

TECHNICAL EXHIBIT
AMENDMENT TO
APPLICATION FOR CONSTRUCTION PERMIT
FCC FILE NO. 0000145184
FM STATION WKFC
HUSTONVILLE, KENTUCKY
CH 270A 3.5 KW 133 M

Technical Narrative

The technical exhibit of which this narrative is part was prepared in support of an amendment to the pending application for a construction permit (FCC File No. 0000145184) for FM station WKFC which proposes operation on channel 270A (101.9 MHz) at Crab Orchard, KY. Station WKFC is currently licensed (BLH-20080317ACV, Facility ID 164241) to operate on channel 270A at North Corbin, KY with an effective radiated power (ERP) of 6 kilowatts (kW) and an antenna height above average terrain (HAAT) of 100 meters.

The purpose of this instant amendment application is to specify a change in the city of license of WKFC on channel 270A as permitted by the rules adopted by the FCC allowing community of license changes by application.¹ Specifically, it is proposed to operate on channel 270A at Hustonville, KY from an existing, unregistered supporting structure with a directional antenna maximum ERP of 3.5 kW and an HAAT of 133 meters.² The instant WKFC application is considered a “minor” change in facilities in accordance with Sections 73.3573(a)(1)(i) and 73.3573(g). Processing under Section 73.215 is requested with respect to short-spacings with stations WKYM on channel 269A (101.7 MHz) at Monticello, KY and WKYL on channel 271A (102.1 MHz) at Lawrenceburg, KY as detailed below.

WKFC Allotment

Figure 1 is a separation study from the proposed WKFC allotment coordinates. As shown, the proposed WKFC allotment coordinates comply with the minimum distance separation requirements of Section 73.207 for Class A operation on channel 270 towards all existing, authorized and proposed stations and allotments except with respect to (1) the current WKFC operation which establishes mutual exclusivity pursuant to Section 73.3573(g) and (2) the licensed operation of WKYM on channel 269A at Monticello. However, as indicated on Figure 1, the proposed WKFC allotment coordinates are fully-spaced to proposed allotment coordinates for WKYM which are also fully-spaced and comply with FCC’s city coverage requirements (see below).³

¹ *Report and Order in the Matter of Revision of Procedures Governing Amendments to the FM Table of Allotments and Changes of Community of License in the Radio Broadcast Services*, MB Docket No. 05-210, RM-10960, FCC 06-163, released November 29, 2006 (“Report and Order”).

² These are equivalent to maximum Class A facilities (ERP 6 kW/HAAT 100 meters). It is noted that the HAAT was determined based on the NED 1-second terrain database and 8 equally-spaced radials.

Figure 2 is a map which demonstrates that the proposed WKFC allotment coordinates comply with the FCC's city coverage requirements (73.315) based on maximum Class A facilities (ERP 6 kW/HAAT 100 m). The Hustonville city limits shown on Figure 2 were obtained from a map contained in the 2010 U.S. Census of Population.

WKYM Allotment Coordinates

Figure 3 is a separation study from the proposed WKYM allotment coordinates. As demonstrated, the proposed WKYM allotment coordinates comply with the minimum distance separation requirements of Section 73.207 for Class A operation on channel 269A towards all existing, authorized and proposed stations and allotments, including the proposed WKFC allotment coordinates.⁴

Figure 4 is a map which demonstrates that the proposed WKYM allotment coordinates comply with the FCC's city coverage requirements (73.315) based on maximum Class A facilities (ERP 6 kW/HAAT 100 m). The Monticello city limits shown on Figure 4 were obtained from a map contained in the 2010 U.S. Census of Population.

Section 73.207 & Section 73.215 Compliance

Figure 5 is a separation study for the proposed WKFC channel 270A operation from the proposed site. As shown, the proposed site complies with the minimum distance separation requirements of Section 73.207 for Class A operation on channel 270 towards all existing, authorized and proposed stations with the exceptions of the licensed operations of WKYM on channel 269A at Monticello, KY and WKYL on channel 271A at Lawrenceburg, KY. It is proposed to utilize the contour protection provisions of Section 73.215 with respect to the WKYM and WKYL short-spacings. Figure 6 demonstrates that the proposed WKFC operation on channel 270A at Hustonville complies with the contour protection provisions of Section 73.215 with respect to WKYM and WKYL.⁵ All contour locations were based on the use of the NED 1-second terrain database and 72 equally spaced radials.

RFR Hazard Statement

The proposed WKFC facilities were evaluated in terms of potential radiofrequency radiation exposure at 2 meters above ground level in accordance with the OST Bulletin No. 65, "Evaluating Compliance With FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation". This Bulletin provides assistance in determining whether FCC-

³ The proposed WKYM allotment coordinates will only be used for creation of the FCC rule compliance allotment coordinates for WKFC. The proposal would not involve any physical change to WKYM's operation, only the temporary use of an FCC rule compliance allotment coordinates.

⁴ *Ibid.*

⁵ The distance between the proposed transmitter site and the WKYM and WKYL transmitter sites complies with the minimum distance separation requirements of Section 73.215(e).

regulated transmitting facilities, operations or devices comply with limits for human exposure to radiofrequency (RF) electromagnetic fields.

It is proposed to utilize an ERI 2-bay, 0.5 wavelength spaced (EPA type 3) antenna mounted at the 34 meter level on the existing supporting structure. The ERP will be 3.5 kW (H&V). Figure 12 depicts the output of the FCC's FM Model program. As indicated, a maximum power density of 20.3 uW/cm^2 will occur at a point located 65 meters from the supporting structure base. This is 10.2% of the FCC's recommended limit of 200 uW/cm^2 for the FM band for an uncontrolled/general population environment.

However, this will be a multiple-user site to be shared with FM station WPBK on channel 275A (102.9 MHz) at Crab Orchard, KY (BLH-20080108AAE). Thus, the existing WPBK operation has also been considered in the RFR evaluation. Station WPBK utilizes a Shively 1-bay antenna (EPA type 1) with an ERP of 2.75 kW (H&V). Based on the FCC's FM Model program a maximum power density of 131.5 uW/cm^2 will occur at a point located 8 meters from the supporting structure base. This is 65.8% of the FCC's recommended limit. The summation of the above fractions of the ANSI limit for each of the above stations is 0.76. Since this is less than unity, the combined power density at 2 meters above ground level will be less than the ANSI recommended limit applicable to general population/uncontrolled exposure areas. Thus, it is believed that the proposed WKFC facility is in full compliance with the FCC's requirements with regard to RF radiation exposure.

Access to the transmitting site will be restricted and appropriately marked with warning signs. Furthermore, as this is a multi-user site, procedures will be in effect in the event that workers or other authorized personnel enter the restricted area to ensure 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 stations are at reduced power or shut down.

Community of License Change – Section 307(b)

1. Proposal

It is proposed to specify a change in the city of license of WKFC from North Corbin, KY to Hustonville, KY as permitted by the rules adopted by the FCC allowing community of license changes by application.

