

# **WRMD-CD Application for Modification of Post-Repack Construction Permit**

## **November 1, 2017**

### Engineering Exhibit

The purpose of this application is to request authority to modify a post-repack construction permit (LMS file number 0000028890) for operation on channel 30 for WRMD-CD, Tampa, FL, Facility ID 74559, licensed to ZGS Television of Tampa, Inc.

This application specifies a new antenna location on the tower ASR# 1211242 owned by Florida West Coast Public Broadcasting, Inc located at 14021 Boyette Road, Riverview, FL. The proposed facility will use a DielectricTLP-8F (SP) antenna side mounted on the tower with the radiation center at 380 meters above ground (403.2 meters AMSL).

A TVStudy 2.2.3 analysis using the default 1 km cell size and 1 km terrain profile point spacing for Class A interference evaluation with the facility proposed in this application operating in compliance with the full service emission mask with an effective radiated power (ERP) of 14 kW at 403.2 meters AMSL with the antenna pattern tabulation provided in the application showed the maximum amount of new interference created to any post-auction baseline facility, any application filed in the replication and first priority windows, and any granted post-auction construction permits in the LMS database dated October 26, 2017 was under 0.5%. TVStudy did not identify interference at any level to any LPTV or TV translator facilities.

Tampa, Florida, the community of license is within the service area contour of the proposed facility.

### Antenna System

The proposed facility will use a side mounted Dielectric TLP-8F(SP) directional antenna with horizontal polarization and 1.0 degree of electrical beam tilt.

### Environmental Statement

The requested facility will be side mounted on an existing tower in an antenna farm. The tower height will not be increased. No new tower construction is required.

RF power density from the facility was calculated using the procedures in FCC Office of Engineering and Technology Bulletin 65. The maximum power density around the site, allowing for 2 meter person height and allowing for 10 meter building height, is calculated to be 0.00015 mW/cm<sup>2</sup> or 0.04% of the FCC maximum permissible exposure level of 0.379 mW/cm<sup>2</sup> at 569 MHz for an uncontrolled environment. At full power the RF power density from the proposed facility is calculated to be below occupational exposure levels in the main beam of the antenna at distances greater than 16 meters from the antenna and below uncontrolled environment exposure levels at distances greater than 36 meters from the antenna. There are no other towers within this distance. WRMD-CD will cooperate with other users on this and adjacent towers to protect worker from excessive RF exposure.

**WRMD-CD Application for Modification of Post-Repack Construction Permit  
(continued)**

Broadcast Facility

*Compliance with Section 73.709*

The channel assigned to WRMD-CD is not allocated for land-mobile operation in any market.

*Compliance with Section 74.793(e) and Section 74.793(f)*

A TVStudy 2.2.3 analysis using the default 1 km cell size and 1 km terrain profile point spacing for Class A interference evaluation and the facility proposed in this application showed the maximum amount of new interference created to any post-auction baseline facility, any application filed in the replication and first priority windows, and any granted post-auction construction permits in the LMS database dated October 26, 2017 was under 0.5%

*Compliance with Section 74.793(g)*

A TVStudy 2.2.3 analysis using the default 1 km cell size and 1 km terrain profile point spacing for Class A interference evaluation and the facility proposed in this application showed no new interference to any authorized Class A TV station or Class A TV station application filed in or before the replication and first priority windows in the LMS database dated October 26, 2017.

*Compliance with Section 74.793(h)*

A TVStudy 2.2.3 analysis using the default 1 km cell size and 1 km terrain profile point spacing for Class A interference evaluation and the facility proposed in this application showed no new interference to any authorized low power TV, TV translator, digital lower power TV, or digital TV translator station in the LMS database dated October 26, 2017..

This exhibit was prepared November 1, 2017  
by::

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