

**REQUEST FOR SPECIAL TEMPORARY AUTHORITY (MULTICAST HOSTS)**

Gray Television Licensee, LLC (“Gray”), licensee of digital full power television station KSCW-TV, Wichita, Kansas (FID 72348) (“KSCW-TV”), hereby submits this revised request for special temporary authority (“STA”) to host KSCW-TV’s ATSC 1.0-formatted multicast channels on television stations other than KSCW-TV’s primary ATSC 1.0 simulcast host to allow KSCW-TV to serve over-the-air viewers in the Wichita-Hutchinson Plus DMA. This request updates and revises the Legal STA granted on July 27, 2022 (File No. 190822). This market originally planned to transition to the ATSC 3.0 in late July. The transition date has now been moved back to October 27, 2022.

In its original STA filing, KSCW-TV requested authority to broadcast its ATSC 1.0-formatted multicast channels on KAKE(TV) and KPTS(TV). This STA proposes a different host for one KSCW-TV multicast stream. Specifically, Gray is requesting authority to broadcast KSCW-TV’s multicast streams in an ATSC 1.0 format, with no ATSC 3.0 simulcast, as follows:

| <b>Stream</b>     | <b>Host Station</b> |
|-------------------|---------------------|
| 33.2 (Decades)    | KWCH-DT             |
| 33.3 (Antenna TV) | KAKE(TV)            |
| 33.4 (Start TV)   | KPTS(TV)            |

Gray requests that for purposes of enforcement and application of the Commission’s rules, KSCW-TV be treated as if it is airing the multicast streams over the facilities of the aforementioned stations and be the responsible party under the Act and Commission rules and regulations akin to the manner that the Commission treats ATSC 1.0 primary simulcast streams under the Next Gen TV rules.

On May 25, 2022, the Commission granted KSCW-TV’s application to voluntarily convert to the ATSC 3.0 transmission standard.<sup>1</sup> Under the transition plan for the Wichita-Hutchinson Plus DMA (in which KSCW-TV is located), KSCW-TV will host its own ATSC 3.0-formatted primary channel along with the ATSC 3.0-formatted primary channels of KWCH-DT and KPTS(TV). KSCW-TV’s ATSC 1.0-formatted primary channel will be hosted by KWCH-DT. KSCW-TV also transmits three ATSC 1.0-formatted multicast channels. Because of ATSC 1.0 capacity limitations, KWCH-DT does not have sufficient bandwidth capacity to host KSCW-TV’s multicast channels in ATSC 1.0, and those channels would be hosted as follows: Decades on KWCH-DT, Antenna TV on KAKE(TV) and Start TV on KPTS(TV). Gray will indemnify the licensee of the host stations with respect to the content of the hosted multicast channels and will be responsible for the multicast channels’ compliance with all applicable laws and regulations. To avoid viewer confusion, each of KSCW-TV’s current multicast channels would retain its existing PSIP major/minor channel numbers.

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, it is not feasible for KSCW-TV to simulcast an ATSC 3.0 version of its multicast streams without unduly minimizing, if not largely eliminating, the benefits to the public and the participating stations of transitioning to ATSC 3.0. Simulcasting those streams in ATSC 3.0 would reduce capacity available to NextGen stations for offering consumers the improved services that ATSC 3.0 enables. The types of services and improvements that

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<sup>1</sup> See File No, 0000190148 (the “KSCW-TV Next Gen App”).

would be precluded would include enhanced video featuring High Dynamic Range, Wide Color Gamut and High Frame Rate, 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. Each of these requires a portion of the ATSC 3.0 capacity that would be unavailable were Gray to carry multicast program streams as the ATSC 3.0 host for stations in the Wichita-Hutchinson Plus market. Furthermore, significant additional engineering work and more equipment would be required to simulcast KSCW-TV’s multicast streams in ATSC 3.0 and ATSC 1.0 formats. Obtaining, installing, and testing that equipment would, at minimum, delay rollout of ATSC 3.0 in the Wichita-Hutchinson Plus market.