2. Contingent Application

This instant application is being filed under the contingent application rule [Section 73.3517(e)] as a grant is contingent upon grant of the pending application for construction permit for WKKQ on channel 241C3 (96.1 MHz) at Barbourville, KY to change its city of license to North Corbin, KY, FCC File No. 0000145185 (replacement service).

3. City Populations and Local Service

North Corbin is a census designated place (CDP) and has a 2020 U.S. Census population of 1,727 persons. Station WKFC is the only aural (AM/FM) service licensed to North Corbin. However, the proposal will not remove the only local service at North Corbin as licensed FM station WKKQ on channel 241C3 at Barbourville, KY will be reallocated from Barbourville to North Corbin. Furthermore, Barbourville city, which has a 2020 Census population of 3,222 persons, will not be deprived on its sole existing service as AM station WYWY on 950 kHz is currently licensed to Barbourville, KY. It is noted that the proposal will also not remove the 2nd local service from a community with a population of at least 7,500 persons. It is also noted that neither North Corbin nor Barbourville are located within, or near, an Urbanized Area (UA).

Hustonville city has a 2020 U.S. Census population of 387 persons and has no other FM or AM service. Therefore, the instant proposal will result in a first local aural transmission service to the community of Hustonville. It is noted that Hustonville is not located within, or near, a UA.

4. 60 dBu Gain and Loss Areas and Available Aural Services – WKFC Class A Proposal

Figure 7 is a map showing the FM 60 dBu (1 mV/m) primary service contours for WKFC'S licensed operation on channel 270A at North Corbin and the proposed channel 270A operation at Hustonville. In accordance with the criteria set forth in the Second Order on Reconsideration in MB Docket No. 09-52 (RM-11528, adopted October 11, 2012, released October 12, 2012, FCC 12-127) ("*Second Order*"), WKFC's licensed and proposed 60 dBu contours were calculated based on licensed and proposed ERP and HAAT using actual terrain, the NED 1-second terrain database and the FCC's standard prediction method. The 60 dBu "gain" and "loss" areas are also indicated.

The following tabulates the land areas and 2020 Census populations within the 60 dBu FM contours for the WKFC licensed operation on channel 270A at North Corbin and the proposed operation on channel 270A at Hustonville. Also tabulated are the gain, loss and "net" gain areas. As indicated, the proposal will result in a net loss in 60 dBu service to 31,919 persons.

<i>Facilities</i>	<i>Within 60 dBu Contour</i>	
	<i>2020 Census Population</i>	<i>Land Area (km²)</i>
Licensed Ch. 270A North Corbin, KY	107,146	2,477
Proposed Ch. 270A Hustonville, KY	75,227	2,380
Gain	75,227	2,380
Loss	107,146	2,477
"Net" Gain (Loss)	(-31,919)	(-97)

Figure 7 also shows the other full-time aural services available to the gain and loss areas within the 60 dBu contours. The determination of available full-time reception services was also based on the criteria set forth in the *Second Order*. Specifically, for FM service (commercial and noncommercial educational) the Class service contour was used based on the authorized (licensed or permitted) facilities using actual terrain, the NED 1-second terrain database and the FCC's standard prediction method. For AM fulltime service, the common area within the daytime 2 mV/m contour and nighttime interference-free (NIF) contour was used.

The numerals within the gain and loss areas indicate the number of available services. As indicated on Figure 7, there are no underserved areas in the loss area as a minimum of 9 and a maximum of 18 aural services will remain. However, there is one underserved area located within the gain area receiving 4 aural services and containing a total population of 2 persons. Figure 8 tabulates the AM and FM stations whose contours are shown on Figure 7.

5. 70 dBu and 60 dBu Coverage

The following tabulates the land area and 2020 Census population within the 70 dBu and 60 dBu contours for the proposed WKFC operation on channel 270A at Hustonville which are depicted on Figure 9.

Contour	Population (2020 Census)	Land Area (sq. km)
70 dBu	20,283	784
60 dBu	75,227	2,380

Contour locations calculated in accordance with the provisions of Section 73.313. Population calculated using a computer program that utilizes the 2020 U.S. Census database of "population centroids". Area calculated using a root mean square algorithm.

6. Urbanized Area Coverage Considerations

The proposed WKFC operation would not provide 70 dBu coverage to any portion of a UA. Furthermore, a study determined that it would also not be possible to relocate WKFC and provide 70 dBu service to any portion of a UA. Specifically, Figure 10 is a map which depicts the proposed WKFC 70 dBu and the closest UA which is the Lexington-Fayette, KY UA (LF-UA). As indicated, the proposed WKFC 70 dBu does not encompass any portion of the LF-UA. Also shown is an area-to-locate (ATL) based on the minimum distance separation requirements of Section 73.215(e). In other words, this 73.215(e) ATL represents the absolute boundary for site relocations by WKFC. As indicated, the minimum distance to the LF-UA from the 73.215(e) ATL is 33 km whereas the distance to the 70 dBu contour for a nominal maximum Class A station (presuming uniform terrain) is only 16.2 km. Furthermore, a 70 dBu coverage study was conducted from the closest registered tower to the LF-UA located within the 73.215(e) ATL, namely, ASRN 1203627. For the 70 dBu coverage study, an equivalent maximum Class A operation was presumed from ASRN 1203627 based on an ERP of 2.4 kW and an HAAT of 160 meters (see Figure 11 for the technical specifications utilized).⁶ The resulting 70 dBu contour is depicted on Figure 10 and, as indicated, it falls over 16 km short of the closest point of the LF-UA. It is apparent from this analysis that it would not be possible for WKFC to provide 70 dBu coverage to any portion of the LF-UA or any other UA from any location.

7. Preferential Arrangement of Allotments Per Section 307(b).

As demonstrated herein, by establishing a first local transmission service to Hustonville, KY, the subject proposal would result in a preferential arrangement of allotments pursuant to Section 307(b) of the Communications Act, as amended, and the Commission's policies thereunder.

⁶ This was a "best-case" coverage analysis which ignored any pertinent protection requirements under Section 73.215.

If there are any questions, or additional information is required, please contact the office of the undersigned.

A handwritten signature in black ink, reading "W. Jeffrey Reynolds". The signature is written in a cursive, flowing style.

