ENGINEERING REPORT

MINOR CONSTRUCTION PERMIT APPLICATION

Minor Change in Site Locations

WBVA(AM) – 1450 kHz – Bayside, VA
License No. BL-20010122ANP

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Discussion

This firm was retained to prepare this engineering report in support of a minor construction permit application for the licensed facilities of AM broadcast station WBVA(AM), 1450 kHz, Bayside, VA, License BL-20010122ANP. Currently WBVA(AM) holds a Class C AM License for 1.0 kW of daytime non-directional power and 1.0 kW nighttime non-directional power. Due to pending site lease issues, a 1.2 km site change to an adjacent property is proposed. Daytime and Nighttime non-directional power will remain 1.0 kW, however a new top-loaded tower construction is proposed. The AM facility will continue to serve the community of Bayside, VA. The data and exhibit numbering contained herein is responsive to Section III-A of FCC Form 301.

Broadcast Facility. The broadcast facility remains in compliance with all applicable rules contained in *C.F.R. Chapter 47, Part 73, Subpart A*. The new site and new site construction will not alter the daytime and nighttime non-directional power, however use of a shorter (top-loaded) radiating element and losses from a de-rated ground system (less than 1/4 wavelength) will result in net losses in antenna efficiency. Details of the proposed antenna system are located in ***Exhibit(s) 13.1-5***. FCC TOWAIR has been consulted and Antenna Structure Registration is not required for the proposed tower. The present and proposed daytime service contours have been included in ***Exhibit(s) 13.6***. The present and proposed secondary nighttime interference free service contours (N.I.F.) have been included in ***Exhibit 13.7***. The daytime and nighttime 1.0 V/m "Blanket" Contours have been included in ***Exhibit 13.8***.

Community Coverage. The community boundaries of Bayside, VA no longer exist as this city has been incorporated into the larger community of Virginia Beach, VA. However, as the city of Virginia Beach has retained the existing Bayside High School, the Voting District Boundaries for the Bayside High School School District have been employed as the Bayside Community Boundaries here-in. Pursuant to the community coverage requirements of §73.24(i), 100% of Bayside, VA will receive 5.0 mV/m city grade daytime service as noted in ***Exhibit 13.6***. Pursuant to FCC Policy, more than 50% of Bayside, VA (55.04%) will receive nighttime Interference Free (N.I.F.) community service as noted in ***Exhibit 13.7***.

Main Studio Location. The new main studio location will remain in compliance with the requirements of *§73.1125***.** The main studio location is slated to be co-located at the transmitter site.

Groundwave Interference. The proposed allocation remains in compliance with the requirements of *§73.37.* Contour overlap presently exists with nine (9) facilities, existing or proposed. Contour overlap with four (4) of these facilities falls completely over the Atlantic Ocean and may therefore be disregarded. Contour overlap with three (3) facilities fall over inland areas, however all incoming or outgoing contour overlap with these three (3) allocation concerns will be reduced as a result of this proposal. Contour overlaps with the remaining two (2) facilities are consistent with *de minimis* saltwater path contour overlaps along coastal shorelines. Saltwater path contour overlaps of this nature are routinely waived by the Commission as a matter of standard practice. ***Exhibit(s) 17.1*** and ***17.2*** are the relevant allocation studies for the presently licensed WBVA(AM) daytime operation. ***Exhibit(s) 17.3*** and ***17.4*** are the relevant allocation studies for the proposed WBVA(AM) daytime operation. Additional or individual contour protection maps for any of these allocation protections will be supplied upon request.

Skywave Interference. The proposed allocation will comply with the requirements of *§73.182*. As operation on a Class C channel is proposed, sufficient daytime allocation showings merit an automatic grant of 1.0 kW of nighttime operation. ***Exhibit 18.1*** is a nighttime RSS Limitation study establishing the 26.3 mV/m Nighttime Interference Free (N.I.F.) contour. The proposed nighttime operation meets the minimum 250 watt and 141 mV/m RMS protection thresholds. Therefore, the proposal is protected from other full-time stations.

Critical Hours Interference. The proposed allocation is in compliance with the requirements of *§73.187*. No Critical Hours operation is required on 1450 kHz.

Environmental Protection Act. The proposed allocation is in compliance with OET Bulletin No. 65. Full protection is afforded by the proposal. An RF Radiation study has been included in ***Exhibit 20.1***.