The proposed multicast arrangements will serve the public interest by enabling nearly all current over-the-air viewers to continue to have access to KSCW-TV’s multicast streams. The service contours of the respective ATSC 1.0 hosts cover a majority of KSCW-TV’s current service area population:

| <b>Stream</b>     | <b>Host Station</b> | <b>Service Area Coverage</b> |
|-------------------|---------------------|------------------------------|
| 33.2 (Decades)    | KWCH-DT             | 95.9% <sup>2</sup>           |
| 33.3 (Antenna TV) | KAKE(TV)            | 86.2%                        |
| 33.4 (Start TV)   | KPTS(TV)            | 91.6%                        |

See attached engineering exhibit. Although the service area coverage is beneath the 95% expedited processing threshold for primary stations for two of the streams, there is no other station with available ATSC 1.0 bandwidth that can provide greater coverage to KSCW-TV’s existing service area. As mentioned above, KWCH-DT, the station with the next largest service area, will be carrying KSCW-TV’s primary stream along with three of its own ATSC 1.0 multicast streams. It is only able to carry one additional stream from KSCW. KPTS and KAKE are the next largest stations in the market and they will each have capacity to carry one stream from KSCW-TV.

Absent the arrangement with these stations, all over-the-air viewers would lose access to KSCW-TV’s multicast streams. Additionally, the arrangements will preserve access to those KSCW-TV multicast streams for viewers who are receiving them via MVPDs. Currently, 33.2 and 33.3 (Decades and Antenna TV) are carried by the majority of cable operators in this DMA, including Cox Cable. KSCW’s 33.4 stream (Start TV) is not carried by Cox Cable, but is carried on most of the other cable operators in this DMA. Gray will provide the requisite notice to MVPDs regarding relocation of KSCW-TV’s primary ATSC 1.0 stream and its non-primary multicast streams. Gray will work with all impacted MVPDs to ensure that they continue to receive a good quality signal of the non-primary multicast streams, whether that be over-the-air or via alternate delivery methods. KSCW-TV will also air public service announcements to inform viewers of its upcoming transition and of the need for viewers to rescan their televisions after the transition date in order to maintain over-the-air access to KSCW-TV’s program streams in the current format.<sup>3</sup>

In its November 5, 2021 Second Further Notice of Proposed Rulemaking, the Commission recognized that its “existing rules do not address the licensing of multicast streams” but that “a Next Gen TV broadcaster

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<sup>2</sup> Note, this is an improvement over the coverage contemplated in the original STA (FCC File No. 190822). In the original proposal, Decades would be carried by KAKE(TV), which provides 86.2% service area coverage.

<sup>3</sup> See 47 C.F.R. § 73.3801(g).

that has converted or is seeking to convert its facility to 3.0 can seek special temporary authority (STA) to air 1.0 multicast streams on a host station.”<sup>4</sup> As the Commission further explained, “these STAs permit a guest multicast stream to be treated as if it originated from the Next Gen TV broadcaster’s facility, as opposed to the host station’s facility, for purposes of the Commission’s rules and the Communications Act.”<sup>5</sup>

Consistent with the FCC’s proposal in the Second FNPRM, Gray’s use of multiple ATSC 1.0 hosts will allow it to maintain existing service to viewers without burdening any party. Gray acknowledges that the use of multiple ATSC 1.0 hosts does not create any new carriage rights for its multicast streams. Gray seeks the Commission’s recognition of its proposed multi-host arrangements simply to provide needed clarity: (1) that the hosting arrangements do not implicate the broadcast ownership rules, and (2) that KSCW-TV, as the originator of each multicast stream at issue, is “responsible for regulatory compliance regarding the multicast stream being aired on a host station.”<sup>6</sup>

Finally, Gray notes that KSCW-TV fulfills all of its children’s programming requirements by airing core E/I programming on KSCW-TV’s primary stream. KSCW-TV does not, and does not intend to, rely on any programming broadcast on its multicast streams for compliance with the Commission’s children’s programming requirements. As such, neither KSCW-TV’s compliance with the Commission’s Children’s Television Programming requirements nor viewers’ access to the station’s required core programming will be affected by the relocation of KSCW-TV’s multicast signals as proposed herein.

For the reasons set forth above, the Commission should grant forthwith Gray’s request for Special Temporary Authority, to the extent required, to broadcast its ATSC 1.0-formatted multicast channels via the facilities of KWCH-DT, KAKE(TV) and KPTS(TV) after KSCW-TV converts its broadcast transmission to the Next Gen Television standard.

