

WNEH-DT CHANNEL 18 MINOR  
CHANGE IN LICENSED FACILITY  
APPLICATION FOR MAXIMIZED  
POST-TRANSITION DTV OPERATION  
*GREENWOOD, SOUTH CAROLINA*  
*(South Carolina Educational Television Commission)*

KESSLER AND GEHMAN ASSOCIATES, INC.  
TELECOMMUNICATIONS CONSULTING ENGINEERS

20080619

*Prepared by William T. Godfrey, Jr.*

KGGA

507 N.W. 60th Street, Suite C  
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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 CHANGE IN LICENSED FACILITY APPLICATION (BLEDT-20050322AGH) REQUESTING A CONSTRUCTION PERMIT FOR AUTHORIZATION TO OPERATE THE SOUTH CAROLINA EDUCATIONAL TELEVISION COMMISSION (SCETC) DIGITAL TELEVISION BROADCAST FACILITY, WNEH-DT CHANNEL 18, WITH MAXIMIZED PARAMETERS ON ITS POST-TRANSITION DIGITAL CHANNEL AS ADOPTED IN APPENDIX B.**

The firm Kessler and Gehman Associates, Inc. has been retained by South Carolina Educational Television Commission (SCETC), Columbia, SC to prepare engineering studies and the engineering portion of a minor change in licensed facility application (BLEDT-20050322AGH) requesting authorization to maximize the WNEH-DT Channel 18 post-transition DTV facility pursuant to the procedures outlined in the Third Periodic Review Report and Order (MB Docket No. 07-91) and the Public Notice released on May 30, 2008 lifting the freeze on maximization application filings (DA-08-1213). The following table depicts the allotted (Appendix B), licensed (LIC) and proposed (maximized) parameters respectively for the WNEH-DT post-transition DTV facility.

Facility ID	State	City	Call Sign	DTV Chan	DTV ERP (kW)	DTV HAAT (m)	DTV Antenna ID	DTV Latitude (DDMMSS)	DTV Longitude (DDMMSS)
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**• Final DTV Table of Allotments (Appendix B) Parameters:**

60931	SC	GREENWOOD	WNEH	18	49.0	230	OMNI	342219	821005
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**• Authorized Parameters (BLEDT-20050322AGH):**

60931	SC	GREENWOOD	WNEH	18	49.0	230	OMNI	342219	821005
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**• Proposed Maximized Parameters:**

60931	SC	GREENWOOD	WNEH	18	106.7	230	OMNI	342219	821005
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Accordingly, SCETC proposes to maximize operation of the WNEH-DT Channel 18 post-transition DTV facility by making the following change to its digital Channel 18 license for post-transition DTV operation:

- 1) Increase maximum Effective Radiated Power (ERP) from 49.0 kW to 106.7 kW.

All other operating parameters shall remain as authorized in the existing license (BLEDT-20050322AGH).

### **Post-Transition Interference Protection**

The proposed facility satisfies the post-transition interference protection provisions of §73.616 of the FCC Rules. Exhibits 10 (Part1) and 11 (Part2) are Longley-Rice interference studies that were computed using a Sun Microsystems SPARC 5 computer work station loaded with the FCC's DTV analysis software. The interference percentages are exactly the same as the FCC calculations since the studies were performed using the same type computers and the same interference analysis software. Exhibit 10 was run to determine the interference predicted to each desired station from the proposed WNEH-DT Channel 18 post-transition DTV maximized facility. The FCC program recognized a mutually exclusive situation between the proposed WNEH-DT maximized facility and the allotted WNEH-DT Appendix B facility because they both had the same community of license (Greenwood) and they both were assigned Channel 18. As a result, the program threw out the allotted Channel 18 facility in the "Before" studies and used the proposed Channel 18 maximized facility in the "After" studies. Therefore, only the populations in the "After" studies are used in Exhibit 10 to identify the population predicted to receive interference from the proposed maximized facility. Exhibit 11 is the exact same study as Exhibit 10 except the community of license was purposely changed from "Greenwood" to "Greenwood \_2" for the proposed maximized facility so that the program would not throw out the allotted Channel 18 facility. Referring to Exhibit 11, it can be seen that the "Before" studies now contain the allotted Channel 18 facility so that the interference predicted to be received within the desired stations protected noise limited contour from the allotted Channel 18 facility can be calculated for masking purposes.



Referring to Exhibit 10, it can be seen that the following stations are within the prescribed culling distance and are potentially affected by the proposed facility:

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WUNE-TV	LINVILLE NC	190.3	LIC	BDTV	-0972
17	WLTX	COLUMBIA SC	132.6	LIC	BDTV	-1393
18	WFXB	MYRTLE BEACH SC	274.9	LIC	BDTV	-1409
18	WDBJ	ROANOKE VA	362.4	LIC	BDTV	-1676
19	WGCL-TV	ATLANTA GA	209.5	LIC	BDTV	-0389

The following post-transition DTV stations listed above are either beyond the site to the nearest cell evaluation distance or are not predicted to receive interference from the proposed WNEH-DT facility:

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WUNE-TV	LINVILLE NC	190.3	LIC	BDTV	-0972
18	WFXB	MYRTLE BEACH SC	274.9	LIC	BDTV	-1409
18	WDBJ	ROANOKE VA	362.4	LIC	BDTV	-1676
19	WGCL-TV	ATLANTA GA	209.5	LIC	BDTV	-0389

Therefore, the only post-transition DTV station within the prescribed culling distance that is predicted to receive new interference from the proposed WNEH-DT facility is:

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WLTX	COLUMBIA SC	132.6	LIC	BDTV	-1393

It can be seen in the “Before” analysis in Exhibit 11 that 92,569 persons within the WTLX-DT Channel 17 post-transition DTV facility’s protected noise limited contour are predicted to receive interference from one or more of the following post-transition DTV stations, which does not include the proposed WNEH-DT facility but does include the WNEH-DT allotted facility:

16A	SC	FLORENCE	BDTV	1399	LIC
17A	NC	GOLDSBORO	BDTV	0958	LIC
17A	NC	LINVILLE	BDTV	0972	LIC
17A	TN	KNOXVILLE	BDTV	1461	LIC
17A	VA	ROANOKE	BDTV	1675	LIC
18A	SC	GREENWOOD	BDTV	1407	LIC
18A	SC	MYRTLE BEACH	BDTV	1409	LIC

Referring to the “After” analysis in Exhibit 10, it can be seen that 92,907 persons within the WTLX-DT Channel 17 post-transition DTV facility’s protected noise limited contour are



predicted to receive interference from one or more of the following post-transition DTV stations, which includes the proposed WNEH-DT facility but does not include the allotted facility:

16A SC FLORENCE	BDTV	1399	LIC
17A NC GOLDSBORO	BDTV	0958	LIC
17A NC LINVILLE	BDTV	0972	LIC
17A TN KNOXVILLE	BDTV	1461	LIC
17A VA ROANOKE	BDTV	1675	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
18A SC GREENWOOD	USERRECORD01		APP

Accordingly, the proposed WNEH-DT post-transition DTV facility is predicted to cause 0.025% new interference to the WTLX-DT Channel 17 post-transition DTV facility [(92,907-92,569)/1,341,128] which rounds down to 0.0%.

The interference studies demonstrate that the proposed facility is predicted to cause 0.0% new interference, to all post-transition DTV stations considered in the culling list, which is below the 0.5% new interference standard. Accordingly, the 0.5% new interference standard, pursuant to §V.F. (¶155) of the Third Periodic Review Report and Order, has been satisfied.

SCETC proposes to operate the WNEH-DT Channel 18 maximized facility using a solid state digital transmitter which has a maximum transmitter power output of 5.0 kW (average power). Therefore, SCETC is requesting an ERP of 106.7 kW based on the maximum transmitter power output available from its transmitter.

**Exhibits**

Exhibits 1 and 2 represent WNEH’s administration data, antenna and antenna structure specifications.

Exhibit 3 depicts the profile view of the proposed antenna on the antenna structure with all the appropriate elevations.

Exhibits 4 (11 deg) and 5 (90 deg) display the elevation pattern and Exhibit 6 displays the elevation pattern tabulation.



Exhibit 7 depicts the location of the WNEH-DT transmitter site on a USGS 7.5-Minute (Series) Topographic map.

Exhibit 8 is a principal community contour map demonstrating that the proposed (maximized) WNEH-DT Channel 18 post-transition DTV facility's F(50,90) 48.0 dBuV/m Principal Community contour would completely encompass the principal community of Greenwood, SC.

Exhibit 9 is a contour map comparing the authorized WNEH-DT Channel 18 F(50,90) 39.2 dBuV/m contour (green) and the proposed (maximized) WNEH-DT Channel 18 F(50,90) 39.2 dBuV/m contour (red).

Exhibits 10 and 11 are Longley-Rice interference studies that were computed using a Sun Microsystems SPARC 5 computer work station loaded with the FCC's DTV analysis software. The exhibits demonstrate compliance with the 0.5% new interference standard.