W. Jeffrey Reynolds

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5212 Station Way
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(941) 329-6013
JEFF@DLR.COM

January 10, 2022

FM Study LMS

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



Station Channel: 270 **Station Coordinates:** 037-23-53 084-41-52 (NAD 83)

Class: A **Buffer Distance:** 10 km

Comment: Proposed WKFC Ch. 270A Hustonville Allotment Coordinates

Callsign	Status	Channel	Service	Freq.	City	State	Co.	Rec Type	Latitude	Dist. (km)	Sep. (km)	Spacing (km)
Facility ID	ARN			Class	DA	Ant ID	ERP (kW)	HAAT (m)	73.215 Longitude	Bear. (deg)	73.215 (km)	Comment
WKYM	L2C	269	FM	101.7	MONTICELLO	KY	US	C	036-48-36.2	66.59	72	-5.41
63323	BLH-19930721KB			A	NDIR		1.75	188	084-50-48.8	191.48	49	SHORT /1
WKYM-RP	PROPSD	269	FM	101.7	MONTICELLO	KY	US	C	036-45-47.6	71.6	72	-0.4
197	4867 - RADIOACT			A	N		6	100	084-50-29.2	190.28	49	CLOSE /2
PWKFC-RP	PROPSD	270	FM	101.9	HUSTONVILLE	KY	US	C	037-23-53	0	115	-115
198	4867 - RADIOACT			A	N		6	100	084-41-52	0	92	SHORT /3
WKFC	MOD	270	FM	101.9	CRAB ORCHARD	KY	US	C	037-25-39.5	4.96	115	-110.04
164241	0000145184			A	NDIR	100606 3	2.2	110	084-39-20.9	48.4	92	SHORT /4
PWKFC	PROPSD	270	FM	101.9	HUSTONVILLE	KY	US	C	037-25-39.5	4.98	115	-110.02
199	4867 - RADIOACT			A	D	801282	3.5	133	084-39-19.5	48.66	92	SHORT /5
WKFC	L2C	270	FM	101.9	NORTH CORBIN	KY	US	C	037-02-09.3	67.65	115	-47.35
164241	BLH-20080317ACV			A	NDIR		6	100	084-05-04.8	126.38	92	SHORT /6
WEKV	MOD	270	FM	101.9	CENTRAL CITY	KY	US	C	037-35-03.1	203.89	200	3.89
46945	0000120641			C1	NDIR	100721 3	100	204	086-59-28.9	276.54	178	CLOSE
WKYL	L2C	271	FM	102.1	LAWRENCEBURG	KY	US	C	038-01-37.3	71.69	72	-0.31
22938	BLH-20040217ADG			A	NDIR		6	100	084-52-58.8	346.94	49	CLOSE
WLLK-FM	L2C	272	FM	102.3	SOMERSET	KY	US	C	037-04-41.2	35.55	31	4.55
72780	BLH-19970902KC			A	NDIR		6	100	084-40-38.7	177.09	25	CLOSE

/1 Short-spacing not a concern as the proposed WKFC allotment coordinates are fully-spaced to the proposed fully-spaced allotment coordinates for WKYM. See footnote 2.

/2 Proposed WKYM fully-spaced allotment coordinates which are fully-spaced to the proposed WKFC allotment coordinates. It is noted that there will be no change in the licensed WKYM operation (BLH-19930721KB).

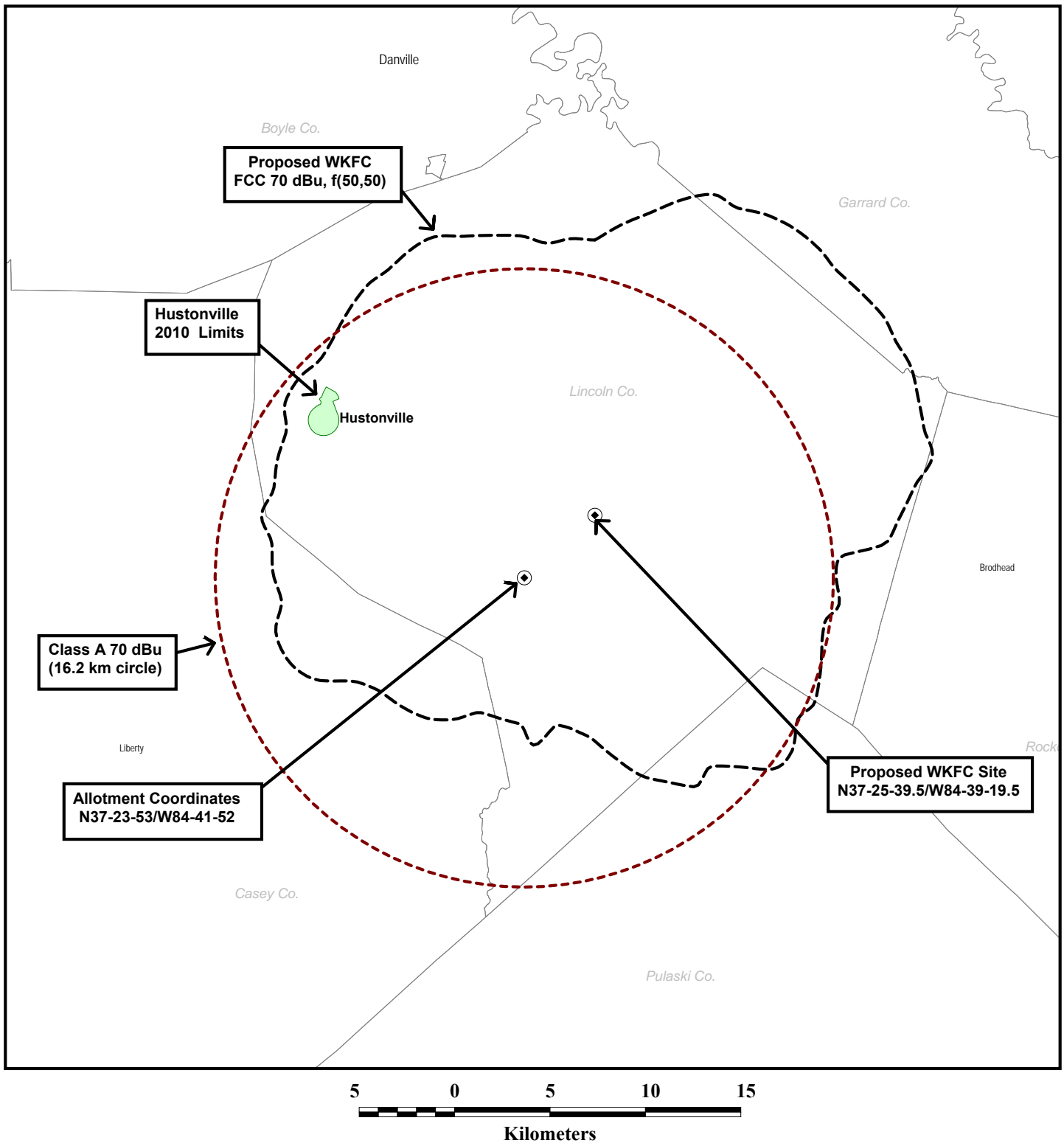
/3 Proposed WKFC fully-spaced allotment coordinates.

/4 WKFC application being amended by the instant application.

/5 Proposed WKFC operation at Hustonville.

/6 Licensed WKFC operation.