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<sup>4</sup> *Authorizing Permissive Use of the “Next Generation” Broadcast Television Standard*. Second Further Notice of Proposed Rulemaking, GN Dkt. No. 16-142, FCC 21-116, ¶ 6 (rel. Nov. 5, 2021) (the “Second FNPRM”).

<sup>5</sup> *Id.*

<sup>6</sup> *Id.* ¶ 11.

Engineering Statement

**KSCW-DT Wichita KS**  
**Non-Primary Multicast Stream Coverage Comparison**  
 prepared for  
**Gray Television Licensee, LLC**

This statement, prepared on behalf of *Gray Television Licensee, LLC*, provides a comparison of noise limited coverage contour (“NLSC”) coverage corresponding to the non-primary multicast streams of digital television station KSCW-DT, Facility ID 72348, Wichita, KS. *Gray* is authorized to convert the existing KSCW-DT broadcast facility to ATSC 3.0 transmission (file# 0000190148). Commencing with a transition date of October 25, 2022, the KSCW-DT primary programming stream will be carried in ATSC 1.0 format by station KWCH-DT (Ch. 19, Fac ID 66413, Hutchinson KS). Additionally, Special Temporary Authority (STA) has been granted (file# 0000190822) to allow KSCW-DT’s non-primary multicast streams to be aired in ATSC 1.0 format by certain other television stations. Now, to consider a revised multicast channel plan,<sup>1</sup> this statement supports a new STA request to reflect the updated multicast channel host stations.

*Gray* proposes that KSCW-DT’s non-primary multicast streams be carried in ATSC 1.0 format by a combination of several other participating stations in the same market. These streams will be hosted as follows.

| <b>Non-Primary Multicast Stream</b> | <b>Host Station</b>                        |
|-------------------------------------|--|
| 33.2 Decades                        | KWCH-DT Ch. 19 Fac ID 66413 Hutchinson, KS |
| 33.3 Antenna TV                     | KAKE Ch. 10 Fac ID 65522 Wichita, KS       |
| 33.4 Start TV                       | KPTS Ch. 8 Fac ID 33345 Hutchinson, KS     |

Coverage contour comparison maps are attached that depict the NLSC of KSCW-DT and the various ATSC 1.0 host stations. Population counts of each station are provided along with the corresponding percentage of NLSC population match and loss.

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<sup>1</sup>Multicast stream 33.2 “Decades” will now be hosted by KWCH-DT rather than KAKE.

The KSCW-DT non-primary multicast stream associated with virtual channel number 33.2 (Decades) is to be carried in ATSC 1.0 on KWCH-DT. An NLSC comparison of KSCW-DT and KWCH-DT is provided in Figure 1, showing substantial duplicate service area. The population detail is provided below, showing that 95.9 percent of the population within KSCW-DT’s NLSC is within that of KWCH-DT, representing a 4.1 percent loss.

**KSCW-DT and KWCH-DT Non-Primary Multicast Stream Comparison  
 (Figure 1)**

| Non-Primary Multicast Comparison<br>Noise Limited Service Contour | Population<br>(2020 census) |
|---|-----------------------------|
| KSCW-DT Ch. 12 Total:<br>(Proposed ATSC 3.0)                      | 927,183                     |
| KWCH-DT Ch. 19 Total:<br>(ATSC 1.0 Multicast Host)                | 888,830                     |
| Common Area Population:   | 888,830                     |
| Match of KSCW-DT Total:   | 95.9%                       |
| KSCW-DT Multicast Loss:   | 4.1%                        |

The KSCW-DT non-primary multicast streams associated with virtual channel number 33.3 (Antenna TV) is to be carried in ATSC 1.0 on KAKE. An NLSC comparison of KSCW-DT and KAKE is provided in Figure 2, showing substantial overlap. The population detail is provided below, showing that 86.2 percent of the population within KSCW-DT’s NLSC is within that of KAKE, representing a 13.8 percent loss.

