3 km

V-Soft Communications LLC ©

Section 73.315 Supplemental Coverage Showing
KVDU Channel 281C3 Gonzales, Louisiana
Comparison of FCC F(50,50) 70 dBu contour distance
vs.
Point-to-Point v2 70 dBu Contour
(16 radials which cross Gonzales are shown)

Site:	KVDU Channel 281C3 Gonzales, LA				
Coordinates:	37-31-14 N ~ 93-06-15 W				
Freq:(MHz)	104.1				
ERP:(kW)	18.0				
HAAT:(m)	101.8				
Bearing (degrees)	ERP kW	HAAT (m)	FCC F(50,50) 70 dBu Distance (km)	Point-to-Point 70 dBu Contour Distance (km)	Percentage Increase
131	18.0	103.6	21.9	37.40	70.8%
131	18.0	103.6	21.9	37.50	71.2%
133	18.0	103.6	21.9	37.50	71.2%
134	18.0	103.6	21.9	37.40	70.8%
135	18.0	103.6	21.9	37.30	70.3%
136	18.0	104.5	22.0	37.40	70.0%
137	18.0	105.7	22.1	37.40	69.2%
138	18.0	105.7	22.1	37.20	68.3%
139	18.0	105.7	22.1	37.00	67.4%
140	18.0	105.7	22.1	37.00	67.4%
141	18.0	106.5	22.2	37.10	67.1%
142	18.0	106.5	22.2	37.30	68.0%
143	18.0	106.5	22.2	36.80	65.8%
144	18.0	106.5	22.2	37.00	66.6%
145	18.0	107.5	22.3	36.30	62.8%
146	18.0	107.5	22.3	36.70	64.6%
Avg.	18.0	129.7	22.08	37.14	68.2%

Broadcast Facility

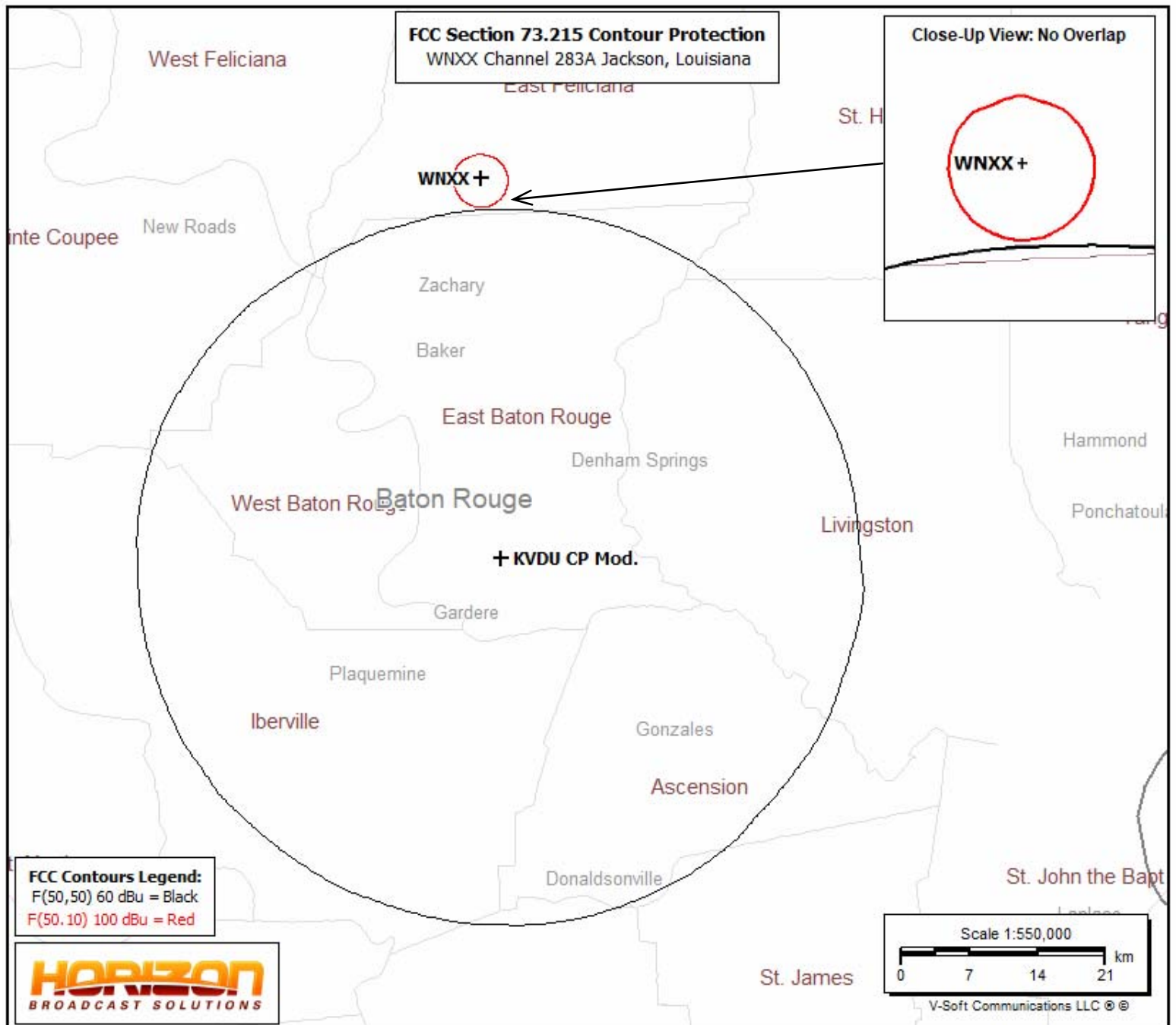
The proposed KVDU facility does not comply with the applicable engineering standards and assignments of 47 C.F. R. Section 73.207 and 47 C.F.R. Section 73.315. Please refer to the 47 C.F.R. Section 73.215 Contour Protection Exhibit for WNXX, Channel 283A, Facility ID No. 52882, Jackson, LA and the 47 C.F.R. Section 73.315 Supplemental Showing Exhibit.

