Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of)	
)	
Authorizing Permissive Use of the "Next)	GN Docket No. 16-142
Generation" Broadcast Television Standard)	
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THIRD REPORT AND ORDER AND FOURTH FURTHER NOTICE OF PROPOSED RULEMAKING

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I. INTRODUCTION

1. In this Third Report and Order in the Next Generation Broadcast Television (ATSC 3.0 or Next Gen TV) docket, we make changes to our Next Gen TV rules designed to preserve over-the-air (OTA) television viewers' access to the widest possible range of programming while also supporting television broadcasters' transition to the next generation of broadcast television technology. These

changes are based on the records collected in response to both the *Next Gen TV Multicast Licensing FNPRM*¹ and the *Sunsets FNPRM*.² We generally adopt our proposal in the *Next Gen TV Multicast Licensing FNPRM* to allow a Next Gen TV station³ to seek modification of its license⁴ to include certain of its non-primary video programming streams (multicast streams)⁵ that are aired on "host" stations⁶ during a transitional period. In adopting this proposal, we follow the same licensing framework, and to a large extent the same regulatory regime, established for the simulcast of primary video programming streams on "host" station facilities.⁷ We also extend the sunsets of, and thus retain in effect until at least July 17, 2027, the substantially similar rule for simulcast streams and the requirement to comply with the ATSC A/322 standard on primary 3.0 streams.⁸

2. Given that Next Gen TV stations must, without any additional allocation of spectrum, continue serving ATSC 1.0 viewers while voluntarily transitioning to ATSC 3.0,9 we seek to take actions that will minimize viewer disruption as much as possible during this limited transition period.

¹ Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard, GN Docket No. 16-142, Second Further Notice of Proposed Rulemaking, 36 FCC Rcd 16088, at para. 1 (2021) (Next Gen TV Multicast Licensing FNPRM or Multicast Licensing FNPRM).

² Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard, GN Docket No. 16-142, Third Further Notice of Proposed Rulemaking, FCC 22-47, 2022 WL 2290237 at *1, para. 1 (rel. June 22, 2022) (Sunsets FNPRM).

³ By "Next Gen TV" broadcaster or station, we mean a television broadcaster or station that has obtained Commission approval and commenced broadcasting its signal using the ATSC 3.0 standard in its local market. A station can deploy ATSC 3.0 service either by converting its own facility to ATSC 3.0 or by airing its ATSC 3.0 signal(s) on a station in its local market that has converted its facility to ATSC 3.0 (which we refer to as an ATSC 3.0 "host" station). For purposes of this Report and Order, a station's "own" channel or facility refers to the channel and facility on which it operated prior to its transition to ATSC 3.0 (even if it has already converted to operate in 3.0). We use this term to distinguish between operations on this facility and a station's operations as a guest on a host facility.

⁴ While in this document we may refer to the licensing of multicast streams, we clarify that we are establishing a process to license a guest Next Gen TV station capacity on a host's channel for the purpose of airing one or more guest multicast streams. Consistent with the *Next Gen TV Multicast Licensing FNPRM*, each portion of a host channel that is being licensed by a guest station to air one or more programming streams will be separately authorized channels under the originating (guest) broadcaster's single, unified license. *See infra* Section III.H ("Licensing"). *See also Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard*, GN Docket No. 16-142, Report and Order and Further Notice of Proposed Rulemaking, 32 FCC Rcd 9930, 9953-54, para. 48 (2017) (*Next Gen TV First Report and Order*) (stating that "the ATSC 1.0 and ATSC 3.0 signals of a Next Gen TV broadcaster will be two separately authorized companion channels under the broadcaster's single, unified license").

⁵ For purposes of this Report and Order, "multicast" stream(s) refers to a TV broadcast station's *non-primary* video programming stream(s); that is, stream(s) other than the station's primary video programming stream.

⁶ A "host" station is one whose facilities are being used to transmit programming originated by another station (*i.e.*, "guest") as part of a local simulcasting arrangement.

⁷ We note that our rules do not prohibit the use of private contractual arrangements for partner stations to air their multicast streams. For regulatory compliance purposes, such streams would be considered multicast streams of the host partner station, not the originator (guest) station.

⁸ The Commission will initiate a review approximately one year before these rules are set to expire to seek comment on whether they should be extended based on marketplace conditions at that time.

⁹ Next Gen TV First Report and Order, 32 FCC Rcd at 9939, para. 16 ("To avoid either forcing viewers to acquire new equipment or depriving them of television service, it is critical that broadcasters continue to provide service using the current ATSC 1.0 standard to deliver DTV service while the marketplace adopts devices compatible with the new 3.0 transmission standard.").

Specifically, this Report and Order seeks to facilitate and encourage partnerships that will minimize potential disruptions by permitting stations in a market to work together to preserve viewers' access to ATSC 1.0-formatted programming during the transition. We intend simultaneously to facilitate broadcasters' voluntary transition to ATSC 3.0, which can provide consumers with the benefit of new and innovative services, while protecting the vast majority of over-the-air TV viewers who continue to rely on 1.0 equipment.