**KSCW-DT and KAKE Non-Primary Multicast Stream Comparison  
 (Figure 2)**

| Non-Primary Multicast Comparison<br>Noise Limited Service Contour | Population<br>(2020 census) |
|---|-----------------------------|
| KSCW-DT Ch. 12 Total:<br>(Proposed ATSC 3.0)                      | 927,183                     |
| KAKE Ch. 10 Total:<br>(ATSC 1.0 Multicast Host)                   | 822,443                     |
| Common Area Population:   | 799,359                     |
| Match of KSCW-DT Total:   | 86.2%                       |
| KSCW-DT Multicast Loss:   | 13.8%                       |

The KSCW-DT non-primary multicast stream associated with virtual channel number 33.4 (Start TV) is to be carried in ATSC 1.0 on KPTS. An NLSC comparison of KSCW-DT and KPTS is provided in Figure 3, showing that 91.6 percent of the population within KSCW-DT's NLSC is within that of KPTS, representing an 8.4 percent loss.

**KSCW-DT and KPTS Non-Primary Multicast Stream Comparison  
(Figure 3)**

| Non-Primary Multicast Comparison<br>Noise Limited Service Contour | Population<br>(2020 census) |
|---|-----------------------------|
| KSCW-DT Ch. 12 Total:<br>(Proposed ATSC 3.0)                      | 927,183                     |
| KPTS Ch. 8 Total:<br>(ATSC 1.0 Multicast Host)                    | 848,965                     |
| Common Area Population:   | 848,965                     |
| Match of KSCW-DT Total:   | 91.6%                       |
| KSCW-DT Multicast Loss:   | 8.4%                        |

List of Attachments

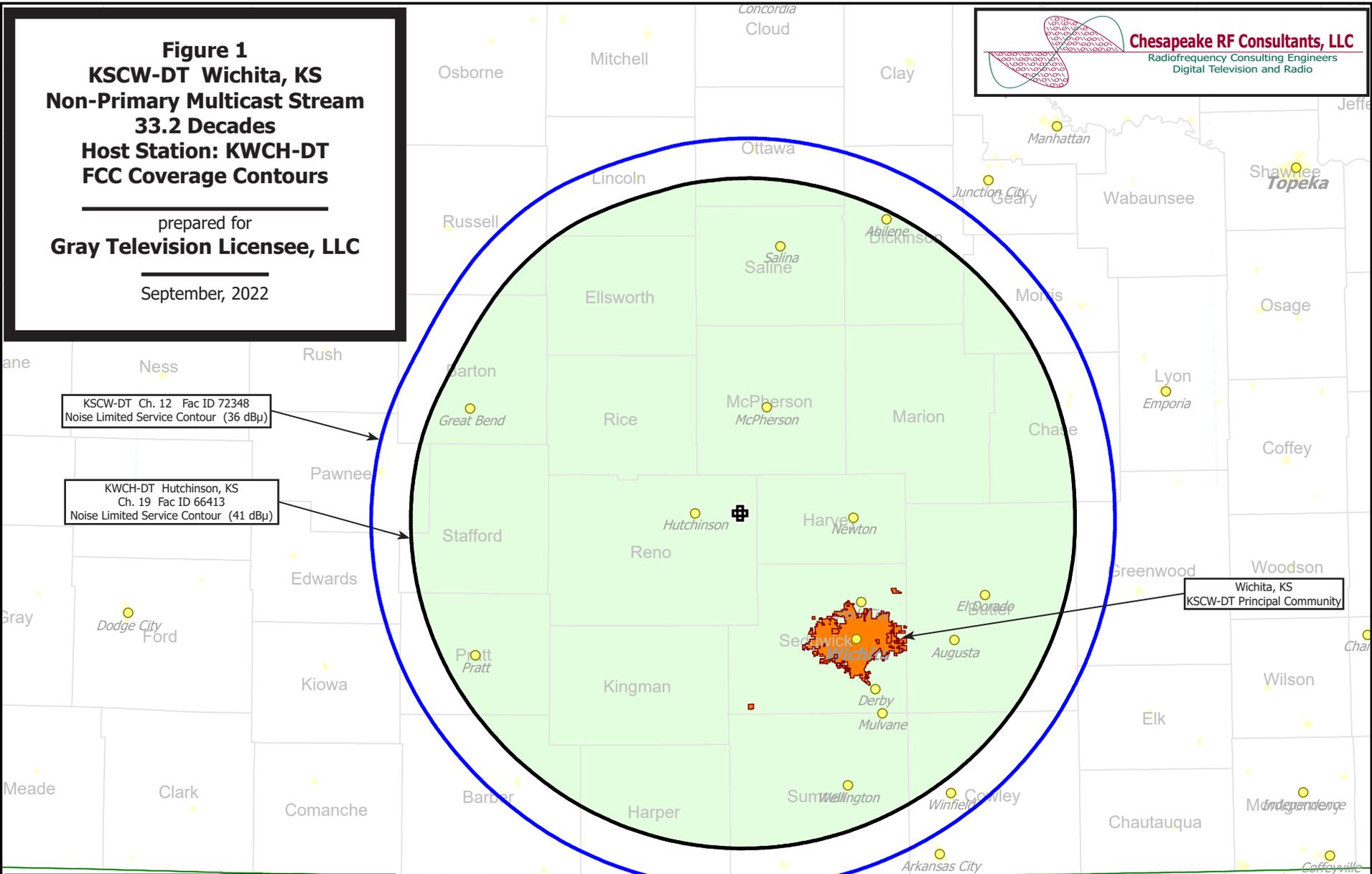
- Figure 1 KSCW-DT with ATSC 1.0 Host Station KWCH-DT
- Figure 2 KSCW-DT with ATSC 1.0 Host Station KAKE
- Figure 3 KSCW-DT with ATSC 1.0 Host Station KPTS

