

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)
)
Amendment of Section 73.622(b) of)
the Commission's Rules, DTV)
Table of Allotments)
(Charleston, South Carolina))

MM Docket No.
RM No.

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Chief, Allocations Branch

PETITION FOR RULEMAKING

1. WCSC, Inc. ("WCSC"), by its attorneys and pursuant to Section 73.623 of the Commission's rules, 47 C.F.R. §73.623, hereby requests that the Commission institute a rulemaking proceeding for the purpose of amending the Table of Allotments for the digital television ("DTV") service to change the DTV channel allotment for station WCSC-DT, Charleston, South Carolina, from channel 52 to Channel 47.

2. WCSC is the licensee of television station WCSC-TV, Charleston, South Carolina, which currently operates on NTSC channel 5. As the attached engineering exhibit of Denny & Associates, P.C. (the "Engineering Statement") indicates, the proposed channel substitution will enable WCSC to operate on a core channel and would facilitate the use of a common antenna by WCSC-DT and collocated noncommercial educational station WITV-DT, channel 49, Charleston, South Carolina.

3. As demonstrated in the Engineering Statement, the substitution of Channel 47 for Channel 52 at Charleston involves no change in WCSC-DT's allotment reference ERP, antenna radiation center HAAT, or to the geographic coordinates for

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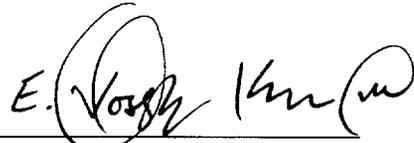
the allotment reference point. Moreover, as further set forth in the Engineering Statement, the proposed allotment meets the Commission's *de minimis* interference criteria because the interference to those stations is less than 2%, with the aggregate interference for each station less than 10%, as well as the Commission's principal community coverage requirements. *See* Engineering Statement.

4. Accordingly, WCSC respectfully requests that the Commission expeditiously commence a rulemaking proceeding to amend the DTV Table of Allotments to allot and assign DTV channel 47 to Charleston, South Carolina (in lieu of Channel 52) for use by WCSC-DT.

Respectfully submitted,

WCSC, INC.

By: _____

Handwritten signature of E. Joseph Knoll III in black ink, written over a horizontal line.

James R. Bayes

E. Joseph Knoll III

WILEY, REIN & FIELDING
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Its Attorneys

May 1, 2000

**ENGINEERING EXHIBIT
IN SUPPORT OF A
PETITION FOR RULEMAKING
TO AMEND SECTION 73.622(b) OF THE FCC RULES,
DTV TABLE OF ALLOTMENTS
WCSC-TV, INC.
STATION WCSC-DT
CHARLESTON, SOUTH CAROLINA**

ENGINEERING STATEMENT

The engineering exhibit of which this statement is part was prepared in accordance with Section 73.623(c) of the FCC Rules on behalf of WCSC, Inc. (hereinafter WCSC) to request the substitution of digital television (DTV) channel 47 (668-674 megahertz (MHz)) for DTV channel 52 (698-704 MHz) at Charleston, South Carolina, for use by its station WCSC-DT. WCSC-TV, Charleston, South Carolina, is licensed to operate on NTSC channel 5 (76-82 MHz), and Table 1, *DTV Allotments, Assignment Pairings with Analog Stations, and Service Replication and Interference Evaluation*, of the *Sixth Report and Order* in MM Docket Number 87-268, as revised, pairs DTV channel 52 with the existing WCSC-TV NTSC channel 5 assignment. The reference facilities for DTV operation on channel 52 at Charleston are 1000 kilowatts (kW) effective radiated power (ERP) and

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597 meters antenna radiation center height above average terrain (HAAT).

The reference coordinates for the DTV channel 52 allotment at Charleston are:

32° 55' 28" North Latitude

79° 41' 58" West Longitude.

WCSC believes that initial deployment of WCSC-DT on channel 47, a core channel, will be far more efficient than beginning DTV operation on channel 52, a non-core channel, and then moving WCSC-DT to a core channel in the future. The substitution of channel 47 for channel 52 at Charleston also would facilitate the use of a common antenna by WCSC-DT and collocated noncommercial educational station WITV-DT, channel 49, Charleston, South Carolina.