3. In the accompanying Fourth Further Notice of Proposed Rulemaking (*RAND FNPRM*), we seek to further our understanding of the current marketplace for ATSC 3.0 Standard Essential Patents (SEPs) and the ability of third parties to develop products that rely upon them. We also seek comment on the impact on consumers if the Commission were to adopt, or not adopt, rules to require essential patent holders in 3.0 technology to commit to licensing them on reasonable and non-discriminatory (RAND) terms.

II. BACKGROUND

- 4. In 2017, the Commission authorized television broadcasters to use the Next Gen TV transmission standard, also called "ATSC 3.0" or "3.0," on a voluntary, market-driven basis. 10 The Commission required that broadcasters voluntarily deploying ATSC 3.0 service must, with very limited exceptions, 11 continue to air at least their primary streams using the current-generation TV transmission standard, also called "ATSC 1.0" or "1.0," to their viewers through "local simulcasting." Under the Commission's rules, Next Gen TV broadcasters are encouraged, but not required, to simulcast their 3.0 multicast streams in a 1.0 format. 13
- 5. The Commission found that the local simulcasting requirement is crucial to deploying Next Gen TV service in a manner that minimizes viewer disruption. The Next Gen TV standard is not backward-compatible with existing TV sets or receivers, which have only ATSC 1.0 and analog tuners. ¹⁴ Accordingly, viewers will be unable to watch ATSC 3.0 transmissions on their existing televisions

¹⁰ Id. at 9931, para. 1; Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard, GN Docket No. 16-142, Second Report and Order and Order on Reconsideration, 35 FCC Rcd 6793, 6794, para. 2 & n.4 (2020) (Next Gen TV Second Report and Order). Next Gen TV is the newest broadcast TV transmission standard, developed by the Advanced Television Systems Committee (ATSC), which promises to enable broadcasters to deliver an array of new video and non-video services and enhanced content features to consumers. See ATSC, Spotlight ATSC 3.0, https://www.atsc.org/nextgen-tv/ (last visited June 22, 2021) (listing key features of 3.0 and providing a video describing the 3.0 service). ATSC 3.0 merges the capabilities of over-the-air (OTA) broadcasting with the broadband viewing and information delivery methods of the Internet, using the same 6 MHz channels presently allocated for TV service. As 3.0 proponents have previously explained to the Commission, the greater spectral capacity of the new standard and its Internet-Protocol delivery component will allow broadcasters to provide consumers with a higher quality television viewing experience, such as ultra-high-definition (UHD) picture resolutions and immersive audio. It also has the potential to enable broadcasters to reach viewers on both home and mobile screens. In addition, ATSC 3.0 will allow broadcasters to offer enhanced public safety capabilities, such as geo-targeting of emergency alerts to tailor information to particular communities and emergency alerting capable of waking up sleeping devices to warn consumers of imminent emergencies, as well as greater accessibility options, localized content, and interactive educational children's content. See Promoting Broadcast Internet Innovation through ATSC 3.0, MB Docket No. 20-145, Report and Order, 35 FCC Rcd 14492, 14493, para. 4 (2020) (Broadcast Internet Order); Next Gen TV First Report and Order, 32 FCC Rcd at 9933-34, para. 4.

¹¹ LPTV and TV translator stations may deploy ATSC 3.0 service without providing an ATSC 1.0 simulcast signal. *Next Gen TV First Report and Order*, 32 FCC Rcd at 9950, para. 40; 47 CFR § 74.782(c). In addition, full power and Class A stations may request a waiver of the simulcast requirements. *Next Gen TV First Report and Order*, 32 FCC Rcd at 9953, para. 46.

¹² *Id.* at 9931, para. 1. *See infra* para. 5.

¹³ *Id.* at 9937-38, para. 13 & n.40.

¹⁴ *Id.* at 9939, para. 15.

without additional equipment. Thus, it is critical that Next Gen TV broadcasters continue to provide service using the current ATSC 1.0 standard while the consumer equipment marketplace adopts televisions and converter devices compatible with the new 3.0 transmission standard. This is necessary in order to avoid forcing viewers to acquire expensive new equipment immediately or depriving them of their local television service during the transition.¹⁵ Because a TV station cannot, as a technical matter, simultaneously broadcast in both 1.0 and 3.0 format from the same facility on the same physical channel, local simulcasting must be effectuated through voluntary partnerships that broadcasters seeking to provide Next Gen TV service enter into with other broadcasters in their local markets. ¹⁶ A Next Gen TV station must partner with another television station (i.e., a temporary "host" station) in its local market to either: (1) air an ATSC 3.0 channel at the temporary host's facility, while using its original facility to continue to provide an ATSC 1.0 simulcast channel, or (2) air an ATSC 1.0 simulcast channel at the temporary host's facility, while converting its original facility to the ATSC 3.0 standard in order to provide a 3.0 channel.¹⁷ A Next Gen TV station's ATSC 1.0 "simulcast" must be "substantially similar" to that of the primary video programming stream on the ATSC 3.0 channel.¹⁸ Substantially similar "means that the programming must be the same except for advertisements, promotions for upcoming programs, and programming features that are based on the enhanced capabilities of ATSC 3.0."19