KVDU CP Mod.

Gonzales, LA
Latitude: 30-23-44.70 N
Longitude: 091-06-15.60 W
ERP: 18.00 kW
HAAT: 101.8
Channel: 281
Frequency: 104.1 MHz
AMSL Height: 111.3 m
Elevation: 11.3 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%
HAAT Mthd: FCC

WNXX

Jackson, LA
BLH20070702AAN
Latitude: 30-44-44.70 N
Longitude: 091-07-32.40 W
ERP: 6.00 kW
HAAT: 99.56
Channel: 283
Frequency: 104.5 MHz
AMSL Height: 142.0 m
Elevation: 40.4 m
Horiz. Pattern: Omni
Vert. Pattern: No
Prop Model: FCC Model
Loc. Variability: 50.0%
Time Variability: 50.0%
HAAT Mthd: FCC

FCC Section 73.215 Contour Protection
WNXX Channel 283A Jackson, Louisiana**Close-Up View: No Overlap****WNXX +**

**Human Exposure to Radiofrequency Electromagnetic Field
&
Section 106 Compliance
(Environmental)**

A study has been made to determine whether this proposal is in compliance with 47 C.F.R. 1.1307 of the Commission's rules and with OET Bulletin #65, dated August 1997, regarding human exposure to radio frequency radiation in the vicinity of broadcast towers. IHM Licenses, LLC, ("IHM"), is the licensee of station KVDU, Channel 281C, Facility ID No. 34528, Houma, Louisiana with construction permit 0000187347 for Channel 281C, licensed to Gonzales, Louisiana. IHM is proposing to modify the KVDU construction permit to specify operation on Channel 281C3 licensed to Gonzales, LA. The transmitting site is an existing tower 112.2 meters in overall height. The tower is registered with FCC Antenna Structure Registration (ASR) #1015906. The tower is located at 30° 23' 44.7" N ~ 91° 06' 15.6" W (NAD 83). The proposed antenna is a side mounted ERI MP-4E four bay full wavelength circularly polarized antenna. KVDU will operate with 18.0 kilowatts ERP at 100 meters above ground level and 101.8 meters HAAT. The use of existing transmitting locations has been characterized as being environmentally preferable by the Commission, according to Note 1 of § 1.1306 of the FCC Rules.

