

Engineering Statement (Amendment)  
Application for Construction Permit  
R&F Broadcasting Inc.  
WRFB-DT  
Channel 30, 250kW (H), 75kW (V)  
Carolina, Puerto Rico

**I. Introduction**

This amendment is to correct the antenna azimuth, pattern rotation information, add antenna xls format elevation pattern and TV Study interference results. It is prepared in support of a minor modification to the authorized facilities of TV station WRFB-DT Carolina, Puerto Rico. As a repack affected station WRFB is entitled to apply for expanded facilities during the ongoing window. It is proposed to modify the present construction permit to, relocate WRFB-DT antenna and Increase Effective Radiated Power to 250kW. The proposed WRFB-DT facility is compliant with all interference protection requirements. The results of the interference analysis using the FCC's *TVStudy (version 2.2.3 LMS Database dated 01/06/2018, Climate: Equatorial)* predicted service and interference analysis tool are attached hereto. As per the Köppen climate classification Puerto Rico climate is classified as tropical rainforest also known as Equatorial.

The instant proposal is compliant with the principal city coverage requirements of Carolina, Puerto Rico as illustrated in the Predicted Coverage Contours exhibit.

**II. Protection to FCC Monitoring Station and Arecibo Observatory**

The proposed WRFB-DT facility is located 36.2 KM from the FCC monitoring station at Santa Isabel, Puerto Rico, because of the low ERP of the WRFB-DT radiation and the intervening terrain toward the Santa Isabel monitoring station no adverse effects to the monitoring station are expected. Pursuant 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.

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