WACG-FM CHANNEL 214 (90.7 MHz)
CLASS C2 MINOR MODIFICATION OF
CONSTRUCTION PERMIT APPLICATION
AUGUSTA, GEORGIA
(GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION)

KESSLER AND GEHMAN ASSOCIATES, INC.
TELECOMMUNICATIONS CONSULTING ENGINEERS

20070625

Prepared by William T. Godfrey, Jr.

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ENGINEERING TECHNICAL STATEMENT PREPARED BY WILLIAM T. GODFREY, JR. OF THE FIRM KESSLER AND GEHMAN ASSOCIATES, INC., TELECOMMUNICATIONS CONSULTING ENGINEERS IN CONNECTION WITH A MINOR MODIFICATION APPLICATION TO MAKE CHANGES TO THE GEORGIA PUBLIC TELECOMMUNICATIONS COMMISSION (GPTC) CONSTRUCTION PERMIT (BPED-20051014AAE) FOR THE WACG-FM CHANNEL 214 C2, AUGUSTA, GEORGIA NON-COMMERCIAL EDUCATIONAL FM BROADCAST FACILITY.

The firm Kessler and Gehman Associates, Inc., has been retained by the Georgia Public Telecommunications Commission (GPTC), Atlanta, Georgia, in order to prepare engineering studies and the engineering portion of a minor modification of construction permit application for the authorized WACG-FM Channel 214 C2 FM broadcast facility (BPED-20051014AAE) requesting authorization to make changes to the following: 1) transmitter site; 2) effective radiated power (ERP); 3) antenna height radiation center; and 4) polarization.

Discussion

GPTC is licensed to operate WACG-FM Channel 214 C2 (BLED19890911KC) with an effective radiated power (ERP) of 25 kW (horizontal and vertical polarization) at an antenna height radiation center of 83 meters above ground level (AGL) using a nondirectional, side-mounted Jampro antenna. GPTC also has a construction permit (CP) to operate using the former WJBF-TV Channel 6 General Electric model TY-60-F batwing antenna, which is top-mounted on the same tower as the licensed WACG-FM Jampro antenna, using horizontal-only polarization. The licensee of the WJBF-TV Channel 6 facility is Media General Broadcasting of South Carolina Holdings, Inc. (Media General). GPTC is the licensee of fifteen full-service FM stations and of those, the following are authorized to be collocated with GPTC full-service television stations on GPTC-owned towers: 1) WJSP-FM on WJSP-TV tower; WMUM-FM on WMUM-TV tower; WSVH-FM on WVAN-TV tower; and WXVS-FM on WXGA-TV tower. GPTC proposes to do the same thing with its WACG-FM facility by moving it approximately 44 km SW to its WCES-TV tower. The Media General tower is located in SC and over 50% of the WACG-FM coverage

is in SC. Moving WACG-FM to the WCES-TV tower would serve the public's best interest by 1) eliminating a huge monthly fee paid to Media General by tax dollars for leasing tower space on the Media General tower; 2) better serving the GA public by improving coverage in GA; 3) saving tax dollars by maintaining one engineer at the WCES site instead of possibly maintaining an engineer at the WCES site and another at the Media General site in SC; and 4) improving the response time if and when the facility must send its quick reaction team to fix problems causing outages.

According to the Power and Antenna Height Requirements depicted in §73.211 of the FCC rules, the proposed ERP of 5.6 kW would classify the proposed WACG-FM facility as a Class A station without taking the proposed antenna height above average terrain and the reference distance to contour; however, the proposed antenna height radiation center above average terrain is 429.4 meters. Therefore, in accordance with §73.211(b) of the FCC rules, the proposed WACG-FM station would be a Class C2 facility based on the fact that the distance to the reference contour in all azimuthal directions would be greater than 39 km and would not exceed 52 km.

Attached Figures

The following list is an index of enclosed figures produced by calculations and engineering studies of the proposed WACG-FM Channel 214 C2 facility.

1) Proposed Engineering Specifications (Exhibit 1).
2) Antenna Data (Exhibit 2).
3) Support Structure Profile/Elevation View of Antenna System (Exhibit 3).
4) Antenna Vertical Pattern: 0° - 11° (Exhibit 4)
5) Antenna Vertical Pattern: 0° - 90° (Exhibit 5)
6) Antenna Vertical Pattern Tabulation (Exhibit 6)
7) USGS 7.5-minute topographic quadrangle map depicting the proposed transmitter location and coordinate lines (Exhibit 7).

8) Licensed WACG-FM 1 mV/m Contour (Black) vs. Proposed WACG-FM 1 mV/m Contour (Red) – Exhibit 8.
9) Proposed 1mV/m (60 dBuV/m) Predicted Contour and Radials, Proposed Transmitter Location, & Principal Community Boundary Depiction (Exhibit 9).
10) FM-to-FM Interference Studies (Exhibit 10).
11) FM Allocation Study - WPWB-FM (Exhibit 11)
12) FM Allocation Study - WMVV-FM (Exhibit 12)
13) FM Allocation Study – APP BNPED-20000207AAS (Exhibit 13)
14) FM Allocation Study - WUOG-FM (Exhibit 14)
15) TV Channel 6 Allocation Study (Exhibit 15)
16) Area Gained vs. Area Lost Contour Map (Exhibit 16)
17) Area in GA served by licensed WACG-FM facility (Exhibit 17)

Transmitter Location

The licensed WACG-FM facility is currently operating on a 1,292-foot, Media General support structure located in SC with its antenna side-mounted at a 272-foot AGL radiation center height. The proposed FM antenna would be side-mounted on the WCES-TV support structure and would have a 1,350-foot AGL radiation center height (Exhibit 3). The proposed tower is registered with the FCC and has a registration number of 1018796. The proposed antenna structure's address is 2316 Miller PL RD Wrens, GA.

Allocation Studies

The F(50,50) 60.0 dBuV/m protected service contours for the licensed (black) and proposed (red) WACG-FM facilities are depicted in Exhibit 8. It can be seen that the proposed facility would serve a much larger area of GA than the licensed facility.

The F(50,50) 60.0 dBuV/m protected service contour for the proposed WACG-FM facility is depicted in Exhibit 9. It can be seen that the proposed facility's F(50,50) 60.0 dBuV/m service

contour would completely encompass Augusta, GA in all azimuthal directions. Augusta, GA is the community of license for the WACG-FM station.

Exhibit 10 is an FM-to-FM interference study which verifies that the proposed WACG-FM (5.6 kW ERP) facility's F(50,10) interfering contours would not overlap any applicable station's F(50,50) 60.0 dBuV/m protected contours and that the proposed WACG-FM (5.6 kW ERP) facility's F(50,50) 60.0 dBuV/m protected contour would not be overlapped by any applicable station's F(50,10) interfering contours.

Exhibit 11 is a pictorial depiction of the contour relationship between the proposed WACG-FM facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 54.0 dBuV/m interfering (red) contours and the 1st-adjacent WPWB-FM facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 54.0 dBuV/m interfering (red) contours. It can be seen that unacceptable overlap would not exist between the two stations.

Exhibit 12 is a pictorial depiction of the contour relationship between the proposed WACG-FM facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 40.0 dBuV/m interfering (red) contours and the co-channel WMVV-FM facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 40.0 dBuV/m interfering (red) contours. It can be seen that unacceptable overlap would not exist between the two stations.

Exhibit 13 is a pictorial depiction of the contour relationship between the proposed WACG-FM facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 40.0 dBuV/m interfering (red) contours and the pending co-channel application facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 40.0 dBuV/m interfering (red) contours. It can be seen that unacceptable overlap would not exist between the two stations.

Exhibit 14 is a pictorial depiction of the contour relationship between the proposed WACG-FM facility's F(50,50) 60.0 dBuV/m protected (black) and F(50,10) 54.0 dBuV/m interfering (red) contours and the 1st adjacent WUOG-FM facility's F(50,50) 60.0 dBuV/m protected (black) and

F(50,10) 54.0 dBuV/m interfering (red) contours. It can be seen that unacceptable overlap would not exist between the two stations.

Exhibit 15 is a TV Channel 6 study depicting the WJBF-TV Channel 6 F(50,50) field strength contours and the associated F(50,10) interfering contours for the proposed WACG-FM facility. The green shaded region depicts the interference area within the WJBF-TV Channel 6 F(50,50) 47.0 dBuV/m field strength contour that is bounded by the locus of intersections of a series of TV Channel 6 field strength contours and the applicable interference contours from the proposed WACG-FM facility. An adjustment of 6 dB for television receiving antenna directivity was added to each applicable WACG-FM interfering contour at all points at and within the WJBF-TV Channel 6 F(50,50) 68.0 dBuV/m Grade A field strength contour over the range of angles from 70˚ clockwise to 110˚ and from 250˚ clockwise to 290˚ relative to the azimuth from the proposed WACG-FM transmitter site to the WJBF-TV Channel 6 transmitter site.

Section 73.525(e) of the FCC rules states that the maximum permissible vertically polarized ERP will be the maximum horizontally polarized ERP permissible at the same proposed antenna height, calculated without the adjustment for television receiving antenna directivity, multiplied by 40 if the predicted interference area lies entirely outside the limits of a city of 50,000 or more persons. Referring to Exhibit 15, it can be seen that the interference area would lie completely outside the limits of a city of 50,000 or more persons so a multiplier of 40 should be used. Referring to Exhibit 10, it can be seen that the maximum horizontally polarized ERP permissible calculated without the adjustment for television receiving antenna directivity is 5.6 kW. Therefore, the horizontal ERP used in the TV Channel 6 study depicted in Exhibit 15 is 0.14 kW which calculates correctly since the maximum vertical-only ERP is 0.14 kW x 40 which equals 5.6 kW (v-pol only).

Calculations depicted in TV Channel 6 study (Exhibit 15) demonstrate that the interference area predicted to exist from the proposed WACG-FM facility at the WCES transmitter site would encompass only 616 persons based on US Census 2000 data or 622 persons based on US Census 2004 Estimation Data. Since the proposed interference area would affect much less than 3,000 persons, it has been demonstrated that the WACG-FM facility could operate at the WCES site

with an ERP of 5.6 kW (v-pol only) at an antenna height radiation center of 411.5 meters AGL using a non-directional antenna.

