

TECHNICAL EXHIBIT
MINOR MODIFICATION APPLICATION
FM STATION KXEA (FACILITY ID 170999)
LOWRY CITY, MISSOURI

MAY 10, 2010

CH 285A 1.5 KW 42 M

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Technical Narrative

This Technical Exhibit was prepared on behalf of a new FM station at Lowry City, Missouri, resulting from FCC Auction 70 (MM-FM554-A). A subsequent "long-form" application was also timely filed (BNPH-20070419AEP).

This modification is intended to increase effective radiated power (ERP) and reduce antenna height above average terrain (HAAT) for the proposal. FCC Section 73.215 processing is also requested.

Proposed Facilities

This application proposes to construct a Class A facility at the following site coordinates (NAD27): 38-09-08 N, 93-39-43 W (see Figure 1). It is proposed to operate with a non-directional ERP of 1.5 kW and antenna HAAT of 42 meters (less than maximum Class A facilities). A sketch of the proposed structure is shown in Figure 2. The antenna structure registration number is 1272186.

Interference Concerns

The 115 dBu predicted "blanketing" contour of the proposed station is predicted to extend radially 0.5 kilometer from the transmitting site. No interference is expected. However, the applicant recognizes its responsibility to resolve complaints of interference, including blanketing and receiver-induced interference as required by Sections 73.315(b), 73.316(e) and 73.318.

Proposed Coverage Analysis

Figure 3 is a map showing the predicted FCC coverage contours for the proposed operation. The FCC predicted 70 dBu coverage contour will encompass 100% of the populated areas within the Lowry City limits as derived from 2000 U.S. Census data, using 36 evenly spaced radials, as noted below.

The overall average HAAT (42 meters, rounded to the nearest meter) was determined using the N.G.D.C. 30-second terrain database and 36 evenly spaced radials (every 10 degrees of azimuth).

Allocation Study

Figure 4 is an allocation study for channel 285A from the proposed allotment reference point coordinates. The allotment reference point meets the FCC's minimum separation requirements, specified in Section 73.207(b) of the Commission's Rules, to all assignments and stations. The allotment reference point is that of ASRN 1012449.

Sheet 1 of Figure 5 is an allocation study for channel 285A from the proposed site. As indicated the proposed site meets the FCC's minimum separation requirements, specified in Section 73.207(b) of the Commission's Rules, to all assignments and stations except to a station KCJK, on channel 286C1 at Garden City, Missouri. There are no other allocation issues.

Processing pursuant to the short-spacing provisions is requested with respect to station KCJK. Station KCJK is being protected using contour overlap procedures (see Figure 5). The protected and interfering contours for KCJK were generated using maximum equivalent Class C1 facilities (100 kW/299 meters).

Radiofrequency Electromagnetic Field Exposure

The proposed FM facility was evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. Based on the FCC's FM Model program using a 4-bay "rototiller" antenna, the calculated power density at a point

2 meters above ground level will not exceed 0.015 mW/cm^2 , which is 7.5% (or less than 100%) of the FCC's recommended limit of 0.2 mW/cm^2 for FM channels, applicable to general population/uncontrolled exposure areas. There are no other known broadcast operations within 1 kilometer of the proposed facility.

Access to the transmitting site will be restricted and appropriately marked with warning signs. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the station is at reduced power or shut down. The proposed operation appears to be otherwise categorically excluded from environmental processing.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.



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May 10, 2010

Figure 1



PROPOSED TRANSMITTER SITE

FM STATION KXEA
LOWRY CITY, MISSOURI
CH 285A 1.5 KW 42 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Registration Number: 1272186



379 m AMSL
(1244 ft AMSL)

123 m
(404 ft)

Proposed FM Antenna

Radiation Center
284 m AMSL
(932 ft AMSL)

28 m
(92 ft)

256 m AMSL
(840 ft AMSL)