**Chesapeake RF Consultants, LLC**

Joseph M. Davis, P.E.                      September 27, 2022  
207 Old Dominion Road                      Yorktown, VA 23692                      703-650-9600

**Figure 1**  
**KSCW-DT Wichita, KS**  
**Non-Primary Multicast Stream**  
**33.2 Decades**  
**Host Station: KWCH-DT**  
**FCC Coverage Contours**

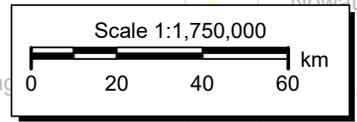
prepared for  
**Gray Television Licensee, LLC**  
 September, 2022



KSCW-DT Ch. 12 Fac ID 72348  
 Noise Limited Service Contour (36 dBμ)

KWCH-DT Hutchinson, KS  
 Ch. 19 Fac ID 66413  
 Noise Limited Service Contour (41 dBμ)

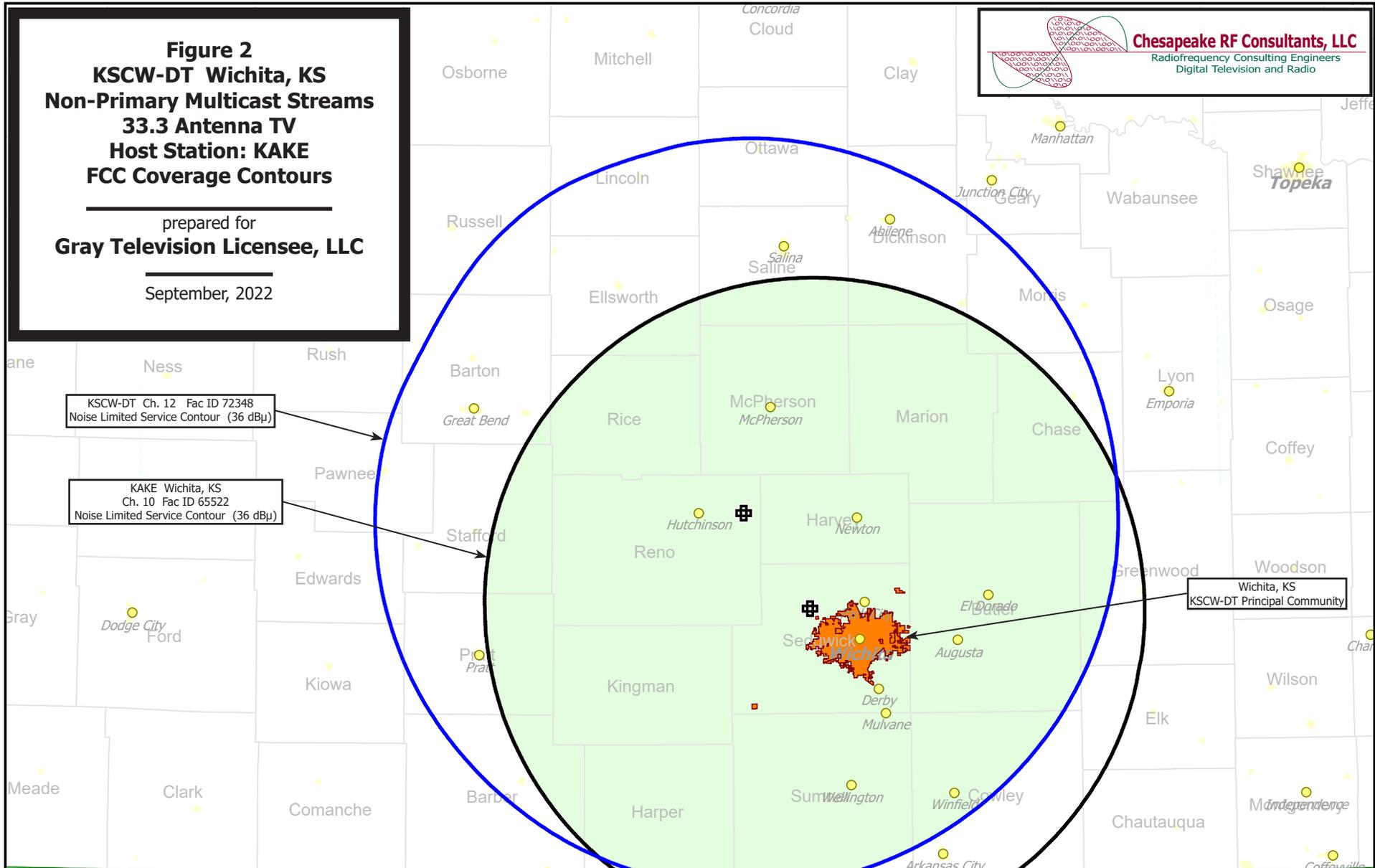
| Non-Primary Multicast Comparison |                           | Population (2020 census) |
|----------------------------------|---------------------------|--------------------------|
| Noise Limited Service Contour    |                           |                          |
| KSCW-DT Ch. 12 Total:            | (Proposed ATSC 3.0)       | 927,183                  |
| KWCH-DT Ch. 19 Total:            | (ATSC 1.0 Multicast Host) | 888,830                  |
| Common Area Population:          |                           | 888,830                  |
| Match of KSCW-DT Total:          |                           | 95.9%                    |
| KSCW-DT Multicast Loss:          |                           | 4.1%                     |



