



**STATEMENT OF JOHN E. HIDLE, P.E.
IN SUPPORT OF AN APPLICATION FOR
A CONSTRUCTION PERMIT FOR A
MINOR MODIFICATION OF LICENSE
WRGB - SCHENECTADY, NEW YORK
CH. 6 - 60 kW - 392 meters HAAT**

Prepared for: WRGB LICENSEE, LLC

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 Licensed Professional Engineer in the Commonwealth of Virginia, License No. 7418, and in the State of New York, License No. 63418.

GENERAL

This office has been authorized by WRGB LICENSEE, LLC, Licensee of WRGB, channel 6, Schenectady, New York, to prepare this statement and the associated exhibits, in support of an application for a construction permit for a minor modification of its license to increase WRGB's authorized Effective Radiated Power (ERP) from 30.2 kW to 60 kW. WRGB seeks a construction permit to implement its proposed ERP increase to 60 kW in a further attempt to ameliorate the well documented reception problems that have been, and continue to be experienced by potential viewers in the Albany-Schenectady-Troy, New York Designated Market Area (DMA).

PURPOSE OF REQUEST

As herein explained, WRGB seeks the proposed construction permit for an increase in its ERP in order to assist in its efforts to overcome serious reception problems that its

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viewers have historically suffered, and continue even to this day to suffer, since the June 12, 2009 DTV transition date. A substantial body of serious reception problems that are suffered by the digital television stations that are broadcasting on the VHF channels is well-documented, both before and, especially, after June 12, 2009. The most serious of the documented reception problems clearly appear to be suffered by the digital television stations that are broadcasting on any one of the low-VHF channels 2 to 6.

Shortly after the DTV transition on June 12, 2009, both WRGB and another digital television station broadcasting on channel 6, WPVI-TV in Philadelphia, Pennsylvania, filed applications for new DTV construction permits seeking increases in ERP, in a mutual attempt to ameliorate the very serious reception deficiencies that their viewers were suffering, and to try to improve the likelihood of potential viewers being able to receive usable signals from the stations. WPVI-TV's application, BPCDT-20090617ADQ, and WRGB's application, BPCDT-20090622ABV, were both granted on March 16, 2011, each construction permit authorizing equal ERPs of 30.2 kW. Subsequently, WPVI-TV obtained authorization to relocate to a different tower 249 meters away, with a lower HAAT, and corresponding slight increase in ERP to 34.0 kW.

WRGB's license application, BLCDT-20110428ABT, was granted on August 15, 2011. WPVI-TV's license application, BLCDT-20111019ACJ, was granted on February 17, 2012. After WRGB's authorized ERP increase to 30.2 kW was implemented there remained many reception problems, many of which appear to result from lack of sufficient signal level at many viewers' locations. The applicant believes that most of these remaining reception problems could be solved by the requested 2.98 dB increase in ERP.

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Therefore, for the stated reasons, WRGB herein proposes to increase its authorized ERP by 2.98 dB on a permanent basis.

REQUEST FOR WAIVERS

To any extent necessary, WRGB also requests waivers of Sections 73.622(f)(7)(ii) and 73.622(f)(5) of the Commission's rules. The Media Bureau previously has approved WRGB's applications for construction permits to operate facilities at power levels in excess of the Zone I limit, which applications specified facilities that would define WRGB as the largest station in the Albany-Schenectady-Troy, NY DMA. See FCC File Nos. BPCDT-20080307AAK, and BPCDT-20090622ABV. As explained herein, WRGB anticipates that the enhanced facilities that are proposed herein will enable it to resolve most, if not all, of its remaining reception problems. Accordingly, it is in the public interest to further waive Sections 73.622(f)(7)(ii) and 73.622(f)(5) to the extent necessary for the grant of the instant application for a construction permit.

AUTHORIZED FACILITY

WRGB's current authorization, BLCDT-20110428ABT, allows a facility with an ERP of 30.2 kW at a Height Above Average Terrain (HAAT) of 392 meters. WRGB's authorized antenna is a Dielectric Model THB-O3-4/12-1 channel 6 omni-directional horizontally polarized antenna on the tower bearing registration number 1231728, with its radiation center line located 106 meters above ground level, and 392 meters above average terrain. The authorized antenna employs no electrical nor mechanical beam-tilt. For the purposes of this instant application for construction permit WRGB proposes to use its currently authorized antenna.

ALLOCATION CONSIDERATIONS

A study was performed, using the FCC's software, *tvstudy*, v. 2.2.4, to determine if the instant application for construction permit is predicted to any cause new prohibited interference to post reassignment DTV stations, construction permits, DTV allotments or Class A DTV stations. The study results, shown in Appendix B, indicate that the instant proposal is predicted to cause no new interference exceeding 0.5% to the populations served by any post reassignment DTV station, construction permit, allotment or Class A DTV stations, except WPVI-TV, channel 6, Philadelphia, Pennsylvania, which has entered into a mutual interference acceptance agreement with WRGB and therein accepts the new interference predicted in the aforementioned study.

