

WKBR-FM
BNPED-20071015AKQ
Summerville, South Carolina
Application for Modified Facilities for Noncommercial FM Station
On Channel 205 Class C1
by
Spirit Broadcasting Group, Inc.

Exhibit 25
Community of License Change

March 2013

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Declaration

I declare, under penalty of perjury, that I am a technical consultant to broadcasting and other communications systems, that I have over twenty-five years of experience in the engineering of broadcast and other communications systems, that I am familiar with the Federal Communications Commission's Rules found in the Code of Federal Regulations Title 47, that I am a Professional Engineer registered in North Carolina, that I have prepared or supervised the preparation of the attached Exhibit 25, Community of License Change, for Spirit Broadcasting Group, Inc., and that all of the facts therein, except for facts of which the Federal Communications Commission may take official notice, are true to the best of my knowledge and belief.



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30 March 2013

Narrative

This Exhibit provides details of the change of community for the proposed modified facilities of WKBR-FM, at Summerville, South Carolina. The authorization file number is BNPED-20071015AKQ, currently at Branchville, South Carolina.

The changes are a new site, increased height, increased effective radiated power, and a new directional antenna pattern. This application is being filed in coordination with a modification application for new station WAGP, Beaufort, South Carolina. The licensee of WAGP, Community Broadcasting Corp. of Beaufort, Inc., has prepared a minor modification application. This WKBR-FM application is contingent upon the grant of the WAGP modification.

Figure 1 shows the WKBR-FM Construction Permit and Proposed 60 dBu F(50,50) contours with the areas of gain and loss highlighted. Figure 2 shows the proposed 60 dBu F(50,50) contour with the city limits of Summerville, South Carolina, and the urbanized area for Charleston-North Charleston, SC, and other urbanized clusters.

Figure 2 also shows the 60 dBu F(50,50) contour of second adjacent station WSCI, Charleston, South Carolina, and the proposed WKBR-FM 100 dBu F(50,10) interference contour. The requirement to protect the WSCI 60 dBu contour prevents WKBR-FM from moving closer to the Charleston-North Charleston Urbanized Area. There is no site from which WKBR-FM could serve more than 50% of the Charleston-North Charleston Urbanized Area.

Preferential Arrangement of Allotments

This application proposes changing the community of license for WKBR-FM under priority 4, other public interest matters.

WKBR-FM is an unbuilt authorization for Branchville, South Carolina. This application proposes modifying the authorization to specify Summerville, South Carolina. Branchville is a community in Orangeburg County, South Carolina, with a Census 2010 population of 1,024 persons. Summerville is a community primarily in Dorchester County, South Carolina, with small portions in Berkeley and Charleston Counties, and a Census 2010 population of 43,392.

Branchville has one (1) licensed local origination radio station, WGFG (FM). Summerville has one (1) full time local origination radio station, WWWZ (FM), and one (1) daytime AM radio station, WAZS (AM). Because WKBR-FM is an as-yet unbuilt construction permit, the loss area is a loss of potential service, not existing service. Population and area gains and losses are tabulated below:

	Census 2010 Population	Area (sq. km.)
Construction Permit	44,424	2,852
Proposed	197,366	4,641
Loss area	636	46
Gain area	153,578	1,835

As detailed below, this proposal, if granted, will provide fourth aural service to a population of 1,129 persons in an area of 90.05 square kilometers and fifth aural service to a population of 5,625 persons in an area of 106.07 square kilometers. Additionally, this proposal adds service number 6-15 to 12,765 persons in 606 square kilometers, service number 16 to 20 to 107,007 persons in 960 square kilometers, and service 21-23 to 27,052 persons in 73 square kilometers.

This proposal serves the public interest by providing service to 153,578 persons, while removing service from only 636 persons. In addition, it provides a fourth aural service to 1,129 persons and a fifth aural service to 5,625 persons, while creating no underserved areas.

Loss Area is Well Served

The entire loss area is well served. Figure 3 shows the authorized and proposed 60 dBu F(50,50) contours with other services in the area. FM facilities are plotted with solid lines. AM 2 mV/m contours are plotted with dashed lines. In the loss area, the minimum number of existing services is 8. No new underserved areas are created.

Gain Area Includes Area Not Well Served

Figure 4 shows the gain area with other services considered. Figure 5 is a detail view of the loss area in the region with the fewest protected services. The areas with six (6) or fewer existing services are identified with the number of services. In all areas with five (5) or fewer services, a letter code is shown followed by the number of services. Those codes, with population and area, are tabulated below. In each case, the services are counted in the absence of WKBR-FM.

Map Code	Number of Services	Population	Area (sq. km.)
A	5	125	10.37
B	5	195	27.13
C	4	124	12.58
D	3	502	56.81
E	4	579	48.35
F	3	627	33.24
G	4	4,922	45.14

H	5	3,843	42.32
Summary			
D, F	3	1,129	90.05
C, E, G	4	5,625	106.07
A, B, H	5	4,163	79.82

Areas D and F correspond to a population of 1,129 persons in an area of 90.05 square kilometers who are predicted to receive a fourth aural protected service. Areas C, E and G correspond to a population of 5,625 persons in an area of 106.07 square kilometers who are predicted to receive a fifth aural protected service.