Area and population Analysis

The population counts within the licensed and proposed 1 mV/m contours (60.0 dBuV/m) were determined using 2000 U.S. Census data. The area and population gain within the proposed WACG-FM 1 mV/m contour is predicted to be 5,238.87 sq km and 60,170 persons respectively. The area and population loss within the licensed WACG-FM 1 mV/m contour is predicted to be 2,279.54 sq km and 84,441 persons respectively. However, it is predicted that approximately 98.8% of the area/population loss would be in the state of SC. The area and population loss within the licensed WACG-FM 1 mV/m contour in the state of GA is predicted to be only 143.03 sq km and only 958 persons respectively. This represents a predicted area gain within the state of GA of approximately 5,095.84 sq km and a predicted population gain within the state of GA of approximately 59,212 persons (Exhibit 16). The percentage of increase in area within the state of GA (5,238.87/2,627.07) is predicted to be 199.4% and the percentage of increase in population within the state of GA (24,372/448,335) is predicted to be 19.9%.

Intermediate Frequency Interference (53rd & 54th Adjacent Channels)

The proposed WACG-FM site would meet all separation requirements pertaining to intermediate frequency ("IF") interference. The station with the narrowest gap with respect to distance from the proposed WACG-FM transmitter site is (214 + 53 = ***267*** & 214 + 54 = ***268***) the licensed WQIL-FM Channel 267 Class C2 facility located approximately 124.6 km from the proposed WACG-FM transmitter site in Chauncey, GA at North Latitude 32° 22' 59" and West Longitude 83° 07' 08" where a separation of 20 km is required; therefore, the distance is easily met with a margin of 104.6 km.

FM Blanketing Interference

Blanketing is defined as interference to the reception of other broadcast stations which is caused by the presence of an FM broadcast signal of 115 dBu (562 mV/m) or greater signal strength in the area adjacent to the antenna of the transmitting station. The 115 dBu contour is referred to as the blanketing contour and the area within this contour is referred to as the blanketing area. The proposed WACG-FM Channel 214 blanketing contour extends 0.93 km from its transmitter and it is understood that GPTC must assume full financial responsibility for remedying new complaints of blanketing interference for a period of one year to all broadcast stations within the proposed WACG-FM blanketing contour.

Environmental Impact

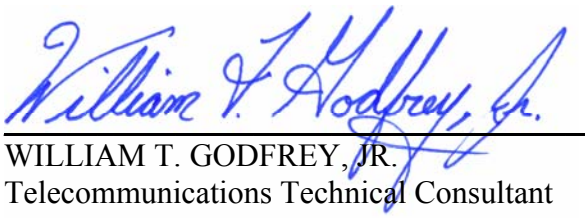
The proposed WACG-FM Channel 214 Class C2 facility would have no significant environmental impact as defined in §1.1307 of the FCC Rules. The FM transmitter, transmission line and antenna system would produce a maximum ERP of 5.6 kW (v-pol only). Assuming the maximum lobe of radiation were oriented toward the base of the tower, the proposed WACG-FM facility's power density six feet above the ground would be 0.001 mW/cm^2. That would only be 0.115% of the maximum permissible exposure (MPE) limits for Occupational/Controlled Exposure and only 0.577% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute (ANSI). The proposed WACG-FM facility would not be considered a "significant contributor" to the RF exposure environment pursuant to OET Bulletin 65, Edition 97-01 since the operation of the proposed facility would not exceed 5.0% of the MPE limit for Occupational/Controlled Exposure or General Population/Uncontrolled Exposure at any point on the ground. Therefore, contributions of exposure from other sources were not accounted for and not required in this analysis. It is safe to conclude that the emissions would be insignificant and well within the maximum allowable requirements.

If other antennas are placed on the tower in the future, the applicant will cooperate with those users by reducing or completely terminating the power to the antenna when maintenance workers are in danger from electromagnetic radiation emanating from the antenna.

Certification

This technical statement was prepared by William T. Godfrey, Jr., Telecommunications Technical Consultant with Kessler and Gehman Associates, Inc. having offices in Gainesville, Florida and has been working in the field of radio and television broadcast consulting since 1998. He graduated from the University of North Florida with a Bachelor of Arts degree in Criminal Justice and a minor in Mathematics in 1993. As a Professional in the field of Telecommunications he states under penalty of perjury that the information contained in this report is true and correct to the best of his knowledge and belief.

KESSLER AND GEHMAN ASSOCIATES, INC.



WILLIAM T. GODFREY, JR.
Telecommunications Technical Consultant 5 July, 2007

WACG-FM CHANNEL 214 CLASS C2

AUGUSTA, GEORGIA

ENGINEERING SPECIFICATIONS

A. Transmitter Site

Geographic coordinates (NAD27): **North Latitude** **33° 15' 33"**
West Longitude **82° 17' 09"**

Location: **2316 Miller PL RD**
Wrens, GA

B. Licensee

Mailing Address **260 14th Street N.W. Atlanta, Georgia 30318**

C. Proposed Facility

FM Channel
Number **214**
Frequency **91.1 MHz**
Class **C2**

D. Antenna Height

Height of Site Above Mean Sea Level (AMSL)	**132.5 M**
Overall Height of Structure Above Ground (including all appurtenances)	**446.0 M**
Overall Height of Structure Above Mean Sea Level (including all appurtenances)	**544.0 M**
Height of Site Above Average Terrain	**17.9 M**
Antenna Height Radiation Center (R/C) Above Ground	**411.5 M**
Antenna Height R/C Above Mean Sea Level	**544.0 M**
Antenna Height R/C Above Average Terrain	**429.4 M**
Average of All Non-Odd Radials	**114.6 M**

E. System Parameters –Vertical Polarization:

Transmitter Power Required	**2.5 kW**
Maximum Power Input to Antenna	**1.6 kW**
Transmission Line Loss	**1.88 dB**
Transmission Line Efficiency	**64.9%**
RMS Gain at Main Lobe	**5.31 dB**
RMS Gain at Horizontal	**5.31 dB**
Maximum Effective Radiated Power	**7.48 dBk**
In Beam Maximum	**5.6 kW**
Maximum Effective Radiated Power	**7.48 dBk**
In Horizontal Plane	**5.6 kW**

WACG-FM

Augusta, Georgia

DATA FOR PROPOSED NONDIRECTIONAL TRANSMITTING ANTENNA

A. ***Antenna:*** Dielectric Model THB-03-3M/9H-1-R FM Side-Mount Antenna.

B. ***Electrical Beam Tilt:*** None

C. ***Mechanical Beam Tilt:*** None

D.

RMS Gain	**Vertical Polarization**
Main Lobe:	3.4 (5.31 dB)
Horizontal:	3.4 (5.31 dB)

E. ***Length:*** 32.6 feet (9.9 meters) – without lightning protector

F. ***Transmitter Power Output (TPO):*** 2.5 kW

G. ***Transmission Line:*** 3" Flexible Line (50 ohm)

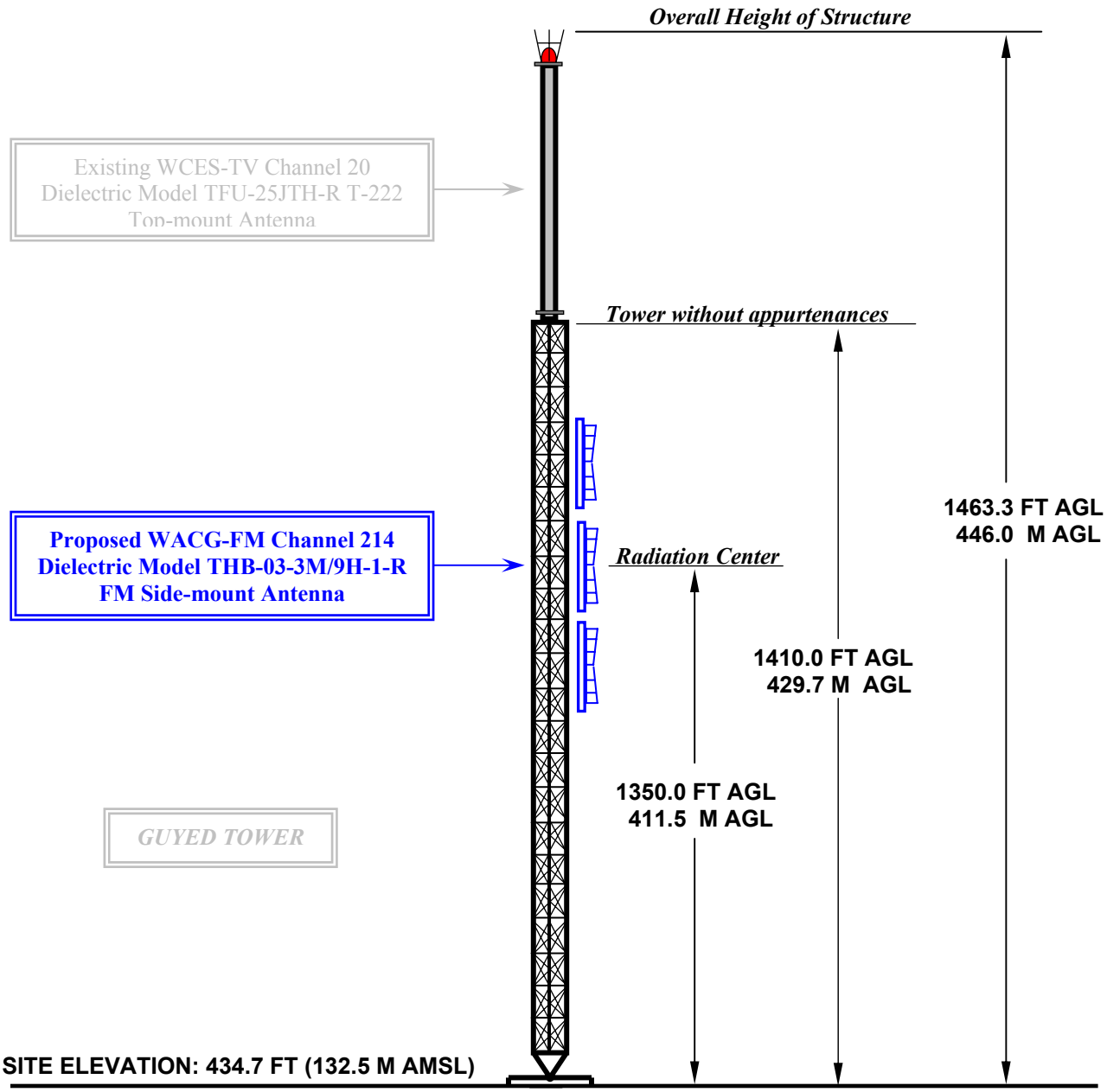
H. ***Transmission Line Efficiency:*** 64.9%

