

TECHNICAL SUMMARY  
APPLICATION FOR MODIFICATION OF CONSTRUCTION PERMIT  
LMS FILE NO. 0000025327  
TV STATION WVUP-CD  
TALLAHASSEE, FLORIDA  
CHANNEL 30 15 KW (ND)

1. This instant application proposes to modify the WVUP-CD construction permit (CP, LMS File No. 0000025327) for operation on channel 30 at Tallahassee, Florida. Specifically, the purpose is to change antenna system and increase the ERP and antenna height. Specifically, a Dielectric model TUM-O4-10/40H-1-R, nondirectional, elliptically polarized panel antenna will be top-mounted on the existing/authorized tower and will operate on channel 30 with a nondirectional ERP 15 kW and an RCMSL of 304 meters. There will be no other changes, including no change in transmitter site or the overall structure height of the existing tower that will be utilized for the proposed operation (ASRN 1031203).

2. Compliance with Lifted Freeze for Certain Repacked Stations: Although there will be some contour extension as indicated on Figure 1, it is believed that the proposed operation complies with the FCC Public Notice which lifted the freeze on contour expansion for certain repacked stations.<sup>1</sup> In this case, the proposed operation will permit the sharing of the proposed Dielectric nondirectional antenna with WCTV (auxiliary antenna, Ch. 20, Thomasville, FL, Facility ID 31590), WFXU (main antenna, Ch. 17, Live Oak, FL, Facility ID 22245) and WUFX-LD (main antenna, Ch. 33, Tallahassee, FL, Facility ID 187680) which represents an economy of scale and will permit construction of the repacked facilities by the Phase 8 completion date.

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 km and profile resolution of 0.5 point/km.

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<sup>1</sup> *Media Bureau Lifts the Freeze on the Filing of Minor Modification Applications That Expand the Contour of Full Power and Class A Television Stations for Certain Repacked Stations, Effective Immediately*, FCC Public Notice, DA 19-684 (released July 22, 2019).

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 260 meters above ground level. The total DTV ERP is 21.43 kW (15 kW horizontal polarization, 6.43 kW vertical polarization). A worst-case vertical plane relative field value of 1.0 is presumed for the antenna's downward radiation in both the horizontal and vertical planes of polarization (for angles below 60 degrees downward). The calculated power density at a point 2 meters above ground level is  $10.75 \text{ uW/cm}^2$  which is 2.84% of the FCC's recommended limit of  $379.3 \text{ uW/cm}^2$  for channel 30 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.