

KBYS Allocation Study  
McNeese State University  
December 18, 2013

## **KBYS Allocation Study**

### **McNeese State University**

KBYS desires to mount a Channel 202 FM antenna on the roof of the L'Auberge du lac building in Lake Charles, LA.

Table A of this document is an FM Allocation Spacing Study from the L'Auberge du lac site. The KBYS Class A facility is shortspaced to two co-channel facilities, KIEE-Lic (BLED-20110808AAB) and KPCP-CP (BPED-20130515ABY). The KBYS proposed facility is shortspaced to three 1<sup>st</sup> adjacent facilities, KLBT-CP (BPED-20130404ACC), KGHY-Lic (BLED-20090601AUP), and KGHY-CP (BPED-20091105ADO). The KBYS proposed facility is shortspaced to one 2<sup>nd</sup> adjacent facility, KRVS-Lic (BLED-20040105AAF). The KBYS facility must not cause interference to any of these facilities. KBYS proposes to use a three bay Shively 6812B low power directional antenna with 0.7 wavelength bay spacing to eliminate downward radiation. The effective radiated power ("ERP") will be 1000 watts circularly polarized. Figure 1 demonstrates that the existing KBYS construction permit (BNPED-20071022BBJ) 60 dbu contour overlaps the proposed KBYS facility 60 dbu contour. Figure 2 demonstrates the protection to shortspaced co-channel facilities. Figure 3 and Figure 3a demonstrates the protection to shortspaced 1<sup>st</sup> adjacent channel facilities. Figure 4 demonstrates the protection to shortspaced 2<sup>nd</sup> adjacent channel facilities.

KBYS meets all co-channel, first adjacent, 2<sup>nd</sup> adjacent, third adjacent, and IF spacing requirements either by full distance spacing or contour-to-contour protection.

# Table A

## KBYS Spacing Allocation Study

Client: KBYS  
FM Study for Proposed Site: 30-12-23.08, 93-15-33.78  
Desired Class: A  
Distance to Canadian Border greater than 320 KM. Needs no Canadian coordination.  
Distance to Canadian Border: 1585.85 km  
Distance to Mexican Border greater than 320 KM. Needs no Mexican coordination.  
Distance to Mexican Border: 605.18 km

Channel 6 Facilities within 300 km of desired facility:

Callsign: KKKW-LP  
Facility ID: 33177  
Type: TX  
Status: LIC  
Distance: 125.67 km

Callsign: W30CC  
Facility ID: 129233  
Type: TX  
Status: APP  
Distance: 235.27 km