### **Environmental Impact**

The proposed construction would have no significant environmental impact as defined in §1.1307 of the FCC Rules. The digital transmitter, 6-1/8" transmission line and antenna system shall produce an ERP of 106.7 kW (horizontal polarization). It was determined that the maximum lobe of radiation from the base of the tower would occur at approximately 1,037.3 feet from the base of the tower (1,223.2-foot radial distance from the antenna center). At approximately 1,037.3 feet from the base of the tower, the depression angle of the main lobe will be approximately 32° below the horizontal. At that point, the relative field is 0.070 and the power density six feet above the ground will be approximately 0.00013 mW/cm<sup>2</sup>. This equates to only 0.01% of the Maximum Permissible Exposure (MPE) limits for Occupational/Controlled Exposure and only 0.04% of the MPE limits for General Population/Uncontrolled Exposure authorized by the American National Standards Institute (ANSI). Since operation of the proposed (maximized) WNEH-DT Channel 18 post-transition DTV facility will not exceed 5.0% of the MPE limit for Occupational/Controlled Exposure or General Population/Uncontrolled Exposure at any point on



the ground, the proposed (maximized) WNEH-DT facility is not considered a “significant contributor” to the RF exposure environment pursuant to OET Bulletin 65, Edition 97-01. Therefore, contributions of exposure from other sources were not accounted for 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 licensee will cooperate with those users by reducing or completely terminating the power to the antenna when maintenance workers are in danger from the electromagnetic radiation emanating from the antenna. It is also understood that additional antennas on the support structure could increase the overall RF exposure levels and it is the responsibility of each licensee to ensure that the total RF exposure resulting from the operation of all antennas on the support structure do not exceed the maximum permissible exposure level at any point on the ground.

**Certification**

This technical statement was prepared by William T. Godfrey, Telecommunications 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

19 June, 2008

# WNEH-DT CHANNEL 18 MAXIMIZED DTV FACILITY

*Greenwood, South Carolina*

## ENGINEERING SPECIFICATIONS

**A. Transmitter Site:**

Geographic coordinates (NAD27):

North Latitude .....	34° 22' 19"
West Longitude .....	82° 10' 05"

Transmitter Site: **3.5 miles northeast of Good Hope Church**

**B. Main Studio Site Address: 1101 George Rogers Boulevard  
Columbia, South Carolina 29201**

**Proposed Facility:**

DTV Channel:	Number .....	18
	Frequency .....	494-500 MHz

**C. Antenna Height:**

Height of Site Above Mean Sea Level (AMSL) .....	212.4 M
Overall Height of Structure Above Ground .....	209.1 M
(including all appurtenances)	
Overall Height of Structure Above Mean Sea Level .....	421.5 M
(including all appurtenances)	
Height of Site Above Average Terrain .....	30.3 M
Antenna Height Radiation Center (R/C) Above Ground .....	199.4 M
Antenna Height R/C Above Mean Sea Level .....	411.8 M
Average of All Non-Odd Radials .....	182.1 M
Antenna Height R/C Above Average Terrain .....	229.7 M

**D. System Parameters – Horizontal Polarization:**

Transmitter Power Required: .....	5.0 kW
Maximum Power Input to Antenna: .....	4.0 kW
Transmission Line Loss: .....	0.73 dB
Combiner & Splitter Loss: .....	0.25 dB
Total System Loss: .....	0.98 dB
Transmission Line Efficiency: .....	84.5%
Combiner & Splitter Efficiency: .....	94.4%
Total System Efficiency: .....	79.8%
Maximum Antenna Gain in Beam Maximum: .....	14.27 dB
Maximum Antenna Gain in Horizontal Plane: .....	11.85 dB
Maximum Effective Radiated Power: .....	20.28 dBk
In Beam Maximum: .....	106.7 kW
Maximum Effective Radiated Power: .....	17.86 dBk
In Horizontal Plane: .....	61.1 kW

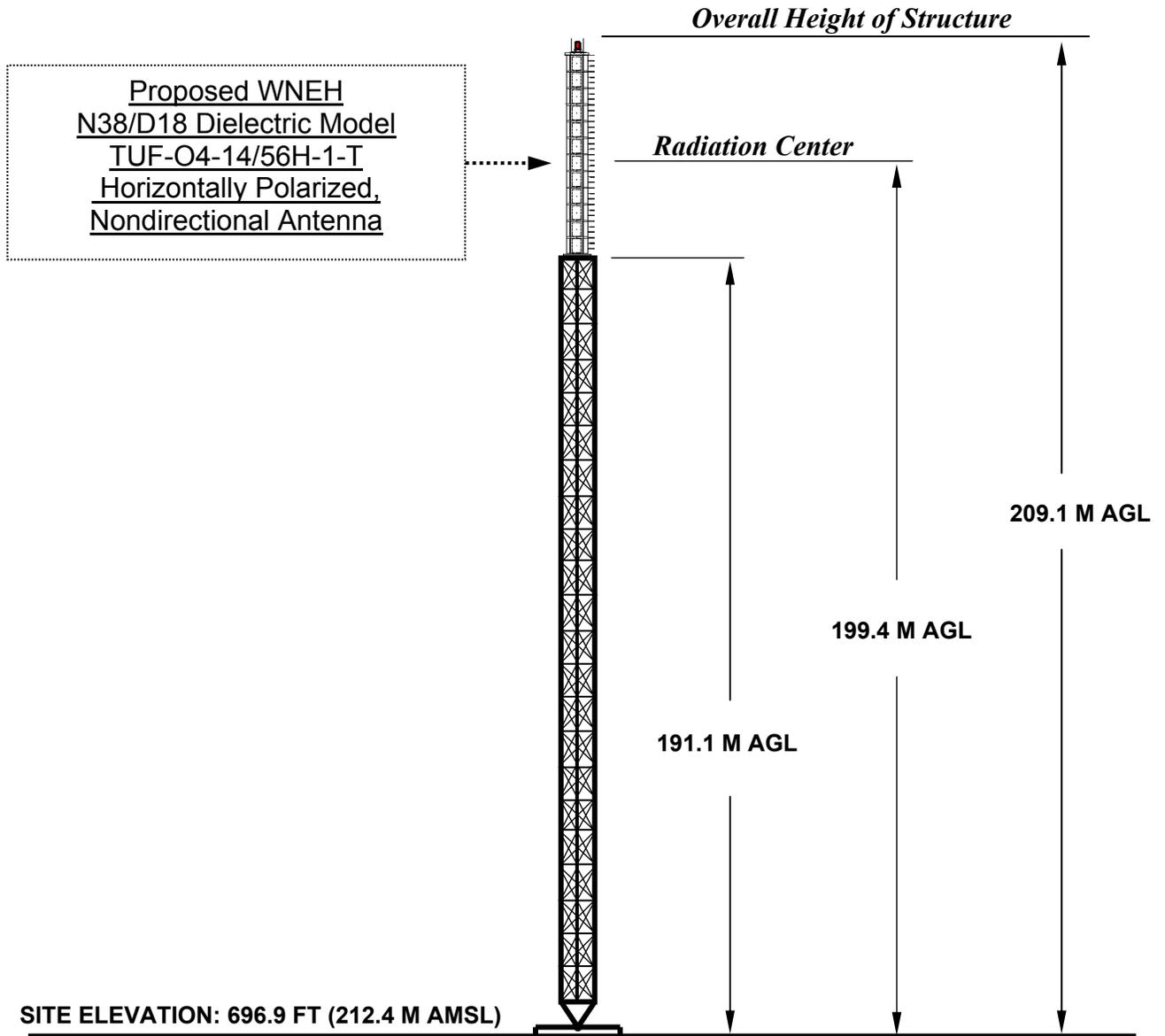
# WNEH-DT CHANNEL 18 MAXIMIZED DTV FACILITY

GREENWOOD, SOUTH CAROLINA

## DATA FOR PROPOSED NONDIRECTIONAL TRANSMITTING ANTENNA

- A. **Antenna:** Dielectric Model TUF-O4-14/56H-1-T, Horizontally Polarized, Nondirectional, Top-mount, Broadband Antenna.
- B. **Electrical Beam Tilt:** 0.75°
- C. **Mechanical Beam Tilt:** None
- D. **Maximum Power Gain**                      **Horizontal Polarization**  
Maximum:                      26.7                      (14.27 dB)  
Horizontal:                      15.3                      (11.85 dB)
- E. **Length:** 54.5 feet (16.6 meters) not including lightning protector.
- F. **Transmitter Power Output:** 5.0 kW
- G. **Null Fill:** 17.7%
- H. **Transmission Line:** 6-1/8" 75-ohm EIA/DCA
- I. **Transmission Line Loss:** 0.108 dB/100-feet
- J. **Total Transmission Line:** 677 feet (206.3 meters)
- K. **Transmission Line Attenuation:** 0.73 dB
- L. **Combiner Loss:** 0.25 dB
- M. **Total Antenna System Loss:** 0.98 dB

# WNEH-DT CHANNEL 18 TOWER ELEVATION VIEW



OVERALL HEIGHT AGL:	209.1 M
OVERALL HEIGHT AMSL:	421.5 M
RADIATION CENTER AGL:	199.4 M
RADIATION CENTER AMSL:	411.8 M
RADIATION CENTER HAAT:	229.7 M
AVG OF ALL NON-ODD RADIALS:	182.1 M
SITE HAAT:	30.3 M

**COORDINATES (NAD 27):**  
 N. LATITUDE 34° 22' 19"  
 W. LONGITUDE 82° 10' 05"  
Antenna Structure Registration Number:  
 1059185

**NOTE: NOT TO SCALE**

**KESSLER AND GEHMAN**  
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**WNEH-DT CHANNEL 18**  
 GREENWOOD, SOUTH CAROLINA