Not to Scale

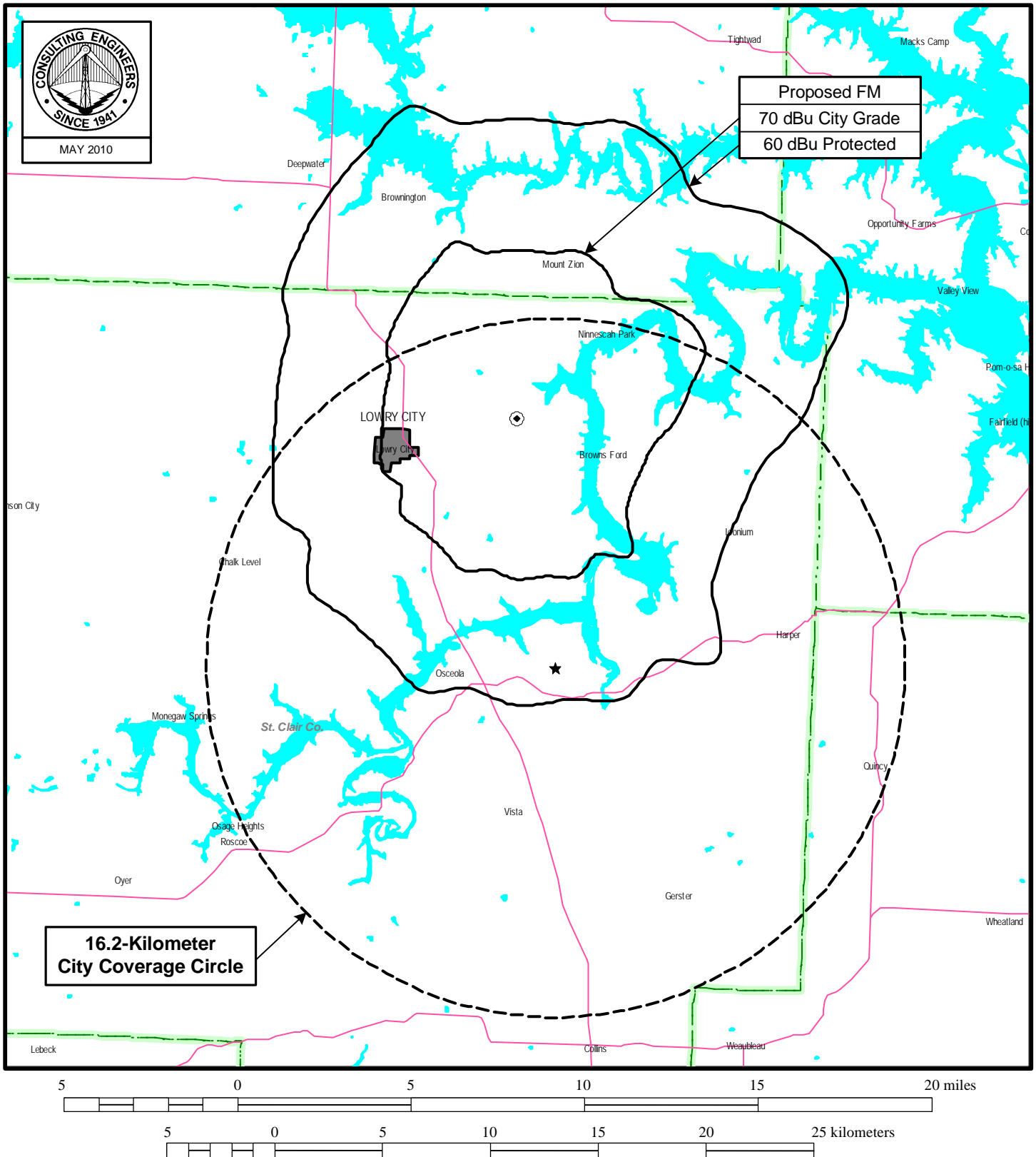
NAD 27
Site Coordinates:
38° 09' 08" N
93° 39' 43" W

PROPOSED ANTENNA AND SUPPORTING STRUCTURE

FM STATION KXEA
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du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 3