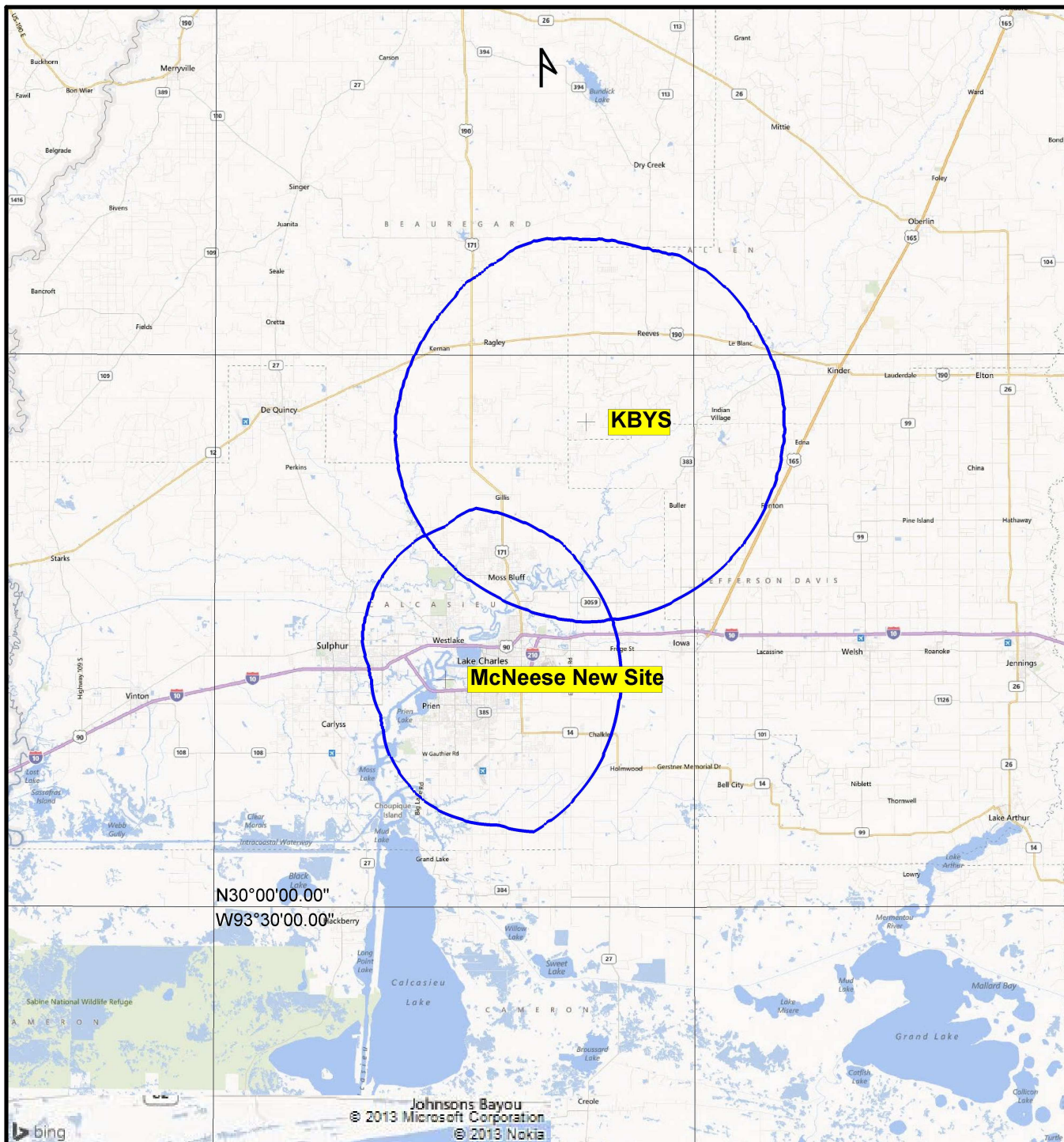
Callsign: KXTY-LP  
Facility ID: 130016  
Type: TX  
Status: APP  
Distance: 295.72 km

Callsign: K22GT  
Facility ID: 128731  
Type: TX  
Status: APP  
Distance: 5.25 km

Callsign: KIPS-LD  
Facility ID: 128836  
Type: LD  
Status: LIC  
Distance: 83.21 km

