

COMPLIANCE WITH §73.3801 (SIMULCASTING DURING ATSC 3.0 TRANSITION)

WCCT-TV, Waterbury, Connecticut,¹ a full-service television facility, is licensed to TEGNA Broadcast Holdings, LLC. and is authorized to operate on Channel 33 with an ERP of 220 kW using an omni-directional antenna mounted on a tower with Antenna Structure Registration Number (ASRN) 1041624. WTIC-TV, Hartford, Connecticut,² a full-service television facility, also is licensed to TEGNA Broadcast Holdings, LLC. and is authorized to operate on Channel 34 with an ERP of 526 kW using a directional antenna mounted on a tower with ASRN 1005358.

The stations share a common DMA³ and plan to partner in an arrangement where WTIC-TV shall host tenant station WCCT-TV for purposes of simulcasting ATSC 1.0 emissions while WCCT-TV shall host tenant station WTIC-TV for the purposes of simulcasting ATSC 3.0 emissions.

Pursuant to section 73.3801(f)(6)(i) of FCC Rules, the following information is required for such a hosting arrangement:

- Station serving as the ATSC 1.0 host: WTIC-TV
- Technical facilities of the ATSC 1.0 host station:
 - Frequency: 593 MHz (Channel 34)
 - ERP: 526 kW
 - Antenna: Directional
 - Antenna Center Height: 389.0 m AGL
 - Antenna Model: TFU-18DSC/VP-R C170
 - Antenna Polarization: Elliptical
 - Antenna Beam Tilt: 1.0°

¹ FCC File No.: 0000080031

² FCC File No.: 0000080032

³ Hartford & New Haven, CT

- NAD83 Coordinates: 41° 42' 13.0" N, 072° 49' 55.0" W
- ASRN: 1005358

As demonstrated in the attached exhibit, WTIC-TV has a contracted contour to the SW and an expanded contour to the NE, N, NW, W and SW with respect to the currently licensed ATSC 1.0 facilities of WCCT-TV. The exhibit was produced by running the licensed WTIC-TV and WCCT-TV facilities in TVStudy V2.2.5 to generate geographical files using the “general-purpose study” option. The output was subsequently mapped in Arcmap v10.8. The metadata from coverpts.shp and points.shp have been merged to yield population figures along with the TVStudy result codes which determine signal coverage status for each cell studied. The merged data was filtered to remove all points that are not considered interference free service. The WTIC-TV coverage area was augmented to match the WCCT-TV noise limited contour such that a complete cell by cell comparison can be made between the two facilities beyond the contracted WTIC-TV contour. The resulting coverage areas are layered with the WTIC-TV blue cells overlapping and thus masking the WCCT-TV red cells such that if a blue cell is missing a red cell shows through visually indicating lost coverage area for WCCT-TV. Using Arcmap GIS functions, the population was tallied for all red visible non masked cells and are provided below. Pursuant to section 73.3801(f)(6)(ii) of FCC Rules, the analysis above and in the attached exhibit demonstrates that:

- Predicted terrain limited population within the WCCT-TV ATSC 1.0 licensed noise limited contour is 5,307,612 people
- Predicted terrain limited population within the WCCT-TV ATSC 1.0 licensed noise limited contour that will lose over-the-air access to WCCT-TV’s ATSC 1.0 service due to the simulcasting arrangement is 176,411 people
- Predicted terrain limited population which lies between the WCCT-TV and WTIC-TV ATSC 1.0 contour that will gain over-the-air interference protected access to

WCCT-TV's ATSC 1.0 service due to the simulcasting arrangement is 164,418 people

- The result of the ATSC 1.0 simulcast arrangement is that 96.68% of the WCCT-TV ATSC 1.0 population will continue to have over-the-air access to WCCT-TV's ATSC 1.0 service as hosted on WTIC-TV. The proposed arrangement thus meets the 95% retention required for expedited processing.

Pursuant to §73.3801(c) of FCC Rules, full power broadcasters that elect temporarily to relocate their ATSC 1.0 signal to the facilities of a host station for purposes of deploying ATSC 3.0 service must continue to cover the station's entire community of license with the ATSC 1.0 simulcast signal and must be assigned to the same Designated Market Area (DMA) as the originating station. The attached exhibit demonstrates that the WTIC-TV ATSC 1.0 "host" station will completely subsume WCCT-TV's community of license of Waterbury, CT with a 48.0 dBuV/m principal community contour. As demonstrated, the proposed WTIC-TV "host" facility operating with an ATSC 1.0 signal and sharing the frequency with the WCCT-TV ATSC 1.0 "tenant" station fully satisfies the FCC rules specified in §73.3801 and the application should therefore be granted with expedited processing in accordance with the streamlined 1-step process specified in the rules.

CERTIFICATION

The foregoing statement and the report regarding the engineering work are true and correct to the best of my knowledge. Executed September 21, 2021

Kessler and Gehman Associates, Inc.



Ryan Wilhour
Consulting Engineer

