## **Engineering Narrative and Environmental Considerations**

Application for Displacement Construction Permit
Minor Change
W31DV-LD
DTV Channel 31
Guayama, Puerto Rico

As a result of the repacking process associated with the broadcast television incentive auction, W31DV-D, facility ID: 188711, got displaced by the assignment of WNJX-TV to channel 31 and WIPM-TV to channel 32. As a result, WNJX receives interference of 8.1%, and WIPM receives interference of 1.91% from the licensed W31DV-D. With this minor change application, Ramon Hernandez proposes to relocate W31DV-D, stay on channel 31, increase ERP, modify antenna type & azimuth, and requesting TVStudy processing using a cell size of 0.5km and profile increments of 0.14 km. The new proposed location is compliant with all interference requirements.

Ramon Hernandez was previously authorized similar facilities but could not complete construction within the terms of the construction permit, file number 000059669. Therefore, that permit expired. With this application, Ramon Hernandez requests similar facilities.

## **Environmental Considerations**

The evaluation of the W31DV-D proposed operations for potential radiofrequency exposure to workers and the general public indicates that, based on a radiation center at 30 meters above ground, a maximum relative antenna field of 0.17 between 60 and 90 degrees from horizontal and a total ERP of 14.5kW, the calculated RF exposure at two meters above ground will not exceed 17.39µw/cm² or 4.00% of the 383.33µw/cm² general uncontrolled population limit applicable to DTV channel 31.

Access to the proposed transmitter site is restricted.

The tower is not located in a flood plain, a wilderness area, or a wildlife preserve that might affect threatened and endangered species or their habitat. In addition, it is not located in an Indian religious and/or cultural site; no significant changes in surface features will occur.

If workers are required to climb the tower, the W31DV-LD site emission shall be reduced or terminated as necessary to prevent RF radiation exposure above the FCC limits.

The proposed modifications will not have a significant environmental effect as described above.

## <u>Protection to FCC Monitoring Station and Arecibo Observatory</u>

W31DV-D proposed facility is located 28.4 km from the FCC monitoring station at Santa Isabel, Puerto Rico. Due to the low ERP of the W31DV-D radiation toward the monitoring station and the intervening terrain, the proposed W31DV-D will have no adverse effects on the monitoring station.

According to Section 73.1030 of the FCC Rules, concurrently with filling this application, the Arecibo Observatory is notified of the proposed facility.

Alejandro Luciano PE PO Box 194528 San Juan, Puerto Rico 00919-4528 (787)717-6984 02/28/2022