Channel 202 Frequency 88.3 MHz

Channel	Facility/Application ID	City	State	Country	Callsign	Licensee	Facility Status	Class	Service	Latitude	Longitude	Distance Between Facilities	Direction True North	Required Distance	Spacing Status	Separation Distance
201	18556	JENA	LA	US	KAYT	BLACK MEDIA WORKS, INC.	LIC	C1	FM	31-33-55.000000	92-33-0.000000	165.22	24.24	133	OK	32.22
201	86329	BEAUMONT	TX	US	KLBT	THE KING'S MUSICIAN EDUCATIONAL FOUNDATION, INC.	LIC	C3	FM	29-54-52.000000	94-17-6.000000	104.06	251.88	89	OK	15.06
201	86794	PLAQUEMINE	LA	US	KPAQ	AMERICAN FAMILY ASSOCIATION	LIC	A	FM	30-15-41.000000	91-18-40.000000	187.64	88.14	72	OK	115.64
201	12969	PASADENA	TX	US	KFTG	ALELUYA BROADCASTING NETWORK	LIC	A	FM	29-41-18.000000	95-12-7.000000	196.13	252.97	72	OK	124.13
201	86794	PLAQUEMINE	LA	US	KPAQ	AMERICAN FAMILY ASSOCIATION	APP	C1	FM	30-15-41.000000	91-18-40.000000	187.64	88.14	133	OK	54.64
201	86329	BEAUMONT	TX	US	KLBT	THE KING'S MUSICIAN EDUCATIONAL FOUNDATION, INC.	CP	C2	FM	29-54-52.000000	94-17-6.000000	104.06	251.88	106	****SHORT****	-1.94
202	81300	CONROE	TX	US	KAFR	AMERICAN FAMILY ASSOCIATION	LIC	C1	FM	30-27-52.000000	95-30-20.000000	217.88	277.54	200	OK	17.88
202	1635	RUSTON	LA	US	KAPI	AMERICAN FAMILY ASSOCIATION	LIC	A	FM	32-33-8.000000	92-39-21.000000	266.35	12.45	115	OK	151.35
202	172777	MOSS BLUFF	LA	US	KBYS	MCMEESE STATE UNIVERSITY	CP	A	FM	30-26-22.000000	93-6-45.000000	29.44	28.67	115	****SHORT****	-85.56
202	173391	ST. MARTINVILLE	LA	US	KIEE	SOUTHERN CONSUMERS EDUCATION FOUNDATION	LIC	C2	FM	29-49-31.000000	91-39-49.000000	159.64	105.35	166	****SHORT****	-6.36
202	173351	CARTHAGE	TX	US	KRTG	HOUSTON CHRISTIAN BROADCASTERS, INC.	LIC	C3	FM	31-50-39.600000	94-20-44.100000	209.12	330.27	142	OK	67.12
202	169910	NEW ROADS	LA	US	KPCP	STOP THE VIOLENCE/SAVE THE CHILDREN, INC.	LIC	C3	FM	30-43-20.400000	91-35-45.600000	169.67	70.3	142	OK	27.67
202	169910	NEW ROADS	LA	US	KPCP	STOP THE VIOLENCE/SAVE THE CHILDREN, INC.	CP	C1	FM	30-48-21.000000	91-38-10.000000	169.4	66.9	200	****SHORT****	-30.6
202	174146	BASTROP	LA	US	KJGM	FAMILY WORSHIP CENTER, INC.	LIC	C1	FM	32-37-12.500000	91-43-47.500000	304.59	28.52	200	OK	104.59
203	31171	BATON ROUGE	LA	US	WJFM	FAMILY WORSHIP CENTER CHURCH, INC.	LIC	C2	FM	30-23-6.000000	91-5-23.000000	209.66	84.58	106	OK	103.66
203	93122	CROCKETT	TX	US	KCKT	AMERICAN FAMILY ASSOCIATION	LIC	A	FM	31-19-37.000000	95-28-26.000000	245.73	300.37	72	OK	173.73
203	91638	BEAUMONT	TX	US	KGHY	CCS RADIO, INC.	LIC	C3	FM	30-16-23.000000	93-57-23.000000	67.5	276.28	89	****SHORT****	-21.5
203	91638	BEAUMONT	TX	US	KGHY	CCS RADIO, INC.	CP	C2	FM	30-16-23.000000	93-57-23.000000	67.5	276.28	106	****SHORT****	-38.5
204	66595	LAFAYETTE	LA	US	KRV5	THE UNIVERSITY OF LOUISIANA AT LAFAYETTE	LIC	C0	FM	30-19-20.000000	92-22-40.000000	85.8	81.4	86	****SHORT****	-0.2
205	171671	PORT ARTHUR	TX	US	KOFF	TRUTH AND EDUCATION CORPORATION	CP	A	FM	29-43-35.000000	93-53-7.000000	80.5	228.63	31	OK	49.5



## KBYS McNeese State University

### Sites

Site: KBYS

N30°26'22.00" W93°06'45.00" 18.0 m

KBSY Tx.Ht.AGL: 102.0 m Total ERPd: 1.00 kW  
Model: 1 Isotropic-horizontal/0.0° 88.3000 MHz

Site: McNeese New Site

N30°12'23.08" W93°15'33.78" 3.9 m

New Tx.Ht.AGL: 91.1 m Total ERPd: 1.00 kW  
Model: 1 Use file-horizontal/0.0° 88.3000 MHz

