

TECHNICAL EXHIBIT  
CHANGE OF PRINCIPAL COMMUNITY

KIYS (FM)

JONESBORO, ARKANSAS  
CRAWFORDSVILLE, ARKANSAS

Technical Narrative

This technical narrative and accompanying Figures have been prepared on behalf of station KIYS (FM), Jonesboro, Arkansas, Facility ID No. 54566, in support of a minor change application to specify operations on channel 270C2 at Crawfordsville, Arkansas, in lieu of channel 270C at Jonesboro, Arkansas.

As the requested change is mutually exclusive with the Station's current allotment, this modification is appropriately requested on a minor modification application. See 47 C.F.R. Sections 73.203(a), 73.3573(a)(i) and 73.3573(g).

The following is a summary of the merits of this proposal:

- The community of Crawfordsville, Arkansas (2000 Census population 514 persons) would be provided with its first local aural transmission service.
- The community of Jonesboro, Arkansas (2000 Census population 55,515 persons) would continue to have local aural transmission service from: KAOG (FM), KASU (FM), KBTM (AM), KEGI (FM), KFIN (FM), and KNEA (AM).
- The proposed channel 270C2 allotment site at Crawfordsville, Arkansas satisfies the Commission's allocations spacing rules for a fully spaced, full 50 kilowatt ("kW") Class C2 facility.<sup>1</sup>

---

<sup>1</sup> The proposed allotment reference coordinates are 35° 21' 53.0" North, 90° 08' 25.0" West. See this Exhibit under the heading "Compliance With FCC Rules" for details on allocations considerations with respect to

- The 60 dBu service area associated with the proposed operation of KIYS(FM) on channel 270C2 at Crawfordsville, Arkansas would encompass 1,077,937 persons, while the current 60 dBu service area encompasses 303,983 persons, for a net gain of 855,239 additional persons served within the KIYS(FM) 60 dBu service contour.
- The channel 270C at Jonesboro, Arkansas 60 dBu loss area is well served by a number of radio services.<sup>2</sup>

*Table of Figures Accompanying this Exhibit*

Figure 1	KIYS(FM) Channel 270C2 Allocations Spacing Study at Allocations Site
Figure 2	KIYS(FM) 60 dBu Gain and Loss Areas
Figure 3	Tabulation of Services to KIYS(FM) 60 dBu Loss Area
Figure 4	Map of Services to KIYS(FM) 60 dBu Loss Area
Figure 5	KIYS(FM) Present and Proposed 70 dBu Service
Figure 6	Map of Protected Service to Proposed Community of License
Figure 7	Table of Protected Service to Proposed Community of License

---

this site. Also see *Figure 1* accompanying this Exhibit for the allocations spacing study.

<sup>2</sup> See Figures 3 and 4.

### Proposed Change

Jonesboro is located in Craighead County, Arkansas, and has a 2000 U.S. Census population of 55,515 persons. Jonesboro would continue to be served by local aural transmission services, specifically, KAOG(FM), KASU(FM), KBTM(AM), KEGI(FM), KFIN(FM) and KNEA(AM).

Crawfordsville is located in Crittenden County, Arkansas, and has a 2000 U.S. Census population of 514 persons. Crawfordsville has no local FM or AM aural transmission service and, therefore, this proposal would bring a first local aural transmission service to Crawfordsville.

### Compliance With FCC Rules

The attached *Figure 1* is a tabulation of required separations pertinent to use of channel 270C2 at Crawfordsville, Arkansas. The allotment reference site complies with the Commission's minimum distance separations contained in Section 73.207 of the FCC's rules to all existing, authorized and proposed stations and allotments as a full 50 kW Class C2 allotment, except for KIYS(FM)'s existing channel 270C operation at Jonesboro, Arkansas, for which this proposal is a mutually exclusive substitute.

Operation from the channel 270C2 reference site would provide the requisite community grade (70 dBu) signal to all of Crawfordsville.<sup>3</sup> *Figure 5* is a map which depicts the community grade coverage (70 dBu) contour based on maximum class C2 facilities (ERP 50 kW/HAAT 150 meters) at the proposed allotment site. As shown, all (100%) of Crawfordsville is located within the predicted 70 dBu community grade contour.