I. ***Transmission Line Length:*** 1,400 feet

J. ***Transmission Line Loss:*** 0.134 dB/100 ft

K. ***Transmission Line Attenuation:*** 1.88 dB

PROPOSED WACG-FM ELEVATION VIEW



OVERALL HEIGHT AGL:	446.0	M
OVERALL HEIGHT AMSL:	578.5	M
RADIATION CENTER AGL:	411.5	M
RADIATION CENTER AMSL:	544.0	M
RADIATION CENTER HAAT:	429.4	M
AVG OF ALL NON-ODD RADIALS:	114.6	M
SITE HAAT:	17.9	M

COORDINATES (NAD 27):

N. LATITUDE 33° 15’ 33”

W. LONGITUDE 82° 17’ 09”

Antenna Structure Registration Number:
1018796

NOTE: NOT TO SCALE

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WACG-FM CHANNEL 214C2

AUGUSTA, GEORGIA

20070621 **EXHIBIT 3**

Proposal Number	**C-01266**		
Date	**11-Apr-07**		
Call Letters	**WACG-FM**	Channel	**214**
Location	**Wrens, GA**		
Customer	**GA Public Broadcasting**		
Antenna Type	**THB-O3-3M-FM/9H-1-R**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**3.31**	**(5.20 dB)**	
RMS Gain at Horizontal	**3.30**	**(5.19 dB)**	
Calculated / Measured	**Calculated**		

Beam Tilt	**0.00 deg**
Frequency	**90.70 MHz**
Drawing #	**03H033000**

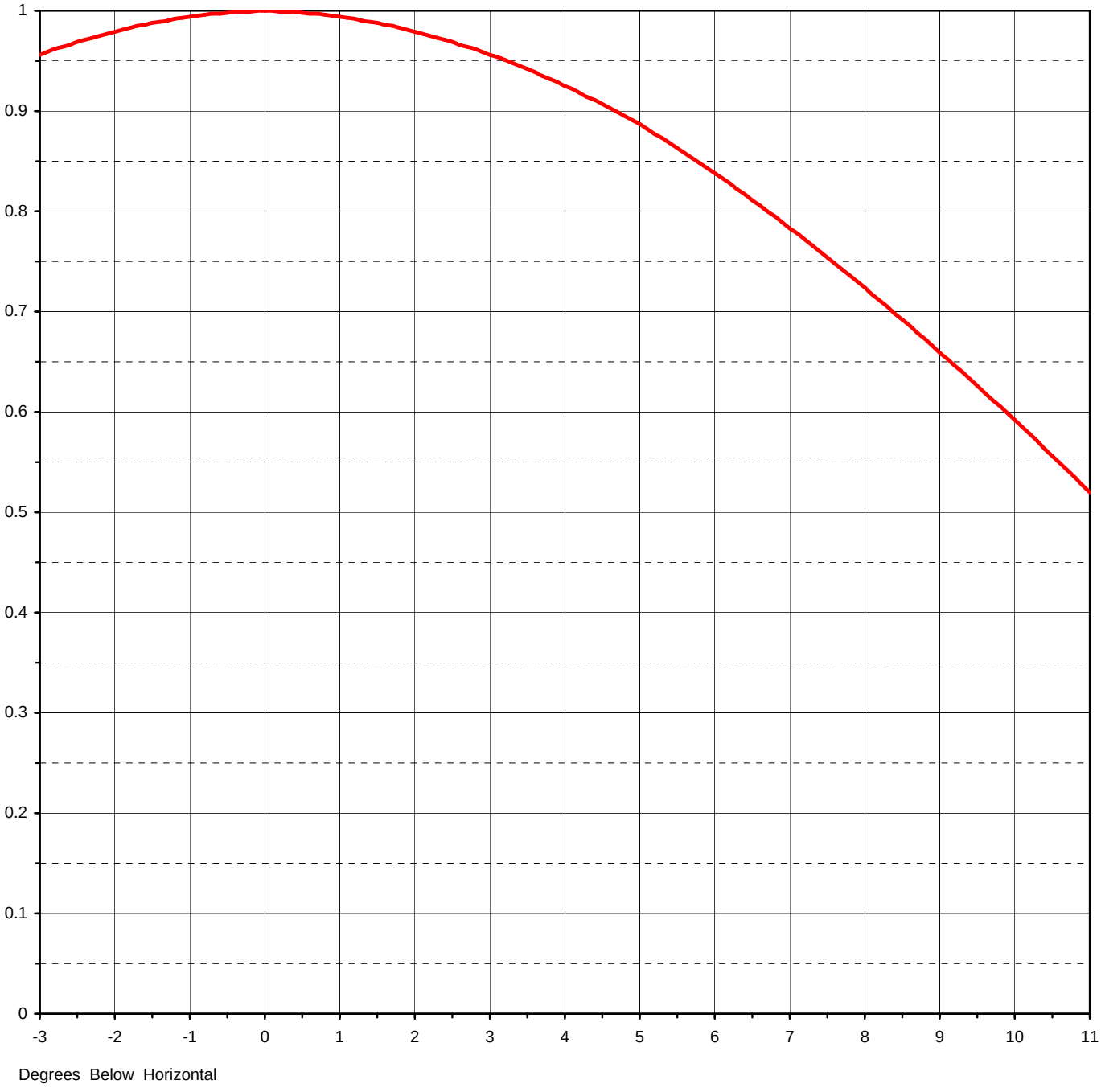


EXHIBIT 4

Dielectric

Proposal Number	**C-01266**		
Date	**11-Apr-07**		
Call Letters	**WACG-FM**	Channel	**214**
Location	**Wrens, GA**		
Customer	**GA Public Broadcasting**		
Antenna Type	**THB-O3-3M-FM/9H-1-R**		

ELEVATION PATTERN

RMS Gain at Main Lobe	**3.31**	**(5.20 dB)**	Beam Tilt **0.00 deg**
RMS Gain at Horizontal	**3.30**	**(5.19 dB)**	Frequency **90.70 MHz**
Calculated / Measured	**Calculated**		Drawing # **03H033000-90**