### Interference contour study

Propagation models:

service contour : FCC 50.0% time

■ = 60.0 dBμV/m service contour

Reference Grid (spacing: 30')

KILOMETERS



## McNeese 1.0 kW Directional

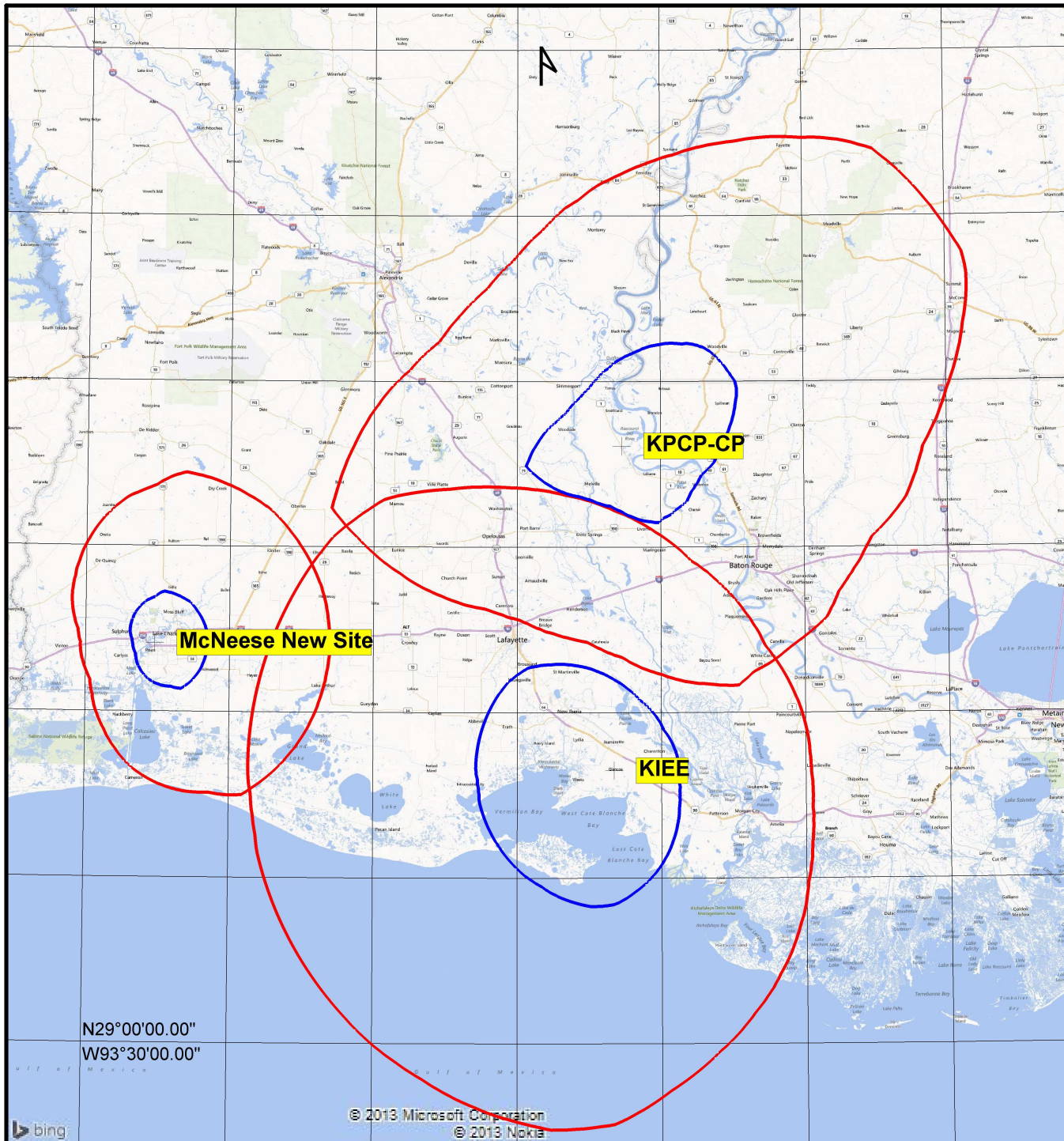
KBYS Overlap

Figure 1

Tue Dec 17 15:13:43 2013

Figure 1





## KBYS McNeese State University

### Sites

Site: KIEE

N29°49'31.00" W91°39'49.00" 3.0 m

KIEE Tx.Ht.AGL: 150.0 m Total ERPd: 25.00 kW

Model: 1 Use file-horizontal/0.0° 88. 3000 MHz

Site: KPCP-CP

N30°48'21.00" W91°38'10.00" 11.0 m

KPCP-CP Tx.Ht.AGL: 89.0 m Total ERPd: 55.00 kW

Model: 1 Use file-horizontal/0.0° 88. 3000 MHz

Site: McNeese New Site

N30°12'23.08" W93°15'33.78" 3.9 m

New Tx.Ht.AGL: 91.1 m Total ERPd: 1.00 kW

Model: 1 Use file-horizontal/0.0° 88. 3000 MHz

### Interference contour study

Propagation models:

service contour : FCC 50.0% time

cochannel interference : FCC 10.0% time

■ = 60.0 dBμV/m service contour

■ = 40.0 dBμV/m cochannel interference

Reference Grid (spacing: 30')