PREDICTED COVERAGE CONTOURS

The predicted coverage contours were calculated in accordance with the method described in Section 73.625(b) of the Rules, utilizing the appropriate F(50,90) propagation curves (47 CFR Section 73.699, Figure 9), proposed Effective Radiated 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 NED Three Second US Terrain Database as permitted in the FCC Rules. The antenna site elevation and coordinates were determined from FCC antenna registration data. Exhibit 1 contains the predicted DTV Noise Limited (28 dBu) contour and the predicted principal community (35 dBu) contour. The predicted 35 dBu contour entirely encompasses the principal community, Schenectady, New York.

BLANKETING AND INTERMODULATION INTERFERENCE

Other broadcast and non-broadcast technical facilities are co-located with, or located within 10 km of the proposed WRGB transmitter/antenna site. The applicant recognizes its responsibility to remedy complaints of interference which might result from this proposal in accordance with applicable Rules.

RADIO FREQUENCY IMPACT

The FCC's guidelines and procedures for evaluating environmental effects of radio frequency (RF) emissions 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, LLC (IEEE) in ANSI/IEEE C95.1-1992 (IEEE C95.1-1991). The guidelines define a maximum permissible exposure (MPE) level for occupational or "controlled" situations, and for "uncontrolled" environments that apply in all other cases that might affect the general public. The FCC Office of Engineering and Technology's technical bulletin No. 65 entitled, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields" (Edition 97-01, August 1997), provides assistance to determine whether FCC-regulated facilities comply with guidelines for human exposure to radio frequency electromagnetic fields as adopted by the Commission in 1996. OET Bulletin No. 65 contains the technical information necessary to evaluate compliance with the FCC's policies and guidelines. The Maximum Permitted Exposure (MPE) level for broadcast facilities that operate on a frequency between 30 MHz and 300 MHz is 200 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) for an "uncontrolled" environment, and is

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1000 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) for a “controlled” environment. The MPE level for broadcast facilities that operate on a frequency between 300 MHz and 1500 MHz, primarily UHF DTV stations, is determined for an “uncontrolled” environment by dividing the operating frequency in MHz by 1.5, and is determined for a “controlled” environment by dividing the operating frequency in MHz by 0.3.

The predicted emissions of WRGB operating on channel 6 must be considered, in addition to predicted emissions from any other proposed or existing stations at the site. For WRGB, which will operate on television channel 6 (82-88 MHz), the MPE is 200 microwatts per centimeter squared ($\mu\text{W}/\text{cm}^2$) in an “uncontrolled” environment and 1000 $\mu\text{W}/\text{cm}^2$ in a “controlled” environment. The proposed WRGB facility will operate with a maximum ERP of 60 kW using a horizontally polarized omni-directional transmitting antenna with a centerline height of 106 meters above ground level (AGL). Considering the proposed antenna’s vertical plane relative field factor of 0.300 the WRGB facility is predicted to produce a power density at two meters above ground level of 16.68 $\mu\text{W}/\text{cm}^2$, which is 8.34% of the FCC guideline value for an “uncontrolled” environment, and 1.668% of the FCC’s guideline value for “controlled” environments.

There are five other full-service DTV stations, and one FM radio station that are authorized to be located at the site, or within the relevant proximity of 315 meters. The total percentage of the ANSI value at the proposed site, including the cumulative radiation based on actual field factors, from all post-transition broadcast stations within the relevant proximity is 89.74% of the limit for “uncontrolled” environments, and 17.95% of the limit for “controlled” environments.

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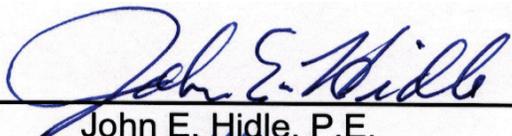
OCCUPATIONAL SAFETY

The applicant is committed to the protection of station personnel and/or tower contractors working on the tower support structure, or in the vicinity of the proposed WRGB antenna, by reducing power and/or ceasing operation during times of maintenance of the transmission systems, when necessary, to ensure the proper protection of persons who might be required to perform their assigned tasks in this “controlled” environment.

SUMMARY

WRGB contends that its instant application for construction permit seeking to increase its authorized ERP from 30.2 kW to 60 kW, as described herein, is in the public interest, and, except in the instance(s) where waiver(s) exist, and/or are requested, complies with the Rules, Regulations, and Policies of the Federal Communications Commission. This statement and the attached exhibits were prepared by me, or under my direct supervision, and are believed to be true and correct to the best of my knowledge and belief.

DATED: November 24, 2017



John E. Hidle, P.E.