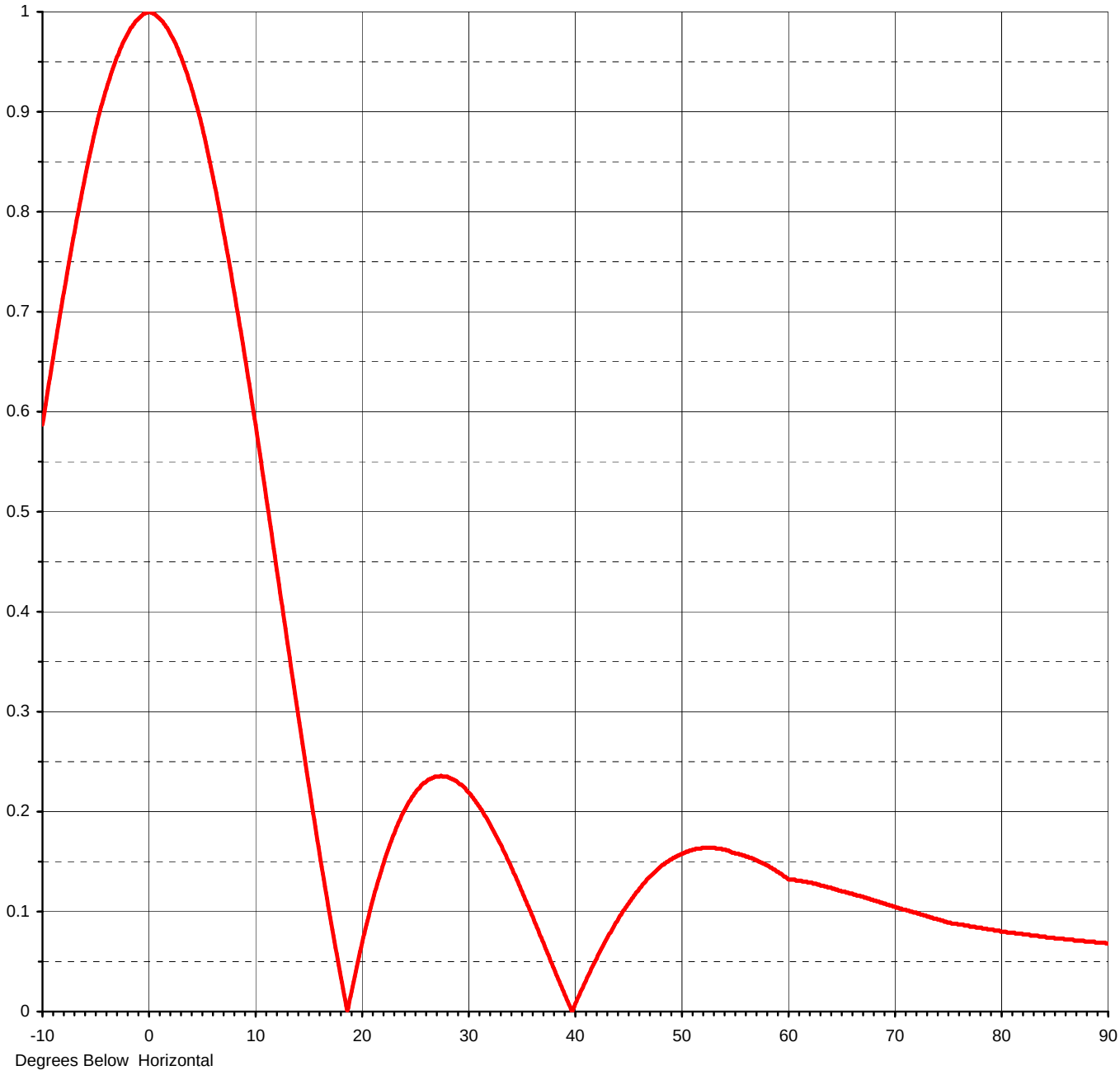


EXHIBIT 5

Dielectric

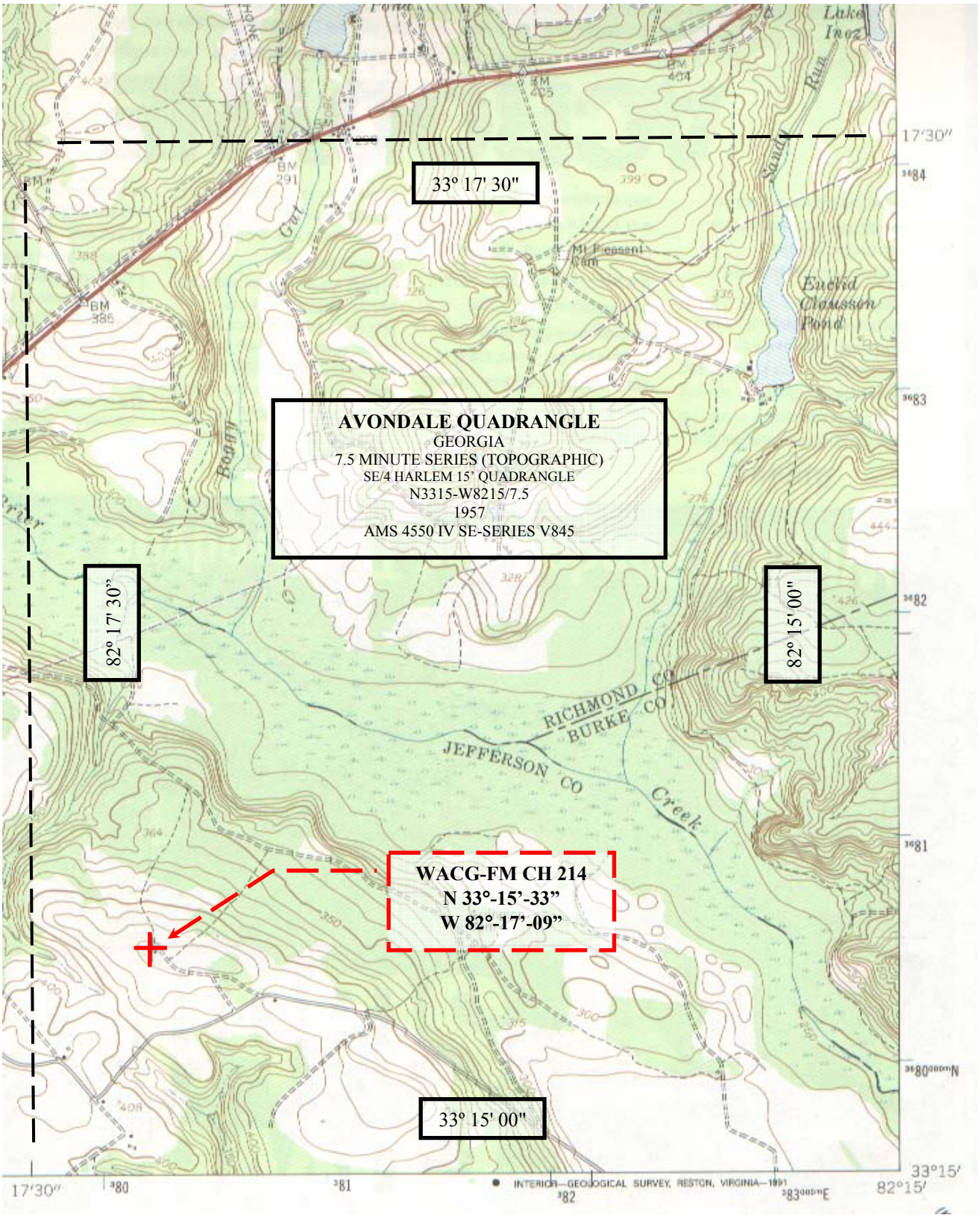
Proposal Number	**C-01266**		
Date	**11-Apr-07**		
Call Letters	**WACG-FM**	Channel	**214**
Location	**Wrens, GA**		
Customer	**GA Public Broadcasting**		
Antenna Type	**THB-O3-3M-FM/9H-1-R**		

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **03H033000-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.592	2.4	0.971	10.6	0.556	30.5	0.233	51.0	0.211	71.5	0.114
-9.5	0.626	2.6	0.966	10.8	0.542	31.0	0.226	51.5	0.214	72.0	0.113
-9.0	0.659	2.8	0.962	11.0	0.527	31.5	0.217	52.0	0.216	72.5	0.111
-8.5	0.692	3.0	0.956	11.5	0.491	32.0	0.208	52.5	0.218	73.0	0.109
-8.0	0.724	3.2	0.951	12.0	0.454	32.5	0.198	53.0	0.219	73.5	0.108
-7.5	0.754	3.4	0.945	12.5	0.418	33.0	0.187	53.5	0.220	74.0	0.106
-7.0	0.783	3.6	0.939	13.0	0.381	33.5	0.176	54.0	0.220	74.5	0.104
-6.5	0.811	3.8	0.932	13.5	0.345	34.0	0.163	54.5	0.220	75.0	0.103
-6.0	0.838	4.0	0.925	14.0	0.309	34.5	0.151	55.0	0.219	75.5	0.102
-5.5	0.863	4.2	0.918	14.5	0.273	35.0	0.137	55.5	0.218	76.0	0.100
-5.0	0.887	4.4	0.911	15.0	0.238	35.5	0.124	56.0	0.217	76.5	0.099
-4.5	0.907	4.6	0.903	15.5	0.203	36.0	0.110	56.5	0.215	77.0	0.098
-4.0	0.925	4.8	0.895	16.0	0.169	36.5	0.096	57.0	0.213	77.5	0.097
-3.5	0.942	5.0	0.887	16.5	0.135	37.0	0.081	57.5	0.211	78.0	0.095
-3.0	0.956	5.2	0.877	17.0	0.103	37.5	0.067	58.0	0.208	78.5	0.094
-2.8	0.962	5.4	0.868	17.5	0.071	38.0	0.052	58.5	0.205	79.0	0.093
-2.6	0.966	5.6	0.858	18.0	0.041	38.5	0.037	59.0	0.201	79.5	0.092
-2.4	0.971	5.8	0.848	18.5	0.012	39.0	0.023	59.5	0.197	80.0	0.090
-2.2	0.975	6.0	0.838	19.0	0.015	39.5	0.008	60.0	0.193	80.5	0.089
-2.0	0.979	6.2	0.828	19.5	0.042	40.0	0.006	60.5	0.190	81.0	0.088
-1.8	0.983	6.4	0.817	20.0	0.067	40.5	0.020	61.0	0.186	81.5	0.087
-1.6	0.986	6.6	0.806	20.5	0.090	41.0	0.034	61.5	0.183	82.0	0.086
-1.4	0.989	6.8	0.795	21.0	0.112	41.5	0.048	62.0	0.179	82.5	0.084
-1.2	0.992	7.0	0.783	21.5	0.133	42.0	0.061	62.5	0.175	83.0	0.083
-1.0	0.994	7.2	0.772	22.0	0.151	42.5	0.074	63.0	0.170	83.5	0.082
-0.8	0.996	7.4	0.760	22.5	0.169	43.0	0.086	63.5	0.166	84.0	0.081
-0.6	0.997	7.6	0.748	23.0	0.184	43.5	0.098	64.0	0.161	84.5	0.080
-0.4	0.999	7.8	0.736	23.5	0.198	44.0	0.109	64.5	0.155	85.0	0.079
-0.2	0.999	8.0	0.724	24.0	0.211	44.5	0.120	65.0	0.150	85.5	0.077
0.0	1.000	8.2	0.711	24.5	0.221	45.0	0.131	65.5	0.148	86.0	0.076
0.2	0.999	8.4	0.698	25.0	0.231	45.5	0.141	66.0	0.145	86.5	0.075
0.4	0.999	8.6	0.686	25.5	0.238	46.0	0.150	66.5	0.142	87.0	0.073
0.6	0.997	8.8	0.673	26.0	0.244	46.5	0.159	67.0	0.139	87.5	0.072
0.8	0.996	9.0	0.659	26.5	0.248	47.0	0.167	67.5	0.136	88.0	0.071
1.0	0.994	9.2	0.646	27.0	0.251	47.5	0.174	68.0	0.132	88.5	0.070
1.2	0.992	9.4	0.633	27.5	0.252	48.0	0.181	68.5	0.129	89.0	0.068
1.4	0.989	9.6	0.619	28.0	0.252	48.5	0.188	69.0	0.126	89.5	0.067
1.6	0.986	9.8	0.612	28.5	0.251	49.0	0.193	69.5	0.122	90.0	0.066
1.8	0.983	10.0	0.599	29.0	0.248	49.5	0.198	70.0	0.119		
2.0	0.979	10.2	0.585	29.5	0.245	50.0	0.203	70.5	0.117		
2.2	0.975	10.4	0.571	30.0	0.239	50.5	0.207	71.0	0.116		

