

ENGINEERING EXHIBIT

Incentive Auction Channel Sharing

Application for Digital Television Station Construction Permit

prepared for

Commonwealth Public Broadcasting

WNVC(DT) Culpeper, VA

Facility ID 9999

Ch. 46 165 kW 332 m

Commonwealth Public Broadcasting (“*Commonwealth*”) is the licensee of digital television station WNVC(DT), Channel 24, Facility ID 9999, Fairfax, VA. *Commonwealth* was a winning bidder in the FCC’s incentive auction to relinquish WNVC’s spectrum, as specified in the *Incentive Auction Closing and Channel Reassignment Public Notice* (“*CCRPN*”, DA 17-317, released April 13, 2017). *Commonwealth* herein proposes to become a channel share station with WHTJ(DT), Facility ID 9990, Charlottesville VA, which is also licensed to *Commonwealth*. WNVC will be the guest (sharee) station, utilizing the transmitting facilities of sharer (host) station WHTJ.

Commonwealth herein seeks a “channel share” Construction Permit to utilize the pre-auction RF Channel 46 facility associated with WHTJ. WHTJ has been reassigned to Channel 26 with a transition at phase 8 (March 13, 2020), and WNVC’s operation will transition to Channel 26 at phase 8 with WHTJ. The technical parameters specified herein for WNVC match the licensed WHTJ facility as described in license file number BLEDT-20050819ADO.

The proposed principal community coverage contour (48 dB μ) for WNVC does not encompass the existing principal community of Fairfax VA. *Commonwealth* proposes to change WNVC’s principal community to Culpeper, VA, consistent with the procedures described in the *Incentive Auction*¹ proceeding.

¹“*Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*”, Report and Order, FCC 14-50, released June 2, 2014, at para. 374-378.

The town of Culpeper is located in Culpeper County, Virginia. According to 2010 U.S. census data, Culpeper has a population of 16,379 persons and an area of 17.5 square kilometers. The allotment of WNVC to Culpeper would provide that community with its first television transmission service.

A map is supplied as Figure 1 which depicts the proposed predicted coverage contours based on the FCC's standard propagation curves of §73.625(b). The map demonstrates that Fairfax is beyond the WNVC proposed principal community contour as well as the noise limited service contour ("NLSC"). Culpeper is encompassed by the proposed principal community contour, thus the proposed facility complies with §73.625(a)(1). Figure 1 also shows that both communities are within the same DMA, Washington, DC (Hagerstown, MD).

List of Attachments

Figure 1 Principal Community Coverage

Chesapeake RF Consultants, LLC

Joseph M. Davis, P.E. February 15, 2018
207 Old Dominion Road Yorktown, VA 23692 703-650-9600

Figure 1
Principal Community Coverage
Proposed Channel Sharing
WNVC(DT) Culpeper, VA
Facility ID 9999

prepared for
Commonwealth Public
Broadcasting Corporation

February, 2018