KILOMETERS



McNeese 1.0 kW Directional

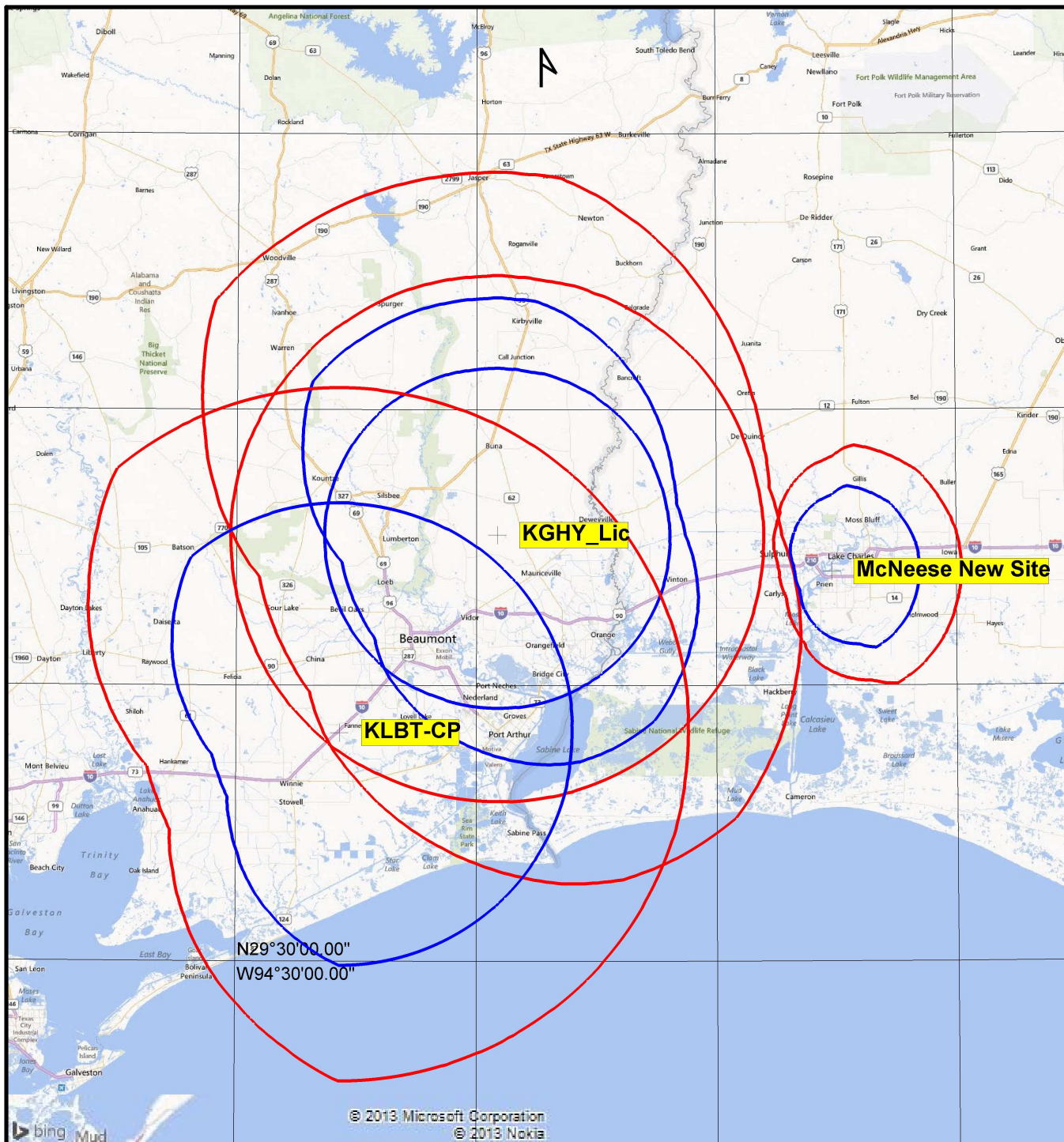
Co-Channel Protection

Figure 2

Tue Dec 17 15:03:36 2013

Figure 2





## KBYS McNeese State University

### Sites

Site: KGHY-CP

N30°16'23.00" W93°57'23.00" 11.0 m

KGHY\_cp Tx.Ht.AGL: 123.0 m Total ERPd: 50.00 kW

Model: 1 Use file-horizontal/0.0° 88.5000 MHz

Site: KGHY\_Lic

N30°16'23.00" W93°57'23.00" 11.0 m

KGHY\_L Tx.Ht.AGL: 101.0 m Total ERPd: 13.50 kW

Model: 1 Isotropic-horizontal/0.0° 88.5000 MHz

Site: KLB-T-CP

N29°54'52.00" W94°17'06.00" 5.5 m

KLB-T-CP Tx.Ht.AGL: 142.0 m Total ERPd: 30.00 kW

Model: 1 Use file-horizontal/0.0° 88.1000 MHz

Site: McNeese New Site

N30°12'23.08" W93°15'33.78" 3.9 m

New Tx.Ht.AGL: 91.1 m Total ERPd: 1.00 kW

Model: 1 Use file-horizontal/0.0° 88.3000 MHz

### Interference contour study

Propagation models:

service contour : FCC 50.0% time

1st adjacent interference : FCC 10.0% time

■ = 60.0 dBμV/m service contour

■ = 54.0 dBμV/m 1st adjacent interference

Reference Grid (spacing: 30')