EXHIBIT 6



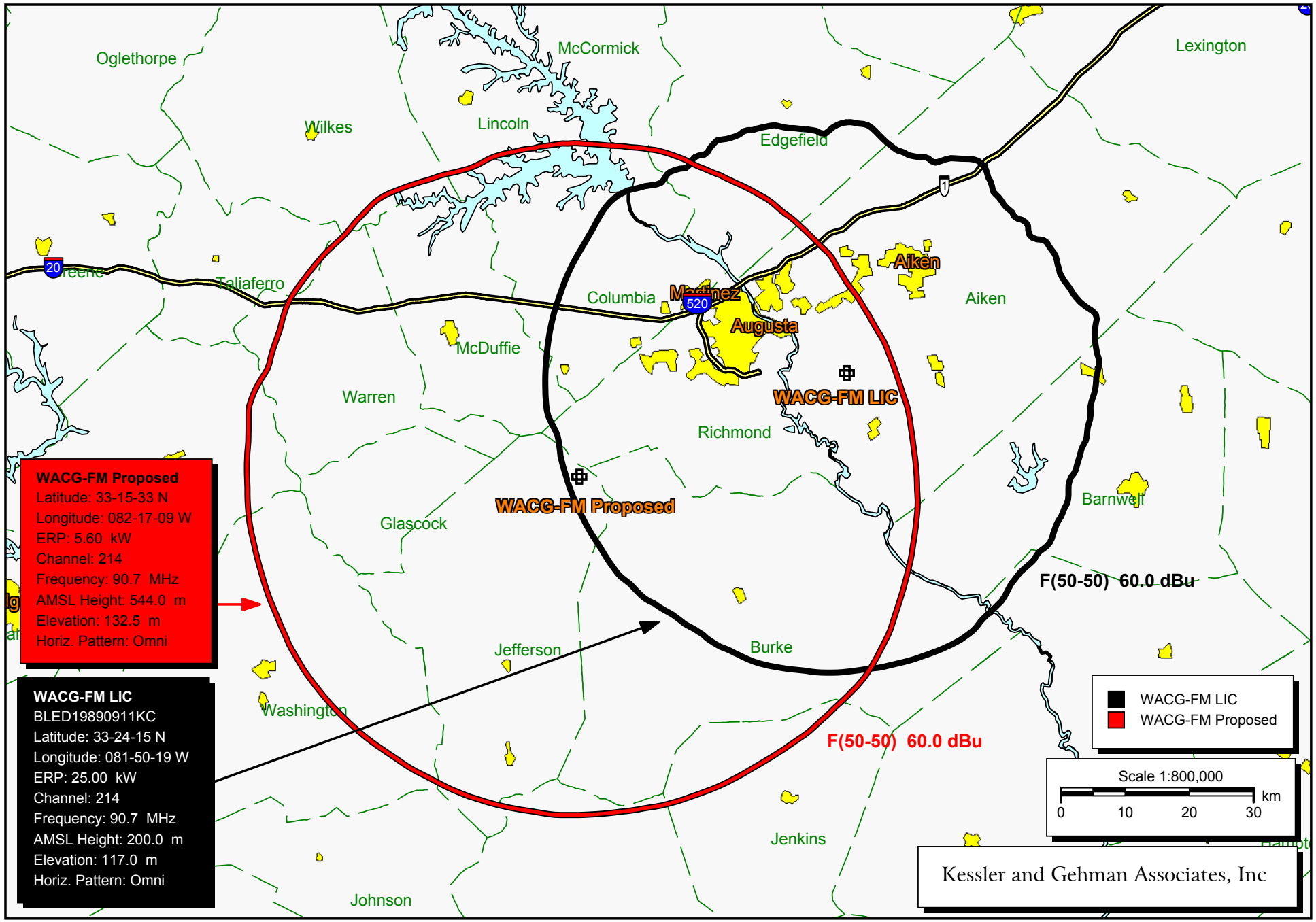
KESSLER AND GEHMAN
TELECOMMUNICATIONS CONSULTING ENGINEERS
507 N.W. 60th Street, Suite C
Gainesville, Florida 32607

WACG-FM CHANNEL 214

AUGUSTA, GEORGIA

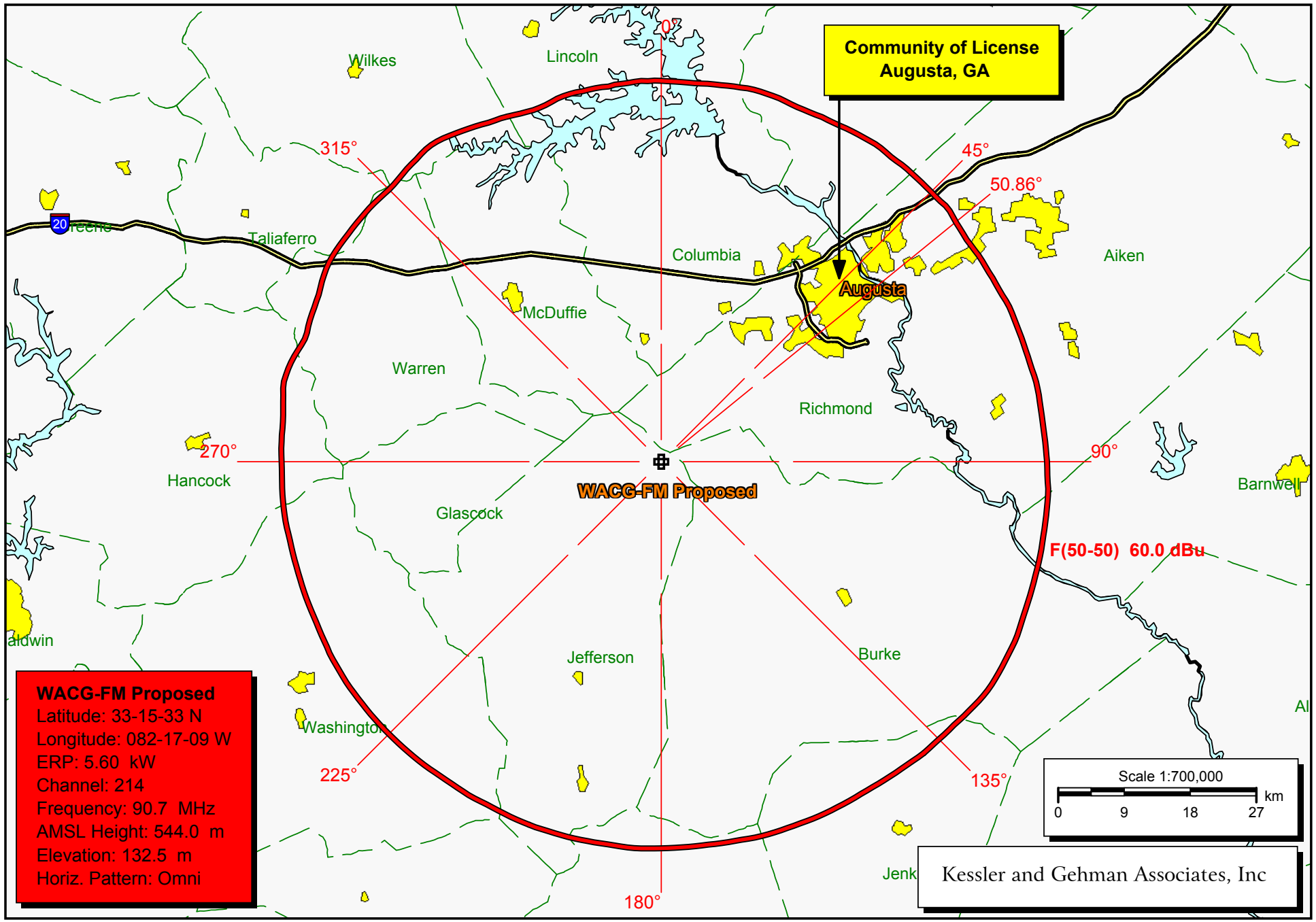
20070621

EXHIBIT 7



WACG-FM (License) vs. WACG-FM (Proposed)

EXHIBIT 8



WACG-FM (Proposed) Community of License Map

EXHIBIT 9

FM Interference Study
WACG-FM at WCES Site

REFERENCE CH# 214C2 - 90.7 MHz, Pwr= 5.6 kW, HAAT=429.4 M, COR= 544 M
33 15 33.0 N. Average Protected F(50-50)= 52.38 km
82 17 09.0 W.

DISPLAY DATES
DATA 06-16-07
SEARCH 06-21-07

CH CALL / CITY	TYPE ANT / STATE	AZI <--	DIST / FILE #	LAT / LNG	PWR(kW) / HAAT(M)	INT(km) / COR(M)	PRO(km) / LICENSEE	*OUT* (Overlap in km)
06Z2 LMWCES	AP DHN	0.0	0.00	33 15 33.0	30.000		95.3	126.9R -126.9M
Wren	GA	0.0	BPRM20060619ABI	82 17 09.0	436	551	Test	
06+2C WJBF	LI _HY	68.7	45.13	33 24 20.0	100.000		121.9	153.5R -108.4M
Augusta	GA	248.9	BLCT20040130AOR	81 50 01.0	495	564	Media General Communicatio	
213C2 WPWB	LIC _CN	237.9	119.83	32 40 55.0	16.500	61.5	41.0	0.45
Byron	GA	57.3	BLED19900319KA	83 22 10.0	138	260	Augusta Radio Fellowship I	
214C2 WMVV	LIC DCX	274.6	172.48	33 22 12.0	18.000	116.3	44.5	1.73
Griffin	GA	93.6	BLED20030321ABI	84 08 00.0	144	381	Life Radio Ministries, Inc	
214C3 AP2895	APP _CX	202.7	182.61	31 44 19.0	12.000	100.8	35.6	19.13
Fitzgerald	GA	22.3	BNPED20000207AAS	83 01 54.0	100	175	Christian Radio Media, Inc	
213C2 WUOG	LIC DCN	307.4	127.40	33 56 59.0	26.000	46.0	29.0	19.32
Athens	GA	126.8	BLED19940103KC	83 22 58.0	55	276	The University Of Georgia	
214C2 WYFH	LIC DCN	98.9	194.33	32 58 23.0	50.000	107.7	40.2	25.42
North Charleston	SC	280.0	BLED19911016KA	80 13 54.0	150	158	Bible Broadcasting Network	
215C1 WRAF	LIC DEN	326.5	179.03	34 35 57.0	100.000	99.3	67.5	31.86
Toccoa Falls	GA	145.9	BLED19860211KD	83 21 55.0	172	513	Toccoa Falls College	
213A WUSC-FM	LIC _CN	54.5	143.23	34 00 02.0	2.500	31.7	21.4	44.76
Columbia	SC	235.2	BLED19870817KD	81 01 19.0	77	148	The University Of South Ca	
214C0 WFAE	LIC DCX	32.5	268.42	35 17 14.0	100.000	169.3	71.8	69.79
Charlotte	NC	213.4	BLED20050223ACA	80 41 45.0	331	544	University Radio Foundatio	
216C WSVH	APP DVX	153.0	138.35	32 08 48.0	96.000	6.8	63.4	70.50
Savannah	GA	333.4	BPED20070212ACE	81 37 05.0	431	456	Georgia Public Telecommuni	

Terrain database is USGS 03 SEC
ERP and HAAT are on direct line to and from reference station.
Ant Column: (D= DA Standard, Z= DA 73.215, N= Not DA 73.215, _= Omni), Polarization (C,H,V,E), Beamtilt(Y,N,X)
Incoming contour overlap is ignored.
"*"affixed to 'IN' or 'OUT' values = site inside protected contour.