---

<sup>3</sup> See Figure 5 herein.

### Proposed 60 dbu Area

There would be 1,077,937 persons residing within the proposed KIYS(FM) 60 dBu contour as calculated from the proposed allotment reference site and based on maximum Class C2 facilities; the area within KIYS(FM)'s proposed 60 dBu contour would be 8,484 square kilometers.

### Proposed 70 dbu Area

There would be 426,731 persons residing within the proposed KIYS(FM)'s 70 dBu contour as calculated from the proposed allotment reference site and based on maximum Class A facilities; the area within KIYS(FM)'s proposed 70 dBu contour would be 3213 square kilometers.

### 60 dbu Gain and Loss Areas

There are currently 303,983 persons residing within the KIYS(FM) 60 dBu contour. There will be 1,077,937 persons residing within the proposed KIYS(FM) 60 dBu contour; 222,698 persons currently residing within the KIYS(FM) 60 dBu contour would continue to receive service under this proposal; 81,285 persons would lose service; and 855,239 persons would gain new 60 dBu service as a result of the proposed operation at Crawfordsville, for a net aggregate gain of 777,954 persons. See *Figure 2*.

The 60 dBu loss area related to the modification of KIYS(FM) to Crawfordsville is well served by many aural services. See *Figures 3 and 4*.

### Urbanized Area Considerations

The proposed channel 270C2 70 dBu contour would encompass 89% of the population and 98% of the area of the Memphis, Tennessee Urbanized Area.

### Coverage Contours

The FM predicted coverage contours were calculated in accordance with the provisions of 47 C.F.R. Section 73.313, except that, in accordance with current FCC practice,

uniform terrain was assumed in all directions. The AM predicted coverage contours were calculated in accordance with the provisions of 47 C.F.R. Section 73.182.

### Population and Area

The population within the FM service contour (1 mV/m or 60 dBu) was calculated using a computer program that utilizes the 2000 U.S. Census database of "population centroids". The program adds the populations of those U.S. Census designated areas whose centroid lies within each service area.

### Protected Service to Proposed Community of License

Crawfordsville, Arkansas, the proposed community of license, currently receives protected aural service from 29 radio stations, as shown in *Figures 6 and 7* (counting those stations which provide protected service to at least 80 percent of the area of the community of license).

### Conclusion

KIYS(FM) can be modified from operation on channel 270C at Jonesboro, Arkansas, to operation on channel 270C2 at Crawfordsville, Arkansas, in compliance with all applicable Commission rules. The community of Crawfordsville, Arkansas would be provided with a first local aural transmission service, and the community of Jonesboro, Arkansas would continue to have local aural transmission services. No service would be lost in any underserved area<sup>4</sup> and no new underserved areas would be created as a result of this proposal. Therefore, the licensee requests the issuance of a construction permit for the minor modification of KIYS(FM) to specify operations on channel 270C2 at Crawfordsville, Arkansas.

---

<sup>4</sup> Defined as an area receiving service from less than five aural broadcast services. In the case of this proposal, the 60 dBu loss areas will continue to receive 60 dBu service from multiple sources, local and distant. See *Figures 3 and 4*.

Respectfully submitted,

Troy G. Langham  
FCC Engineering Supervisor  
July 5, 2007

Figure 1

Spacing Study at Allocation Site

ComStudy 2.2 search of channel 270 (101.9 MHz Class C2) at 35-21-53.0 N, 90-08-25.0 W.