20080619

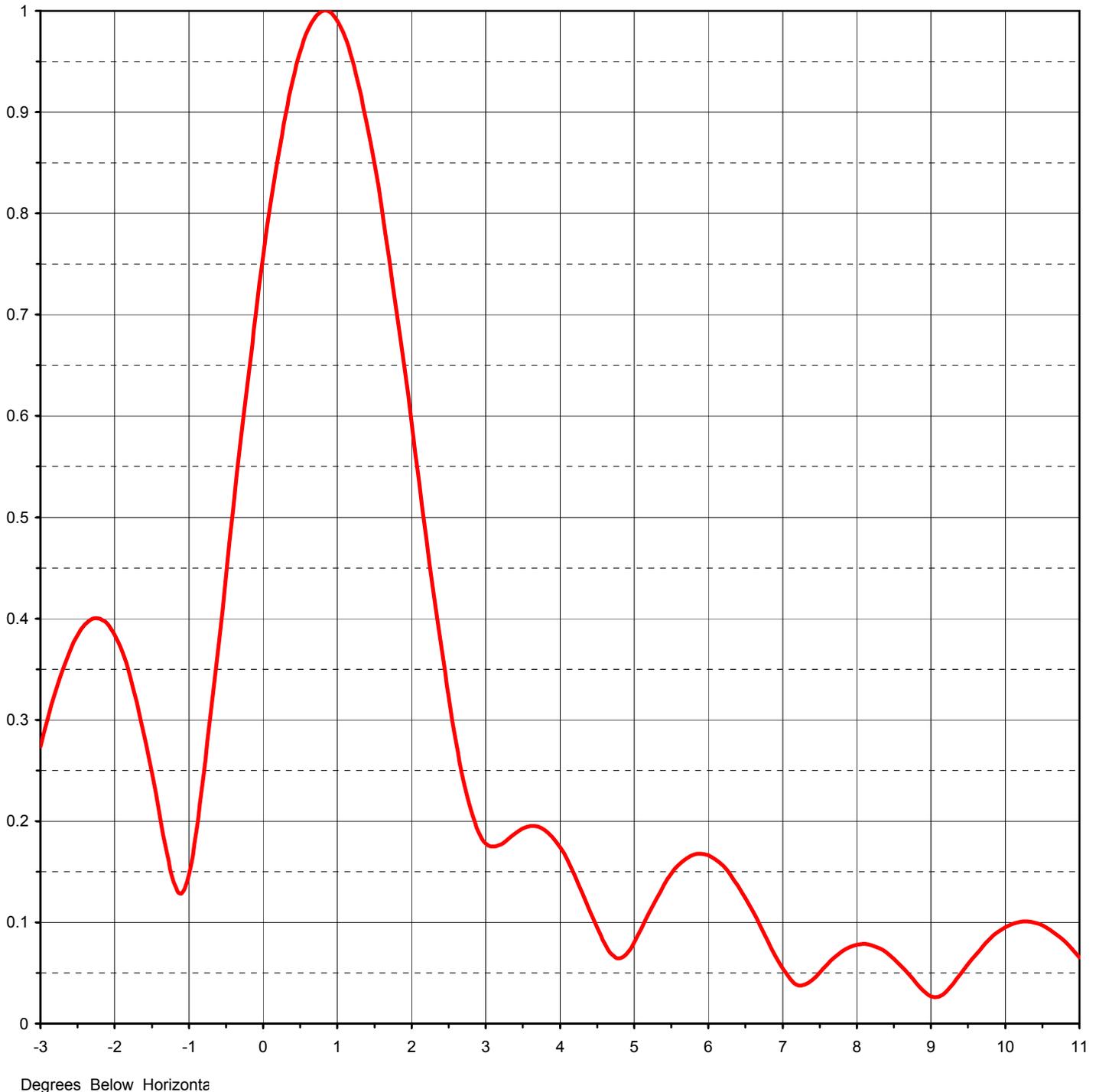
EXHIBIT 3



Proposal Number **DCA-10416** Revision: **1**  
Date **19-Mar-04**  
Call Letters **WNEH-DT** Channel **18**  
Location **Greenwood, SC**  
Customer **SCETV**  
Antenna Type **TUF-O4-14/56H-1-T**

### ELEVATION PATTERN

RMS Gain at Main Lobe **26.70 ( 14.27 dB )** Beam Tilt **0.75 deg**  
RMS Gain at Horizontal **15.30 ( 11.85 dB )** Frequency **497.00 MHz**  
Calculated / Measured **Calculated** Drawing # **14U267075**

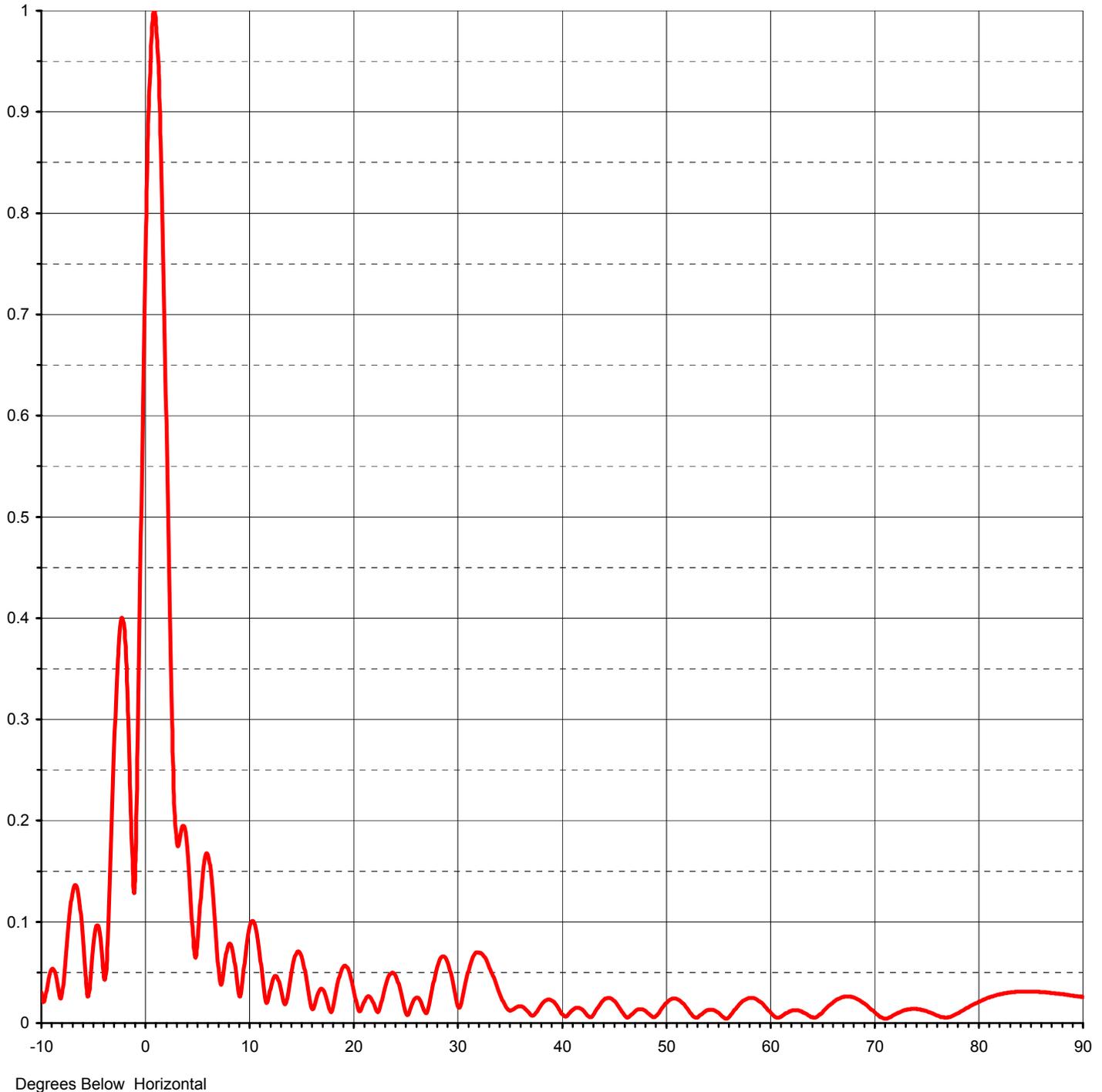




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Customer **SCETV**  
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### ELEVATION PATTERN

RMS Gain at Main Lobe	<b>26.70 ( 14.27 dB )</b>	Beam Tilt	<b>0.75 deg</b>
RMS Gain at Horizontal	<b>15.30 ( 11.85 dB )</b>	Frequency	<b>497.00 MHz</b>
Calculated / Measured	<b>Calculated</b>	Drawing #	<b>14U267075-90</b>