EXHIBIT 10

FM Interference Study
Allocation Study (WPWB-FM Channel 213C2 Byron, GA)

FMCommander Single Allocation Study
06-21-2007

WACG-FM CH 214 C2
5.6 kW 544 M COR
Prot. = 60 dBu
Intef. = 54 dBu

WPWB CH 213 C2 BLED19900319KA
16.5 kW, 260 M COR
Prot. = 60 dBu
Intef. = 54 dBu

Scale = 1:1,500,000

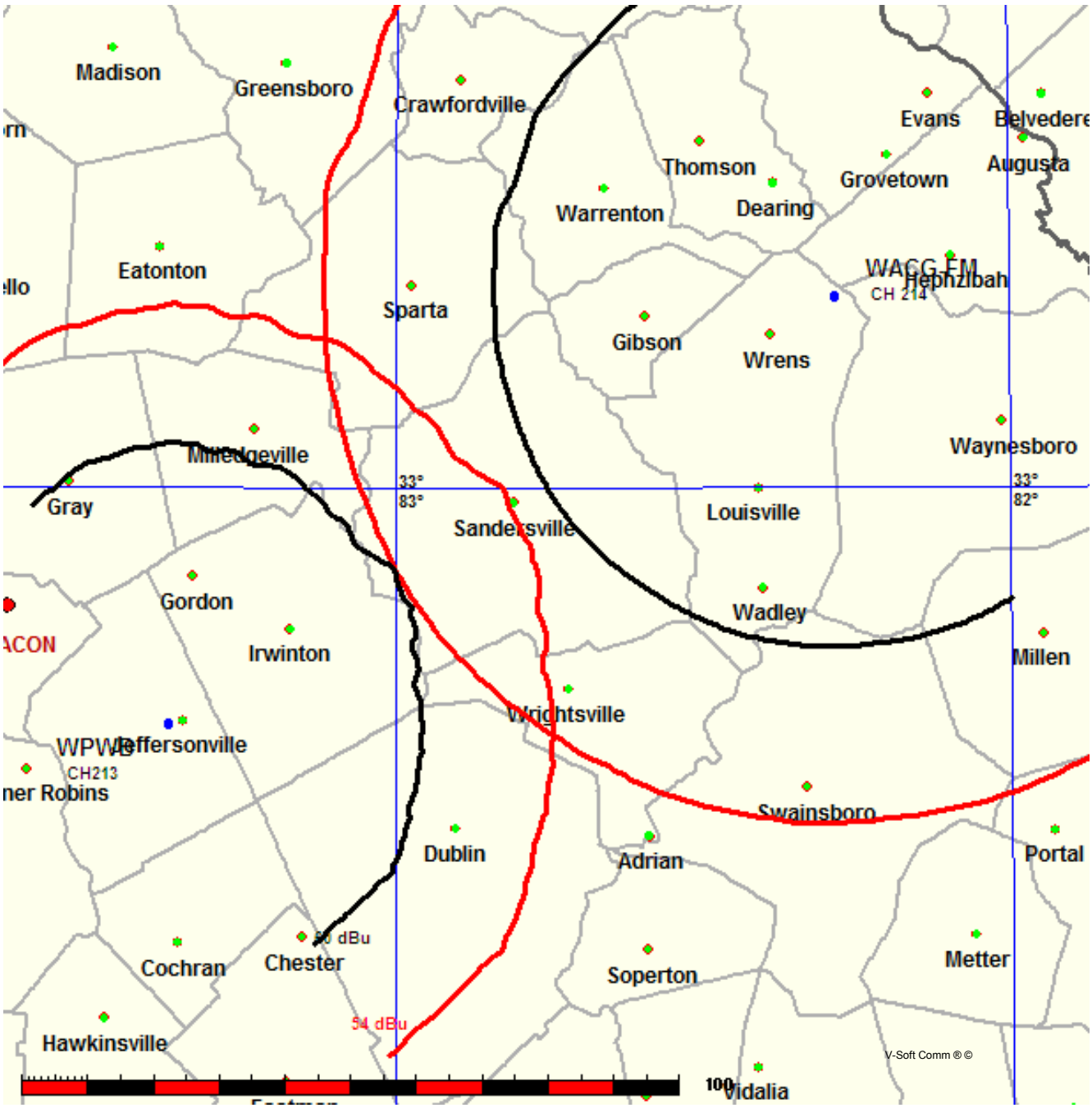


EXHIBIT 11

FM Interference Study
Allocation Study (WMVV-FM Channel 214C2 Griffin, GA)

FMCommander Single Allocation Study
06-21-2007

WACG-FM CH 214 C2
5.6 kW 544 M COR
Prot. = 60 dBu
Intef. = 40 dBu

WMVV CH 214 C2 BLED20030321ABI
18.0 kW, 381 M COR DA
Prot. = 60 dBu
Intef. = 40 dBu

Scale = 1:1,500,000

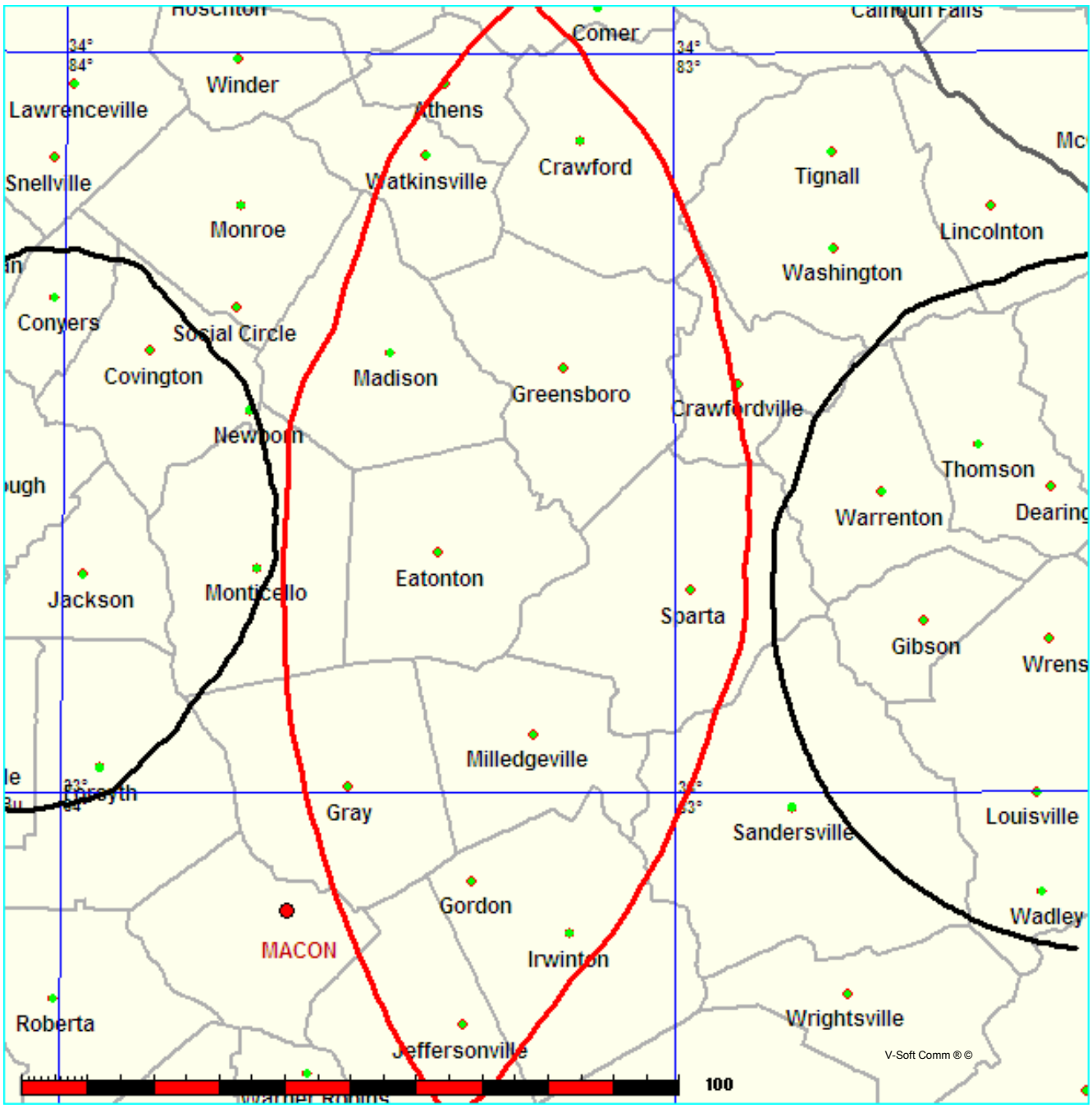


EXHIBIT 12

FM Interference Study
Allocation Study (Fitzgerald, GA Channel 214C3 APP)

FMCommander Single Allocation Study
06-21-2007

WACG-FM CH 214 C2
5.6 kW 544 M COR
Prot. = 60 dBu
Intef. = 40 dBu

AP2895 CH 214 C3 BNPED20000207AAS
12.0 kW, 175 M COR
Prot. = 60 dBu
Intef. = 40 dBu