Callsign	State	City	Freq	Channel	ERP_w	Class	Status	Dist_km	Sep	Clr
KIYS	AR	JONESBORO	101.9	270	100000	C	LIC	82.42	249	-166.6
WFTA	MS	FULTON	101.9	270	50000	C2	LIC	190.74	190	0.7
KTRQ	AR	COLT	102.3	272	50000	C2	APP	58.38	58	0.4
KTRQ	AR	COLT	102.3	272	40000	C2	LIC	64.81	58	6.8
WZYQ	MS	MOUND BAYOU	101.9	270	6000	A	LIC	172.67	166	6.7
KBUD	MS	SARDIS	102.1	271	4000	A	LIC	114.96	106	9
WKNO-FM	TN	MEMPHIS	91.1	216	100000	C1	LIC	37.23	27	10.2

Figure 2  
60 dBu Gain Loss Areas

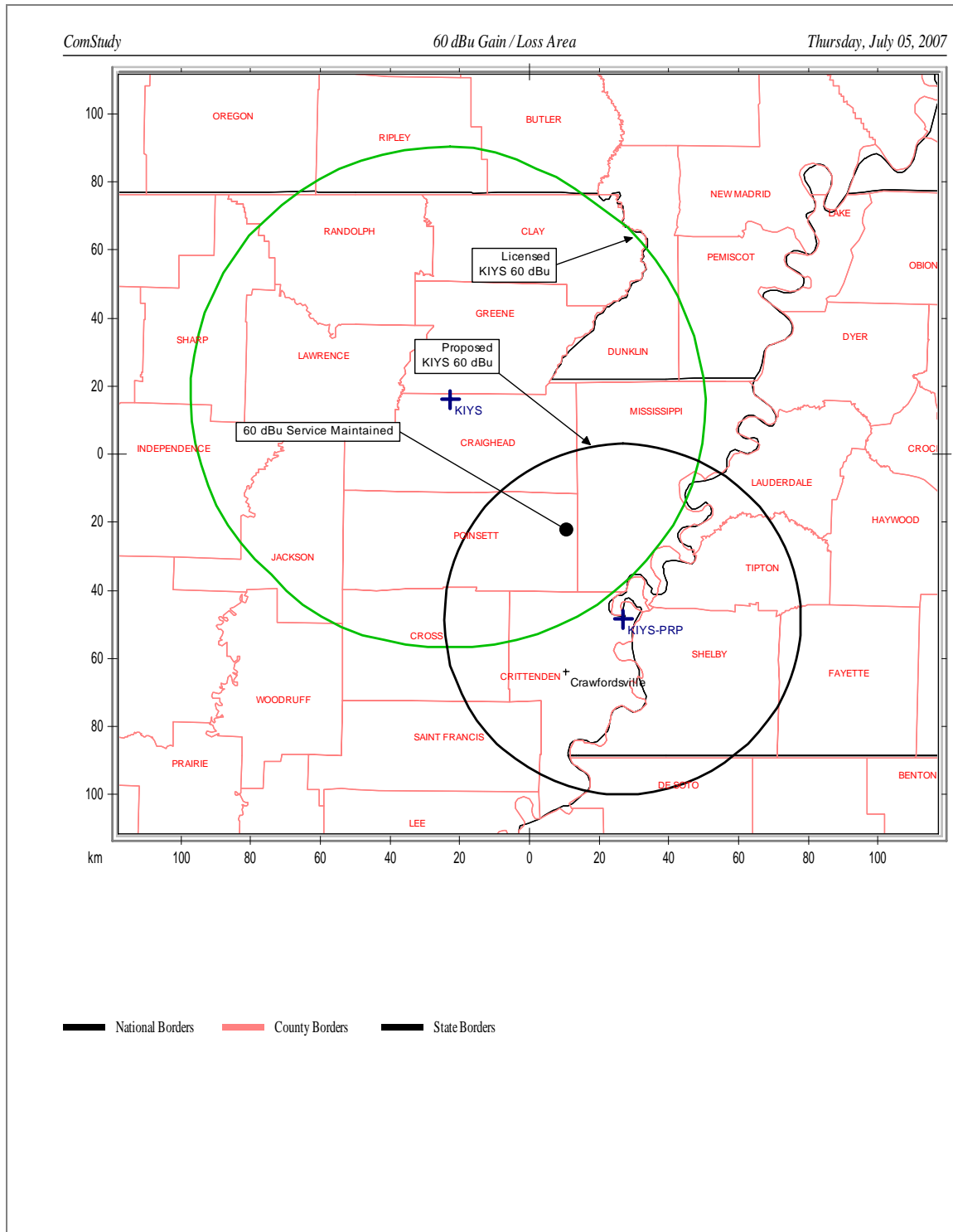




Figure 3  
Tabulation of Services to Loss Area

Call Sign	State	City	Freq
KAAB	AR	BATESVILLE	1130
KAHR	MO	POPLAR BLUFF	96.7
KAIA	AR	BLYTHEVILLE	91.5
KAMJ	AR	GOSNELL	93.9
KAOG	AR	JONESBORO	90.5
KARH	AR	FORREST CITY	88.1
KASU	AR	JONESBORO	91.9
KAUF	MO	KENNETT	89.9
KBCM	AR	BLYTHEVILLE	88.3
KBKG	AR	CORNING	93.5
KBOA	MO	KENNETT	1540
KBOA-FM	AR	PIGGOTT	105.5
KBTA	AR	BATESVILLE	1340