PREDICTED COVERAGE CONTOURS

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LOWRY CITY, MO (ALLOTMENT REF POINT) FM SEPARATION STUDY

Channel: 285 Coordinates: 038-02-54 93-38-30
Class: A Buffer Distance: 16 km

Date: 05/10/2010

Callsign Fac. ID	Status ARN	Chan. ID	Serv. Type	Freq. Class	City DA Ant. ID	ERP(kW)	State HAAT(m)	Latitude Longitude	Dist.(km) Bear.(deg)	Sep.(km) 73.215	Spacing(km) Comment
KKLH 24424	LIC BMLH 20080229AAB	284	FM	104.7 C2	MARSHFIELD N	34	MO 181	037-12-21 092-54-20	113.87 145.09	106 89 N	7.87 CLOSE
KVCY 73062	LIC BLED 19970929KE	284	FM	104.7 C3	FORT SCOTT N	16	KS 125	037-52-43 094-43-24	96.9 259.08	89 72 N	7.9 CLOSE
KRES 35890	LIC BLH 19830124BA	284	FM	104.7 C	MOBERLY	100	MO 311	039-27-35 092-42-07	176.69 27.15	165 142 N	11.69 CLEAR
KXEA 170999	CP MOD BMPH 20090806ACH	285	FM	104.9 A	LOWRY CITY N	1.1	MO 127	038-09-08 093-39-43	11.67 351.27		
<i>Applicant's existing authorization</i>											
	VAC RM 9845	285	FA	104.9 A	LOWRY CITY		MO	038-02-24 093-38-28	0.93 176.99		
KCJK 87565	LIC BLH 20010620AAM	286	FM	105.1 C1	GARDEN CITY N	69	MO 349	039-05-26 094-28-18	136.44 328.35	133 111 N	3.44 CLOSE
KOSP 35427	LIC BLH 19940602KB	286	FM	105.1 C2	WILLARD N	50	MO 150	037-01-08 093-30-31	114.86 174.11	106 89 N	8.86 CLOSE
KESM-FM 72447	LIC BMLH 19921014KA	288	FM	105.5 A	EL DORADO SPRINGS N	6	MO 57	037-51-51 094-00-54	38.66 238.08	31 25 N	7.66 CLOSE