Scale = 1:2,000,000

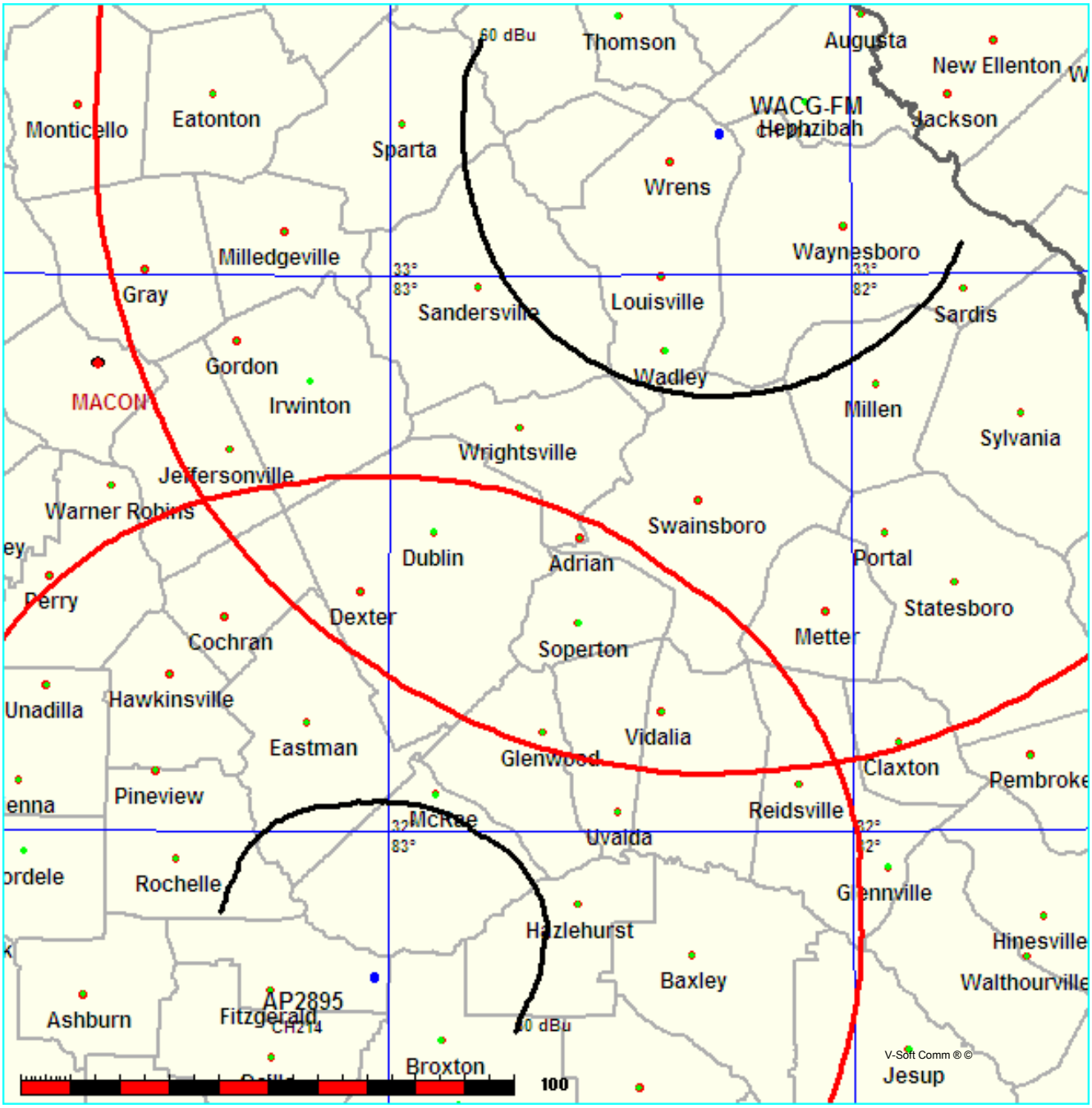


EXHIBIT 13

FM Interference Study
Allocation Study (WUOG-FM Channel 213C2 Athens, GA)

FMCommander Single Allocation Study
06-21-2007

WACG-FM CH 214 C2
5.6 kW 544 M COR
Prot. = 60 dBu
Intef. = 54 dBu

WUOG CH 213 C2 BLED19940103KC
26.0 kW, 276 M COR DA
Prot. = 60 dBu
Intef. = 54 dBu