KBTA-FM	AR	BATESVILLE	99.5
KBTM	AR	JONESBORO	1230
KCCB	AR	CORNING	1260
KCJF	AR	EARLE	103.9
KDFN	MO	DONIPHAN	1500
KDRS	AR	PARAGOULD	1490
KDRS-FM	AR	PARAGOULD	107.1
KDXY	AR	LAKE CITY	104.9
KEGI	AR	JONESBORO	100.5
		CHEROKEE	
KFCM	AR	VILLAGE	98.3
KFIN	AR	JONESBORO	107.9
KHLS	AR	BLYTHEVILLE	96.3
KJBX	AR	TRUMANN	106.7
KJLV	AR	HOXIE	105.3
KKLR-FM	MO	POPLAR BLUFF	94.5
KLCN	AR	BLYTHEVILLE	910
KLLN	AR	NEWARK	90.9
KLUH	MO	POPLAR BLUFF	90.3
KMAL	MO	MALDEN	1470
KNBY	AR	NEWPORT	1280
KNEA	AR	JONESBORO	970
KOEA	MO	DONIPHAN	97.5
KOKR	AR	NEWPORT	96.7
KOOU	AR	HARDY	104.7
KOSE	AR	WILSON	860
KOTC	MO	KENNETT	830
KPOC	AR	POCAHONTAS	1420
KPOC-FM	AR	POCAHONTAS	104.1
KRLW	AR	WALNUT RIDGE	1320
KRLW-FM	AR	WALNUT RIDGE	106.3
KSAR	MO	THAYER	92.3

Call Sign	State	City	Freq
KVMN	AR	CAVE CITY	89.9
KWHF	AR	HARRISBURG	95.9
KWOC	MO	POPLAR BLUFF	930
KWYN	AR	WYNNE	1400
KXOQ	MO	KENNETT	104.3
KZMA	MO	NAYLOR	99.9
WYPL	TN	MEMPHIS	89.3

