

TECHNICAL SUMMARY  
APPLICATION FOR CONSTRUCTION PERMIT  
LPTV STATION WPGF-LP  
MEMPHIS, TENNESSEE  
FACILITY ID 23848  
CHANNEL 6 3 KW (ND)

1. The instant minor change application is to increase the antenna height of LPTV station WPGF-LP on analog channel 6 at Memphis, Tennessee at its current site/tower. Specifically, the antenna radiation center height will be increased from 296.4 meters to 331 meters AMSL. There will be no other changes, including no change in the nondirectional ERP of 3 kW or in the overall height of the existing structure (ASRN 1249321).

2. As there will be no change in transmitter site it is axiomatic that there will overlap of the licensed and proposed 62 dBu, f(50,50) protected contours as required by Section 73.3572(a)(2)(ii) for minor change applications.

3. Interference Compliance: As indicated in the attached *TVStudy* analysis summary, WPGF-LP's proposed channel 6 operation meets the FCC's interference protection requirements with respect to all protected facilities based on both the pre- and post-transition allocation environments. A cell size of 1.0 km and a profile resolution of 1.0 km 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 analog antenna will be located 247 meters above ground level. The total ERP is 12 kW (6 kW-visual/6-kW aural, circular polarization). A worst-case vertical plane relative field value of 1.0 is presumed for the antenna's downward radiation (-60° to -90° elevation). The calculated power density at a point 2 meters above ground level is 0.46 uW/cm<sup>2</sup> which is 0.23% of the FCC's recommended limit of 200 uW/cm<sup>2</sup> for channel 6 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. 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 measures 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.