

R.F. RADIATION COMPLIANCE STATEMENT
Channel 21 – 100 kW H DA
Shenandoah Valley Educational TV Corp

October 15, 2008

The WVPY-DT transmitter site is located atop Signal Knob. There are only two transmitters at this site, WVPY-DT and WVPY-TV. The analog TV station will cease operation as required on February 17, 2009. The site, fenced, gated and locked has warning signs posted making it a "controlled environment."

Based on the formulas expressed in the OET Bulletin, No. 65, August 1997, "Evaluating Compliance with F.C.C. Guidelines for Human Exposure to Radio frequency Electromagnetic Fields", published by the Federal Communication Commission's Office of Science and Engineering, the applicant proposes to operate WVPY-DT on its assigned channel of channel 21 with its current high-gain directional antenna and with the newly increased ERP of 100 kW. This station operates from an antenna mounted at 26 meters above the ground. At head height when assuming a vertical elevation field of 0.1 toward the nadir, this station produces a power density of 58.0 microwatts per square centimeter, which is 3.4 percent of the 1,716.7 microwatts per square centimeter maximum for the frequency in use.

Until the transition to digital television is complete analog WVPY-TV, on channel 42, will operate using its licensed 141 kW H visual power with its directional antenna of 27 meters above ground. Assuming the maximum 22% aural injection, the station is predicted to produce a maximum R.F. non-ionization radiation level at a position 25 feet (head height) above the tower base of 46.7 microwatts per square centimeter. Since the applicant proposes a high gain UHF antenna, a vertical elevation field of 0.1 toward the nadir was also used in this calculation. For a controlled environment, 46.7 microwatts per square centimeter amounts to only 2.19 percent of the maximum for the frequency in use of 2,136.7 microwatts per square centimeter.

Together, the common facilities produce a total of 5.59 percent of the maximum for a controlled environment. Consequently, the proposed facility complies with the Commission's Rules with regard to protection of workers and the general public from non-ionization radio frequency radiation

The applicant will protect workers on the tower by either reducing ERP or terminating transmission. An agreement is in effect with the users at this location to reduce power or to terminate operations to protect workers from receiving in excess of the Commission's standard.

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