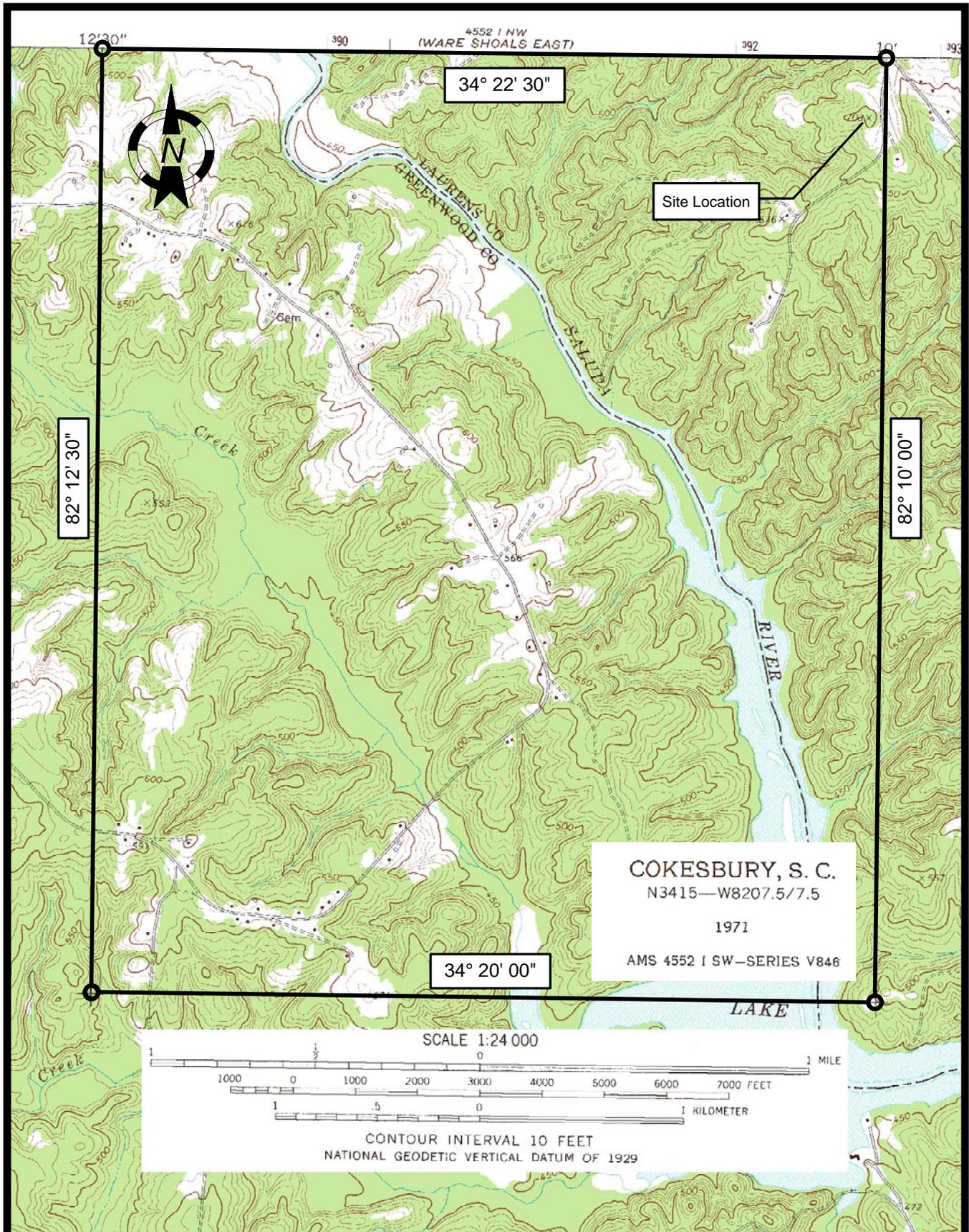


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 Date **19-Mar-04**  
 Call Letters **WNEH-DT** Channel **18**  
 Location **Greenwood, SC**  
 Customer **SCETV**  
 Antenna Type **TUF-O4-14/56H-1-T**

## TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **14U267075-90**

Angle	Field										
-10.0	0.031	2.4	0.372	10.6	0.097	30.5	0.024	51.0	0.024	71.5	0.006
-9.5	0.032	2.6	0.278	10.8	0.087	31.0	0.048	51.5	0.021	72.0	0.009
-9.0	0.053	2.8	0.210	11.0	0.073	31.5	0.064	52.0	0.016	72.5	0.011
-8.5	0.041	3.0	0.178	11.5	0.031	32.0	0.070	52.5	0.009	73.0	0.013
-8.0	0.029	3.2	0.177	12.0	0.029	32.5	0.067	53.0	0.005	73.5	0.014
-7.5	0.084	3.4	0.188	12.5	0.046	33.0	0.058	53.5	0.009	74.0	0.014
-7.0	0.129	3.6	0.195	13.0	0.037	33.5	0.046	54.0	0.012	74.5	0.013
-6.5	0.131	3.8	0.191	13.5	0.018	34.0	0.032	54.5	0.013	75.0	0.012
-6.0	0.083	4.0	0.174	14.0	0.043	34.5	0.020	55.0	0.011	75.5	0.010
-5.5	0.026	4.2	0.146	14.5	0.067	35.0	0.013	55.5	0.007	76.0	0.007
-5.0	0.078	4.4	0.112	15.0	0.068	35.5	0.014	56.0	0.005	76.5	0.006
-4.5	0.094	4.6	0.079	15.5	0.046	36.0	0.016	56.5	0.011	77.0	0.005
-4.0	0.048	4.8	0.064	16.0	0.017	36.5	0.014	57.0	0.017	77.5	0.007
-3.5	0.120	5.0	0.080	16.5	0.024	37.0	0.009	57.5	0.022	78.0	0.010
-3.0	0.273	5.2	0.109	17.0	0.034	37.5	0.009	58.0	0.025	78.5	0.013
-2.8	0.327	5.4	0.137	17.5	0.023	38.0	0.017	58.5	0.024	79.0	0.016
-2.6	0.369	5.6	0.157	18.0	0.012	38.5	0.022	59.0	0.022	79.5	0.019
-2.4	0.394	5.8	0.167	18.5	0.037	39.0	0.023	59.5	0.017	80.0	0.021
-2.2	0.400	6.0	0.166	19.0	0.054	39.5	0.018	60.0	0.012	80.5	0.023
-2.0	0.384	6.2	0.156	19.5	0.054	40.0	0.010	60.5	0.006	81.0	0.025
-1.8	0.345	6.4	0.136	20.0	0.037	40.5	0.007	61.0	0.006	81.5	0.027
-1.6	0.284	6.6	0.111	20.5	0.014	41.0	0.012	61.5	0.009	82.0	0.028
-1.4	0.208	6.8	0.082	21.0	0.019	41.5	0.015	62.0	0.012	82.5	0.029
-1.2	0.139	7.0	0.054	21.5	0.026	42.0	0.014	62.5	0.013	83.0	0.030
-1.0	0.147	7.2	0.038	22.0	0.019	42.5	0.008	63.0	0.012	83.5	0.031
-0.8	0.246	7.4	0.043	22.5	0.012	43.0	0.007	63.5	0.009	84.0	0.031
-0.6	0.375	7.6	0.058	23.0	0.031	43.5	0.015	64.0	0.006	84.5	0.031
-0.4	0.510	7.8	0.071	23.5	0.047	44.0	0.022	64.5	0.006	85.0	0.031
-0.2	0.640	8.0	0.078	24.0	0.049	44.5	0.025	65.0	0.011	85.5	0.031
0.0	0.757	8.2	0.078	24.5	0.035	45.0	0.023	65.5	0.016	86.0	0.031
0.2	0.856	8.4	0.070	25.0	0.014	45.5	0.017	66.0	0.020	86.5	0.030
0.4	0.932	8.6	0.056	25.5	0.014	46.0	0.009	66.5	0.024	87.0	0.030
0.6	0.980	8.8	0.040	26.0	0.024	46.5	0.006	67.0	0.026	87.5	0.029
0.8	1.000	9.0	0.027	26.5	0.022	47.0	0.011	67.5	0.026	88.0	0.029
1.0	0.990	9.2	0.031	27.0	0.010	47.5	0.014	68.0	0.025	88.5	0.028
1.2	0.952	9.4	0.049	27.5	0.027	48.0	0.013	68.5	0.023	89.0	0.027
1.4	0.888	9.6	0.068	28.0	0.051	48.5	0.008	69.0	0.019	89.5	0.026
1.6	0.804	9.8	0.076	28.5	0.065	49.0	0.006	69.5	0.015	90.0	0.026
1.8	0.703	10.0	0.090	29.0	0.063	49.5	0.012	70.0	0.011		
2.0	0.593	10.2	0.098	29.5	0.045	50.0	0.019	70.5	0.006		
2.2	0.480	10.4	0.101	30.0	0.020	50.5	0.023	71.0	0.004		



