CARL T. JONES
CORPORATION

STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN AMENDMENT TO A PENDING
APPLICATION FOR CONSTRUCTION PERMIT
WZTV-DT - NASHVILLE, TENNESSEE
BPCDT-19991101ADI
DTV - CH. 15 - 1000 kW - 411 M HAAT

Prepared for: Sullivan Broadcasting Company II, Inc.

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a registered Professional Engineer in the Commonwealth of Virginia, Registration No. 7418, and in the State of New York, Registration No. 63418.

GENERAL

Sullivan Broadcasting Company II, Inc., licensee of WZTV(TV), channel 17, Nashville, Tennessee, and applicant for a construction permit for the paired Digital Television Allotment for WZTV-DT, channel 15, has authorized this office to prepare this statement, FCC Form 301, Sections III and III-D, and associated exhibits in support of an application to amend the pending application for construction permit for digital transmission facilities for WZTV-DT on Channel 15, BPCDT-19991101ADI. The modification proposed herein differs from the pending application, in that it is now proposed to install the WZTV-DT antenna on a new support structure at 36E 15' 50" N. latitude, 86E 47' 39" W. longitude; FCC antenna structure registration No. 1224078. This new tower support structure is owned by American Tower Corporation, and is located approximately 7 meters from the

existing tower site specified in WZTV-DT's pending application for construction permit. The geographic coordinates specified in the original application have not changed. The proposed structure is intended for use by multiple NTSC and DTV stations in the Nashville market.

It is proposed, in a separate application, to relocate the WZTV(TV) NTSC antenna to the same tower. The tower top multiple antenna placement design requires that WZTV-DT's antenna serve as a support element for the WZTV(TV) NTSC antenna. Therefore, it is herein proposed to reduce the WZTV-DT antenna radiation center height above average terrain (HAAT) from 434 meters, as proposed in the pending application, to 411 meters in order to conform to the overall antenna placement design. This proposed modification constitutes a reduction in proposed HAAT of 23 meters. WZTV-DT herein proposes a different antenna model utilizing slightly different azimuth and elevation patterns. Otherwise, the WZTV-DT facility proposed herein is identical to that proposed in the pending application for construction permit. No other changes are proposed.

PROPOSED DIRECTIONAL ANTENNA

At the proposed new site, the applicant proposes to install a directional antenna, Dielectric model TFU-18DSC-R P230, using a "peanut" azimuth pattern similar to that shown in the pending application. As it is to be installed, the WZTV-DT antenna will support the existing NTSC antenna of WZTV(TV) that, in a separate application, is

proposed to be relocated to this site. Attached as Exhibit 1 is a polar plot of the proposed antenna's horizontal plane radiation pattern in relative field. Exhibit 2 is a tabulation of the proposed directional antenna's horizontal plane radiation pattern at ten-degree intervals in relative field, kW and dBk.

In addition, the proposed directional transmitting antenna shall employ an electrical beam tilt of 0.75 degrees below the horizontal plane. The antenna manufacturer's vertical plane radiation pattern, illustrating the proposed antenna's radiation characteristics above and below the horizontal plane, is attached hereto as Exhibit 3, and tabulated in Exhibit 4. A Vertical Plan Antenna Sketch is provided in Exhibit 5.

ALLOTMENT CONSIDERATIONS

Since the azimuth pattern of the instant proposed antenna differs slightly from that proposed in the pending application an analysis was performed to determine compliance with Section 73.623(c)(2). The results of the analysis using the FCC's processing program tv_process show no prohibited increase in interference to any NTSC station or construction permit, or any DTV station, construction permit or allotment. Since the slight difference in azimuth pattern occurs in conjunction with a 23 meter reduction in HAAT, a "distance to contours" study was performed. The results indicate that all signal strength contours based on the instant proposed modification, both coverage and interference, are located wholly within the comparable contours that are based on the pending application.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.625 of the Rules, utilizing the appropriate F(50,90) propagation curves, power, and antenna height above average terrain as determined for each profile radial. The average terrain on the eight cardinal radials from 3 kilometers to 16 kilometers from the site was determined using the National Geophysical Data Center Thirty Second Point Database (TPG-0050) as prescribed in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. The predicted WZTV 48 dBF signal contour encompasses the entire principal community of license, as required in Section 73.625(a) of the Commission's Rules. The predicted 41 dBF contour is also shown in Exhibit 6.