**Figure 2**  
**KSCW-DT Wichita, KS**  
**Non-Primary Multicast Streams**  
**33.3 Antenna TV**  
**Host Station: KAKE**  
**FCC Coverage Contours**

prepared for  
**Gray Television Licensee, LLC**

September, 2022

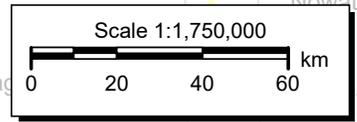


KSCW-DT Ch. 12 Fac ID 72348  
 Noise Limited Service Contour (36 dBμ)

KAKE Wichita, KS  
 Ch. 10 Fac ID 65522  
 Noise Limited Service Contour (36 dBμ)

Wichita, KS  
 KSCW-DT Principal Community

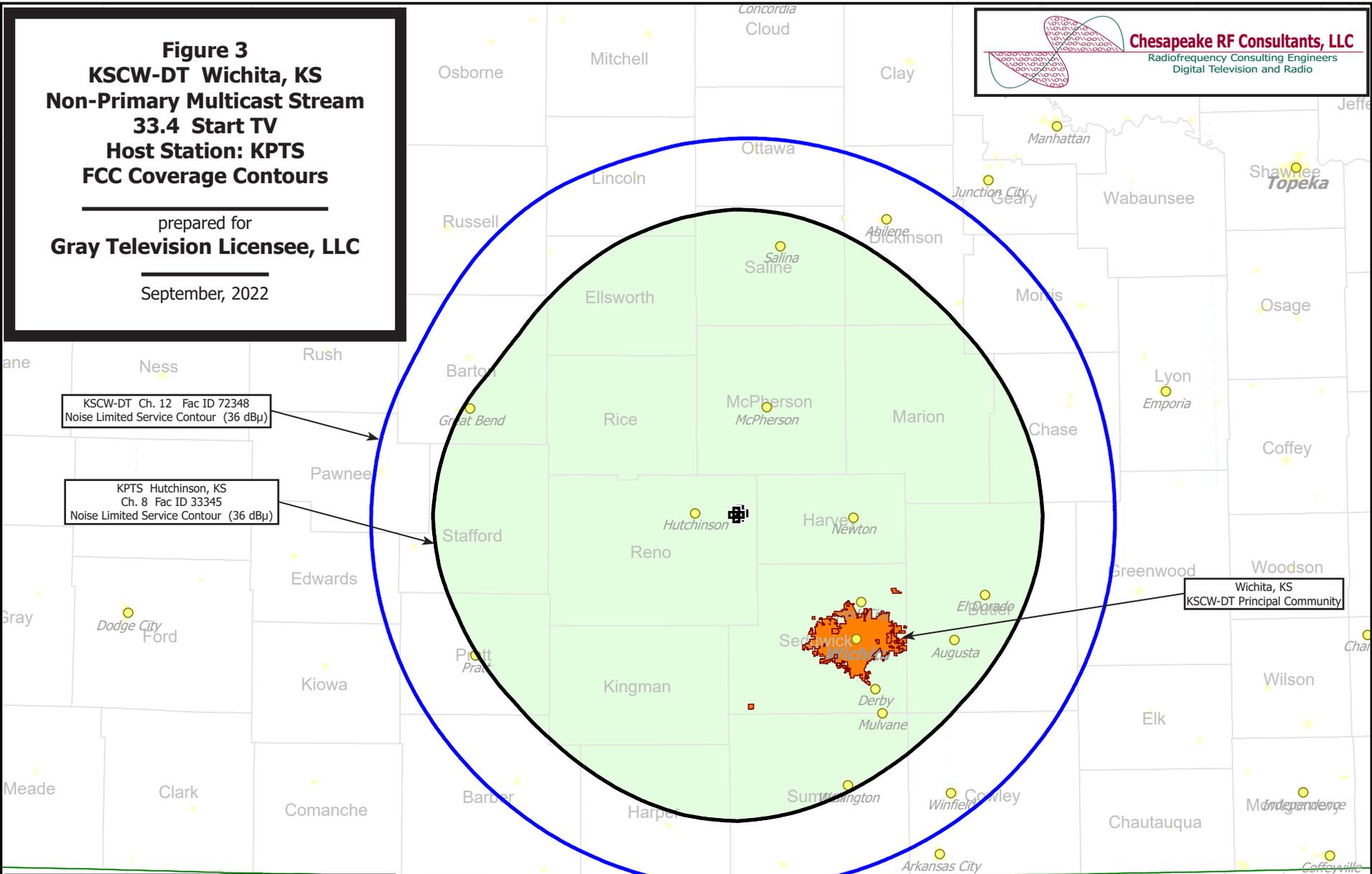
| Non-Primary Multicast Comparison                |  | Population    |
|---|--|---------------|
| Noise Limited Service Contour                   |  | (2020 census) |
| KSCW-DT Ch. 12 Total:<br>(Proposed ATSC 3.0)    |  | 927,183       |
| KAKE Ch. 10 Total:<br>(ATSC 1.0 Multicast Host) |  | 822,443       |
| Common Area Population:                         |  | 799,359       |
| Match of KSCW-DT Total:                         |  | 86.2%         |
| KSCW-DT Multicast Loss:                         |  | 13.8%         |



**Figure 3**  
**KSCW-DT Wichita, KS**  
**Non-Primary Multicast Stream**  
**33.4 Start TV**  
**Host Station: KPTS**  
**FCC Coverage Contours**

prepared for  
**Gray Television Licensee, LLC**

September, 2022



KSCW-DT Ch. 12 Fac ID 72348  
 Noise Limited Service Contour (36 dBμ)

KPTS Hutchinson, KS  
 Ch. 8 Fac ID 33345  
 Noise Limited Service Contour (36 dBμ)

Wichita, KS  
 KSCW-DT Principal Community

| Non-Primary Multicast Comparison |                           | Population (2020 census) |
|----------------------------------|---------------------------|--------------------------|
| Noise Limited Service Contour    |                           |                          |
| KSCW-DT Ch. 12 Total:            | (Proposed ATSC 3.0)       | 927,183                  |
| KPTS Ch. 8 Total:                | (ATSC 1.0 Multicast Host) | 848,965                  |
| Common Area Population:          |                           | 848,965                  |
| Match of KSCW-DT Total:          |                           | 91.6%                    |
| KSCW-DT Multicast Loss:          |                           | 8.4%                     |