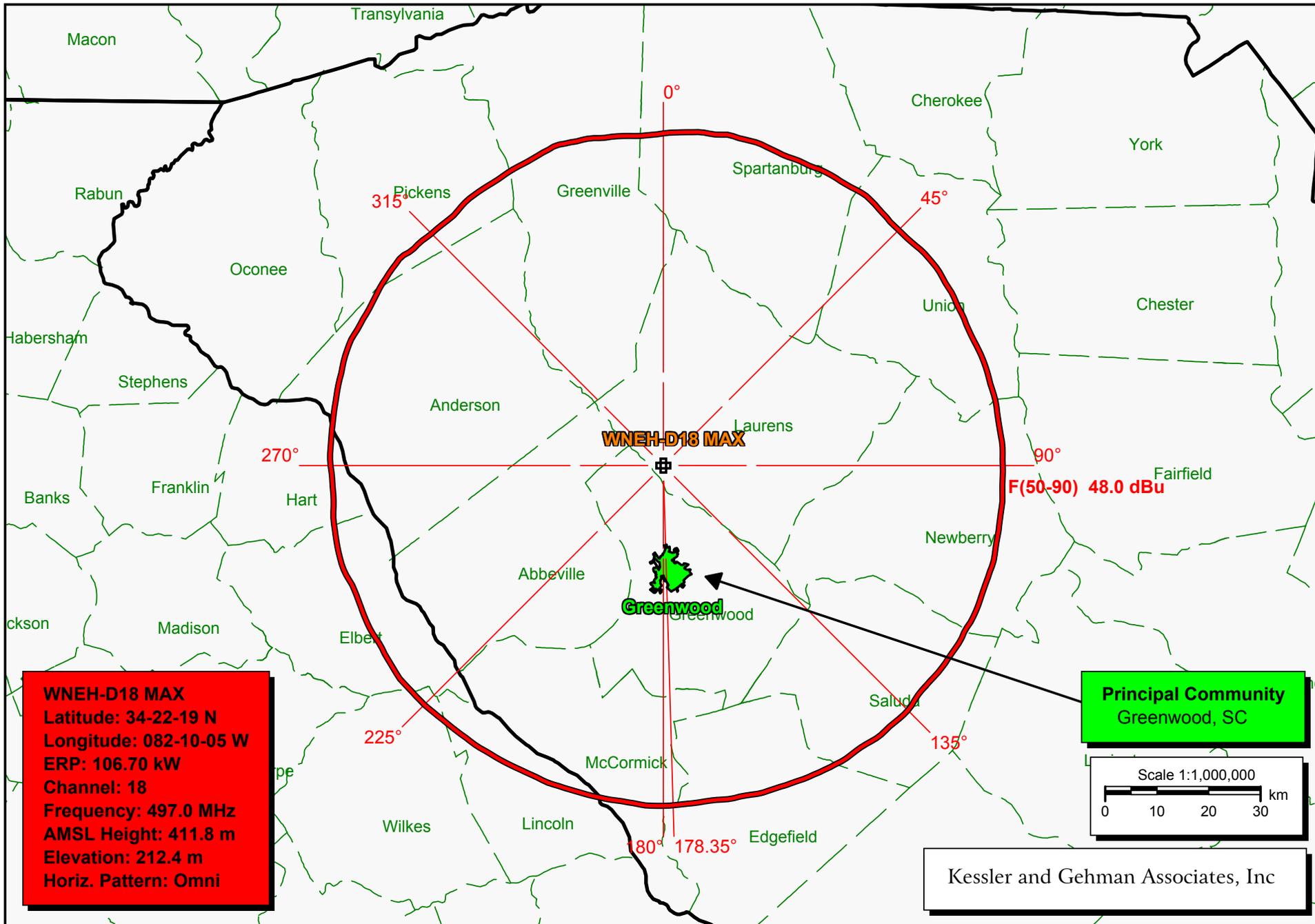
# KESSLER & GEHMAN

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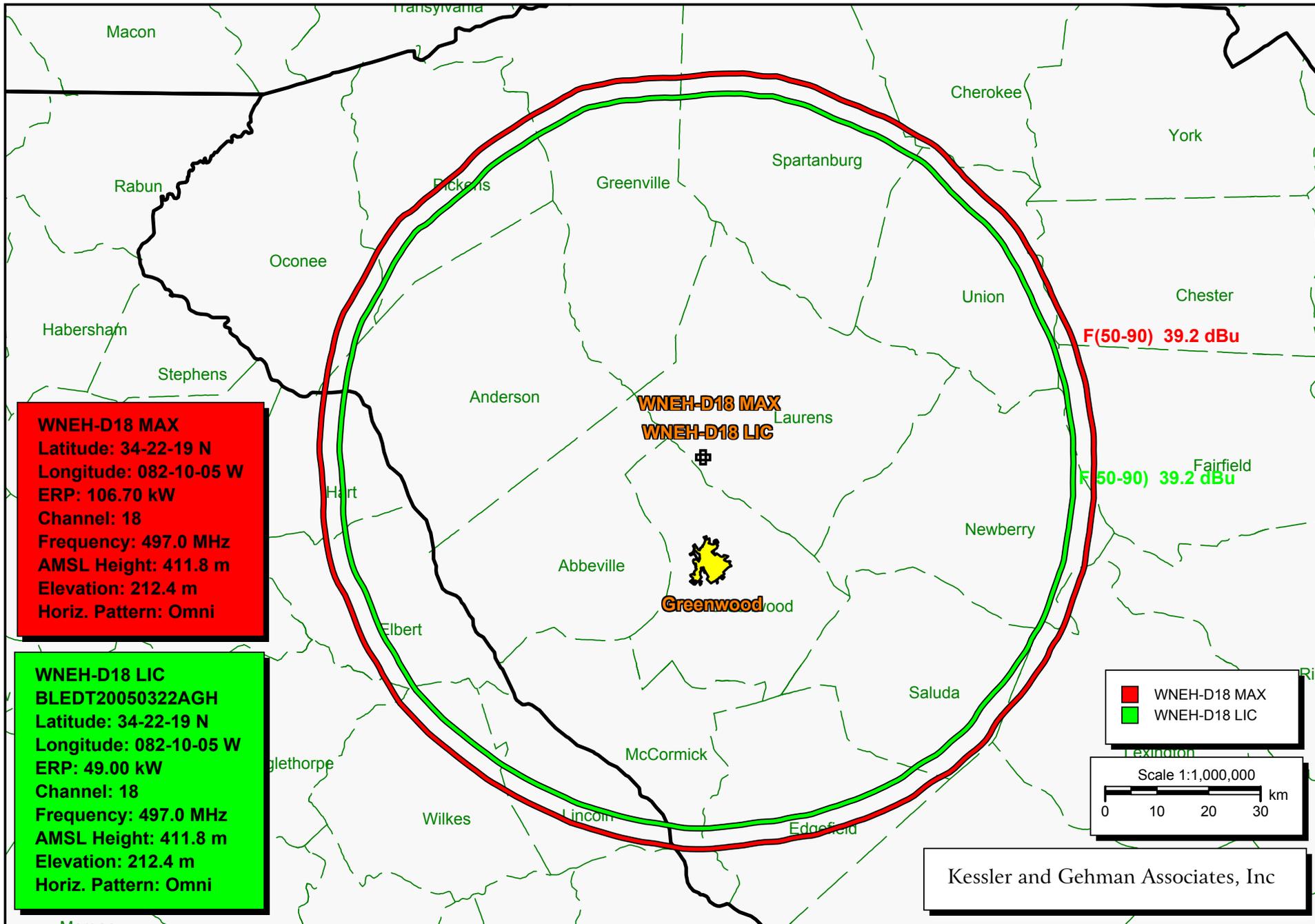
## WNEH-TV & WNEH-DT GREENWOOD, SOUTH CAROLINA

20040610

EXHIBIT E3



WNEH-DT Channel 18 F(50,90) 48.0 dBuV/m Principal Community Contour



**WNEH-D18 MAX**  
 Latitude: 34-22-19 N  
 Longitude: 082-10-05 W  
 ERP: 106.70 kW  
 Channel: 18  
 Frequency: 497.0 MHz  
 AMSL Height: 411.8 m  
 Elevation: 212.4 m  
 Horiz. Pattern: Omni

**WNEH-D18 LIC**  
 BLEDT20050322AGH  
 Latitude: 34-22-19 N  
 Longitude: 082-10-05 W  
 ERP: 49.00 kW  
 Channel: 18  
 Frequency: 497.0 MHz  
 AMSL Height: 411.8 m  
 Elevation: 212.4 m  
 Horiz. Pattern: Omni

■ WNEH-D18 MAX  
■ WNEH-D18 LIC

Scale 1:1,000,000  
 0 10 20 30 km

Kessler and Gehman Associates, Inc

WNEH-D18 LIC (green) vs. WNEH-D18 Proposed (red)

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-14-2008 Time: 13:14:15

Record Selected for Analysis

WNEH-D18 USERRECORD-01 GREENWOOD SC US  
Channel 18 ERP 106.7 kW HAAT 230. m RCAMSL 00412 m  
Latitude 034-22-19 Longitude 0082-10-05  
Status APP Zone 2 Border  
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	41.0 dBu F(50,90) (km)
0.0	106.700	216.7	72.2
45.0	106.700	219.6	72.4
90.0	106.700	239.6	73.9
135.0	106.700	260.0	75.3
180.0	106.700	241.7	74.0
225.0	106.700	235.1	73.5
270.0	106.700	219.4	72.4
315.0	106.700	204.4	71.3

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

WNEH-D18 18 GREENWOOD SC USERRECORD01

and station

SHORT TO: WNEH 18 GREENWOOD SC BDTV 1407  
 34 -22-19 082 -10-05  
 Req. separation 223.7 Actual separation 0.0 Short 223.7 km

LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations  
 Proposed facility OK toward West Virginia quite zone  
 Proposed facility OK toward Table Mountain  
 Proposed facility is beyond the Canadian coordination distance  
 Proposed facility is beyond the Mexican coordination distance  
 Proposed station is OK toward AM broadcast stations

\*\*\*\*\*  
 Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
18	WNEH-D18	GREENWOOD SC	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WUNE-TV	LINVILLE NC	190.3	LIC	BDTV	-0972
17	WLTX	COLUMBIA SC	132.6	LIC	BDTV	-1393
18	WFXB	MYRTLE BEACH SC	274.9	LIC	BDTV	-1409
18	WDBJ	ROANOKE VA	362.4	LIC	BDTV	-1676
19	WGCL-TV	ATLANTA GA	209.5	LIC	BDTV	-0389

%%%

Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
17	WUNE-TV	LINVILLE NC	BDTV	-0972