Figure 4  
Map of Services to Loss Area

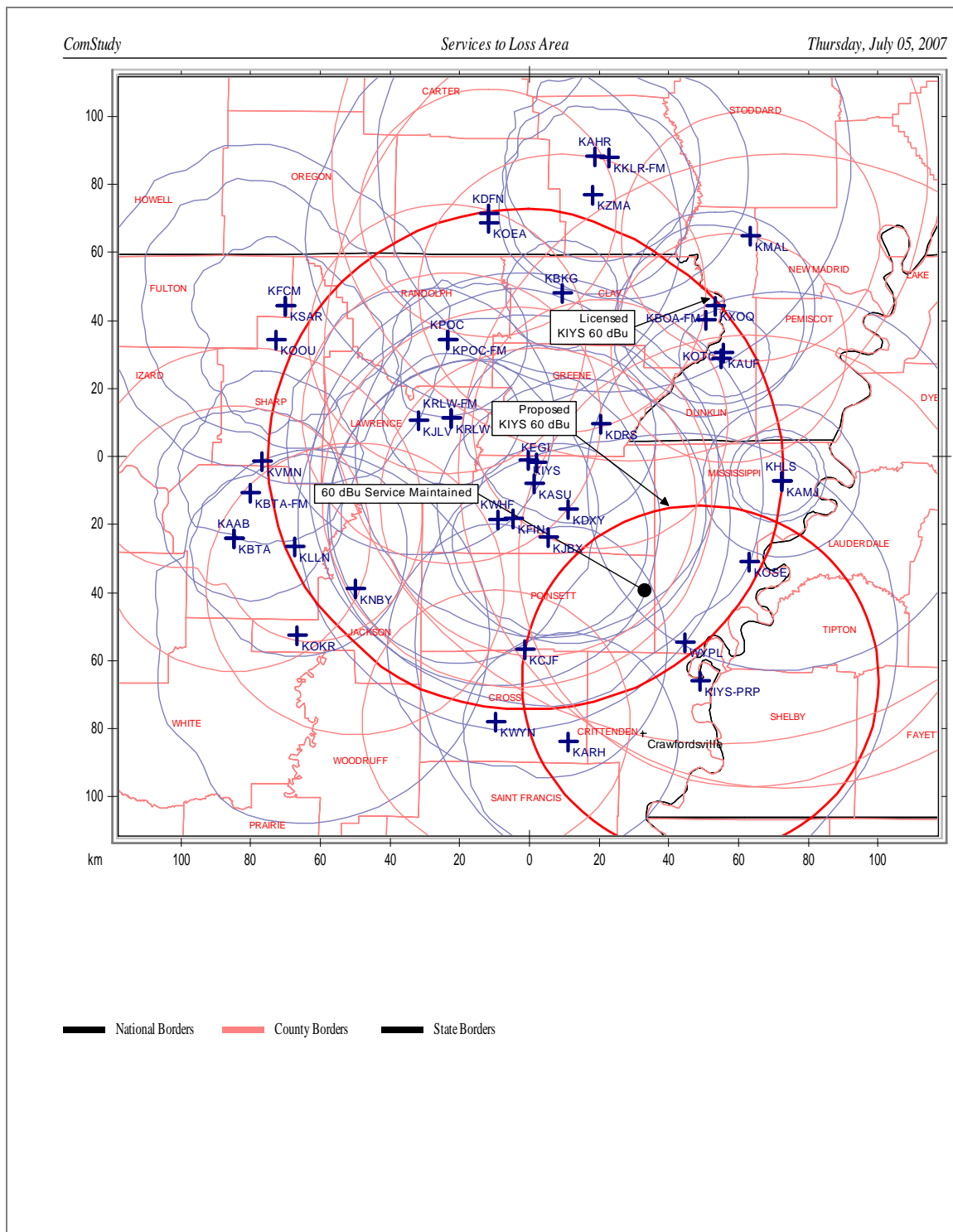


Figure 5  
Present and Proposed 70 dBu Service

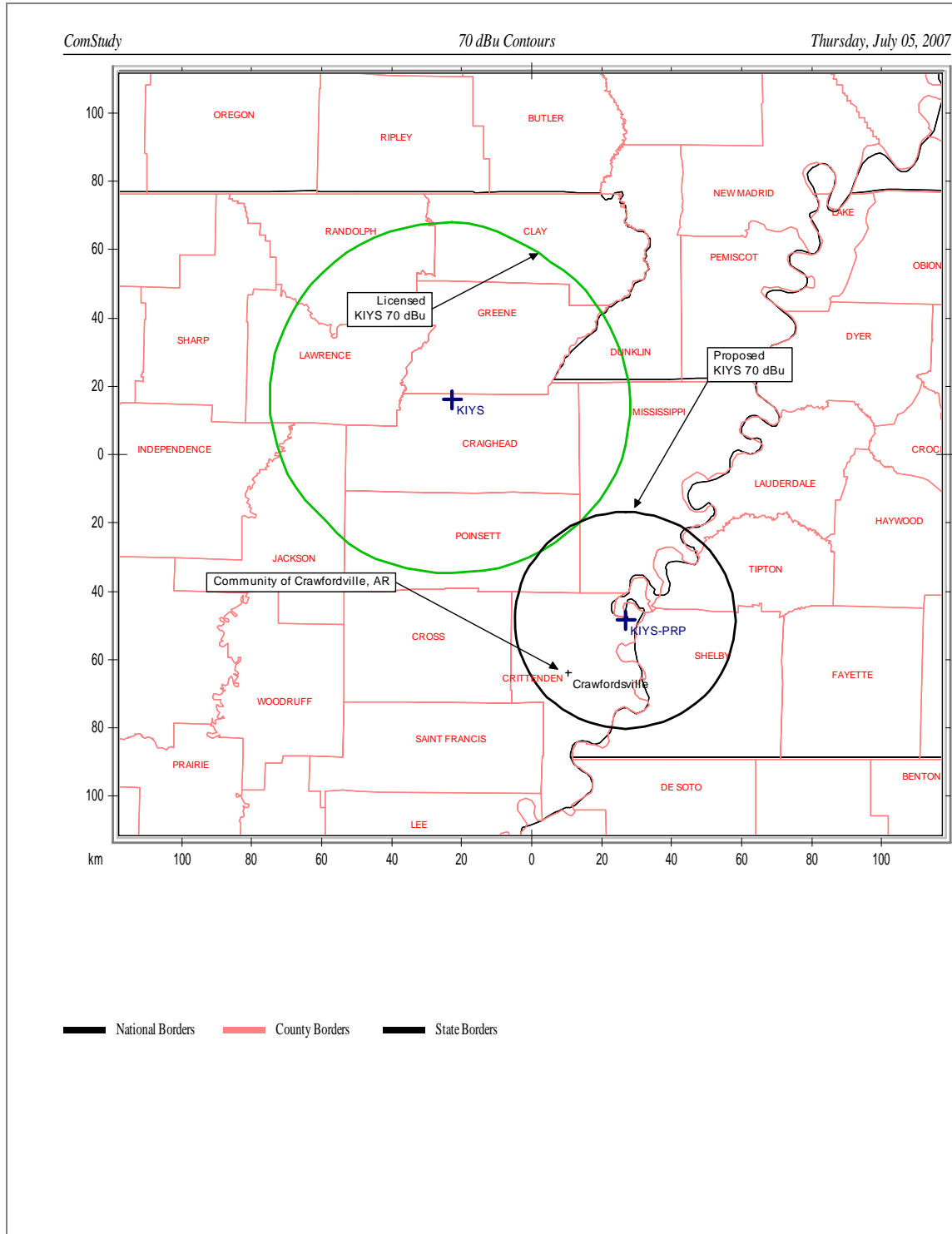


Figure 6

Map of Protected Service to Proposed Community of License

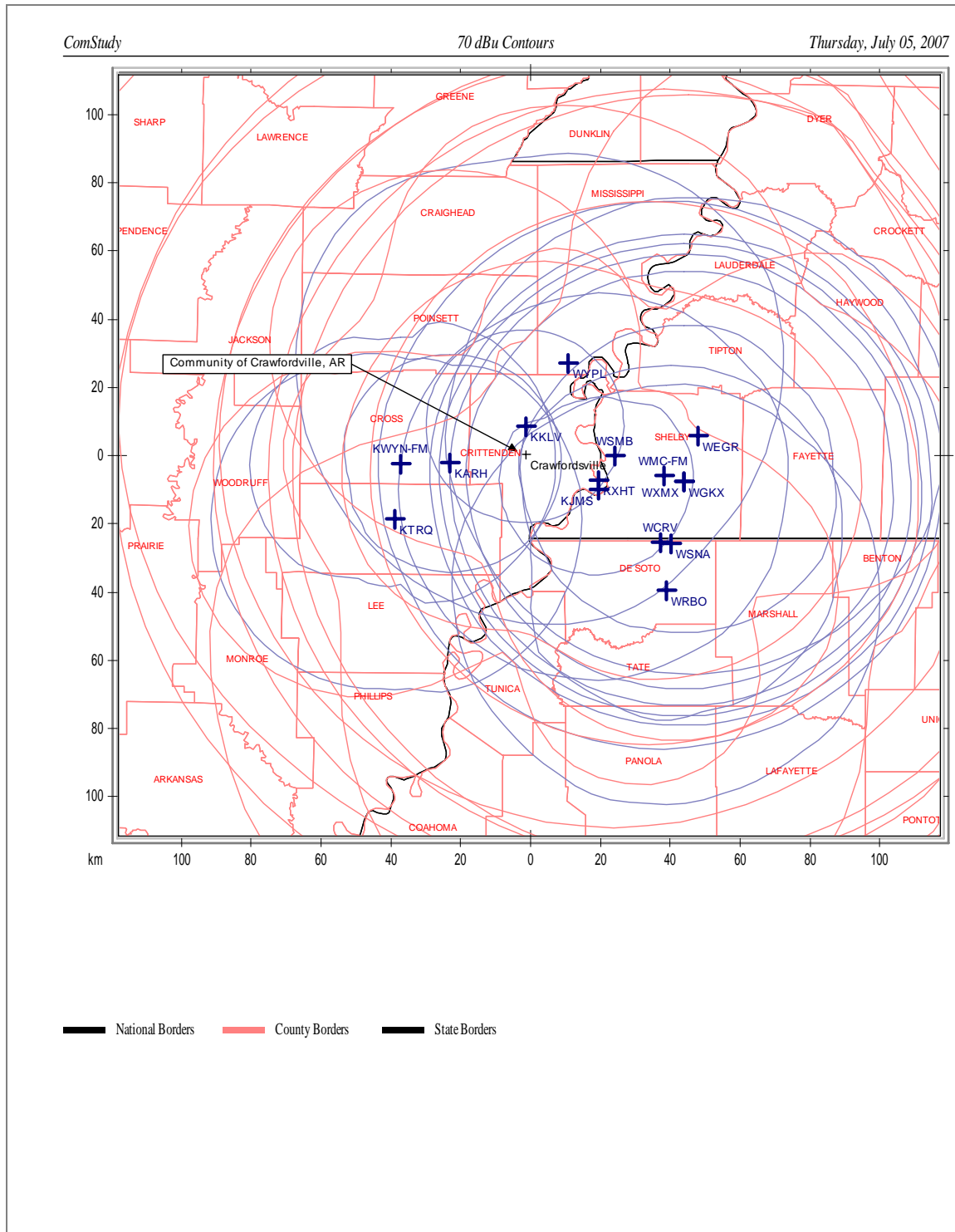


Figure 7

Table of Protected Service to Proposed Community of License