WCSC requests reference facilities of 1000 kW ERP and 597 meters antenna radiation center HAAT for DTV channel 47 at Charleston. There is no change proposed to the allotment reference ERP, the allotment reference antenna radiation center HAAT, or to the geographic coordinates for the allotment reference point. The substitution of DTV channel 47 for DTV

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channel 52 at Charleston complies with the principal community coverage requirements of Section 73.625(a) of the FCC Rules and the interference limits set forth in Section 73.623(c)(2) of the FCC Rules.¹

Figure 1, Sheet 1, of this exhibit is a portion of the National Atlas Southeastern States 1:2,000,000 Series USGS map showing the location of the 41 dB μ F(50,90) coverage contour for an assumed operation of WCSC-DT at the allotment reference point with the allotment reference facilities of 1000 kW ERP and 597 meters antenna radiation center HAAT. Figure 1,

¹ Interference studies made using the FCC's Fortran Longley-Rice (FLR) model show that use of DTV channel 47 at Charleston is predicted to cause interference to a pending application for a new cochannel analog TV station at Columbia, South Carolina (FCC File Number BPCT-960722KG). However, the 1996 construction permit application for channel 47 at Columbia was made well after the adoption of the July 17, 1987, FCC *Order* which put a freeze on the use of vacant television allotments within the minimum cochannel separation distance of Charlotte and other cities identified in the Appendix of the *Order* (See Order, RM-5811, released July 17, 1987). The proposed geographic coordinates for the channel 47, Columbia, transmitter site are 34° 07' 31" North Latitude, 80° 45' 21" West Longitude. Since the minimum cochannel distance separation between UHF TV stations in Zone II is 280.8 kilometers and the proposed channel 47 site at Columbia is only 122.6 kilometers from the Charlotte, North Carolina, reference point specified in Section 76.53 of the FCC Rules, the pending application proposing use of analog channel 47 at Columbia was not included in the DTV interference study because applications for that vacant allotment were frozen by the 1987 FCC *Order*.

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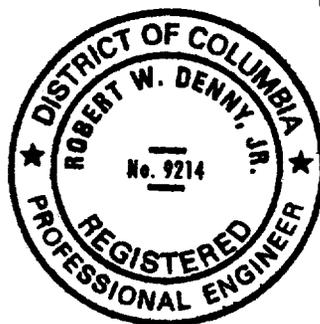
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WCSC-DT, Charleston, South Carolina

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Sheet 1, shows that all of Charleston, South Carolina, is enclosed by the proposed WCSC-DT principal community coverage contour as required by the FCC Rules. The distances to the coverage contour shown on the map of Figure 1, Sheet 1, are tabulated in Figure 1, Sheet 2 of this exhibit.

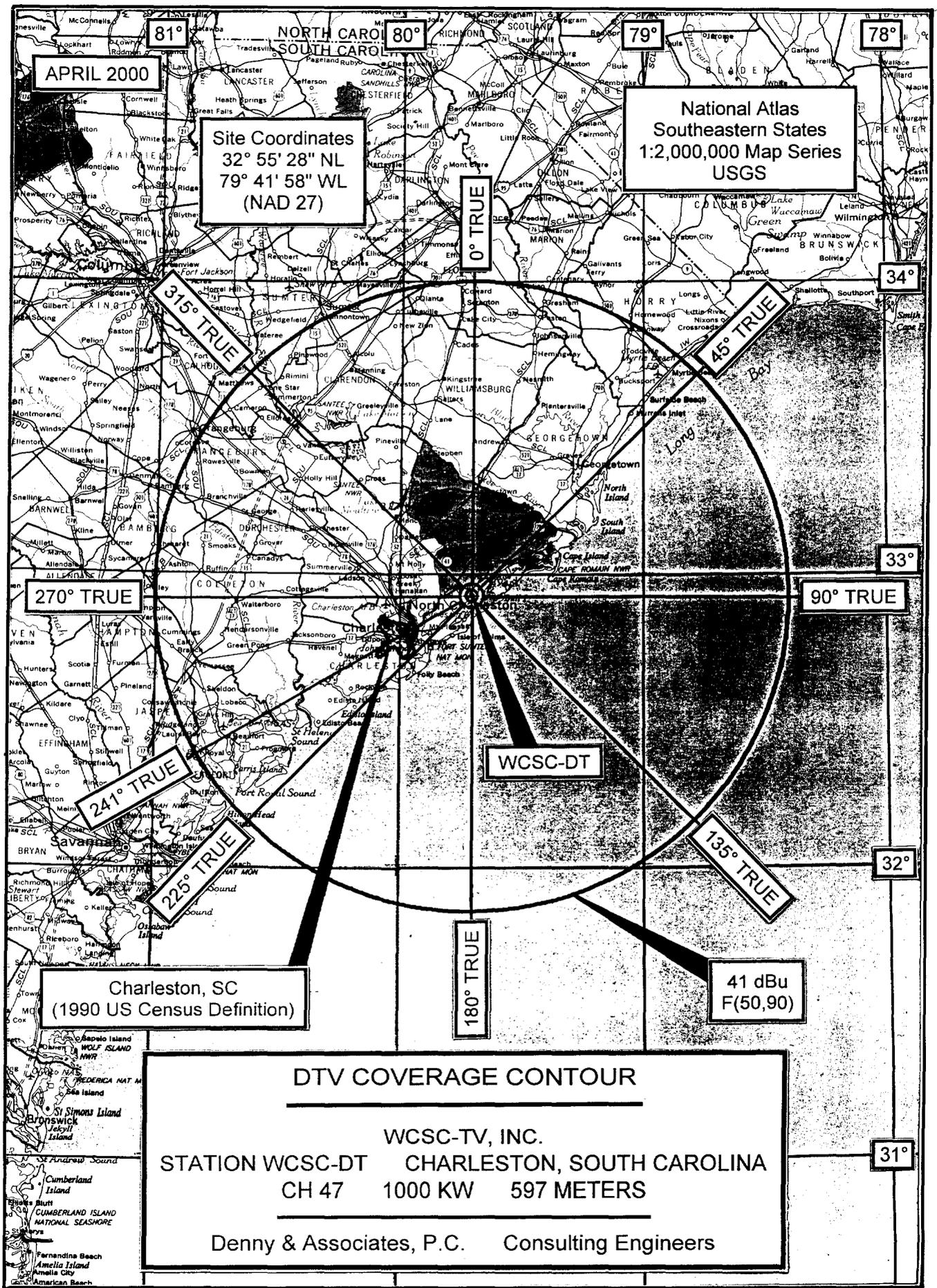
Figure 2, Sheet 1, of this exhibit shows that only very small increases in interference to other DTV facilities are predicted from the use of DTV channel 47 at Charleston as is proposed herein. Figure 2, Sheet 2, is an interference study showing that use of DTV channel 47 at Charleston would not preclude an adjacent channel DTV station with an allotment reference ERP of less than 200 kW from increasing its ERP to 200 kW at its allotment reference antenna radiation center HAAT and allotment reference point.

