

TECHNICAL SUMMARY
APPLICATION FOR CONSTRUCTION PERMIT
TV STATION WXCW
NAPLES, FLORIDA
CHANNEL 32 900 KW (MAX-DA) 393 m

1. The instant application is the initial 90 day application for the reassigned facilities of WXCW, Naples, Florida (Ch. 32). The proposed WXCW facility will be relocated to an existing tower site and will be side-mounted on the tower.¹ There will be no change in the overall structure height of the existing tower.

2. The proposed maximum directional effective radiated power was adjusted to 900 kW to account for the change in transmitter site and antenna height. Although there is some extension of the predicted service area relative to the baseline reassignment facility listed in the FCC's *Closing and Reassignment Public Notice*, the extension will not exceed 1% in any direction. The proposed facility is also compliant with the 95% population service requirement. See attached FCC *TVStudy* analysis exhibit. Also, the proposal complies with the city coverage requirements as demonstrated in the Predicted Coverage Contours exhibit.

3. As also 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 392 meters above ground level. The total DTV ERP is 1058.8 kW (900 kW-horizontal, 158.8 kW-vertical). A conservative vertical plane relative field value of 0.1 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 2.3 uW/cm² which is 0.6% of the FCC's recommended limit of 387.3 uW/cm² for channel 32 for an uncontrolled environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

¹ The tower site is identified by FCC Antenna Structure Registration Number 1019724 and it is also the transmitter site of full-service DTV station WINK-TV, Fort Myers, FL (Facility ID 22093).

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 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.