

TECHNICAL SUMMARY  
APPLICATION FOR CONSTRUCTION PERMIT  
LPTV STATION WUVF-LD  
NAPLES, FLORIDA  
CHANNEL 18 15 KW (ND)

1. This instant application proposes to modify the licensed operation (BLDTL-20140313ABX) of WUVF-LD on channel 18 at Naples, Florida. Specifically, the purpose is to change transmitter site and operate on channel 18 with a nondirectional maximum ERP of 15 kW using an ERI model AL12O-16-3PLE elliptically polarized antenna with 0.75 degrees of electrical beam tilt. There will be no change in the overall structure height of the existing tower that will be utilized for the proposed operation (ASRN 1030207).

2. Facility Minor Change: Figure 1 demonstrates that there is overlap of the licensed and proposed 48.9 dBu, f(50,90) contours. In addition, the proposed site is located less than 48 kilometers (30 miles) from the licensed site (actual distance 8.1 km). Therefore, the proposal is considered a minor change as defined by Section 74.787(b).

3. As demonstrated in the attached *TVStudy* analysis exhibit, the proposal complies with the FCC's interference protection requirements based on a cell size of 1 km and profile resolution of 1 point/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 195 meters above ground level. The total DTV ERP is 19.5 kW (horizontally polarized ERP 15 kW, vertically polarized ERP 4.5 kW). A conservative vertical plane relative field value of 0.10 is presumed for the antenna's downward radiation in both the horizontal and vertical planes of polarization (for angles below 60 degrees downward, see attached antenna data). The calculated power density at a point 2 meters above ground level is  $0.17 \text{ uW/cm}^2$  which is 0.05% of the FCC's recommended limit of  $331.3 \text{ uW/cm}^2$  for channel 18 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.