6. The process for considering applications to deploy ATSC 3.0 service includes coverage requirements for a Next Gen TV station's ATSC 1.0 simulcast signal.²⁰ The Commission sought to minimize disruption to viewers resulting from the voluntary deployment of ATSC 3.0 while recognizing that if a station moves its ATSC 1.0 signal to a partner simulcast host station with a different transmitter location, some OTA viewers may no longer be able to receive the station's 1.0 signal.²¹ Among other obligations, the Commission requires the Next Gen TV station to select a partner 1.0 simulcast host

¹⁵ *Id.* at 9939, paras. 15-16. *See infra* note 180 (indicating that—as of August 8, 2022—the lowest cost 3.0 TV set is available at retail for \$549.00 and the lowest cost separate 3.0 receiver (gateway device) is available at retail for \$199).

¹⁶ Next Gen TV Second Report and Order, 35 FCC Rcd at 6794, para. 3; Next Gen TV First Report and Order, 32 FCC Rcd at 9937, para. 12; 47 CFR § 73.624(b)(3).

¹⁷ Next Gen TV First Report and Order, 32 FCC Rcd at 9937, para. 12; 47 CFR § 73.3801 (simulcasting rules for full power TV stations). In either case, a Next Gen TV broadcaster must simulcast the primary video programming stream of its ATSC 3.0 channel in an ATSC 1.0 format, so that viewers will continue to receive ATSC 1.0 service. Next Gen TV First Report and Order, 32 FCC Rcd at 9937, para. 12; 47 CFR § 73.3801(b) (simulcasting requirement). By the time the transition is complete, any temporary authority granted for local simulcasting will expire, and a station will once again be required to air all of its licensed programming on its own single channel. Next Gen TV First Report and Order, 32 FCC Rcd at 9938, n.46 and accompanying text. In June 2022, the Commission initiated a proceeding to consider the state of the transition and the Next Gen TV marketplace. See Sunsets FNPRM, 2022 WL 2290237 at *1, para. 1.

¹⁸ Next Gen TV First Report and Order, 32 FCC Rcd at 9942-44, paras. 22-24; 47 CFR § 73.3801(b).

¹⁹ 47 CFR § 73.3801(b)(1); see also id. at §§ 73.6029(b)(1), 74.782(b)(1).

²⁰ *Id.* at 9945-46, paras. 29-31; 47 CFR § 73.3801(c). A Next Gen TV broadcaster must file an application and obtain Commission approval before a 1.0 simulcast channel or a 3.0 channel aired on a partner host station can go on the air, as well as before an existing 1.0 station can convert to 3.0 operation or back to 1.0 operation. *Id.* at 9939, para. 48; 47 CFR § 73.3801(f)(2).

²¹ Next Gen TV First Report and Order, 32 FCC Rcd at 9946, para. 30 ("By requiring stations to continue to provide an ATSC 1.0 signal that covers their current community of license and encouraging them to keep coverage loss to 5% or less of the population currently receiving a 1.0 signal over the air, we will limit the number of current viewers and MVPD headends that will lose access to the OTA 1.0 signal as a result of local simulcasting.").

station that is assigned to its same designated market area (DMA) and from which it will continue to provide ATSC 1.0 simulcast service to its entire community of license.²²

A. Multicast Licensing

- According to the National Association of Broadcasters (NAB), as ATSC 3.0 deployment has progressed, broadcasters interested in transitioning to ATSC 3.0 while maintaining their current programming streams have faced challenges finding partner stations willing to host broadcasters' multicast streams through private contractual agreements.²³ Moreover, NAB states that Next Gen TV broadcasters want to "continue to serve audiences with multicast streams," even though they are not required to do so.²⁴ NAB contends that stations are hesitant to serve as hosts pursuant to private arrangements due to concerns about regulatory liability and whether such private multicast agreements are expressly permitted under the Commission's ATSC 3.0 rules.²⁵ Moreover, NAB observes that "a purely contractual approach [to ATSC 3.0 deployment-related sharing arrangements] would exclude noncommercial stations from participating in sharing arrangements to host commercial multicast streams" under section 399B of the of the Communications Act.²⁶ In addition, NAB asserts that if broadcasters execute hosting agreements for their multicast streams that are not reflected on the license of the originating station, "the Commission might not retain enforcement authority" over the originating station with respect to that guest stream.²⁷
- 8. Because our existing rules do not address a guest station's licensing of a host station's spectrum to air multicast streams, even with regard to the host that is airing the guest station's primary stream, the Media Bureau implemented an interim process by which a Next Gen TV broadcaster 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.²⁸ Just as under the current rules for primary guest streams, 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.²⁹ The STAs granted to date are valid for six months but may be renewed. This

²² *Id.* at 9945-46, paras. 29-31. *See* 47 CFR § 73.3801(c). Because Class A TV stations do not have a community of license, the Commission established a coverage requirement based on contour overlap and mileage. *Next Gen TV First Report and Order*, 32 FCC Rcd at 9946-47, para. 32. *See* 47 CFR § 73.6029(c). Some stations may not be formally assigned by Nielsen to DMAs. As stated in the *Next Gen TV First Report and Order*, "we will consider stations that are not assigned to a DMA by Nielsen to be assigned to the DMA in which they are located." *Next Gen TV First Report and Order*, 32 FCC Rcd at 9946, n.93.