Figure 2



COMPLIANCE WITH SECTION 73.315

FM STATION WKFC
HUSTONVILLE, KENTUCKY
CH 270A (101.9 MHZ) 3.5 KW (DA) 133 M

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

FM Study LMS

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



Station Channel: 269 **Station Coordinates:** 036-45-47.6 084-50-29.2 (NAD83)
Class: A **Buffer Distance:** 10 km
Comment: Proposed WKYM Ch 269A Allotment Coordinates

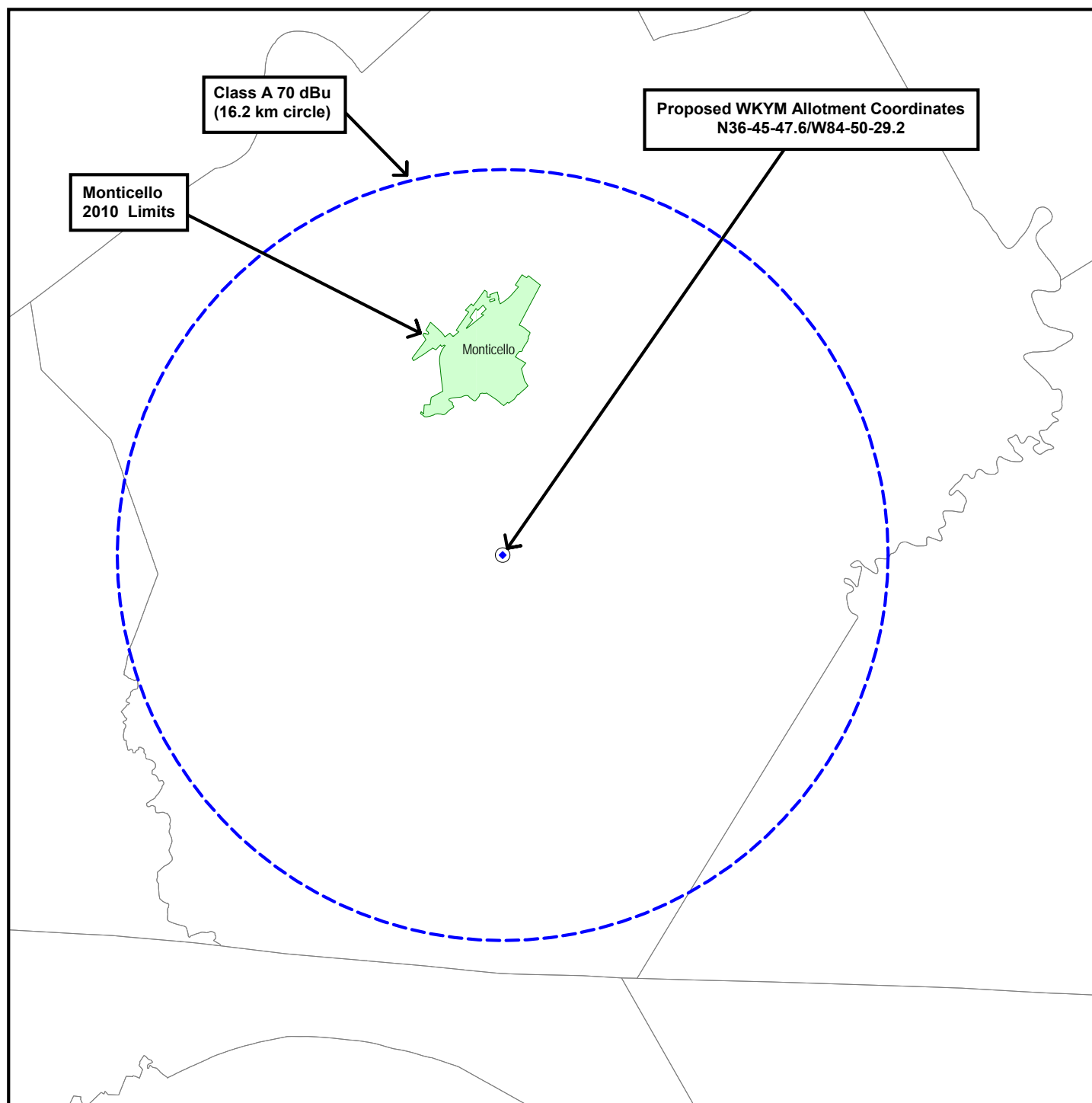
Callsign	Status	Channel	Service	Freq.	City	State	Co.	Rec Type	Latitude	Dist. (km)	Sep. (km)	Spacing (km)
Facility ID	ARN			Class	DA	Ant ID	ERP (kW)	HAAT (m)	73.215 Longitude	Bear. (deg)	73.215 (km)	Comment
WVFB	L2C	268	FM	101.5	CELINA	TN	US	C	036-33-28.2	71.9	72	-0.1
19247	BLH-19940808KJ			A	NDIR		6	100	085-36-14.9	251.67	49	CLOSE
WKYM-RP	PROPSD	269	FM	101.7	MONTICELLO	KY	US	C	036-45-47.6	0	115	-115
197	4867 - RADIOACT			A	N		6	100	084-50-29.2	134.82	92	SHORT /1
WKYM	L2C	269	FM	101.7	MONTICELLO	KY	US	C	036-48-36.2	5.22	115	-109.78
63323	BLH-19930721KB			A	NDIR		1.75	188	084-50-48.8	354.68	92	SHORT /2
WJSQ	L2C	269	FM	101.7	ATHENS	TN	US	C	035-31-19.2	141.98	142	-0.02
29951	BLH-19910813KB			C3	NDIR		7.5	161	084-27-28.7	165.88	119	CLOSE
PWKFC-RP	PROPSD	270	FM	101.9	HUSTONVILLE	KY	US	C	037-23-53	71.6	72	-0.4
198	4867 - RADIOACT			A	N		6	100	084-41-52	10.19	49	CLOSE /3
WKFC	L2C	270	FM	101.9	NORTH CORBIN	KY	US	C	037-02-09.3	73.93	72	1.93
164241	BLH-20080317ACV			A	NDIR		6	100	084-05-04.8	65.52	49	CLOSE
WKFC	MOD	270	FM	101.9	CRAB ORCHARD	KY	US	C	037-25-39.5	75.56	72	3.56
164241	0000145184			A	NDIR	100606 3	2.2	110	084-39-20.9	12.51	49	CLOSE
PWKFC	PROPSD	270	FM	101.9	HUSTONVILLE	KY	US	C	037-25-39.5	75.57	72	3.57
199	4867 - RADIOACT			A	D	801282	3.5	133	084-39-19.5	12.53	49	CLOSE
WLLK-FM	L2C	272	FM	102.3	SOMERSET	KY	US	C	037-04-41.2	37.88	31	6.88
72780	BLH-19970902KC			A	NDIR		6	100	084-40-38.7	22.56	25	CLOSE

/1 Proposed WKYM fully-spaced allotment coordinates.

/2 Licensed WKYM operation.

/3 Proposed WKFC fully-spaced allotment coordinates.