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
16	WKHA	HAZARD KY	173.7	LIC	BDTV	-0644
16	WGGG-TV	GREENVILLE SC	135.0	LIC	BDTV	-1404
17	WNCN	GOLDSBORO NC	301.7	LIC	BDTV	-0958
17	WQCW	PORTSMOUTH OH	318.7	LIC	BDTV	-1218

17	WLTX	COLUMBIA SC	239.5	LIC	BDTV	-1393
17	WKOP-TV	KNOXVILLE TN	190.2	LIC	BDTV	-1461
17	WFXR-TV	ROANOKE VA	196.3	LIC	BDTV	-1675
18	WDBJ	ROANOKE VA	196.1	LIC	BDTV	-1676
18	WNEH-D18	GREENWOOD SC	190.3	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
17	WLTX	COLUMBIA SC	BDTV	-1393

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
16	WPDE-TV	FLORENCE SC	135.1	LIC	BDTV	-1399
16	WGGG-TV	GREENVILLE SC	177.6	LIC	BDTV	-1404
17	WNCN	GOLDSBORO NC	268.9	LIC	BDTV	-0958
17	WUNE-TV	LINVILLE NC	239.5	LIC	BDTV	-0972
17	WKOP-TV	KNOXVILLE TN	359.0	LIC	BDTV	-1461
17	WFXR-TV	ROANOKE VA	348.8	LIC	BDTV	-1675
18	WFXB	MYRTLE BEACH SC	145.8	LIC	BDTV	-1409
18	WNEH-D18	GREENWOOD SC	132.6	APP	USERRECORD-01	

Total scenarios = 1

Result key: 1  
Scenario 1 Affected station 2  
Before Analysis

Results for: 17A SC COLUMBIA BDTV 1393 LIC  
HAAT 500.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1435553	35071.8
not affected by terrain losses	1433697	35023.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	91944	1739.2
lost to ATV IX only	91944	1739.2
lost to all IX	91944	1739.2

Potential Interfering Stations Included in above Scenario 1

16A SC FLORENCE	BDTV	1399	LIC
17A NC GOLDSBORO	BDTV	0958	LIC
17A NC LINVILLE	BDTV	0972	LIC
17A TN KNOXVILLE	BDTV	1461	LIC
17A VA ROANOKE	BDTV	1675	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC

After Analysis

Results for: 17A SC COLUMBIA                      BDTV              1393              LIC  
 HAAT 500.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1435553	35071.8
not affected by terrain losses	1433697	35023.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	92907	1855.4
lost to ATV IX only	92907	1855.4
lost to all IX	92907	1855.4

Potential Interfering Stations Included in above Scenario              1

16A SC FLORENCE	BDTV	1399	LIC
17A NC GOLDSBORO	BDTV	0958	LIC
17A NC LINVILLE	BDTV	0972	LIC
17A TN KNOXVILLE	BDTV	1461	LIC
17A VA ROANOKE	BDTV	1675	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
18A SC GREENWOOD	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1393
*Percent Service lost with proposal:	0.1	to BDTV	1393

#####

Analysis of Interference to Affected Station              3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	WFXB	MYRTLE BEACH SC	BDTV	-1409

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WNCN	GOLDSBORO NC	175.6	LIC	BDTV	-0958
17	WLTX	COLUMBIA SC	145.8	LIC	BDTV	-1393
18	WDBJ	ROANOKE VA	345.5	LIC	BDTV	-1676
19	WUNM-TV	JACKSONVILLE NC	197.1	LIC	BDTV	-0968
19	WTWB-TV	LEXINGTON NC	195.5	LIC	BDTV	-0971
18	WNEH-D18	GREENWOOD SC	274.9	APP	USERRECORD-01	

Total scenarios =    1

Result key:              2  
 Scenario              1 Affected station              3  
 Before Analysis

Results for: 18A SC MYRTLE BEACH                      BDTV              1409              LIC  
 HAAT 459.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1360418	37177.3
not affected by terrain losses	1355134	37089.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	11876	167.9

lost to ATV IX only 11876 167.9  
lost to all IX 11876 167.9

Potential Interfering Stations Included in above Scenario 1

17A NC GOLDSBORO BDTV 0958 LIC  
17A SC COLUMBIA BDTV 1393 LIC  
18A VA ROANOKE BDTV 1676 LIC

After Analysis

Results for: 18A SC MYRTLE BEACH BDTV 1409 LIC  
HAAT 459.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1360418	37177.3
not affected by terrain losses	1355134	37089.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	11926	175.9
lost to ATV IX only	11926	175.9
lost to all IX	11926	175.9

Potential Interfering Stations Included in above Scenario 1

17A NC GOLDSBORO BDTV 0958 LIC  
17A SC COLUMBIA BDTV 1393 LIC  
18A VA ROANOKE BDTV 1676 LIC  
18A SC GREENWOOD USERRECORD01 APP  
\*Percent Service lost without proposal: 0.0 to BDTV 1409  
\*Percent Service lost with proposal: 0.0 to BDTV 1409

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	WDBJ	ROANOKE VA	BDTV	-1676

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WNCN	GOLDSBORO NC	223.1	LIC	BDTV	-0958
17	WUNE-TV	LINVILLE NC	196.1	LIC	BDTV	-0972
17	WFXR-TV	ROANOKE VA	0.2	LIC	BDTV	-1675
18	WFXB	MYRTLE BEACH SC	345.5	LIC	BDTV	-1409
19	WTWB-TV	LEXINGTON NC	150.5	LIC	BDTV	-0971
19	WCAV	CHARLOTTESVILLE VA	171.6	LIC	BDTV	-1647
19	WVAH-TV	CHARLESTON WV	204.2	LIC	BDTV	-1778
18	WNEH-D18	GREENWOOD SC	362.4	APP	USERRECORD-01	

Total scenarios = 1

Result key: 3

Scenario 1 Affected station 4  
 Before Analysis

Results for: 18A VA ROANOKE BDTV 1676 LIC  
 HAAT 606.0 m, ATV ERP 460.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1477255	43001.3
not affected by terrain losses	1313535	37035.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17061	495.2
lost to ATV IX only	17061	495.2
lost to all IX	17061	495.2

Potential Interfering Stations Included in above Scenario 1

17A VA ROANOKE	BDTV	1675	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
19A NC LEXINGTON	BDTV	0971	LIC
19A WV CHARLESTON	BDTV	1778	LIC

After Analysis

Results for: 18A VA ROANOKE BDTV 1676 LIC  
 HAAT 606.0 m, ATV ERP 460.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1477255	43001.3
not affected by terrain losses	1313535	37035.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17244	507.2
lost to ATV IX only	17244	507.2
lost to all IX	17244	507.2

Potential Interfering Stations Included in above Scenario 1

17A VA ROANOKE	BDTV	1675	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
19A NC LEXINGTON	BDTV	0971	LIC
19A WV CHARLESTON	BDTV	1778	LIC
18A SC GREENWOOD	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1676
*Percent Service lost with proposal:	0.0	to BDTV	1676

#####

Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
19	WGCL-TV	ATLANTA GA	BDTV -0389

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
19	WIIQ	DEMOPOLIS AL	365.7	LIC	BDTV -0026

19	WHNT-TV	HUNTSVILLE AL	226.4	LIC	BDTV	-0037
19	WBKI-TV	CAMPBELLSVILLE KY	425.8	LIC	BDTV	-0638
20	WTBS	ATLANTA GA	0.0	LIC	BDTV	-0390
18	WNEH-D18	GREENWOOD SC	209.5	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application Ref. No.
18	WNEH-D18	GREENWOOD SC	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
17	WUNE-TV	LINVILLE NC	190.3	LIC	BDTV -0972
17	WLTX	COLUMBIA SC	132.6	LIC	BDTV -1393
18	WFXB	MYRTLE BEACH SC	274.9	LIC	BDTV -1409
18	WDBJ	ROANOKE VA	362.4	LIC	BDTV -1676
19	WGCL-TV	ATLANTA GA	209.5	LIC	BDTV -0389

Total scenarios = 1

Result key: 4  
 Scenario 1 Affected station 6  
 Before Analysis

Results for: 18A SC GREENWOOD USERRECORD01 APP  
 HAAT 230.0 m, ATV ERP 106.7 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1112329	17841.3
not affected by terrain losses	1107709	17773.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	5867	211.4
lost to ATV IX only	5867	211.4
lost to all IX	5867	211.4

Potential Interfering Stations Included in above Scenario 1

17A SC COLUMBIA	BDTV	1393	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC

#####

FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 06-14-2008 Time: 13:18:10

Record Selected for Analysis

WNEH-D18 USERRECORD-01 GREENWOOD\_2 SC US  
Channel 18 ERP 106.7 kW HAAT 230. m RCAMSL 00412 m  
Latitude 034-22-19 Longitude 0082-10-05  
Status APP Zone 2 Border  
Dir Antenna Make usr Model USRPAT01 Beam tilt N Ref Azimuth 0.  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	41.0 dBu F(50,90) (km)
0.0	106.700	216.7	72.2
45.0	106.700	219.6	72.4
90.0	106.700	239.6	73.9
135.0	106.700	260.0	75.3
180.0	106.700	241.7	74.0
225.0	106.700	235.1	73.5
270.0	106.700	219.4	72.4
315.0	106.700	204.4	71.3

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

WNEH-D18 18 GREENWOOD\_2 SC USERRECORD01

and station

SHORT TO: WNEH 18 GREENWOOD SC BDTV 1407  
 34 -22-19 082 -10-05  
 Req. separation 223.7 Actual separation 0.0 Short 223.7 km

