

Application to Convert to ATSC 3.0 and Move ATSC 1.0 Signal to Host Station

Gray Television Licensee, LLC (“Gray”), licensee of full power television station WUPV(TV), Ashland, VA (Fac ID 10897), hereby requests authority to begin transmitting a Next Gen TV (ATSC 3.0) broadcast signal and to transition its ATSC 1.0 signal to commonly owned host station WWBT(TV).

Coverage Requirements for ATSC 3.0 Signals. Pursuant to Section 73.3801(c) of the Commission’s Rules, 47 C.F.R. § 73.3801(c), Gray hereby certifies that that WUPV(TV) and the proposed ATSC 1.0 host station, WWBT(TV), are assigned to the same Designated Market Area. Moreover, as demonstrated by the attached contour map prepared by Chesapeake RF Consultants, LLC, the ATSC 1.0 signal originating from WWBT(TV)’s transmitter site covers WUPV(TV)’s community of license, Ashland, Virginia, in its entirety.

Simulcasting Agreements. Gray hereby certifies that WUPV(TV) and WWBT(TV) are commonly owned and, therefore, no simulcasting agreement is required. Nevertheless, the local simulcasting agreements for the Richmond-Petersburg market, to which Gray is a party and which cover both WUPV(TV) and WWBT(TV), comply with all of the requirements of Section 73.3801(e) of the Commission’s Rules, 47 C.F.R. § 73.3801(e).

ATSC 1.0 Simulcast Coverage. Pursuant to Section 73.3801(f)(6) of the Commission’s Rules, 47 C.F.R. § 73.3801(f)(6), Gray hereby certifies that, as demonstrated by the attached contour map prepared by Chesapeake RF Consultants, LLC:

- The predicted population within the noise limited service contour served by WUPV(TV)’s original ATSC 1.0 signal is 2,137,267.
- The predicted population within the noise limited service contour served by WUPV(TV)’s original ATSC 1.0 signal that will lose the station’s ATSC 1.0 service as a result of the simulcasting arrangement is 169,813, or 7.95% of the population currently reached by WUPV(TV)’s signal.

However, the majority of those persons who would lose WUPV(TV)’s ATSC 1.0 signal are located outside the Richmond-Petersburg DMA. Only 12,149 persons located within the Richmond-Petersburg DMA would lose the station’s ATSC 1.0 service as a result of the simulcasting arrangement, constituting just 0.84% of the population within the noise limited service contour served by WUPV(TV)’s original ATSC 1.0 signal and located within the DMA.

Additionally, most of the area that would lose WUPV(TV)’s ATSC 1.0 service would have access to the CW network programming broadcast on WUPV(TV) from another source, WDCW(TV). When accounting for areas served by either WWBT(TV) or WDCW(TV), only 31,177 persons would lose access to CW network programming, or just 1.51% of the population currently reached by WUPV(TV)’s signal.

Due to ATSC 3.0 capacity and other constraints attendant with the multi-station and multi-market coordination needed for successful ATSC 3.0 deployment across the country, there is no other host station in the market that would have resulted in less service loss to existing viewers. Moreover, because WUPV(TV) and WWBT(TV) are commonly owned, this was the most efficient simulcasting arrangement and will result in the best service to viewers. The simulcasting arrangement will allow viewers in the Richmond-Petersburg DMA to enjoy the benefits of ATSC 3.0 broadcasts, which may include enhanced video featuring High Dynamic Range, Wide Color Gamut and High Frame Rate,

**Gray Television Licensee, LLC
WUPV(TV), Ashland, VA (Fac ID 10897)**

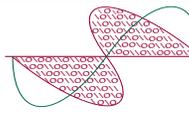
immersive and multiple audio channels using Dolby AC-4, Advanced Emergency Alerting and Information functions as part of a broadcast receiver application, and non-real time interactive data delivery. These potential benefits outweigh the minimal service loss, which is largely offset by the presence of an alternate station providing CW network programming.

Consumer Education and MVPD Notices. Gray hereby certifies that it will provide the consumer education notices required under Section 73.3801(g) and it has provided the MVPD notices required under Section 73.3801(h) of the Commission's rules. 47 C.F.R. §§ 73.3801(g) and (h).