Figure 4



5 0 5 10 15
Kilometers

COMPLIANCE WITH SECTION 73.315

FM STATION WKFC
HUSTONVILLE, KENTUCKY
CH 270A (101.9 MHZ) 3.5 KW (DA) 133 M

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

FM Study LMS

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



Station Channel: 270 **Station Coordinates:** 037-25-39.5 084-39-19.5 (NAD83)
Class: A **Buffer Distance:** 10 km
Comment: Proposed WKFC

Call sign	Status	Channel	Service	Freq.	City	State	Co.	Rec Type	Latitude	Dist. (km)	Sep. (km)	Spacing (km)
Facility ID	ARN			Class	DA	Ant ID	ERP (kW)	HAAT (m)	73.215 Longitude	Bear. (deg)	73.215 (km)	Comment
WKYM	L2C	269	FM	101.7	MONTICELLO	KY	US	C	036-48-36.2	70.62	72	-1.38
63323	BLH-19930721KB			A	NDIR		1.75	188	084-50-48.8	193.94	49	SHORT /1
WKYM-RP	PROPSD	269	FM	101.7	MONTICELLO	KY	US	C	036-45-47.6	75.57	72	3.57
197	4867 - RADIOACT			A	N		6	100	084-50-29.2	192.65	49	CLOSE
PWKFC	PROPSD	270	FM	101.9	HUSTONVILLE	KY	US	C	037-25-39.5	0	115	-115
199	4867 - RADIOACT			A	D	801282	3.5	133	084-39-19.5	293	92	SHORT /2
WKFC	MOD	270	FM	101.9	CRAB ORCHARD	KY	US	C	037-25-39.5	0.03	115	-114.97
164241	0000145184			A	NDIR	100606 3	2.2	110	084-39-20.9	270	92	SHORT /3
PWKFC-RP	PROPSD	270	FM	101.9	HUSTONVILLE	KY	US	C	037-23-53	4.98	115	-110.02
198	4867 - RADIOACT			A	N		6	100	084-41-52	228.69	92	SHORT /4
WKFC	L2C	270	FM	101.9	NORTH CORBIN	KY	US	C	037-02-09.3	66.75	115	-48.25
164241	BLH-20080317ACV			A	NDIR		6	100	084-05-04.8	130.59	92	SHORT /5
WEKV	MOD	270	FM	101.9	CENTRAL CITY	KY	US	C	037-35-03.1	207.28	200	7.28
46945	0000120641			C1	NDIR	100721 3	100	204	086-59-28.9	275.54	178	CLOSE
WKRQ	L2C	270	FM	101.9	CINCINNATI	OH	US	C	039-06-59.2	187.94	178	9.94
11276	BLH-19991004ABU			B	NDIR	28271	16	264	084-30-06.8	4.03	143	CLOSE
WKYL	L2C	271	FM	102.1	LAWRENCEBURG	KY	US	C	038-01-37.3	69.49	72	-2.51
22938	BLH-20040217ADG			A	NDIR		6	100	084-52-58.8	343.35	49	SHORT /1
WLLK-FM	L2C	272	FM	102.3	SOMERSET	KY	US	C	037-04-41.2	38.84	31	7.84
72780	BLH-19970902KC			A	NDIR		6	100	084-40-38.7	182.87	25	CLOSE

/1 It is proposed to utilize the contour protection provisions of Section 73.215 with respect to this short-spacing. The proposal complies with the minimum distance separation requirements of Section 73.215(e) See Figure 6.

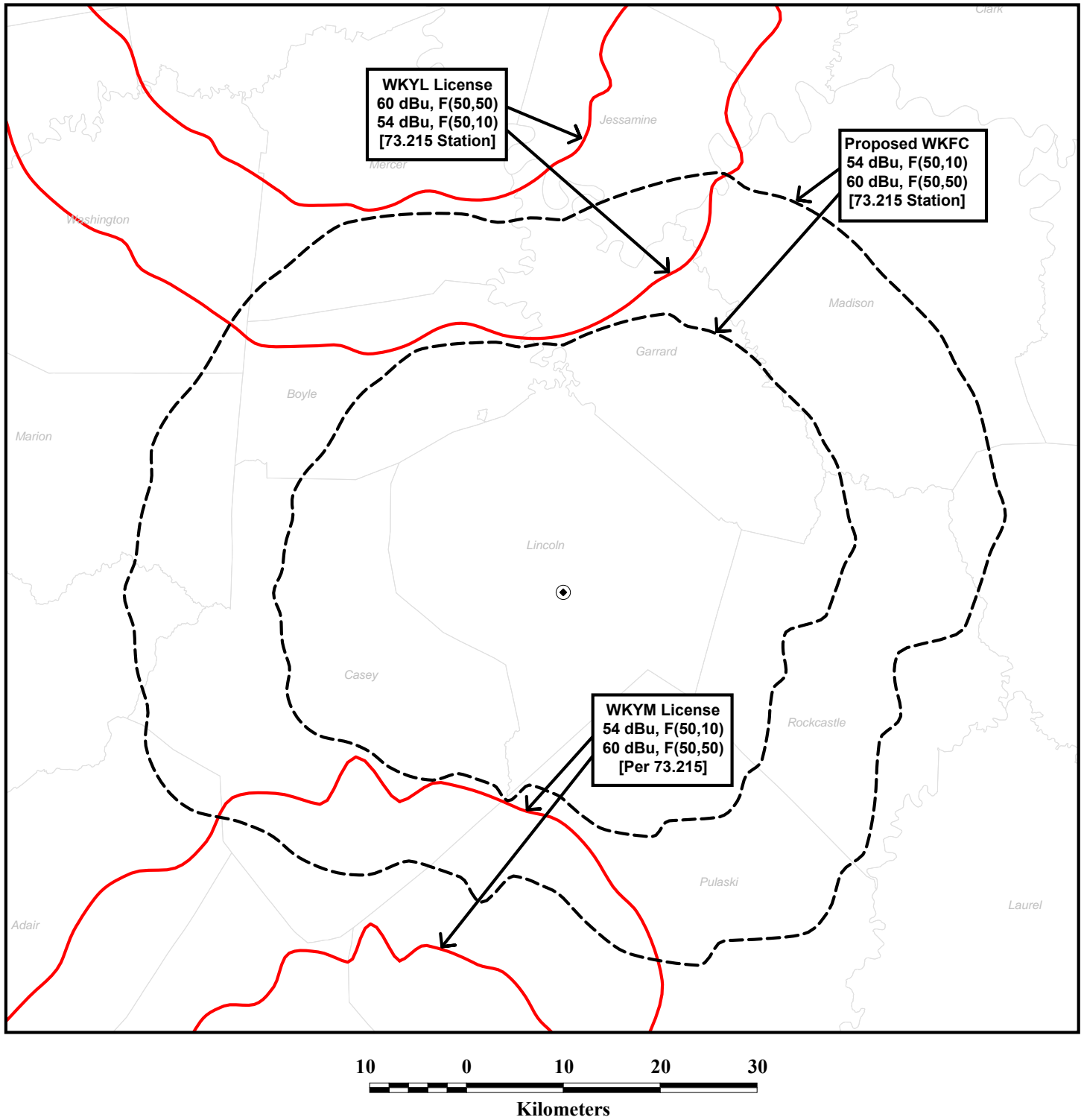
/2 Proposed WKFC operation.

/3 WKFC application being amended by the instant application.

/4 Proposed WKFC fully-spaced allotment coordinates.

/5 Licensed WKFC operation.