Call Sign	State	City	Freq
KXHT	AR	MARION	107.1
KTRQ	AR	COLT	102.3
KKLV	AR	TURRELL	94.7
		OLIVE	
KJMS	MS	BRANCH	101.1
KARH	AR	FORREST CITY	88.1
WYPL	TN	MEMPHIS	89.3
KWYN-FM	AR	WYNNE	92.5
WSNA	TN	GERMANTOWN	94.1
WRBO	MS	COMO	103.5
WQOX	TN	MEMPHIS	88.5
WEGR	TN	ARLINGTON	102.7
WRVR	TN	MEMPHIS	104.5
WGKX	TN	MEMPHIS	105.9
WMC-FM	TN	MEMPHIS	99.7
WKNO-FM	TN	MEMPHIS	91.1
WXMX	TN	MILLINGTON	98.1
KWAM	TN	MEMPHIS	990
WSMB	TN	MEMPHIS	680
KOTC	MO	KENNETT	830
WHBQ	TN	MEMPHIS	560
WREC	TN	MEMPHIS	600
WPLX	TN	GERMANTOWN	1180
		WEST	
KQPN	AR	MEMPHIS	730
WDIA	TN	MEMPHIS	1070
WCRV	TN	COLLIERVILLE	640
KOTC	MO	KENNETT	830
WMC	TN	MEMPHIS	790
WMQM	TN	LAKELAND	1600
WGSF	TN	MEMPHIS	1030