

TECHNICAL SUMMARY  
APPLICATION FOR CONSTRUCTION PERMIT  
TV STATION WMHT  
SCHENECTADY, NEW YORK  
CHANNEL 25 268 KW (DA) 426 m

1. The instant application is the initial 90 day ‘checklist’ application for the reassigned facilities of WMHT, Schenectady, New York (Ch. 25). It is proposed to operate with facilities that are identical to the facilities listed for WMHT in the FCC’s *Closing and Reassignment Public Notice* (CRP). Specifically, it is proposed to utilize WMHT’s current Dielectric model TUD-05-12/60H-1-B nondirectional antenna which incorporates an electrical beam tilt of 0.75 degree and a mechanical beam tilt of 0.25 degree at 45 degrees true. Furthermore, it is proposed to operate with the assigned ERP of 268 kW and there will be no change in the antenna radiation center height (681.8 m AMSL). There will also be no change in the overall structure height (ASRN 1231728).
2. As the proposed facilities are identical to the facilities listed for WMHT in the CRP, there will be no extension of the predicted service area relative to the baseline reassignment facility listed in the CRP. Also, the proposed facility is compliant with the 95% population service requirement. See attached FCC *TVStudy* analysis exhibit. In addition, the proposal complies with the city coverage requirements as demonstrated in the Predicted Coverage Contours exhibit.
3. As also demonstrated in the *TVStudy* analysis exhibit, the proposal complies with the FCC’s interference requirements based on the FCC’s *TVStudy* program. A cell size of 2.0 km and a profile resolution of 1.0 points/km were utilized for the *TVStudy* analysis.
4. RFR Compliance: The proposed facilities were evaluated in terms of potential radiofrequency radiation (RFR) exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna will be located 139 meters above ground level. The total DTV ERP is 268 kW (horizontal polarization). A conservative vertical plane relative field value of 0.18 is presumed for the antenna’s downward radiation (for angles below 60 degrees downward, see attached antenna data). The calculated power density at a point 2 meters above ground level is 15.45 uW/cm<sup>2</sup> which is 4.3% of the FCC’s recommended limit of 359.3 uW/cm<sup>2</sup> for channel 25 for an uncontrolled environment.

Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site is restricted and appropriately markets with RFR warning signs. Also, as this is a multi-user site, a formal RFR protection protocol is in effect in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measure will be taken to assure worker safety with respect to RFR exposure. Such measures include limiting the exposure time, wearing protective clothing, reducing power to an acceptable level or termination of transmitter output power all together until workers leave the restricted area.