Figure 6

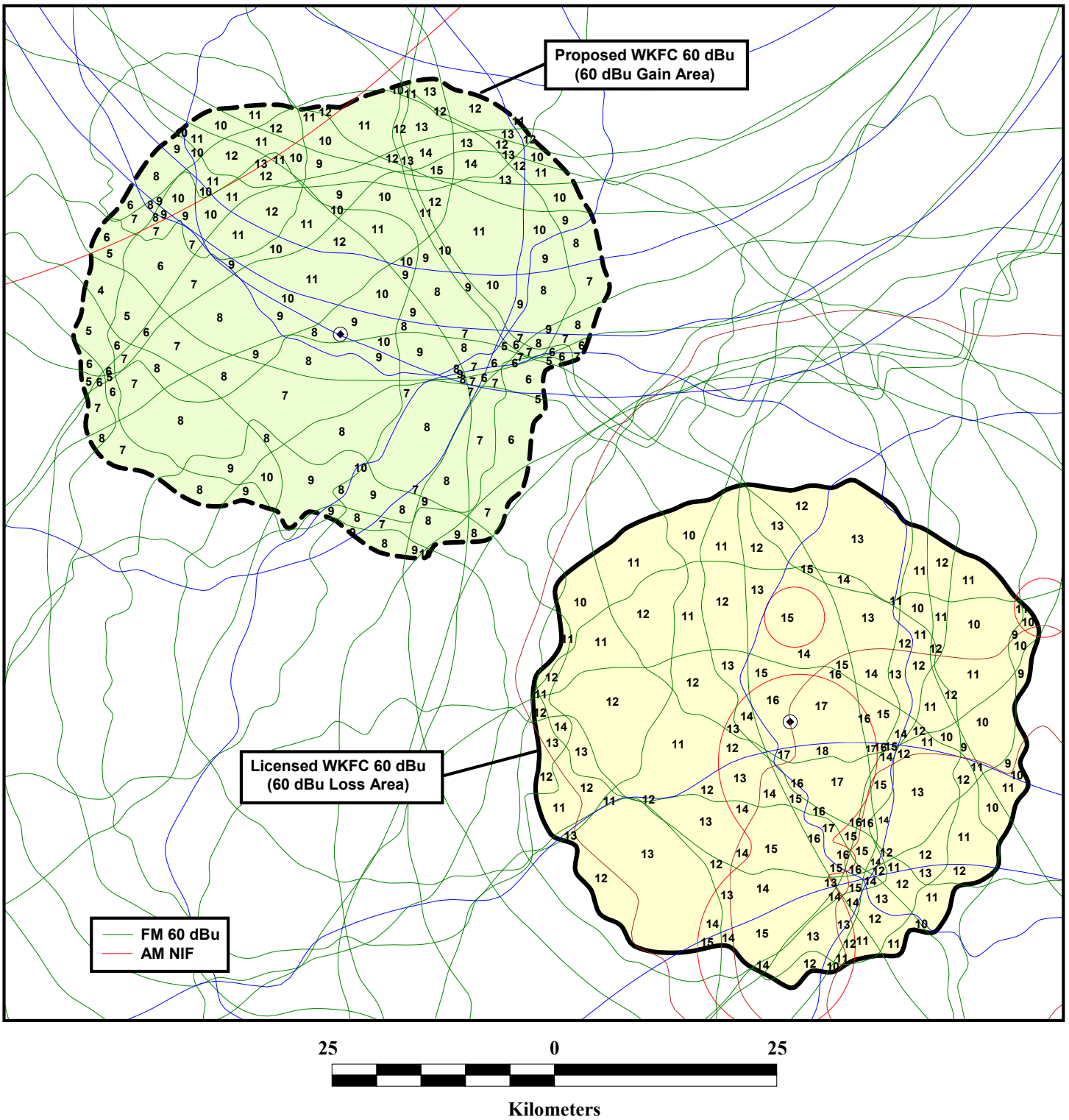


COMPLIANCE WITH SECTION 73.215

FM STATION WKFC
HUSTONVILLE, KENTUCKY
CH 270A (101.9 MHZ) 3.5 KW (DA) 133 M

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

Figure 7



60 DBU GAIN/LOSS/FULL-TIME SERVICES MAP

FM STATION WKFC
HUSTONVILLE, KENTUCKY
CH 270A (101.9 MHZ) 3.5 KW (DA) 133 M

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

TECHNICAL EXHIBIT
STATION WKFC
HUSTONVILLE, KENTUCKY
CH 270A 3.5 KW (DA) 133 M

Tabulation of Other AM/FM Full-Time Services
Available to 60 dBu Gain-Loss Areas

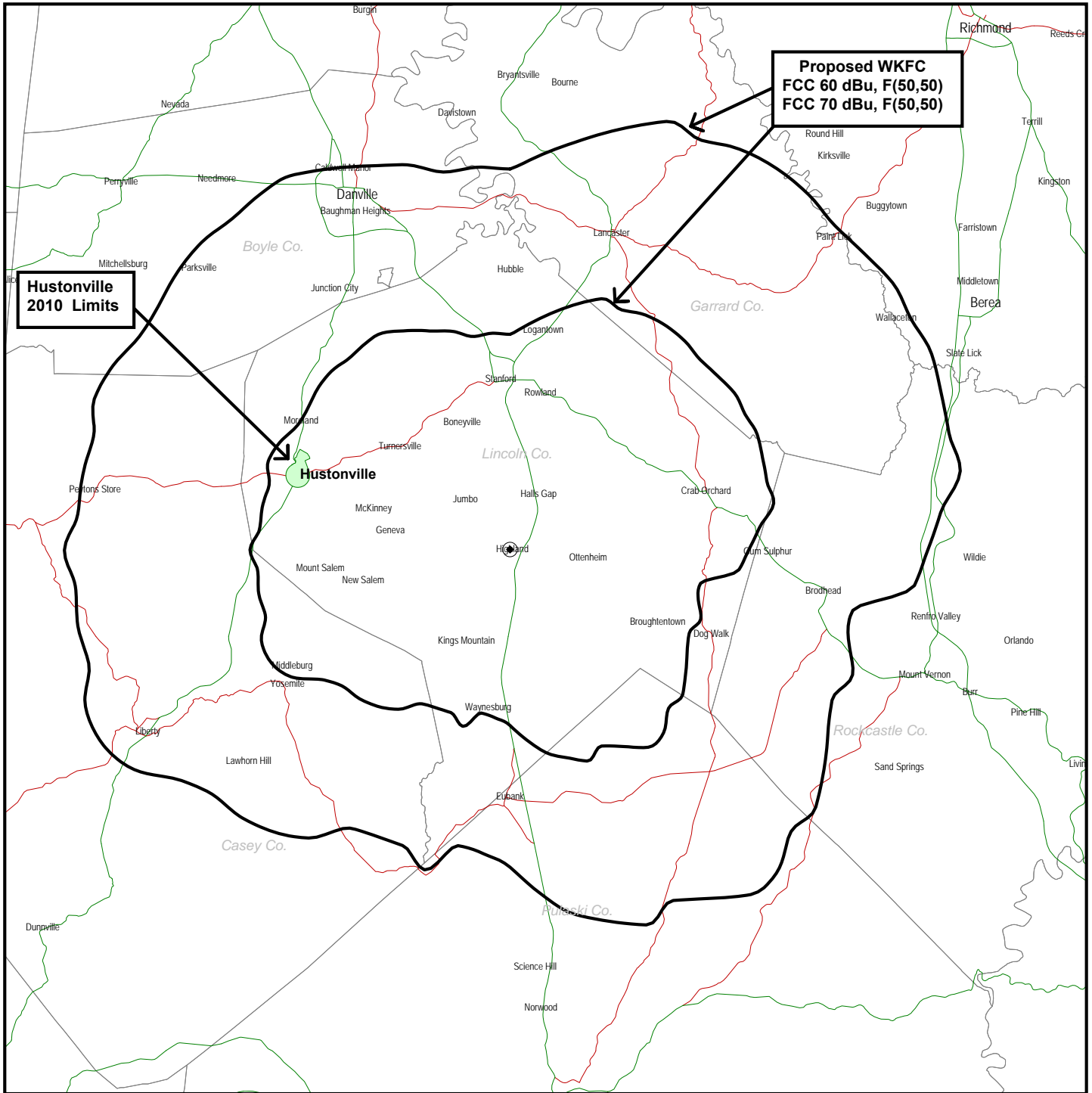
<u>FM Stations</u>					
<u>Call Sign</u>	<u>Community of License</u>	<u>State</u>	<u>Status</u>	<u>Channel</u>	
KYAI	MCKEE	KY	AMD	207	C1
WANV	ANNVILLE	KY	L2C	244	A
WBUL-FM	LEXINGTON	KY	MOD	251	C1
WCKQ	CAMPBELLSVILLE	KY	L2C	281	C3
WCTT-FM	CORBIN	KY	L2C	297	C2
WCYO	IRVINE	KY	L2C	264	C3
WCYQ	OAK RIDGE	TN	MOD	262	C
WDCL-FM	SOMERSET	KY	L2C	209	C1
WDFB-FM	DANVILLE	KY	L2C	201	A
WEKC	CORBIN	KY	MOD	203	C2
WEKH	HAZARD	KY	L2C	215	C1
WEKP	PINEVILLE	KY	AMD	211	C2
WEKU	RICHMOND	KY	MOD	205	C1
WEKX	JELICO	TN	L2C	274	A
WEZJ-FM	WILLIAMSBURG	KY	L2C	282	C3
WGKS	STAMPING GROUND	KY	MOD	245	C2