²³ Letter from Patrick McFadden, Associate General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 1-2 (filed Mar. 19, 2020) (NAB Mar. 19 *Ex Parte* Letter); Letter from Patrick McFadden, Associate General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 1-2 (filed Jan. 27, 2020) (NAB Jan. 27 *Ex Parte* Letter).

²⁴ Petition at 2.

²⁵ NAB Mar. 19 Ex Parte Letter at 1-2; NAB Jan. 27 Ex Parte Letter at 1-2.

²⁶ Petition at 3 and 5-6. *See also* 47 U.S.C. § 399B(b)(2) (prohibiting noncommercial stations from making their "facilities available to any person for the broadcasting of any advertisement").

²⁷ NAB Jan. 27 *Ex Parte* Letter at 1-2. The NAB asserts that these issues "could create complex contractual indemnification concerns that could complicate deployment," particularly for NCE stations, "some of which are restricted or prohibited entirely from agreeing to indemnification." NAB Jan. 27 *Ex Parte* Letter at 2; NAB Mar. 19 *Ex Parte* Letter at 2.

²⁸ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16091, para. 6.

²⁹ *Id*.

case-by-case process is resource-intensive for both the Commission and broadcasters, in addition to making it difficult for potential viewers to track where streams are being hosted.³⁰

- 9. In November 2020, NAB filed a Petition for Declaratory Ruling and Petition for Rulemaking (Petition) asking the Commission to allow Next Gen TV stations to seek modification of their licenses to include certain of their multicast streams that are aired in a different service on host stations during the period of transition to 3.0.³¹ In response to the NAB Petition, we adopted the *Next Gen TV Multicast Licensing FNPRM*,³² which:
 - Proposed to license a Next Gen TV broadcaster's simulcast multicast stream(s) either together with its primary stream on the primary simulcast host or on different simulcast host(s).³³ A "simulcast multicast stream" in the context of this proceeding is a multicast stream that is aired by a Next Gen TV station, in substantially similar fashion,³⁴ in both 1.0 and 3.0 formats throughout the mandatory local simulcasting period.³⁵
 - Proposed to license a Next Gen TV broadcaster's "non-simulcast" 1.0 multicast stream(s) either together with its primary stream on its primary 1.0 host or on different 1.0 simulcast host(s).³⁶ A "non-simulcast 1.0 multicast stream" in the context of this proceeding is a multicast stream that is aired only in 1.0 format and not in 3.0 format.³⁷

³⁰ *Id*.

³¹ See generally Petition for Declaratory Ruling and Petition for Rulemaking of the National Association of Broadcasters, GN Docket No. 16-142 (filed Nov. 9, 2020) (Petition).

³² Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd 16088. Comments were due February 11, 2022 and reply comments were due March 14, 2022. Comment and Reply Comment Dates Set for Next Gen TV Multicast Licensing FNPRM, GN Docket No. 16-142, Public Notice, 36 FCC Rcd 17142 (MB 2021).

³³ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16094-95, para. 12.

³⁴ As with primary streams (*see* 47 CFR §§ 73.3801(b)(1), 73.6029(b)(1), 74.782(b)(1)), "substantially similar" multicast streams must have the same programming, except for programming features that are based on the enhanced capabilities of ATSC 3.0, including targeted advertisements and promotions for upcoming programs. Such enhanced content or features that cannot reasonably be provided in ATSC 1.0 format include: "hyperlocalized" content (*e.g.*, geo-targeted weather, targeted emergency alerts, and hyper-local news), programming features or improvements created for the 3.0 service (*e.g.*, emergency alert "wake up" ability and interactive programming features), enhanced formats made possible by 3.0 technology (*e.g.*, 4K or HDR), and any personalization of programming performed by the viewer and at the viewer's discretion. *Next Gen TV First Report and Order*, 32 FCC Rcd at 9942-43, para. 22.

³⁵ That is, we mean either (1) a 1.0 multicast guest stream aired on a host that is a simulcast of a 3.0 multicast stream aired by the Next Gen TV station, or (2) a 3.0 multicast guest stream aired on a host that is a simulcast of a 1.0 multicast stream aired by the Next Gen TV station. For example, in this situation, Station A converts to 3.0 and arranges for Station B (remaining in 1.0) to host Station A's primary stream and one multicast stream in 1.0; Petitioner wants the multicast stream, like the primary stream, to be licensed to Station A, the originator of the streams. In addition, if Station A arranges for Station C (not the primary host) to host a second multicast stream in 1.0, that multicast stream would also be licensed to Station A. In these examples, Station A would itself be broadcasting both multicast streams in 3.0. Likewise, if a station remained in 1.0, it would be allowed to license its 3.0 multicast streams aired either by the primary host or a secondary host. In these situations, the multicast channels are being simulcast.

