

TECHNICAL SUMMARY  
APPLICATION FOR CONSTRUCTION PERMIT  
TV STATION WRXY-TV  
TICE, FLORIDA  
CHANNEL 33 1000 KW (DA) 429 m

1. The instant application for WRXY-TV on channel 33 at Tice, Florida is filed in response to the FCC's Public Notice which temporarily lifted the freeze on the filing of minor modification applications that expand the contour or full power and Class A TV stations.<sup>1</sup> It is proposed to change the WRXY-TV 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 1213076).

2. Section 73.622(f)(5) Compliance: It is proposed operate on channel 33 with a directional antenna maximum ERP of 1000 kW and an HAAT of 429 meters. These facilities exceed the nominal maximum facilities specified in Section 73.622(f)(8)(i). However, the proposed facilities have been calculated in accordance with the largest station provision of Section 73.622(f)(5). The largest station in the Fort Myers-Naples, Florida market is the authorized operation of WINK-TV on channel 31 (LMS File No. 0000025486) which is authorized to provide noise-limited 41 dBu, f(50,90) service to an area of 32,140 square kilometers whereas the proposed WRXY-TV operation is predicted to provide noise-limited 41 dBu, f(50,90) service to an area of 26,450 square kilometers (see Figure 2 attached). Clarification of the largest station provision is provided in the Report and Order and Further Notice of Proposed Rule Making in MM Docket No. 00-39 at paragraphs 73-74.

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 1.0 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 427 meters above ground

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<sup>1</sup> *Media Bureau Temporarily Lifts the Freeze on the Filing of Minor Modification Applications That Expand the Contour of Full Power and Class A Television Stations from November 28 Through December 7, 2017*, Public Notice, DA 17-1086 (released November 6, 2017).

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 65 degrees downward, see attached antenna data). The calculated power density at a point 2 meters above ground level is  $1.85 \text{ uW/cm}^2$  which is 0.47% of the FCC's recommended limit of  $391.3 \text{ uW/cm}^2$  for channel 33 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, 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.