Scale = 1:1,500,000

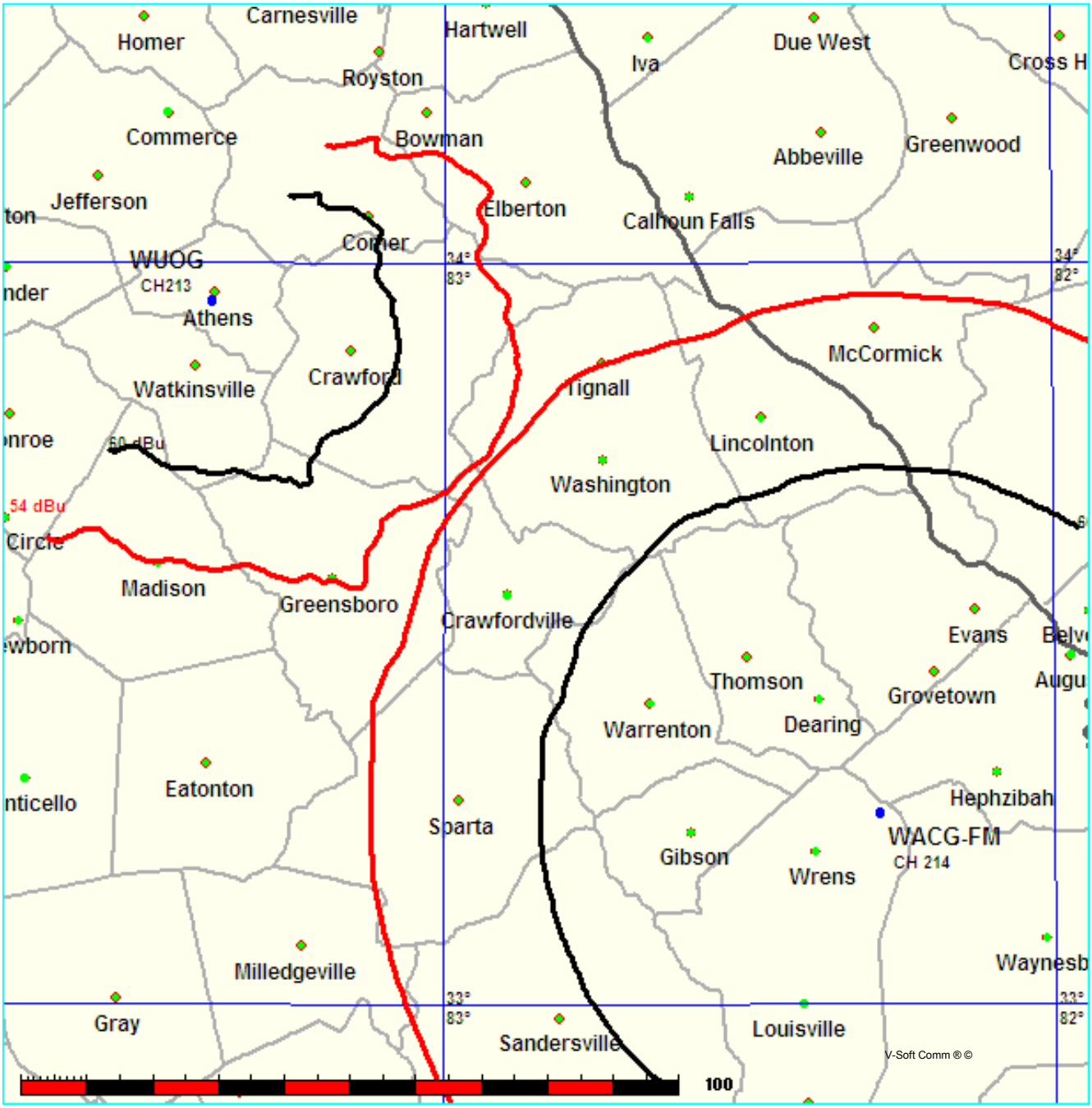
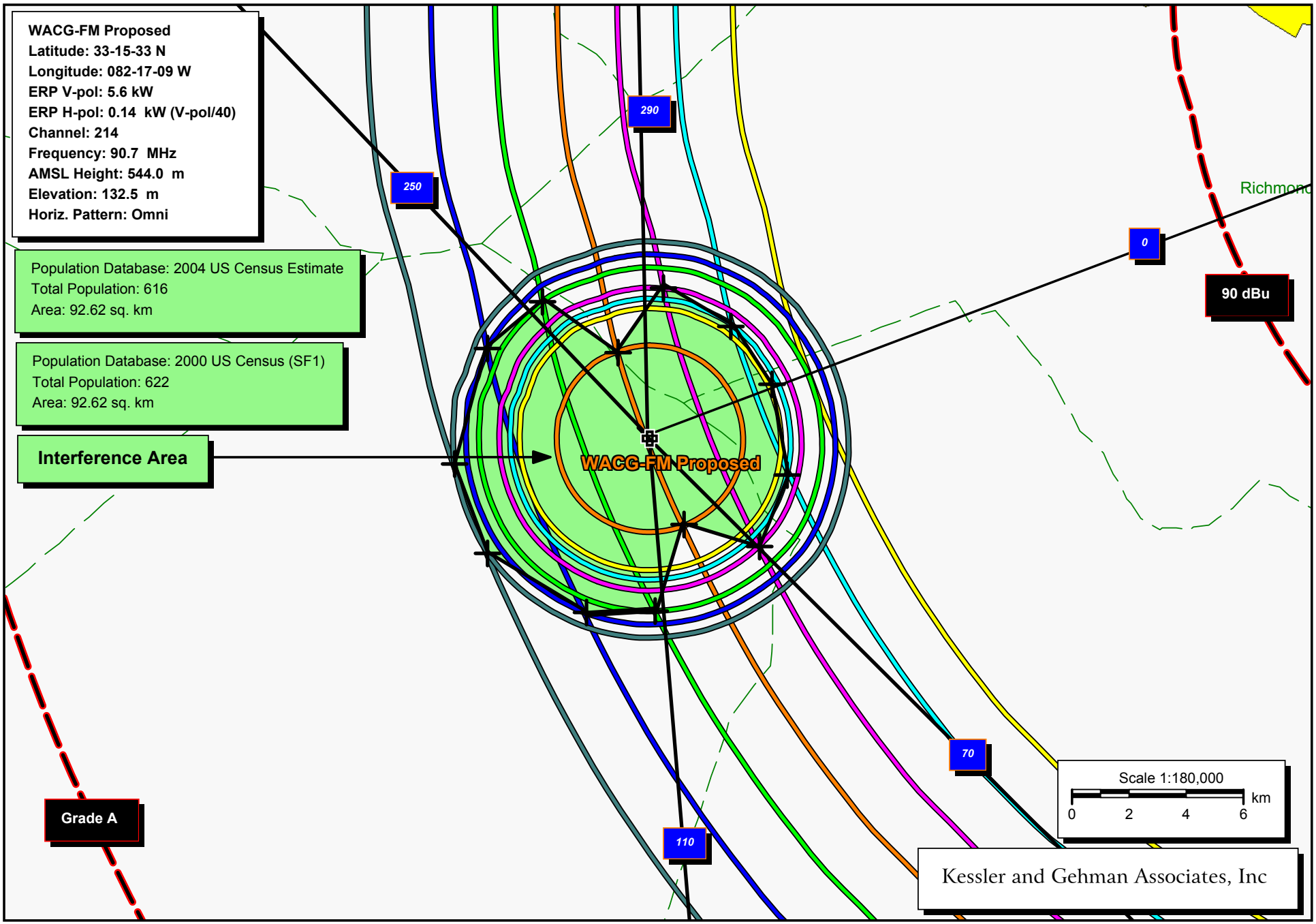
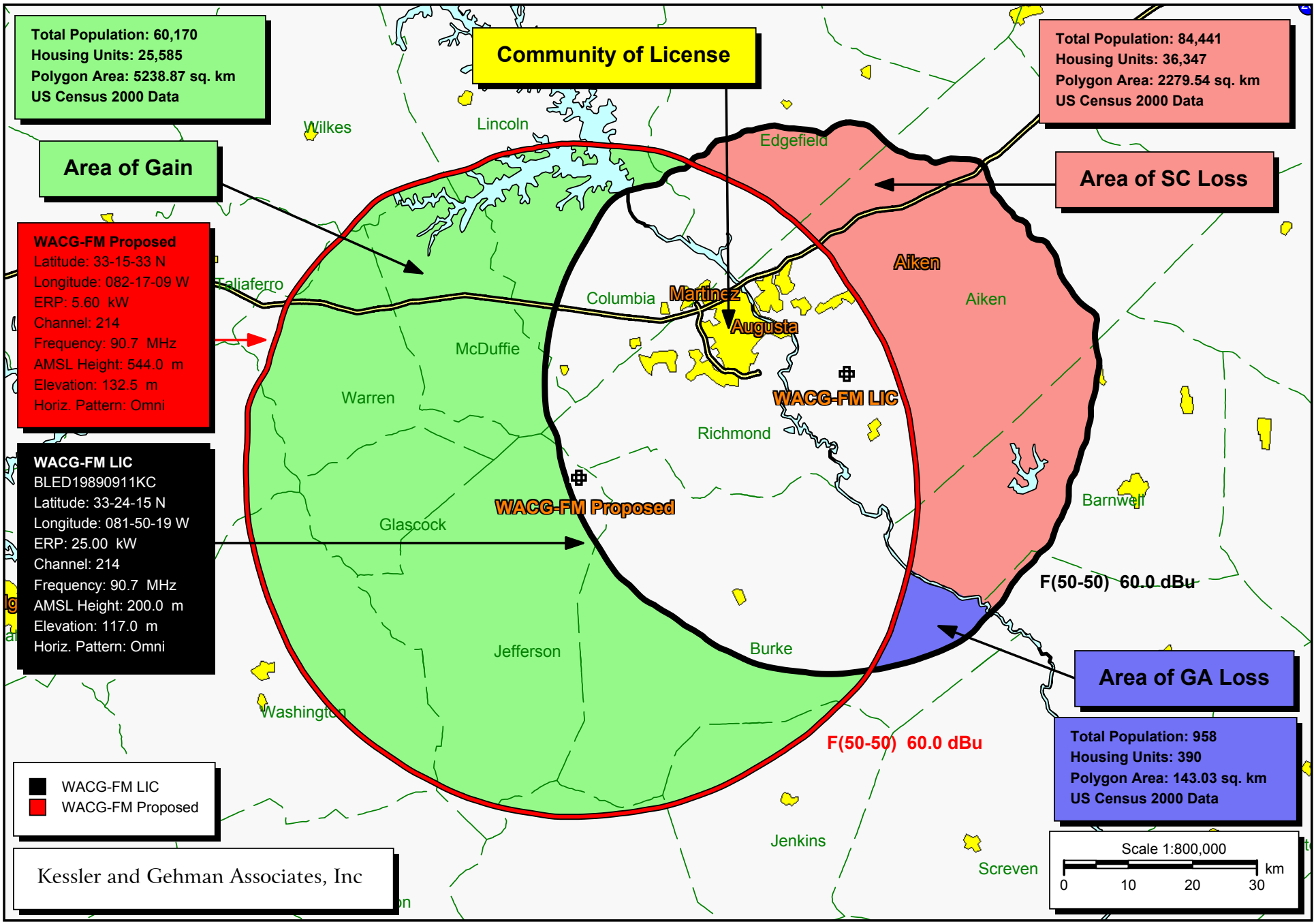


EXHIBIT 14



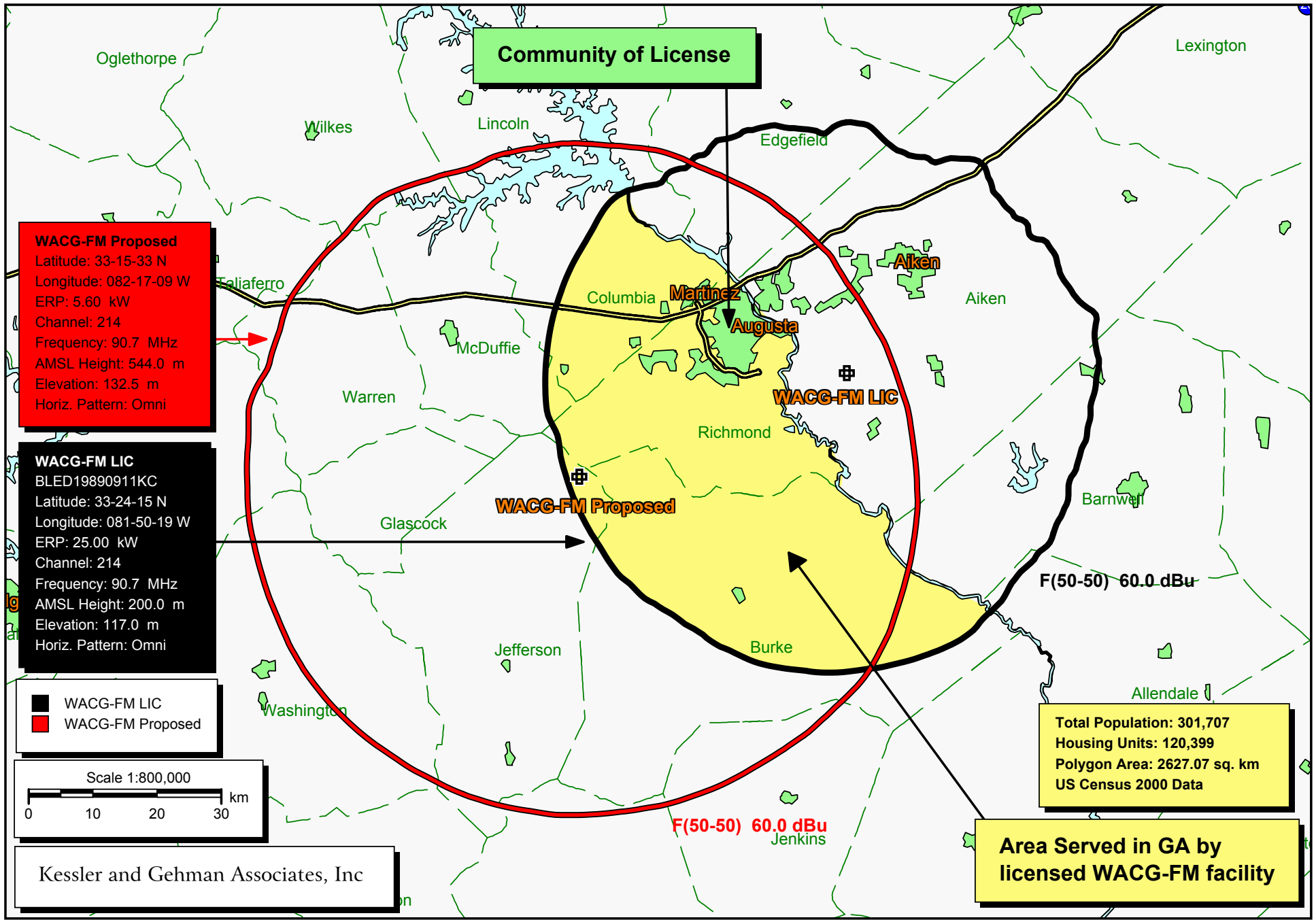
WACG-FM (Proposed) TV Channel 6 Study (V-pol Only)

EXHIBIT 15



WACG-FM (License) vs. WACG-FM (Proposed) - Area of Gain & Area of Loss

EXHIBIT 16



Area in GA served by licensed WACG-FM facility

EXHIBIT 17