³⁶ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16096, para. 14.

³⁷ For example, using Stations A, B, and C from the prior example, Station A (the 3.0 host) only has enough capacity to air its primary channel, Station B's primary channel, and Station C's primary channel in 3.0, but wants to continue to provide its multicast channels in 1.0 during the transition. In this situation, Stations B and C would each be hosting a multicast stream licensed to Station A, but neither multicast stream would be simulcast. Thus, by "non-simulcast 1.0 multicast stream," we refer to a multicast stream that was originated by a Next Gen TV station and (continued....)

- Declined to consider NAB's proposal to license a Next Gen TV broadcaster's "non-simulcast" 3.0 multicast stream(s) either together with its primary stream on its primary 3.0 host or on different 3.0 host(s).³⁸ A "non-simulcast 3.0 multicast stream" in the context of this proceeding is a multicast stream that is aired only in 3.0 format and not in 1.0 format.
- Proposed to allow, under certain circumstances, a Next Gen TV station to simulcast its primary stream programming both on its primary stream host and on a multicast stream carried by a different partner station in order to minimize the impact of service loss that would result if it were only able to air its primary stream on a single host.³⁹

The Next Gen TV Multicast Licensing FNPRM also considered whether to limit the amount of host capacity that may be used by a given Next Gen TV station, and, in particular, sought comment on NAB's proposal that: "In arranging for the hosting of its programming, no individual broadcaster shall partner with other stations to host, in the aggregate, more programming than such station could broadcast on its own facilities based on the then-current state of the art for television broadcasting as evidenced by other television stations then operating with the same standard." In response to the Next Gen TV Multicast Licensing FNPRM, we received comments, reply comments, and ex parte communications from 15 different parties, including 10 broadcast station groups and associations (including NAB) and two multichannel video programming distributor (MVPD) associations.

B. Sunsets

10. "Substantially Similar" Rule. In the 2017 First Next Gen TV Report and Order, the Commission adopted a requirement that the programming aired on a Next Gen TV station's ATSC 1.0 simulcast channel be "substantially similar" to that of the primary video programming stream on the ATSC 3.0 channel.⁴² This means that the programming must be the same, except for programming features that are based on the enhanced capabilities of ATSC 3.0 and promotions for upcoming programs.⁴³ In adopting this approach, the Commission found it "will help ensure that viewers do not lose access to the broadcast programming they receive today, while still providing flexibility for broadcasters to innovate and experiment with new, innovative programming features using Next Gen TV technology."⁴⁴ The Commission decided, however, that the substantially similar requirement would expire on July 17, 2023, unless the Commission takes action to extend it.⁴⁵ In this regard, the

³⁸ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16097, para. 18.

³⁹ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16098, para. 19.

⁴⁰ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16094-95, 16099-16103, paras, 21-29.

⁴¹ See Appendix A – List of Commenters and Reply Commenters.

⁴² 47 CFR §§ 73.3801(b)(1), 73.6029(b)(1), 74.782(b)(1); *First Next Gen TV Report and Order*, 32 FCC Rcd at 9942-43, para. 22. We refer to this as the substantially similar rule. The substantially similar rule is independent of the requirement for Next Gen TV broadcasters to simulcast in 1.0 format, a requirement that does not have a sunset date. *See* 47 CFR §§ 73.3801(b), 73.6029(b), 74.782(b).

⁴³ See supra note 34 (describing enhanced content or features that cannot reasonably be provided in ATSC 1.0 format).

⁴⁴ First Next Gen TV Report and Order, 32 FCC Rcd at 9942-43, para. 22.

⁴⁵ *Id.* We emphasize that the underlying requirement that a Next Gen TV station must simulcast in 1.0 format does not have a sunset date. *See* 47 CFR §§ 73.3801(b), 73.6029(b), 74.782(b) ("A full power television station that chooses to air an ATSC 3.0 signal must simulcast the primary video programming stream of that signal in an ATSC 1.0 format."). In addition, none of the other aspects of the local simulcasting rules are set to expire, including those

Commission concluded that, while "this [substantially similar] requirement is necessary in the early stages of ATSC 3.0 deployment, it could unnecessarily impede Next Gen TV programming innovations as the deployment of ATSC 3.0 progresses."⁴⁶ The Commission further stated that it "intend[ed] to monitor the ATSC 3.0 marketplace," and would "extend the substantially similar requirement if necessary."⁴⁷ The substantially similar rule took effect on July 17, 2018, and is set to expire on July 17, 2023, unless extended by the Commission.⁴⁸ The Commission affirmed this decision in 2020, but stated that, approximately one year before the requirement is set to expire, it would seek comment on whether the rule should be extended based on marketplace conditions at that time.⁴⁹