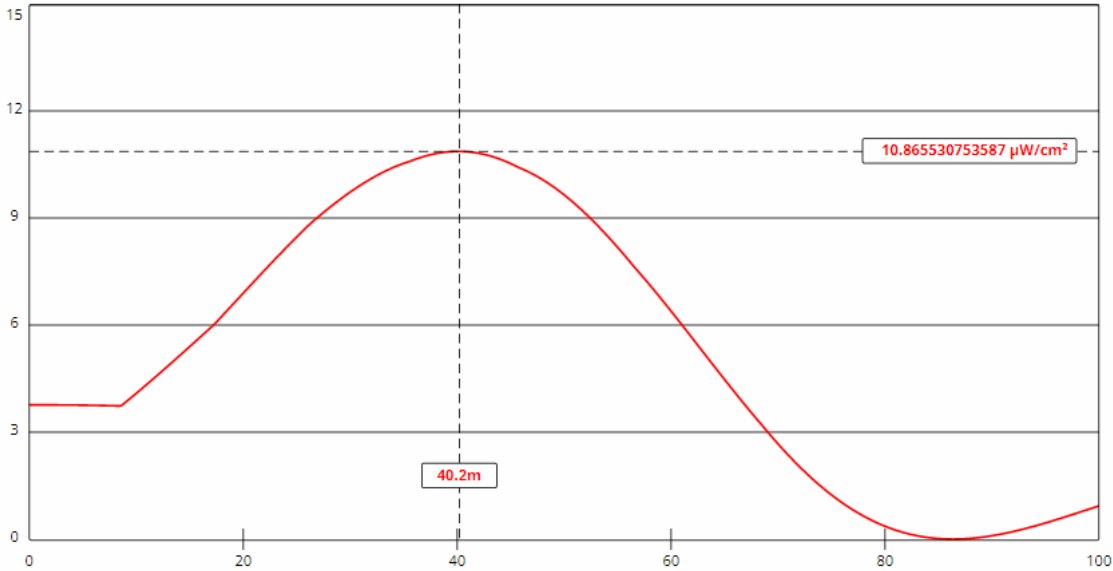
The proposed operation was evaluated for human exposure to RF energy using the procedures outlined in the Commission's OET Bulletin Number 65. The ERI MP antenna is included in the OET's updated FM Model Program under EPA Type 3: Opposed "U" dipole. Using the EPA Type 3 selection, the maximum calculated signal density near the tower at two meters above ground level attributable to the proposed KVDU facility is 10.866 $\mu\text{W}/\text{cm}^2$ at 40.2 meters, which is 5.433 percent of the general population/uncontrolled maximum permitted exposure limit.

The applicant will see that signs are posted in the vicinity of the tower, warning of potential radio frequency hazards at the site. The applicant will cooperate with other users of the tower to reduce power of the facility, or discontinue operation, as necessary to limit human exposure to levels less than specified by the Federal Communications Commission should anyone be required to climb the tower for maintenance or inspection.

FM Model

- Radio Frequency Safety
- FM Model
- FCC Policy on Human Exposure
- RF Safety FAQ
- Body Tissue Dielectric Parameters
- RF Safety Highlighted Releases

The FM Model calculator determines the potential exposure from radiofrequency (RF) electromagnetic fields produced by FM broadcast station antennas at ground level. The FM Model software was originally developed by the FCC in 1997 as a standalone executable program and this improved version provides more precise predictions and runs via a JavaScript enabled web browser. The FM Model is originally based on measured data published in 1985 by the EPA. [Show More....](#)



View Tabular Results +

Channel Selection	Channel 281 (104.1 MHz) ▾		
Antenna Type +	EPA Type 3: Opposed U Dipole ▾		
Height (m)	<input type="text" value="100"/>	Distance (m)	<input type="text" value="100"/>
ERP-H (W)	<input type="text" value="18000"/>	ERP-V (W)	<input type="text" value="18000"/>
Num of Elements	<input type="text" value="4"/>	λ	<input type="text" value="1"/>
Num of Points	<input type="text" value="500"/>	<input type="button" value="Apply"/>	