

R.F. RADIATION COMPLIANCE STATEMENT
Channel 21 – DTS System
Shenandoah Valley Educational TV Corp

February 12, 2013

The WVPY-TV main transmitter site is located atop Signal Knob. The station has been licensed at this site since 1999 and is therefore exempt from further environmental considerations. There are two other low power TV transmitters at this site, WHSV-TV and WAZW-LP. The site, fenced, gated and locked has warning signs posted making it a "controlled environment."

WVPT-TV (WVPY-1)

This station is currently licensed on channel 21 by the Commission at 100 kW ERP from an antenna mounted at 26 meters above the ground. 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, 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.

WHSV-TV operates on channel 42 with an ERP of 1 kW from an antenna height of 27 meters above ground. Using the formulas in OET-65, it can be shown that this station produces 0.535 microwatts per square centimeter at head height which is 0.25 percent of the maximum of 2,136.7 microwatts per square centimeter.

WAZL-LP operates on channel 46 with an ERP of 15 kW from an antenna 20 meters above the ground. Using the formulas of OET-65 this station is shown to contribute 15.5 microwatts per square centimeter at head height which is 0.7 percent of the maximum of 2,216.7 microwatts per square centimeter.

Together the three transmitters contribute a total of 4.35 percent of the maximum for a controlled site. The applicant protects 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 exposure in excess of the Commission's standard.

Fulks Run: (WVPY-4)

This DTS transmitter uses the applicant's previous TV translator site which was constructed prior to 2001. The transmitter employs a high gain antenna from a height above ground of 40 meters. OET-65 calculations show that this high gain antenna produces 0.023 microwatts per square centimeter at head height. This amounts to only 0.0013 percent of the maximum for a controlled area and 0.007 percent for an uncontrolled area. Consequently, no further emissions analysis was deemed necessary.

(continued)

Luray: (WVPY-3)

This DTS transmitter uses the applicant's previous translator site which was constructed prior to March 2001. The transmitter employs a high gain antenna with a height above ground of 59 meters. OET-65 calculations show that this antenna produces 0.01 microwatts per square centimeter. This amounts to only 0.0005 percent of the maximum for a controlled area and 0.003 percent for an uncontrolled area. Consequently, no further analysis was deemed necessary.

Fork Mountain – (Ruckersville): (WVPY-4)

This DTS transmitter uses the applicant's previous translator site built prior to March 2001. The transmitter employs a high gain antenna with a height above ground of 16 meters. OET-65 calculations show that this antenna produces 0.852 microwatts per square centimeter. This amounts to 0.05 percent of the maximum for a controlled area and 0.25 percent for an uncontrolled area. Consequently, no further analysis was deemed necessary.

Therefore, all of the DTS transmitters sites comply with the FCC's maximum R.F. emissions standard with regard to protection of workers and the general public from non- ionization radio frequency radiation.

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