

KESSLER AND GEHMAN ASSOCIATES, INC.

507 NW 60th St. Ste. C, Gainesville, FL 32607
352.332.3157

Minor Modification of a Licensed Television Broadcast Station

WIRS-TV
Yauco, Puerto Rico

TECHNICAL STATEMENT OF RYAN WILHOUR OF THE FIRM OF
KESSLER AND GEHMAN ASSOCIATES, INC., CONSULTING ENGINEERS
IN CONNECTION WITH A MINOR MODIFICATION APPLICATION FOR A
LICENSED TELEVISION BROADCAST STATION
WIRS-TV FCC FILE NUMBER BLCDT-20081006AAY
FCC FACILITY IDENTIFICATION NUMBER 39887

APPLICATION SUMMARY

The instant application makes corrections to the tower site coordinates and ground elevation, no physical site change or elevation changes are proposed. Consequently the overall height of the support structure above mean sea level, average terrain, antenna height above average terrain, and antenna height above mean sea level figures have also been corrected. In addition to the corrections, it is also proposed is modify the omni-directional antenna to the antenna pattern illustrated in Exhibit 46.4 - 46.8 and increase the ERP from 185.0kW to 1MW.

In executing the engineering studies, the following figures were prepared:

- Exhibit 46.1 – Proposed Engineering Parameters
- Exhibit 46.2 – Elevation Drawing of the Antenna System
- Exhibit 46.3 – Existing Tower Site on a USGS Topographic Map
- Exhibits 46.4 – 46.8 – Proposed Antenna Azimuth and Elevation Patterns
- Exhibit 46.9 – OET69 Allocation Studies
- Exhibit 46.10 – Map Showing the Proposed and Licensed Coverage Contours
- Exhibit 46-11 – Largest Station in the Market Analysis

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- Exhibit 46.12 – 46.13 – Observatory and FCC monitoring Station Notification

Exhibit 46.1 is a chart demonstrating the licensed¹ WNPB-TV facility parameters in the left column, and the proposed parameters in the right column. The shaded cells in the proposed column indicate parameters being corrected or modified.

LARGEST STATION IN THE MARKET

The DTV maximum power and antenna heights formula in Section 73.622(f)(8)(ii) dictate the maximum allowable ERP for a DTV station operating on or between channels 14-59 with an antenna HAAT of 841.1 m is 183 kW. However, Section 73.622(f)(5) allows licensees and permittees assigned a DTV channel in the initial DTV Table of Allotments to request an increase in either ERP or antenna HAAT (or both), that exceed the initial technical facilities specified in Appendix B, up to that needed to provide the same geographic coverage area as the largest station within their market.

Exhibit 46.11 illustrates the 41 dBu contour of the largest station in the market² and the proposed WIRS-TV facility which covers 53,033 km² and 42,956 km² respectively. The proposed facility covers significantly less area than the largest station in the market; therefore, the proposed ERP and HAAT is fully compliant with section §73.622(f)(5) of the FCC rules.

¹ FCC File No.: BLCDDT-20081006AAY

² WAPA-TV (FCC File No. BLCDDT-20060621ACQ) a UHF 1MW facility with a 794 meter HAAT

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ANTENNA STRUCTURE REGISTRATION

The proposed facility does not modify the existing tower structure height. The existing tower structure does not require FAA or FCC registration since it is less than 200 feet and passes the FCC's TOWAIR slope test.

OBSERVATORY AND FCC MONITORING STATION NOTIFICATION

In accordance with Section 73.1030, the proposed facility requires notification of technical modifications to the Santa Isabel FCC monitoring station and the Arecibo Observatory. Both facilities have been notified prior to filing the instant application as demonstrated in Exhibit 46.12 and 46.13.

AREA AND POPULATION ANALYSIS

Exhibit 46.10 was generated by a computer which calculates and plots the distances to the contour. The population served by the proposed noise limited contour was determined by using 2000 census data and a computer program which added the population of all census blocks whose centroids fall within the contour. The total population within the proposed noise limited contour is 3,797,636 persons or 3,571,695 persons not affected by terrain losses or incoming interference.

ALLOCATION STUDIES

Exhibit 46.9 is a full OET69 allocation analysis which finds the following:

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Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Evaluation toward Landmobile Stations

No landmobile spacing violations exist.

FCC Monitoring Stations

The proposed facility is 27.9 km from FCC Monitoring station at Santa Isabel, PR

West Virginia quite zone

The proposed station is beyond the West Virginia quite zone coordination distance.

Table Mountain

The proposed station is beyond the Table Mountain coordination distance.

Canadian coordination distance

Proposed facility is beyond the Canadian coordination distance.

Mexican coordination distance

Proposed facility is beyond the Mexican coordination distance.

AM broadcast stations

The proposed station is compliant with regard to AM broadcast stations.

The following stations were analyzed for potential OET69 interference as demonstrated in Exhibit 46.9:

Chan	Call	City/State	Dist(km)	Status	Application.	Ref. No.
33	WQQZ-CA	PONCE PR	20.9	LIC	BLTTA	20110713ABR

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The proposed facility is not predicted to cause prohibited interference to WQQZ-CA. As indicated in the study, the proposed facility is fully compliant.

CERTIFICATION

The foregoing statement and the report regarding the aforementioned engineering work are true and correct to the best of my knowledge. Executed on June 11, 2012.

KESSLER AND GEHMAN ASSOCIATES, INC.



Ryan Wilhour

Consulting Engineer