WHAY	WHITLEY CITY	KY	L2C	252	A
WIMZ-FM	KNOXVILLE	TN	MOD	278	C
WJQQ	SOMERSET	KY	L2C	246	C2
WKDO-FM	LIBERTY	KY	L2C	254	C3
WKDP-FM	CORBIN	KY	L2C	258	C2
WKVY	SOMERSET	KY	L2C	201	C3
WKYB	PERRYVILLE	KY	L2C	298	A
WLFX	BEREA	KY	L2C	294	C3
WLKT	LEXINGTON-FAYETTE	KY	L2C	283	C2
WLLK-FM	SOMERSET	KY	L2C	272	A
WLXX	RICHMOND	KY	L2C	268	C3
WMXL	LEXINGTON	KY	L2C	233	C1
WNJK	BURGIN	KY	L2C	290	A
WPBK	CRAB ORCHARD	KY	L2C	275	A
WRIL	PINEVILLE	KY	AMD	292	A
WRNZ	LANCASTER	KY	MOD	286	A
WSEK-FM	BURNSIDE	KY	L2C	230	C2
WSGS	HAZARD	KY	L2C	266	C
WTBK	MANCHESTER	KY	L2C	289	C3
WTHL	SOMERSET	KY	L2C	213	C1
WUKY	LEXINGTON	KY	L2C	217	C1
WVCT	KEAVY	KY	L2C	218	A

<u>Call Sign</u>	<u>Community of License</u>	<u>State</u>	<u>Status</u>	<u>Channel</u>
WVLC	MANNSVILLE	KY	L2C	260 C3
WVLK-FM	LEXINGTON	KY	MOD	225 C1
WWAG	MCKEE	KY	L2C	300 A
WWEL	LONDON	KY	L2C	280 A
WWLT	MANCHESTER	KY	MOD	276 A
WXKY	STANFORD	KY	MOD	242 C3
WYGE	LONDON	KY	L2C	222 C2
WYKY	SCIENCE HILL	KY	L2C	291 A

AM Stations

<u>Call Sign</u>	<u>Community of License</u>	<u>State</u>	<u>Status</u>	<u>Frequency (kHz)</u>
WHAS	LOUISVILLE	KY	Lic	840
WFTG	LONDON	KY	Lic	1400
WWXL	MANCHESTER	KY	Lic	1450
WCTT	CORBIN	KY	Lic	680