ENVIRONMENTAL CONSIDERATIONS

GENERAL

The proposal described herein meets the criteria specified in Section 1.1306 of the FCC Rules and Regulations as an action that is categorically excluded from environmental processing. The proposed DTV facility involves neither a site location specified under Section 1.1307(a)(1)-(7) of the Rules nor high intensity lighting as specified in Section 1.1307(a)(8).

RADIO FREQUENCY IMPACT

Effective October 15, 1997, the FCC adopted new guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions. The new guidelines are generally based on recommendations by the National Council on Radiation Protection and Measurements (NCRP) in NCRP Report No. 86 (1986), and by the American National Standards Institute and the Institute of Electrical and Electronic Engineers, Inc. (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The newly adopted guidelines provide a maximum permissible exposure (MPE) level for occupational or "controlled" situations as well as "uncontrolled" situations that apply in cases that affect the general public. The FCC's Office of Engineering and Technology (OET) Commission has issued a revised technical bulletin (OET Bulletin No. 65) entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (Edition 97-01, August 1997), to aid in the determination of whether FCC-regulated transmitting facilities, operations or devices comply with limits for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. The revised Bulletin contains updated and additional technical information for evaluating compliance with the new FCC policies and guidelines.

The newly adopted FCC MPE level for "uncontrolled" environments is derived from the formula, (frequency/1500), for UHF TV stations. The MPE level for UHF stations in a "controlled" environment is derived from the formula, (frequency/300). We must consider

the contributions of our own station, WZTV-DT channel 15, and the other proposed and existing stations at the proposed site. For WZTV-DT, which operates on television Channel 15 (479 MHz), the MPE is 0.319 milliwatts per centimeter squared (mW/cm^2) in an “uncontrolled” environment and 1.595 mW/cm^2 in a “controlled” environment.

The proposed WZTV-DT facility will operate with a maximum ERP of 1000 kW from a horizontally polarized omnidirectional transmitting antenna with a centerline height of 350 meters above ground level (AGL). Considering a very conservative vertical plane relative field factor of 0.3, the WZTV-DT facility produces a predicted power density at two meters above ground level of .02482 mW/cm^2, which is 7.77% of the new FCC guideline value for “uncontrolled” environments, and 1.55% of the new FCC guideline value for "controlled" environments (see Appendix A).

The total percentage of the ANSI value at the proposed site, considering the cumulative radiation of all stations at the site, is only 76.69% of the limit for "uncontrolled" environments, and 15.34% of the limit for "controlled" environments.

OCCUPATIONAL SAFETY

Based on the calculations discussed above, the cumulative predicted power density for the twelve co-located facilities would be only 15.34% of the FCC guideline value for “controlled” environments. The licensee of WZTV(TV) is committed to the protection of station personnel and/or tower contractors working in the vicinity of the WZTV-DT antenna.

The applicant is committed to reducing power and/or ceasing operation during times of service or maintenance of the transmission systems, when necessary, to ensure protection of personnel. As an additional safety measure, the base of the tower is fenced to preclude casual access.

In light of the above, the proposed WZTV-DT facility should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Commission's Rules.

SUMMARY

It is submitted that the proposal described herein complies with the Rules and Regulations of the Federal Communications Commission. This statement, FCC Form 301, and the attached exhibits were prepared by me or under my direct supervision and are believed to be true and correct.

DATED: May 21, 2001

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John E. Hidle, P.E.