KILOMETERS

-25

0

25

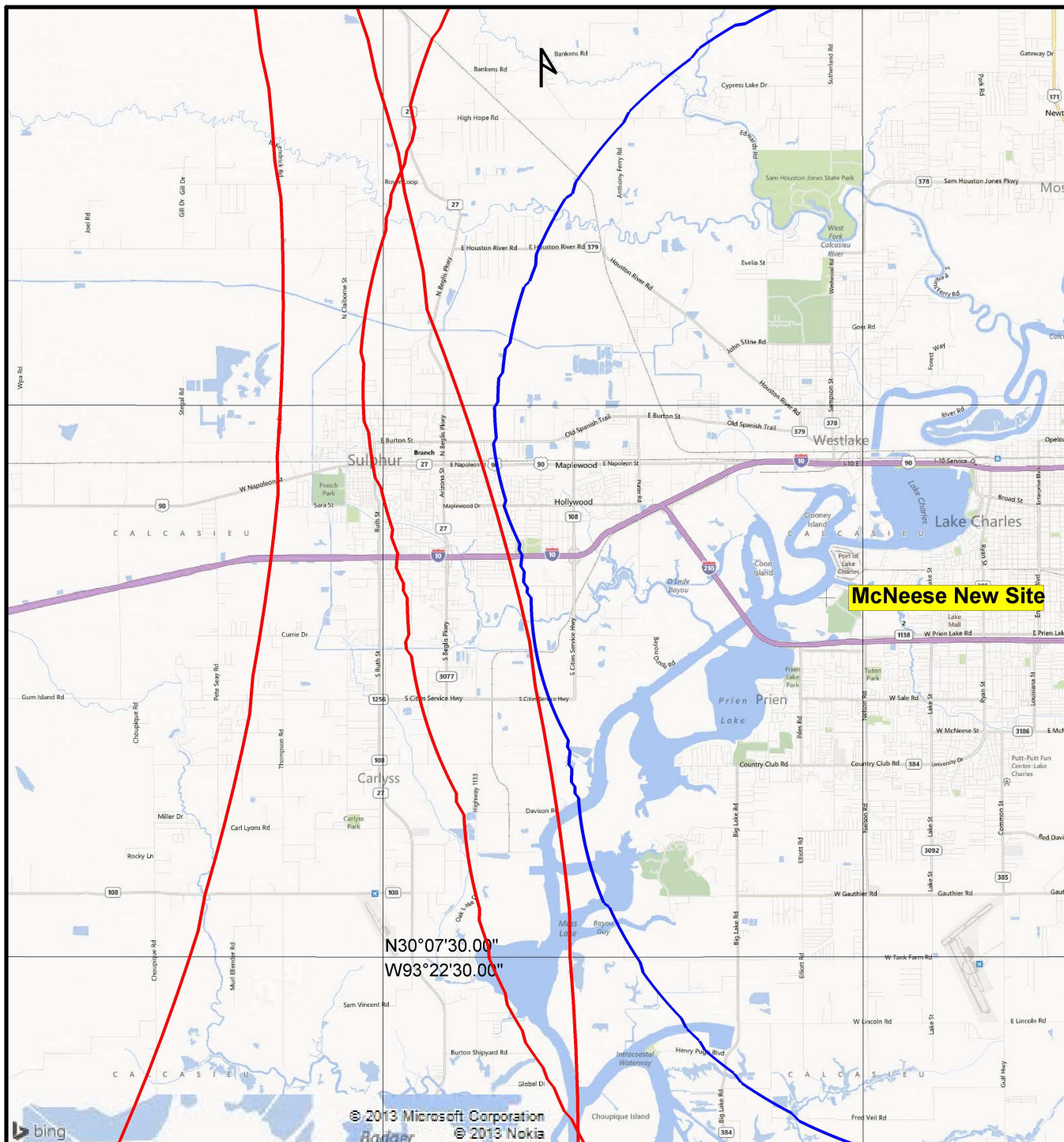
McNeese 1.0 kW Directional

1st Adjacent Channel Protection

Figure 3

Wed Dec 18 13:37:09 2013

Figure 3



## KBYS McNeese State University

## Sites

Site: KGHY-CP

N30°16'23.00" W93°57'23.00" 11.0 m

KGHY\_cp Tx.Ht.AGL: 123.0 m Total ERPd: 50.00 kW  
Model: 1 Use file-horizontal/0.0° 88.5000 MHz

Site: KGHY\_Lic

N30°16'23.00" W93°57'23.00" 11.0 m

KGHY\_I Tx.Ht.AGL: 101.0 m Total ERPd: 13.50 kW  
Model: 1 Isotropic-horizontal/0.0° 88.5000 MHz

Site: KLBT-CP

N29°54'52.00" W94°17'06.00" 5.5 m

KLBT-CP Tx.Ht.AGL: 142.0 m Total ERPd: 30.00 kW  
Model: 1 Use file-horizontal/0.0° 88.1000 MHz

Site: McNeese New Site

N30°12'23.08" W93°15'33.78" 3.9 m

New Tx.Ht.AGL: 91.1 m Total ERPd: 1.00 kW  
Model: 1 Use file-horizontal/0.0° 88.3000 MHz


### Interference contour study

Propagation models:

service contour : FCC 50.0% time

1st adjacent interference : FCC 10.0% time

**■** = 60.0 dB $\mu$ V/m service contour

 = 54.0 dBμV/m 1st adjacent interference

Reference Grid (spacing: 7.5')

KILOMETERS



## McNeese 1.0 kW Directional

### 1st Adjacent Channel Protection Detail

Figure 3a

Wed Dec 18 13:53:45 2013

Figure 3a