**WUPV Ashland, VA
WWBT Richmond, VA
FCC Coverage Contours**

prepared for
Gray Television Licensee, LLC

October, 2021



Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

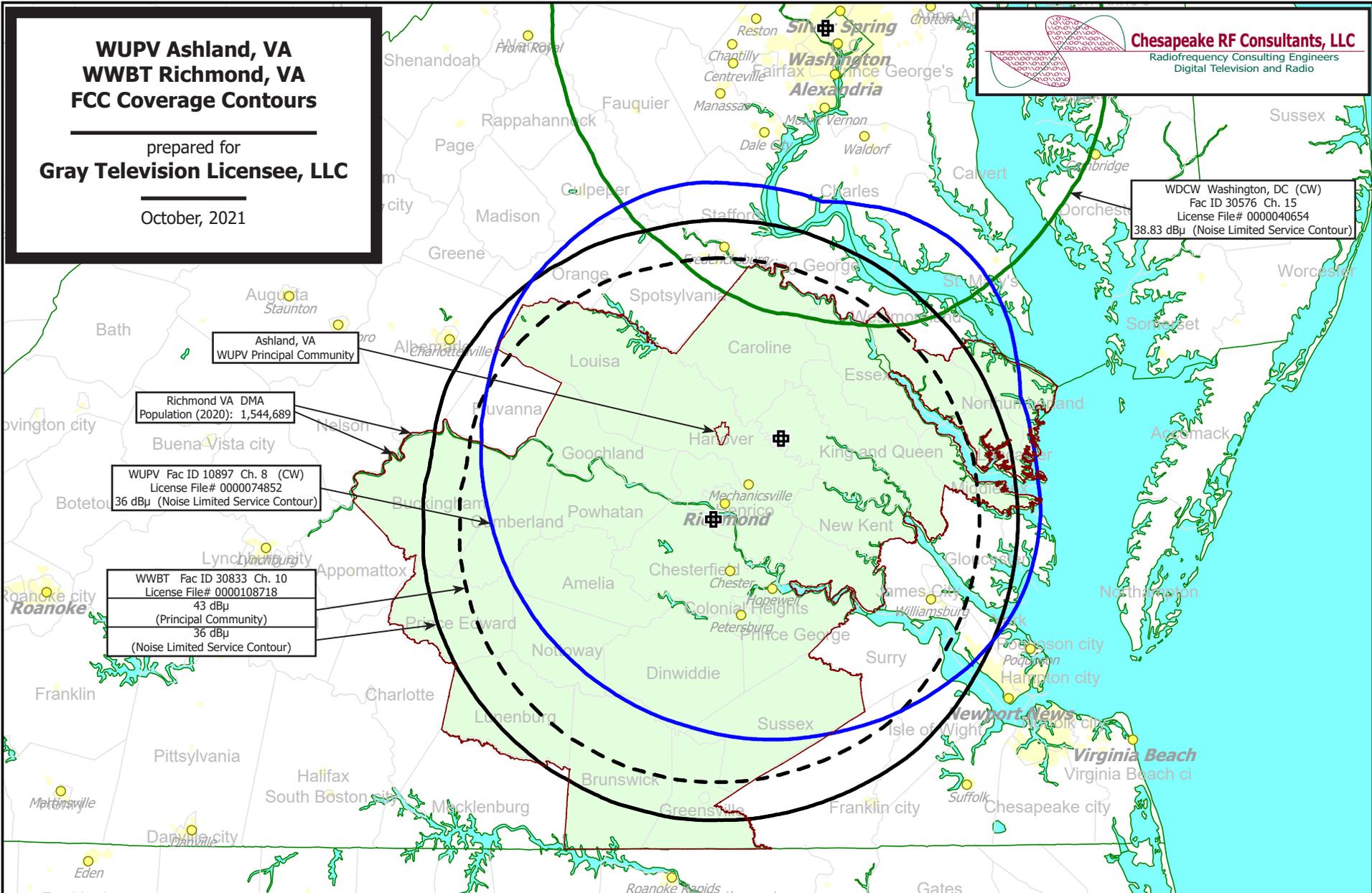
WDCW Washington, DC (CW)
Fac ID 30576 Ch. 15
License File# 0000040654
38.83 dBu (Noise Limited Service Contour)

Ashland, VA
WUPV Principal Community

Richmond VA DMA
Population (2020): 1,544,689

WUPV Fac ID 10897 Ch. 8 (CW)
License File# 0000074852
36 dBu (Noise Limited Service Contour)

WWBT Fac ID 30833 Ch. 10
License File# 0000108718
43 dBu
(Principal Community)
36 dBu
(Noise Limited Service Contour)



	All Population (2020 Census)		Population Within DMA Only (2020 Census)	
Noise Limited Service Contour				
WUPV Ch. 8 (Proposed ATSC 3.0)	2,137,267	Total Original ATSC 1.0	1,443,163	Total Original ATSC 1.0
WWBT Ch. 10 (ATSC 1.0 Host)	2,101,115	Total	1,513,703	Total
WUPV & WWBT Common	1,967,454	92.05% of WUPV Total	1,431,014	99.16% of WUPV Total
WUPV Loss Within WDCW	137,636	Alternate CW Service	N/A	
WUPV & WWBT Common Plus WDCW Alt.	2,105,090	98.49% of WUPV Total		

