

DIGITAL RADIO NOTIFCATION CONSUMATION OF HYBRID DIGITAL OPERATION

WVYA, CHANNEL 209, WILLIAMSPORT, PA; FACILITY IN THE RECOGNICATION OF CONSTRUCTION OF CONSTRUC

- 1. Operation using FM IBOC at the -14 dBc level began on 8/2/2010 Mail
- 2. The applicant certifies that, with the exception of the increased digital signal ERP, the IBOC facilities conform to the Ibiquity specifications and the technical specifications set forth in Appendix B of the First Report and Order in MM Docket No. 99-325.
- 3. In the event of interference, which is not anticipated, the technical contact person is JoeGlynn. He can be reached at 570-602-1170.
- 4. The system is combined with the analog transmitter power at 1,900 watts; the digital transmitter power at 76 watts (-14 dBc), and the combined transmitter output power of 1,976 watts.
- 5. The Effective Radiated Power (ERP) of this system is as follows: the analog ERP is 3,300 watts; the digital ERP is 132 watts (-14 dBc), and the combined ERP is 3,432 watts.
- 6. The applicant certifies that this notified operation will not cause human exposure to levels of RFR in excess of the limits in Section 1.1310 of the FCC Rules and is therefore categorically excluded from environmental processing pursuant to Section 1.1306(b) of the Commission's Rules. See attachment for more RFR information.

It should be noted that this Licensee, Northeastern Pennsylvania Educational Television, and all parties to this application, certify that they are not subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. at 853a.

Respectfully Submitted,

A. William Kelly

President and CEO Northeastern Pennsylvania Educational Television, Licensee of WVYA

RADIOFREQUENCY RADIATION ASSESSMENT

This exhibit has been included to address the issue of allowable radiofrequency radiation levels (RFR). The WVYA antenna would conform to the FCC guidelines with respect to OET Bulletin No. 65 (Edition 97-01, August 1997), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields." Included as an attachment to this exhibit is a printout of the RFR Radiation Hazard Formula. The input values located on this program are for the current WVYA antenna with the addition of the digital component of HD Radio. The type of antenna currently in use at WVYA is a Jampro JBCP-2MR RFR (0.5) 2 Bay Half Wave Spaced Rototiller Style Antenna. The results from this printout show that the WVYA antenna would have a predicted power density value at ground level of 0.00265022 mW per square cm. The maximum power density guideline is 0.2 mW per square cm and five percent of this value is 0.01 $\,$ mW per square cm. Pursuant to Section 1.1307(b) of the Commission's Rules, the power density contributions of co-located and nearby stations are not required to be calculated as the power density contribution is 0.00265022 mW per square cm (for the WVYA antenna), which is less than five percent of the maximum power density guideline value of 0.2 mW per square cm, the FCC maximum permissible uncontrolled/general population RF exposure guideline.

In addition to showing that the WVYA antenna meets the new OET bulletin No. 65 guidelines for a safe center of radiation, it should be noted that the transmitting tower is appropriately marked with warning signs. When it becomes necessary for workers to ascend the tower, appropriate measures, such as reduction of power or shut down of power if necessary, shall be taken to ensure that the human exposure to radiofrequency electromagnetic fields will not exceed the FCC guidelines. All of this information demonstrates that this digital hybrid operation conforms to the new FCC guidelines with respect to OET Bulletin No. 65 (Edition 97-01, August 1997), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields."

CONSUMATION OF HYBRID DIGITAL OPERATION ATTACHMENT

RADIATION HAZARD FORMULA WVYA Williamsport, PA

This proposal has been evaluated with respect to the RF radiation exposure guidelines contained in OET Bulletin 65.

For the FM band, the power density may be computed from the formula:

$$S = \frac{(33.4) (F) (F) (P)}{(R) (R)}$$

where: S = Power Density

P = Total power in watts (Horizontal + Vertical)

R = Height of center of radiation in meters above ground minus 2

F = Relative field factor in the downward direction of interest (-60 to -90 degrees elevation) as supplied by the antenna manufacturer.

The antenna model is: "Jampro JBCP-2MR RFR(0.5)"

In this case P = 6864 and R = 20 and F = 0.068

FCC General Population/

Uncontrolled Exposure limits permit up to 0.2 mW/sq cm exposure at this frequency. Therefore at ground level, S = 0.00265022mW/sq cm, or 1.33% of the allowable.

It is evident that no practical hazard should exist.