

Engineering Statement and Environmental Considerations

Application for Construction Permit
Displacement
W24EI-LD
DTV Channel 4
Naranjito, Puerto Rico

As a result of the broadcast television repacking process W24EI-D, Facility ID: 148881, is displaced by the assignment of WUJA-DT, Facility ID: 8156, to channel 24 in the same geographic area. The W24EI-D displacement interference study included with this application shows that the present W24EI-D facility will cause interference of 10.11% to WUJA-DT, and will receive interference of 60.97% from WUJA.

With this application, W24EI-D is requesting to relocate to a site 23.77 Km (22.85 miles) west of the present site and, displacement to TV Channel 4. That distance is within the allowed 48 kilometers for LPTV relocation and there is ample overlap between the present and proposed facilities. The proposed operation of W24EI-D will cause interference of 3.96% to the licensed facility of WVDO-LD, Facility ID: 183026, both stations, W24EI-D and WVDO-LD, belong to Ramon Hernandez and the interference is accepted.

Environmental Considerations

The proposed channel 4 operations of W24EI-LD were evaluated for potential radiofrequency exposure to workers and the general public. Based on a radiation center at 30 meters above ground, a maximum relative antenna field of 0.20 between 60 and 90 degrees from horizontal and a total ERP of 3.0kW, the calculated RF exposure at two meters above ground will not exceed $3.84\mu\text{w}/\text{cm}^2$ or 1.92% of the $200\mu\text{w}/\text{cm}^2$ general population uncontrolled limit applicable to DTV channel 4.

The transmitter site is restricted from access. The tower is not located in a flood plain, a wilderness area, or in a wildlife preserve that might affect threatened and endangered species or their habitat, it is not located in an Indian religious and/or cultural site. No significant changes in surface features will take place.

If workers are required to climb the tower the W24EI-LD site emission shall be reduced or terminated as necessary to prevent RF radiation exposure above the FCC limits.

As described above the proposed modifications will not have a significant environmental effect.

Protection to FCC Monitoring Station and Arecibo Observatory

The proposed W24EI-D facility is located 29.5 km from the FCC monitoring station at Santa Isabel, Puerto Rico, because of the low ERP of the W24EI-D radiation toward the monitoring station, and the intervening terrain, no adverse effects to the monitoring station are expected.

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

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.

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