

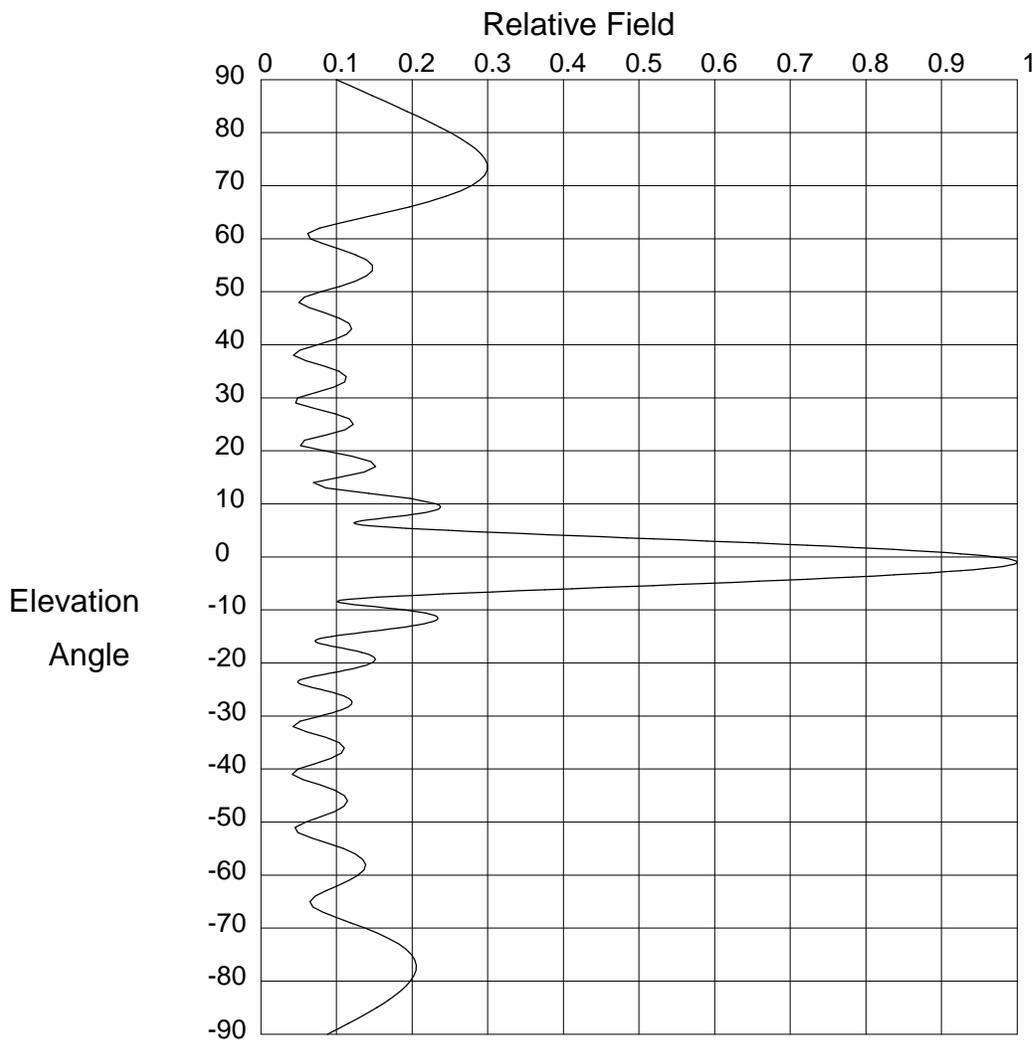
TECHNICAL SUMMARY  
REQUEST FOR SPECIAL TEMPORARY AUTHORITY (STA)  
DTV STATION WPCB-TV  
GREENSBURG, PENNSYLVANIA  
CHANNEL 28 112 KW (MAX-DA) 248 m

1. The instant request is for Special Temporary Authority (STA) for WPCB-TV, Greensburg, Pennsylvania, which is authorized (CP, LMS File No. 0000034177) for post-transition DTV operation on channel 28. The WPCB-TV STA facility will operate on post-transition channel 28 at reduced ERP with a temporary directional antenna side-mounted at a height of 200 meters above ground level on the existing/authorized tower. There will be no change in the overall structure height of the existing tower (ASRN 1056234).

2. The proposed STA antenna system has been designed such that there will be no extension of the predicted noise-limited service contour of the STA facility beyond that of the main facility (see Figure 1 attached).

3. 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 200 meters above ground level. The total DTV ERP is 112 kW (horizontal polarization). A conservative vertical plane relative field value of 0.25 is presumed (for angles below 60 degrees downward, see attached antenna data). The calculated power density at a point 2 meters above ground level is  $5.96 \text{ uW/cm}^2$  which is 1.6% of the FCC's recommended limit of  $371.3 \text{ uW/cm}^2$  for channel 28 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 marked with RFR warning signs. Furthermore, 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.



## Elevation Pattern

Scale: Linear

Units: Field, Relative

## Systems With Reliability

CLIENT: *WPCB (Auxiliary)*  
 ANTENNA TYPE: SWEDM80I/28  
 FREQUENCY: 557 MHz  
 PATTERN POL.: Horizontal  
 DIRECTIVITY(Peak): 8.298/9.19 dBd  
 DIRECTIVITY(Horiz): 7.813/8.928 dBd

Date: 5/3/2019

Beam Tilt (Deg.) : -1.0  
 Null Fill(s)(%) : 10, 7, 5