Requirement to comply with the ATSC A/322 standard. In authorizing use of the Next Gen TV broadcast transmission standard, the Commission in the First Next Gen TV Report and Order required compliance with only two parts of the ATSC 3.0 suite of standards: (1) ATSC A/321:2016 "System Discovery & Signaling" (A/321),50 which is the standard used to communicate the RF signal type that the ATSC 3.0 signal will use; and (2) A/322:2016 "Physical Layer Protocol" (A/322),⁵¹ which is the standard that defines the waveforms that ATSC 3.0 signals may take.⁵² In requiring compliance with A/322, the Commission observed that "device manufacturers and MVPDs may not be able to reliably predict what signal modulation a broadcaster is using unless broadcasters are required to follow A/322." at least with respect to their required primary programming stream.⁵³ The Commission explained that "[t]his uncertainty could cause manufacturers to inadvertently build equipment that cannot receive Next Gen TV broadcasts or could render MVPDs unable to receive and retransmit the signals of Next Gen TV stations. These outcomes would harm consumers."⁵⁴ The Commission, however, decided that it was not appropriate at the time "to require broadcasters to adhere to A/322 indefinitely," explaining that "the ATSC 3.0 standard could evolve, and stagnant Commission rules could prevent broadcasters from taking advantage of that evolution."55 The Commission thus determined that the requirement to comply with the A/322 standard would expire on March 6, 2023, absent Commission action to extend it. In establishing a sunset for A/322 compliance, the Commission sought to "balance [its] goals of protecting consumers while promoting innovation."56 The Commission affirmed this decision in 2020, but stated that,

⁴⁶ First Next Gen TV Report and Order, 32 FCC Rcd at 9942-43, para. 22.

⁴⁷ *Id*.

⁴⁸ The local simulcasting rules, sections 73.3801, 73.6029, and 74.782, took effect on July 17, 2018. *Next Gen TV Rules Receive OMB Approval*, GN Docket No. 16-142, Public Notice, 33 FCC Rcd 6747 (MB 2018).

⁴⁹ See Second Next Gen Report and Order, 35 FCC Rcd at 6812-13, para 39.

⁵⁰ See ATSC A/321:2016 "System Discovery & Signaling" (2016), https://www.atsc.org/wp-content/uploads/2016/03/A321-2016-System-Discovery-and-Signaling.pdf.

⁵¹ See ATSC A/322:2016 "Physical Layer Protocol" (2016), https://atsc.org/wp-content/uploads/2016/10/A322-2016-Physical-Layer-Protocol.pdf.

⁵² These two standards were incorporated by reference into the Commission's rules. *See* 47 CFR § 73.682(f). The Commission applied the A/322 standard only to a Next Gen TV station's primary, free, OTA video programming stream.

⁵³ First Next Gen TV Report and Order, 32 FCC Rcd at 9980, para. 99.

⁵⁴ *Id*.

⁵⁵ Id. at 9980, para. 100.

⁵⁶ *Id.* at 9979-80, para. 98. On March 6, 2023, the Commission temporarily extended this requirement pending further Commission action on the sunset. *Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard*, Order, FCC 23-11 (Mar. 6, 2023).

approximately one year before the requirement is set to expire, it would seek comment on whether the rule should be extended based on marketplace conditions at that time.⁵⁷

12. In June 2022, we adopted a Third Further Notice of Proposed Rulemaking (*Sunsets FNPRM*) in the Next Gen TV docket considering and seeking comment on the state of the Next Gen TV transition and on the scheduled sunsets of the substantially similar rule and the requirement to comply with the ATSC A/322 standard.⁵⁸ In response to the *Sunsets FNPRM*, the Commission received comments and reply comments from 32 different parties.⁵⁹

