

TECHNICAL SUMMARY  
APPLICATION FOR MODIFICATION OF CONSTRUCTION PERMIT  
FILE NO. 0000036056  
TV STATION WCLF  
CLEARWATER, FLORIDA  
CHANNEL 21 1000 KW (DA) 412 m

1. Purpose of Application: It is proposed to modify the outstanding construction permit (File No. 0000036056) to change the WCLF directional antenna system and operate with a maximum ERP of 1000 kW. No other changes are proposed including no change in the overall structure height of the existing tower (ASRN 1057473).

2. City Coverage Compliance: The instant modification application will provide the requisite city grade (48 dBu) signal to all of Clearwater (see Figure 1).

3. As demonstrated in the *TVStudy* analysis exhibit, the proposal complies with the FCC's interference protection requirements based on a cell size of 2.0 km and profile resolution of 0.1 points/km.

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 409 meters above ground level. The total DTV ERP is 1000 kW (horizontal polarization). A conservative vertical plane relative field value of 0.1 is presumed for the antenna's downward radiation (for angles below 13 degrees downward, see attached antenna data). The calculated power density at a point 2 meters above ground level is  $2.0 \text{ uW/cm}^2$  which is 0.6% of the FCC's recommended limit of  $343.3 \text{ uW/cm}^2$  for channel 21 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.