LANDMOBILE SPACING VIOLATIONS FOUND

NONE

Proposed facility OK to FCC Monitoring Stations  
 Proposed facility OK toward West Virginia quite zone  
 Proposed facility OK toward Table Mountain  
 Proposed facility is beyond the Canadian coordination distance  
 Proposed facility is beyond the Mexican coordination distance  
 Proposed station is OK toward AM broadcast stations

\*\*\*\*\*  
 Start of Interference Analysis

Channel	Call	Proposed Station City/State	ARN
18	WNEH-D18	GREENWOOD_2 SC	USERRECORD01

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WUNE-TV	LINVILLE NC	190.3	LIC	BDTV	-0972
17	WLTX	COLUMBIA SC	132.6	LIC	BDTV	-1393
18	WNEH	GREENWOOD SC	0.0	LIC	BDTV	-1407
18	WFXB	MYRTLE BEACH SC	274.9	LIC	BDTV	-1409
18	WDBJ	ROANOKE VA	362.4	LIC	BDTV	-1676
19	WGCL-TV	ATLANTA GA	209.5	LIC	BDTV	-0389

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
17	WUNE-TV	LINVILLE NC	BDTV	-0972

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
16	WKHA	HAZARD KY	173.7	LIC	BDTV	-0644
16	WGGS-TV	GREENVILLE SC	135.0	LIC	BDTV	-1404
17	WNCN	GOLDSBORO NC	301.7	LIC	BDTV	-0958

17	WQCW	PORTSMOUTH OH	318.7	LIC	BDTV	-1218
17	WLTX	COLUMBIA SC	239.5	LIC	BDTV	-1393
17	WKOP-TV	KNOXVILLE TN	190.2	LIC	BDTV	-1461
17	WFXR-TV	ROANOKE VA	196.3	LIC	BDTV	-1675
18	WNEH	GREENWOOD SC	190.3	LIC	BDTV	-1407
18	WDBJ	ROANOKE VA	196.1	LIC	BDTV	-1676
18	WNEH-D18	GREENWOOD_2 SC	190.3	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
17	WLTX	COLUMBIA SC	BDTV	-1393

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
16	WPDE-TV	FLORENCE SC	135.1	LIC	BDTV	-1399
16	WGGG-TV	GREENVILLE SC	177.6	LIC	BDTV	-1404
17	WNCN	GOLDSBORO NC	268.9	LIC	BDTV	-0958
17	WUNE-TV	LINVILLE NC	239.5	LIC	BDTV	-0972
17	WKOP-TV	KNOXVILLE TN	359.0	LIC	BDTV	-1461
17	WFXR-TV	ROANOKE VA	348.8	LIC	BDTV	-1675
18	WNEH	GREENWOOD SC	132.6	LIC	BDTV	-1407
18	WFXB	MYRTLE BEACH SC	145.8	LIC	BDTV	-1409
18	WNEH-D18	GREENWOOD_2 SC	132.6	APP	USERRECORD-01	

Total scenarios = 2

Result key: 1  
Scenario 1 Affected station 2  
Before Analysis

Results for: 17A SC COLUMBIA BDTV 1393 LIC  
HAAT 500.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1435553	35071.8
not affected by terrain losses	1433697	35023.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	92569	1779.2
lost to ATV IX only	92569	1779.2
lost to all IX	92569	1779.2

Potential Interfering Stations Included in above Scenario 1

16A SC FLORENCE	BDTV	1399	LIC
17A NC GOLDSBORO	BDTV	0958	LIC
17A NC LINVILLE	BDTV	0972	LIC
17A TN KNOXVILLE	BDTV	1461	LIC
17A VA ROANOKE	BDTV	1675	LIC
18A SC GREENWOOD	BDTV	1407	LIC

18A SC MYRTLE BEACH            BDTV            1409            LIC

After Analysis

Results for: 17A SC COLUMBIA            BDTV            1393            LIC

HAAT 500.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1435553	35071.8
not affected by terrain losses	1433697	35023.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	92907	1855.4
lost to ATV IX only	92907	1855.4
lost to all IX	92907	1855.4

Potential Interfering Stations Included in above Scenario            1

16A SC FLORENCE	BDTV	1399	LIC
17A NC GOLDSBORO	BDTV	0958	LIC
17A NC LINVILLE	BDTV	0972	LIC
17A TN KNOXVILLE	BDTV	1461	LIC
17A VA ROANOKE	BDTV	1675	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
18A SC GREENWOOD_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1393
*Percent Service lost with proposal:	0.0	to BDTV	1393

Result key:            2  
Scenario            2 Affected station            2  
Before Analysis

Results for: 17A SC COLUMBIA            BDTV            1393            LIC

HAAT 500.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1435553	35071.8
not affected by terrain losses	1433697	35023.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	92569	1779.2
lost to ATV IX only	92569	1779.2
lost to all IX	92569	1779.2

Potential Interfering Stations Included in above Scenario            2

16A SC FLORENCE	BDTV	1399	LIC
17A NC GOLDSBORO	BDTV	0958	LIC
17A NC LINVILLE	BDTV	0972	LIC
17A TN KNOXVILLE	BDTV	1461	LIC
17A VA ROANOKE	BDTV	1675	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC

After Analysis

Results for: 17A SC COLUMBIA            BDTV            1393            LIC

HAAT 500.0 m, ATV ERP 1000.0 kW

POPULATION	AREA (sq km)
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within Noise Limited Contour	1435553	35071.8
not affected by terrain losses	1433697	35023.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	92907	1855.4
lost to ATV IX only	92907	1855.4
lost to all IX	92907	1855.4

Potential Interfering Stations Included in above Scenario 2

16A SC FLORENCE	BDTV	1399	LIC
17A NC GOLDSBORO	BDTV	0958	LIC
17A NC LINVILLE	BDTV	0972	LIC
17A TN KNOXVILLE	BDTV	1461	LIC
17A VA ROANOKE	BDTV	1675	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
18A SC GREENWOOD_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1393
*Percent Service lost with proposal:	0.0	to BDTV	1393

#####

Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	WNEH	GREENWOOD SC	BDTV	-1407

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WUNE-TV	LINVILLE NC	190.3	LIC	BDTV	-0972
17	WLTX	COLUMBIA SC	132.6	LIC	BDTV	-1393
18	WFXB	MYRTLE BEACH SC	274.9	LIC	BDTV	-1409
18	WDBJ	ROANOKE VA	362.4	LIC	BDTV	-1676
19	WGCL-TV	ATLANTA GA	209.5	LIC	BDTV	-0389
18	WNEH-D18	GREENWOOD_2 SC	0.0	APP	USERRECORD-01	

Total scenarios = 2

Result key: 3  
Scenario 1 Affected station 3  
Before Analysis

Results for: 18A SC GREENWOOD	BDTV	1407	LIC
HAAT 230.0 m, ATV ERP 49.0 kW			
	POPULATION	AREA (sq km)	
within Noise Limited Contour	1017528	15962.2	
not affected by terrain losses	1016310	15938.2	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	7045	167.6	
lost to ATV IX only	7045	167.6	
lost to all IX	7045	167.6	

Potential Interfering Stations Included in above Scenario 1

17A SC COLUMBIA BDTV 1393 LIC  
18A SC MYRTLE BEACH BDTV 1409 LIC

After Analysis

Results for: 18A SC GREENWOOD BDTV 1407 LIC

HAAT 230.0 m, ATV ERP 49.0 kW  
POPULATION AREA (sq km)  
within Noise Limited Contour 1017528 15962.2  
not affected by terrain losses 1016310 15938.2  
lost to NTSC IX 0 0.0  
lost to additional IX by ATV 907775 14310.5  
lost to ATV IX only 907775 14310.5  
lost to all IX 907775 14310.5

Potential Interfering Stations Included in above Scenario 1

17A SC COLUMBIA BDTV 1393 LIC  
18A SC MYRTLE BEACH BDTV 1409 LIC  
18A SC GREENWOOD\_2 USERRECORD01 APP

The following station failed the de minimis interference criteria.

18D SC GREENWOOD\_2 USERRECORD01  
ERP 106.70 kW HAAT 230.0 m RCAMSL 412.0 m  
Antenna usr USRPAT01

Due to interference to the following station and scenario: 1

18D SC GREENWOOD BDTV 1407  
ERP 49.00 kW HAAT 230.0 m RCAMSL 411.0 m  
Antenna CDB 9999999999999999

Percent Service lost without proposal: 0.0 to BDTV 1407  
Percent Service lost with proposal: 89.2 to BDTV 1407

Result key: 4  
Scenario 2 Affected station 3  
Before Analysis

Results for: 18A SC GREENWOOD BDTV 1407 LIC

HAAT 230.0 m, ATV ERP 49.0 kW  
POPULATION AREA (sq km)  
within Noise Limited Contour 1017528 15962.2  
not affected by terrain losses 1016310 15938.2  
lost to NTSC IX 0 0.0  
lost to additional IX by ATV 7045 167.6  
lost to ATV IX only 7045 167.6  
lost to all IX 7045 167.6

Potential Interfering Stations Included in above Scenario 2

17A SC COLUMBIA BDTV 1393 LIC  
18A SC MYRTLE BEACH BDTV 1409 LIC

After Analysis

Results for: 18A SC GREENWOOD                    BDTV            1407            LIC  
 HAAT 230.0 m, ATV ERP 49.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1017528	15962.2
not affected by terrain losses	1016310	15938.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	907775	14310.5
lost to ATV IX only	907775	14310.5
lost to all IX	907775	14310.5

Potential Interfering Stations Included in above Scenario            2

17A SC COLUMBIA	BDTV	1393	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
18A SC GREENWOOD_2	USERRECORD01		APP

The following station failed the de minimis interference criteria.