III. DISCUSSION

- In this Order, we largely adopt the rules proposed in the Next Gen TV Multicast Licensing 13. FNPRM, establishing a licensing regime for Next Gen TV stations' multicast streams that are aired on host stations during the transition period. The rules we adopt facilitate and encourage Next Gen TV stations to preserve consumer access to multicast programming in 1.0 format during the voluntary ATSC 3.0 transition. They will provide the industry with regulatory certainty about the legal treatment of licensed multicast streams; clarify that the originating station (and not the host station) is responsible for regulatory compliance regarding a multicast stream being aired on a host station; give the Commission clear enforcement authority over the originating station in the event of a rule violation on the hosted multicast programming stream; and facilitate NCE stations' 3.0 deployment by allowing them to serve as hosts to commercial stations' multicast streams. We recognize that allowing Next Gen TV stations to seek modification of their licenses to include capacity on multiple host stations represents a notable departure from our present licensing regime. We also recognize that every such departure in aid of the voluntary NextGen TV transition, however minor it may appear, results in potential consumer harm and expense. For example, each time a stream is hosted on a different facility with a different noise-limited service contour (NLSC), some current viewers may lose a signal on which they may have come to rely, for the entire uncertain duration of the transition. By the same token, some viewers who were not previously in the coverage area may receive the signal for the first time. These viewers may come to rely on a signal that may be permanently lost at the end of the transition. Even in the case where a hosted stream covers the entire NLSC of the originating station, each time a change is made every single viewer must rescan each of their televisions and other receive devices to continue to receive that signal. In considering proposals like those in this proceeding, we therefore must weigh these inescapable harms, along with others unique to specific proposals, against the benefits that permitting additional flexibility in our licensing procedures may provide. In the case of the rules and flexibility adopted in this Order, we find that departing from our licensing regime is appropriate because it is limited to the temporary broadcast transition to 3.0 and to specific situations for which there is a clear need. Where we have declined to adopt the flexibility sought by broadcasters, it is because the record does not demonstrate that the needs and benefits outweigh the harms.
- 14. First, we conclude that Next Gen TV stations may seek modification of their licenses to include one or more simulcast multicast streams on a host station or stations, whether that guest stream is a 1.0 or 3.0 simulcast ("simulcast" multicast streams).⁶⁰ Second, we conclude that Next Gen TV stations that are broadcasting in 3.0 on their own channels may seek modification of their licenses to include one or more multicast streams aired only in 1.0 format on a host station or stations even if they are not simulcasting that stream in 3.0 ("non-simulcast" 1.0 multicast streams).⁶¹ To permit the licensing of multicast streams on a host, each of the originating station's guest multicast streams will be licensed as a

⁵⁷ Second Next Gen TV Report and Order, 35 FCC Rcd at 6815, para. 44.

⁵⁸ Sunsets FNPRM, 2022 WL 2290237 at *1, para. 1.

⁵⁹ See Appendix A – List of Commenters and Reply Commenters.

⁶⁰ See infra Section III.A.

⁶¹ See infra Section III.B.

temporary channel in the same manner as its primary stream is licensed on the primary host. That is, each of the originating station's guest multicast streams aired on a host will be considered to be an additional, separately authorized channel under the originating station's single, unified license. Third, we decline to address comments asking us to allow the licensing of 3.0 non-simulcast multicast streams (aired as guest streams on a 3.0 host station, as opposed to aired on a 3.0 station's own facility) because we specifically did not seek comment on this issue.⁶² Fourth, we limit the number of 1.0 guest streams that may be included in the license of a single Next Gen TV station to those which it would have the capacity to transmit over its own facility in 1.0.63 Fifth we allow, in certain circumstances, a Next Gen TV station to simulcast its primary stream programming both on its primary stream host and on a multicast stream carried by a different partner station in order to minimize the impact of 1.0 primary service loss that would result if originating station were only able to air its primary stream on a single host.⁶⁴ Sixth, we extend the "ownership waiver" that applies in the primary stream context to ensure that hosted multicast streams do not implicate our broadcaster attribution rules, while reiterating that any changes in our rules governing multicast streams, including any changes adopted in the ongoing ownership proceeding, will apply equally to hosted multicast streams.⁶⁵ Seventh, we decline to license same service (or "lateral") hosting arrangements.⁶⁶ Eighth, we conclude that we will generally apply the same ATSC 3.0 transition rules to licensed multicast streams as we do to primary simulcast streams.⁶⁷ Ninth, we conclude that our multicast licensing rules will apply until the Commission eliminates the mandatory local simulcasting requirement.⁶⁸ Finally, we extend the sunset dates for the substantially similar rule for simulcast streams and the requirement to comply with the ATSC A/322 standard on primary 3.0 streams.⁶⁹

A. Simulcast Multicast Streams

15. We adopt our unopposed tentative conclusion to allow a Next Gen TV broadcaster to seek modification of its license to include its simulcast multicast stream(s), whether they are hosted together with its primary stream on the primary simulcast host or on different simulcast host(s).⁷⁰ That is, a Next Gen TV station may seek modification of its license to include one or more of its multicast streams, hosted by one or more partner stations, whenever the Next Gen TV station is airing that multicast stream in "substantially similar" fashion in both 1.0 and 3.0 formats and otherwise complying with the capacity, coverage, and other requirements discussed below. Broadcasters support this proposal,⁷¹ and no

⁶² See infra Section III.C.

⁶³ See infra Section III.D.

⁶⁴ See infra Section III.E.

⁶⁵ See infra Section III.F (hosting multicast streams on a temporary host station's facility will not result in attribution under our broadcast ownership rules or for any other requirements related to television stations attribution).

⁶⁶ See infra Section III.G.

⁶⁷ See infra Section III.H.

⁶⁸ See infra Section III.H. ("Timing").

⁶⁹ See infra Sections III.I (Substantially Similar Rule) and III.J (Requirement to Comply with the ATSC A/322 Standard).

⁷⁰ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16094-95, para. 12.