List of Stations Considered

The following facilities were considered in determining the number of services in the loss and gain areas.

Call Sign	Lic	Chan.	Svc	Cls	City	ST	DA	Power
WKBR-FM.C	CP	205	M	C3	Branchville	SC	Yes	18.0
WKBRmod	APP	205	M	C1	Branchville	SC	Yes	70.0
WALI	LIC	229	M	A	Walterboro	SC	No	6.0
WJNI	LIC	292	M	A	Ladson	SC	Yes	6.0
WQKI-FM	LIC	275	M	A	Orangeburg	SC	No	3.1
WSPX	LIC	233	M	A	Bowman	SC	No	3.5
WWOS	LIC	220	M	A	St. George	SC	No	6.0
WTUA.C	CP	290	M	A	Pinopolis	SC	No	6.0
WBHC-FM	LIC	221	M	A	Hampton	SC	No	6.0
WALC	LIC	263	M	C3	Charleston	SC	Yes	13.5
WBAW-FM	LIC	256	M	C3	Barnwell	SC	No	25.0
WGFG	LIC	287	M	C3	Branchville	SC	Yes	12.5
WHXT	LIC	280	M	C3	Orangeburg	SC	No	9.2
WLJI	LIC	252	M	C3	Summerton	SC	No	16.0
WMGL	LIC	297	M	C3	Ravenel	SC	No	16.5
WORG	LIC	262	M	C3	Elloree	SC	No	25.0
WSCC-FM	LIC	232	M	C3	Goose Creek	SC	No	25.0
WAYA-FM.C	CP	265	M	C3	Ridgeville	SC	No	25.0
WCOO	LIC	288	M	C2	Kiawah Island	SC	No	50.0
WFCH	LIC	203	M	C2	Charleston	SC	No	29.5
WIIZ	LIC	250	M	C2	Blackville	SC	No	50.0
WMXZ	LIC	240	M	C2	Isle Of Palms	SC	No	50.0
WNKT	LIC	298	M	C2	Eastover	SC	No	40.0
WWWZ	LIC	227	M	C2	Summerville	SC	No	50.0
WYBB	LIC	251	M	C2	Folly Beach	SC	No	50.0
WYFH	LIC	214	M	C2	North Charleston	SC	Yes	50.0
WAVF	LIC	269	M	C1	Hanahan	SC	No	100.0

WCKN	LIC	223	M	C1	Moncks Corner	SC	No	100.0
WEZL	LIC	278	M	C1	Charleston	SC	No	100.0
WJWJ-FM	LIC	210	M	C1	Beaufort	SC	No	48.0
WKCL	LIC	218	M	C1	Ladson	SC	No	100.0
WRFQ	LIC	283	M	C1	Mount Pleasant	SC	No	100.0
WSSB-FM	LIC	212	M	C1	Orangeburg	SC	Yes	80.0
WTCB	LIC	294	M	C1	Orangeburg	SC	Yes	100.0
WXLY	LIC	273	M	C1	North Charleston	SC	No	100.0
WXST	LIC	259	M	C1	Hollywood	SC	No	70.0
WSSX-FM	LIC	236	M	C0	Charleston	SC	No	100.0
WIWF	LIC	245	M	C	Charleston	SC	Yes	100.0
WRJA-FM	LIC	201	M	C	Sumter	SC	No	100.0
WSCI	LIC	207	M	C	Charleston	SC	Yes	100.0
WWDW	LIC	267	M	C	Sumter	SC	Yes	100.0
WQIZ (AM)		810		D	ST. GEORGE	SC	No	5.0
WVCD (AM)		790		D	BAMBERG-DENMARK	SC	No	1.0
WPOG (AM)		710		D	ST. MATTHEWS	SC	Yes	1.0
WHGS (AM)		1270		B	HAMPTON	SC	No	10.0
WLTQ (AM)		730		D	CHARLESTON	SC	No	5.0

As required in the Second Order in the Rural Radio docket¹, all FM facilities are studied using protected service contours with actual constructed facilities or authorized construction permit facilities, and AM facilities are plotted using the 2 mV/m daytime contour.

Source of Data

Transmitter location, effective radiated power, directional antenna pattern, and elevation data are extracted from the Commission's CDBS. All contours for existing and proposed facilities are calculated using height above average terrain calculated at one degree horizontal increments. Terrain data is extracted from the USGS 3 arcsecond terrain database.

Population data is from 2010 U.S. Census PL data files. Population is counted by considering the location of the centroid of each census block. The data for each block is counted if it falls within the area being counted.

¹¹ See *Second Order on reconsideration, In the Matter of Policies to Promote Rural Radio Service and to Streamline Allotment and Assignment Procedures*, FCC 12-127, released October 12, 2012.