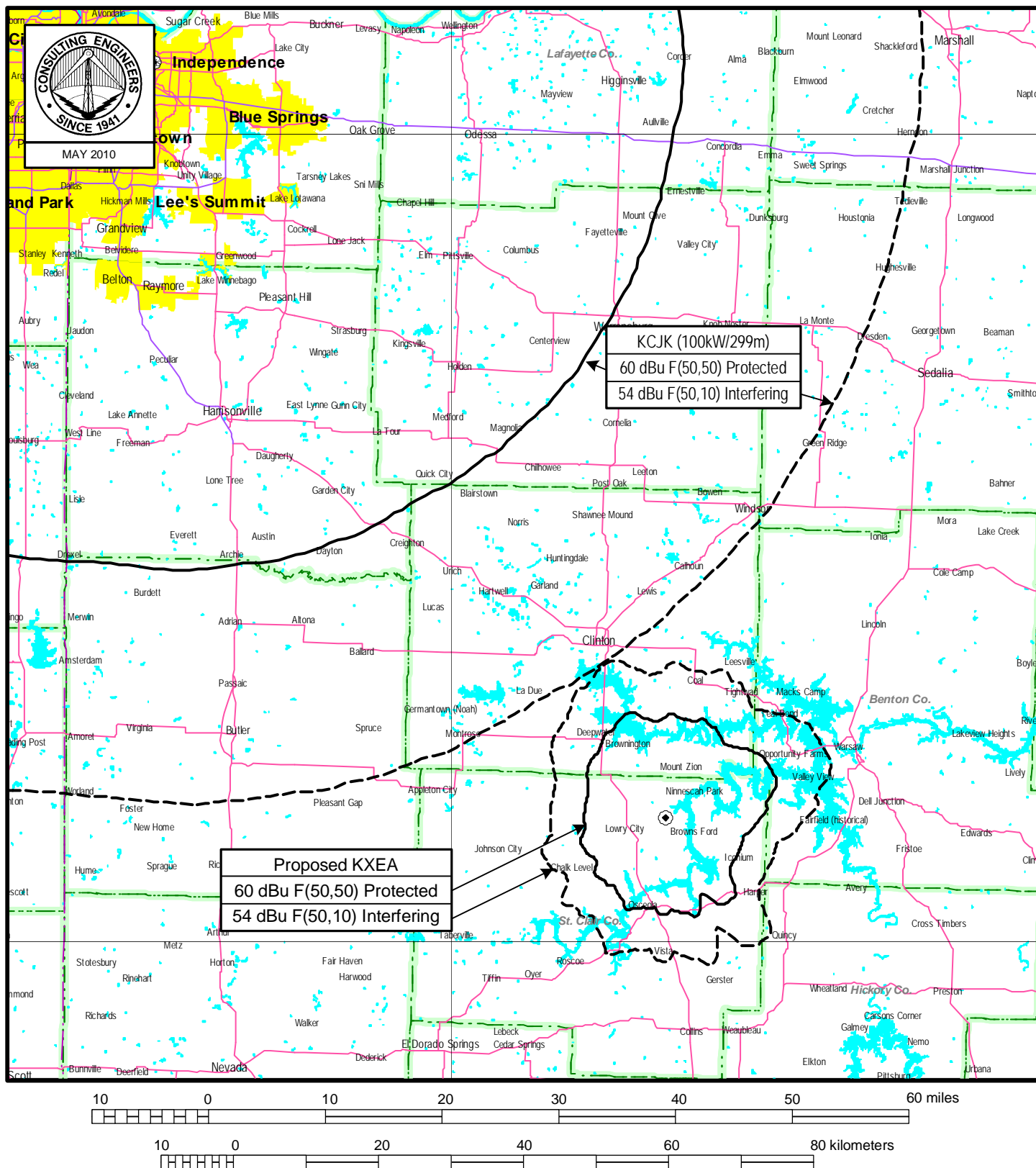
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LOWRY CITY, MO (PROPOSED SITE) FM SEPARATION STUDY

Channel: 285 Coordinates: 038-09-08 93-39-43
Class: A Buffer Distance: 16 km

Date: 05/10/2010

Callsign	Status	Chan.	Serv.	Freq.	City		State	Latitude	Dist.(km)	Sep.(km)	Spacing(km)
Fac. ID	ARN			Class	DA Ant. ID	ERP(kW)	HAAT(m)	Longitude	Bear.(deg)	73.215	Comment
KRES	LIC	284	FM	104.7	MOBERLY		MO	039-27-35	167.39	165	2.39
35890	BLH 19830124BA			C		100	311	092-42-07	29.48	142 N	CLOSE
KVCY	LIC	284	FM	104.7	FORT SCOTT		KS	037-52-43	98.03	89	9.03
73062	BLED 19970929KE			C3 N		16	125	094-43-24	252.21	72 N	CLOSE
KXEA	CP MOD 285	FM	104.9	LOWRY CITY			MO	038-09-08	0		
170999	BMPH 20090806ACH			A N		1.1	127	093-39-43	0		
<i>Applicant's existing authorization</i>											
	VAC	285	FA	104.9	LOWRY CITY		MO	038-02-24	12.59		
	RM 9845			A				093-38-28	171.68		
KCJK	LIC	286	FM	105.1	GARDEN CITY		MO	039-05-26	125.79	133	-7.21
87565	BLH 20010620AAM			C1 N		69	349	094-28-18	326.26	111 N	SHORT
<i>Section 73.215 processing requested</i>											
KESM-FM	LIC	288	FM	105.5	EL DORADO SPRINGS		MO	037-51-51	44.54	31	13.54
72447	BMLH 19921014KA			A N		6	57	094-00-54	224.11	25 N	CLEAR



PREDICTED SITE ALLOCATION STUDY

FM STATION KXEA

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du Treil, Lundin & Rackley, Inc Sarasota, Florida