18D SC GREENWOOD\_2            USERRECORD01  
 ERP 106.70 kW HAAT 230.0 m RCAMSL 412.0 m  
 Antenna usr USRPAT01

Due to interference to the following station and scenario:            2

18D SC GREENWOOD            BDTV            1407  
 ERP 49.00 kW HAAT 230.0 m RCAMSL 411.0 m  
 Antenna CDB 9999999999999999

Percent Service lost without proposal:            0.0 to BDTV            1407  
 Percent Service lost with proposal:            89.2 to BDTV            1407

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Analysis of Interference to Affected Station            4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	WFXB	MYRTLE BEACH SC	BDTV	-1409

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WNCN	GOLDSBORO NC	175.6	LIC	BDTV	-0958
17	WLTX	COLUMBIA SC	145.8	LIC	BDTV	-1393
18	WNEH	GREENWOOD SC	274.9	LIC	BDTV	-1407
18	WDBJ	ROANOKE VA	345.5	LIC	BDTV	-1676
19	WUNM-TV	JACKSONVILLE NC	197.1	LIC	BDTV	-0968
19	WTWB-TV	LEXINGTON NC	195.5	LIC	BDTV	-0971
18	WNEH-D18	GREENWOOD_2 SC	274.9	APP	USERRECORD-01	

Total scenarios =            2

Result key:            5

Scenario 1 Affected station 4  
 Before Analysis

Results for: 18A SC MYRTLE BEACH BDTV 1409 LIC  
 HAAT 459.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1360418	37177.3
not affected by terrain losses	1355134	37089.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	11881	171.9
lost to ATV IX only	11881	171.9
lost to all IX	11881	171.9

Potential Interfering Stations Included in above Scenario 1

17A NC GOLDSBORO	BDTV	0958	LIC
17A SC COLUMBIA	BDTV	1393	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A VA ROANOKE	BDTV	1676	LIC

After Analysis

Results for: 18A SC MYRTLE BEACH BDTV 1409 LIC  
 HAAT 459.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1360418	37177.3
not affected by terrain losses	1355134	37089.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	11926	175.9
lost to ATV IX only	11926	175.9
lost to all IX	11926	175.9

Potential Interfering Stations Included in above Scenario 1

17A NC GOLDSBORO	BDTV	0958	LIC
17A SC COLUMBIA	BDTV	1393	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A VA ROANOKE	BDTV	1676	LIC
18A SC GREENWOOD_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1409
*Percent Service lost with proposal:	0.0	to BDTV	1409

Result key: 6  
 Scenario 2 Affected station 4  
 Before Analysis

Results for: 18A SC MYRTLE BEACH BDTV 1409 LIC  
 HAAT 459.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1360418	37177.3
not affected by terrain losses	1355134	37089.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	11881	171.9
lost to ATV IX only	11881	171.9
lost to all IX	11881	171.9

Potential Interfering Stations Included in above Scenario 2

17A NC GOLDSBORO	BDTV	0958	LIC
17A SC COLUMBIA	BDTV	1393	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A VA ROANOKE	BDTV	1676	LIC

After Analysis

Results for: 18A SC MYRTLE BEACH BDTV 1409 LIC

HAAT 459.0 m, ATV ERP 1000.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1360418	37177.3
not affected by terrain losses	1355134	37089.4
lost to NTSC IX	0	0.0
lost to additional IX by ATV	11926	175.9
lost to ATV IX only	11926	175.9
lost to all IX	11926	175.9

Potential Interfering Stations Included in above Scenario 2

17A NC GOLDSBORO	BDTV	0958	LIC
17A SC COLUMBIA	BDTV	1393	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A VA ROANOKE	BDTV	1676	LIC
18A SC GREENWOOD_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1409
*Percent Service lost with proposal:	0.0	to BDTV	1409

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
18	WDBJ	ROANOKE VA	BDTV	-1676

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
17	WNCN	GOLDSBORO NC	223.1	LIC	BDTV	-0958
17	WUNE-TV	LINVILLE NC	196.1	LIC	BDTV	-0972
17	WFXR-TV	ROANOKE VA	0.2	LIC	BDTV	-1675
18	WNEH	GREENWOOD SC	362.4	LIC	BDTV	-1407
18	WFXB	MYRTLE BEACH SC	345.5	LIC	BDTV	-1409
19	WTWB-TV	LEXINGTON NC	150.5	LIC	BDTV	-0971
19	WCAV	CHARLOTTESVILLE VA	171.6	LIC	BDTV	-1647
19	WVAH-TV	CHARLESTON WV	204.2	LIC	BDTV	-1778
18	WNEH-D18	GREENWOOD_2 SC	362.4	APP	USERRECORD-01	

Total scenarios = 2

Result key: 7

Scenario 1 Affected station 5  
 Before Analysis

Results for: 18A VA ROANOKE BDTV 1676 LIC  
 HAAT 606.0 m, ATV ERP 460.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1477255	43001.3
not affected by terrain losses	1313535	37035.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17061	499.2
lost to ATV IX only	17061	499.2
lost to all IX	17061	499.2

Potential Interfering Stations Included in above Scenario 1

17A VA ROANOKE	BDTV	1675	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
19A NC LEXINGTON	BDTV	0971	LIC
19A WV CHARLESTON	BDTV	1778	LIC

After Analysis

Results for: 18A VA ROANOKE BDTV 1676 LIC  
 HAAT 606.0 m, ATV ERP 460.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1477255	43001.3
not affected by terrain losses	1313535	37035.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17244	507.2
lost to ATV IX only	17244	507.2
lost to all IX	17244	507.2

Potential Interfering Stations Included in above Scenario 1

17A VA ROANOKE	BDTV	1675	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
19A NC LEXINGTON	BDTV	0971	LIC
19A WV CHARLESTON	BDTV	1778	LIC
18A SC GREENWOOD_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1676
*Percent Service lost with proposal:	0.0	to BDTV	1676

Result key: 8  
 Scenario 2 Affected station 5  
 Before Analysis

Results for: 18A VA ROANOKE BDTV 1676 LIC  
 HAAT 606.0 m, ATV ERP 460.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1477255	43001.3
not affected by terrain losses	1313535	37035.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17061	499.2
lost to ATV IX only	17061	499.2

lost to all IX 17061 499.2

Potential Interfering Stations Included in above Scenario 2

17A VA ROANOKE	BDTV	1675	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
19A NC LEXINGTON	BDTV	0971	LIC
19A WV CHARLESTON	BDTV	1778	LIC

After Analysis

Results for: 18A VA ROANOKE BDTV 1676 LIC  
 HAAT 606.0 m, ATV ERP 460.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1477255	43001.3
not affected by terrain losses	1313535	37035.1
lost to NTSC IX	0	0.0
lost to additional IX by ATV	17244	507.2
lost to ATV IX only	17244	507.2
lost to all IX	17244	507.2

Potential Interfering Stations Included in above Scenario 2

17A VA ROANOKE	BDTV	1675	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC
19A NC LEXINGTON	BDTV	0971	LIC
19A WV CHARLESTON	BDTV	1778	LIC
18A SC GREENWOOD_2	USERRECORD01		APP
*Percent Service lost without proposal:	0.0	to BDTV	1676
*Percent Service lost with proposal:	0.0	to BDTV	1676

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
19	WGCL-TV	ATLANTA GA	BDTV	-0389

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
18	WNEH	GREENWOOD SC	209.5	LIC	BDTV	-1407
19	WIIQ	DEMOPOLIS AL	365.7	LIC	BDTV	-0026
19	WHNT-TV	HUNTSVILLE AL	226.4	LIC	BDTV	-0037
19	WBKI-TV	CAMPBELLSVILLE KY	425.8	LIC	BDTV	-0638
20	WTBS	ATLANTA GA	0.0	LIC	BDTV	-0390
18	WNEH-D18	GREENWOOD_2 SC	209.5	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 7

Analysis of current record

Channel	Call	City/State	Application Ref. No.
18	WNEH-D18	GREENWOOD_2 SC	USERRECORD-01

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
17	WUNE-TV	LINVILLE NC	190.3	LIC	BDTV -0972
17	WLTX	COLUMBIA SC	132.6	LIC	BDTV -1393
18	WNEH	GREENWOOD SC	0.0	LIC	BDTV -1407
18	WFXB	MYRTLE BEACH SC	274.9	LIC	BDTV -1409
18	WDBJ	ROANOKE VA	362.4	LIC	BDTV -1676
19	WGCL-TV	ATLANTA GA	209.5	LIC	BDTV -0389

Total scenarios = 1

Result key: 9  
 Scenario 1 Affected station 7  
 Before Analysis

Results for: 18A SC GREENWOOD\_2 USERRECORD01 APP

HAAT 230.0 m, ATV ERP 106.7 kW	POPULATION	AREA (sq km)
within Noise Limited Contour	1112329	17841.3
not affected by terrain losses	1107709	17773.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	984652	15862.5
lost to ATV IX only	984652	15862.5
lost to all IX	984652	15862.5

Potential Interfering Stations Included in above Scenario 1

17A SC COLUMBIA	BDTV	1393	LIC
18A SC GREENWOOD	BDTV	1407	LIC
18A SC MYRTLE BEACH	BDTV	1409	LIC

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