I declare under penalty of perjury that the foregoing is true and correct. Executed on May 1, 2000.



A handwritten signature in black ink, appearing to read "Robert W. Denny, Jr.", written over a horizontal line.

Robert W. Denny, Jr., P.E.



**ENGINEERING EXHIBIT
IN SUPPORT OF A
PETITION FOR RULE MAKING
TO AMEND SECTION 73.622(b) OF THE FCC RULES,
DTV TABLE OF ALLOTMENTS
WCSC-TV, INC.
STATION WCSC-DT
CHARLESTON, SOUTH CAROLINA
CH 47 1000 KW 597 METERS**

Tabulation of Average Elevations and
Distances to the DTV Coverage Contour

<u>Azimuth</u> (deg. T)	<u>3.2-16.1 km Average Terrain Elevation</u> (m. AMSL)	<u>Antenna Radiation Center Height Above Average Terrain</u> (meters)	<u>Distance to DTV Coverage (41 dBμ, F(50,90)) Contour</u> (km)
0	6	594	120.5
45	4	596	120.7
90	0	600	120.9
135	0	600	120.9
180	0	600	120.9
225	4	596	120.7
241*	2	598	120.8
270	2	598	120.8
315	8	592	120.4
Average	3	597	

* Radial through Charleston, South Carolina, not included in overall average.

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DTV TABLE OF ALLOTMENTS
WCSC-TV, INC.
STATION WCSC-DT
CHARLESTON, SOUTH CAROLINA
CH 47 1000 KW 597 METERS**

De Minimis Interference Study

DTV Station	Existing NTSC service ¹	DTV Service During Transition	NTSC Service Population Replicated By DTV Service	Existing Percentage DTV Interference	Proposed New DTV Interference	Interference Increase	New population served	New Percent Loss
	(Persons)	(Persons)	(Percent)	(Percent)	(Persons)	(Percent)	(Persons)	(Percent)
WJZY-DT, Belmont, NC Ch. 47, 208.8 kW, 594 m	2,125,000	2,297,000 ¹	108.1	0.0	5,381	0.2	2,291,619	0.2
WJZY-DT, Belmont, NC(app) Ch. 47, 1000 kW, 595 m	2,125,000	2,670,947	125.7	0.0	9,947	0.4	2,661,000	0.4
WWAY-DT, Wilmington, NC Ch. 46, 1000 kW, 594 m	758,000	1,051,000 ¹	138.7	0.0	6,664	0.6	1,044,336	0.6
WWAY-DT, Wilmington, NC(cp) Ch. 46, 1000 kW, 567 m	758,000	841,938	111.1	0.0	421	0.1	841,517	0.1

¹ Data from Appendix B, DTV Table of Allotments, in *Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders*.

Engineering Exhibit
 Petition for Rule Making
 WCSC-DT, Charleston, South Carolina

Interference Predicted from Proposed WCSC-DT to DTV
Allotments with ERPs below 200 kW calculated using Assumed ERPs of 200 kW

DTV Station	Existing NTSC service ¹	DTV Service During Transition	NTSC Service Population Replicated By DTV Service	Percentage DTV Interference	Proposed New DTV Interference	Interference Increase	New Population Served	New Percent Loss
	(Persons)	(Persons)	(Percent)	(Percent)	(Persons)	(Percent)	(Persons)	(Percent)
Assumed WACH-DT, Columbia, SC Ch. 48, 200 kW, 193 m	714,000	731,622	102.5	0.0	0	0.0	731,622	0.0

¹ Data from Appendix B, DTV Table of Allotments, in *Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders*.