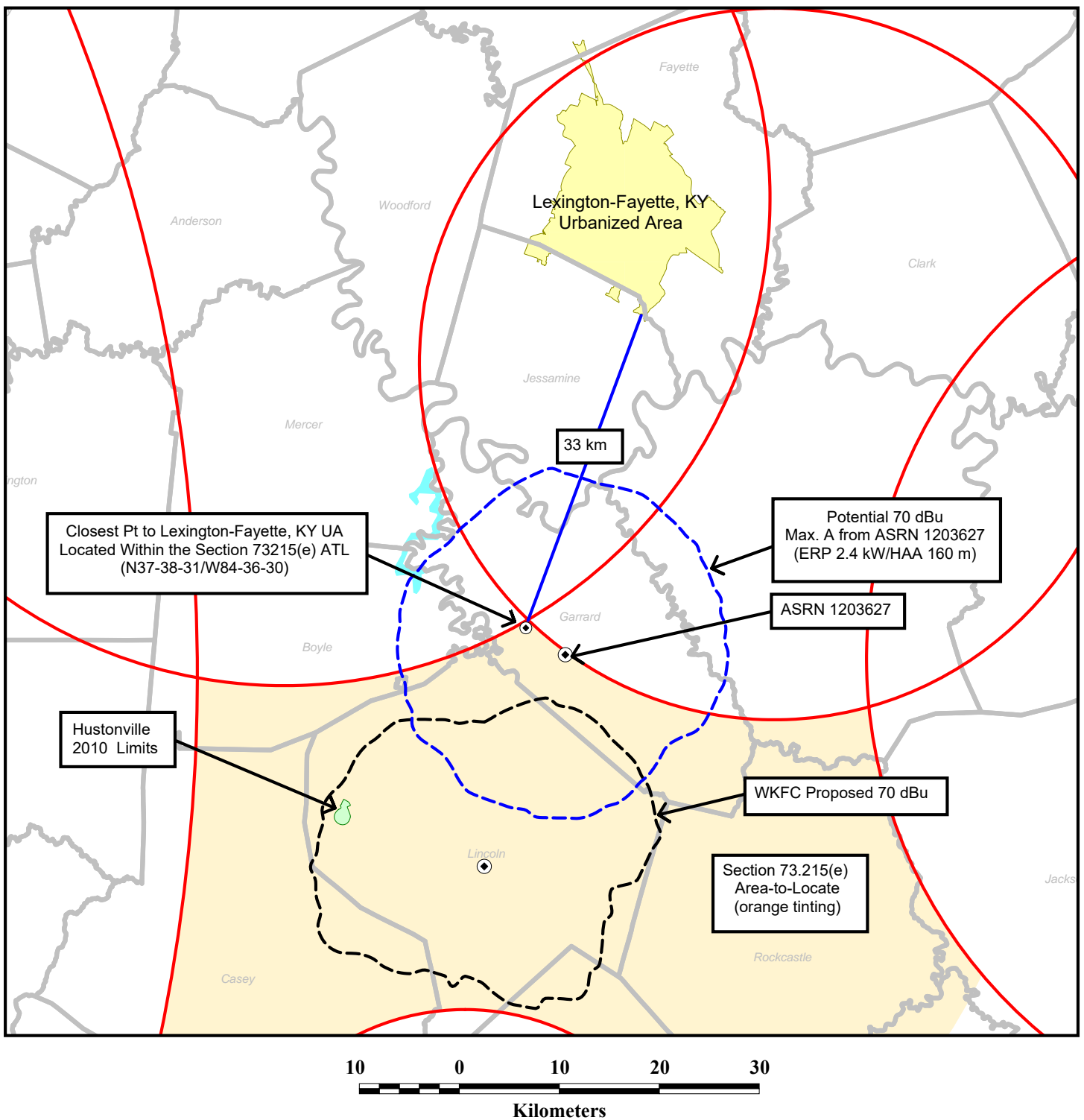
Figure 9



10 0 10 20 30
Kilometers

FCC PREDICTED COVERAGE CONTOURS
FM STATION WKFC
HUSTONVILLE, KENTUCKY
CH 270A (101.9 MHZ) 3.5 KW (DA) 133 M
du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 10



URBANIZED AREA COVERAGE

FM STATION WKFC
HUSTONVILLE, KENTUCKY
CH 270A (101.9 MHZ) 3.5 KW (DA) 133 M

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

Site Study

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



Type:	TOWER	Structure Height (m):	128.0
ASRN:	1203627	Structure Height (ft):	419.9
File Number:	A1018370	Ground Elevation (m):	315.5
		Ground Elevation (ft):	1035.1
Record Type:	CURRENT	Overall Height AGL (m):	134.4
Content:	REGISTRATION	Overall Height AGL (ft):	440.9
Status:	CONSTRUCTED	Overall Height AMSL (m):	449.9
		Overall Height AMSL (ft):	1476.0
Address:	Highway 52, Richmond Road	Date FAA Det. Issued:	03/22/2011
City:	Lancaster	State:	KY
		FAA Circular Number:	70/7460-1J
NEPA Flag:	N	FAA Study No.:	2011-ASO-1270-OE
Specification Option:	FAA CHAPTERS	FAA Emissions Flag:	N
Painting and Lighting:	4, 8, 13		

Application Purpose: ADMINISTRATIVE UPDATE

Coordinates:

Coordinate Type **Latitude (NAD 27, N)** **Longitude (NAD 27, N)** **Latitude (NAD 83, N)** **Longitude (NAD 83, N)**

TOWER	037-37-04.1	084-33-48	37-37-04.4	084-33-47.8
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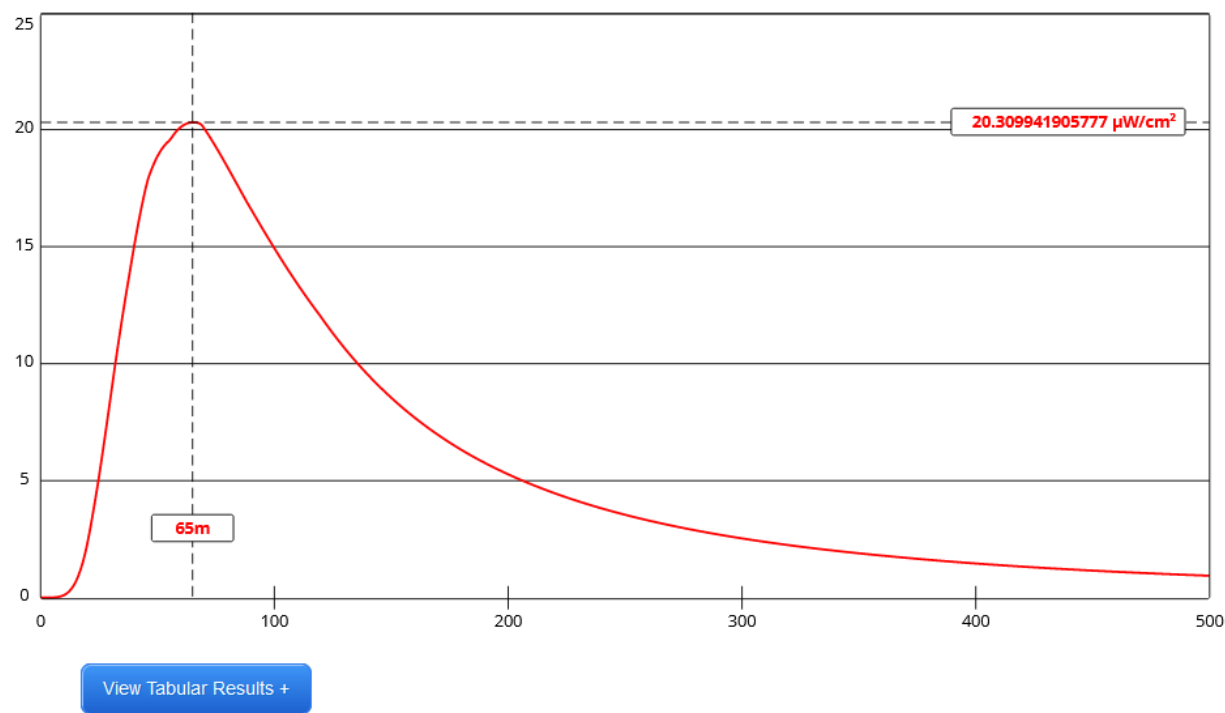
Entities:

Entity Type:	REPRESENTATIVE	Entity Name:	Crown Castle
Name:		Attention:	
Street:	2000 Corporate Drive	P.O. Box:	
City:	Canonsburg	State:	PA Zip: 15317
Licensee ID:		Phone Number:	(724) 416-2470
Entity Type:	OWNER	Entity Name:	Crown Communications LLC
Name:		Attention:	
Street:	2000 Corporate Drive	P.O. Box:	
City:	Canonsburg	State:	PA Zip: 15317
Licensee ID:	L00004843	Phone Number:	(724) 416-2000

Presumed WKFC Operation
 RCAGL 127 m
 RCAMSL 443 m
 HAAT 160 m
 ERP 2.4 kW (Equivalent Maximum Class A)

Figure 12

Output of FCC's FM Model Program:



Channel Selection	Channel 270 (102.9 MHz) ▾		
Antenna Type +	EPA Type 3: Opposed U Dipole ▾		
Height (m)	<input type="text" value="34"/>	Distance (m)	<input type="text" value="500"/>
ERP-H (W)	<input type="text" value="3500"/>	ERP-V (W)	<input type="text" value="3500"/>
Num of Elements	<input type="text" value="2"/>	Element Spacing (λ)	<input type="text" value="0.5"/>
Num of Points	<input type="text" value="500"/>	<input type="button" value="Apply"/>	