⁷¹ See, e.g., CMG Multicast Licensing Comments at 1-3; Gray Multicast Licensing Comments at 3; NAB Multicast Licensing Comments at 4; Pearl Multicast Licensing Comments at 4-5; PTV Multicast Licensing Comments at 3; Broadcasting Alliance Multicast Licensing Reply at 3; Scripps Multicast Licensing Reply at 3; TEGNA Multicast Licensing Reply at 1-2. As explained in the *Next Gen TV Multicast Licensing FNPRM*, 36 FCC Rcd at 16095, n.47, the Commission did not address the issue of multicast licensing when adopting its initial rules. Instead, by default, multicast arrangements were left to private contractual arrangements and more recently to the STA process. We thus reject ONE Media's characterization of our existing rules. ONE Media Multicast Licensing Comments at 4 (arguing that guest multicast streams on a guest's primary host are "already covered under the guest's Next Gen TV (continued....)

commenter raised any concerns about permitting the licensing of simulcast multicast streams.⁷² We adopt our tentative conclusion that any "simulcast" multicast streams must be "substantially similar" as that term is defined in our rules and will apply this requirement for as long as it applies to primary simulcasts.⁷³ In order to be considered a "simulcast," a 1.0 multicast stream must be paired, one to one, with an identified 3.0 multicast stream.⁷⁴ We find that permitting the licensing of simulcast multicast streams best meets our dual goals of facilitating the transition to 3.0 and protecting current 1.0 viewers for the reasons discussed above,⁷⁵ including by allowing NCE stations to host commercial multicast streams without violating section 399B.⁷⁶ We again emphasize, however, that like local simulcasting arrangements for primary streams, hosting arrangements for multicast streams are temporary ones made to facilitate the station's transition to 3.0 service. Any service temporarily provided by such a multicast

(Continued from previous page) license"). We clarify that the existing rules (relating to a Next Gen TV station's primary stream aired on a host) authorize only the use of the amount of capacity on a host's channel that is necessary for airing the guest's primary stream. See 47 CFR § 73.3801(a) (providing that "a full power television station may partner with one or more other full power stations or with one or more Class A, LPTV, or TV translator stations in a simulcasting arrangement for purposes of airing either an ATSC 1.0 or ATSC 3.0 signal on a host station's (i.e., a station whose facilities are being used to transmit programming originated by another station) facilities.") (emphasis added)). The Commission did not previously authorize a guest station's use of host capacity for airing anything other than the guest's primary stream. We further clarify that we are authorizing a guest station to use host capacity only for the specific purpose of airing specific programming streams, each of which must be identified in the license application. We also thus reject ONE Media's position that "a guest station can use its capacity on the licensed host channel(s) for whatever programming or data services it wants." ONE Media Multicast Licensing Comments at 5. To be clear, guest stations (1.0 or 3.0) may never license host capacity for ancillary or supplemental services (also called Broadcast Internet services), although we note they may lease excess capacity from a host for such purposes through a private contractual arrangement. Promoting Broadcast Internet Innovation through ATSC 3.0. MB Docket No. 20-145, Declaratory Ruling and Notice of Proposed Rulemaking, 35 FCC Rcd 5916, 5924, para. 15 (2020) (Broadcast Internet Declaratory Ruling and NPRM) ("[W]e clarify that the lease of excess broadcast television spectrum to a third party, including another broadcaster, for the provision of ancillary and supplementary services does not result in attribution under our broadcast television station ownership rules "). Moreover, guest stations on a 3.0 host, of course, may air 3.0 features even if separately provided from the programming stream (e.g., advanced emergency alerts), as such features are not ancillary or supplemental services but rather enhanced programming features. See supra note 34.

⁷² See ATVA Multicast Licensing Comments at 3 (stating that "[n]o commenter objected to this proposal when NAB made it, and ATVA does not object here"); NCTA Multicast Licensing Comments at 2 ("We generally do not oppose the Commission's proposal to ... permit stations to license simulcast multicast streams on a host station(s), whether that guest stream is the 3.0 broadcast or the 1.0 simulcast."). See also generally GN Docket 16-142.

⁷³ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16094-95, para. 12. See, e.g., 47 CFR § 73.3801(b)(1) and (2). See also NAB Multicast Licensing Comments at 4; infra Section III.H ("Timing").

⁷⁴ Multicast streams serving to deliver a primary stream's signal in order to minimize 1.0 primary stream service loss are the sole exception to this requirement. *Infra* Section III.E.

⁷⁵ See supra para. 13. See also, e.g., NAB Multicast Licensing Comments at 4 (stating the proposal will "help facilitate ATSC 3.0 deployments while giving stations the flexibility to preserve multicast programming where possible"); Scripps Multicast Licensing Reply at 2, 8. See also PTV Multicast Licensing Comments at 3; TEGNA Multicast Licensing Reply at 1.

⁷⁶ 47 U.S.C. § 399B(a), (b)(2) ("No public broadcast station may make its facilities available to any person for the broadcasting of any advertisement," which is defined as "any message or other programming material which is broadcast or otherwise transmitted in exchange for any remuneration."). *See also Next Gen TV First Report and Order*, 32 FCC Rcd at 9954-55, para. 50 (concluding that a licensed simulcast approach will allow NCE stations to serve as hosts to commercial stations' simulcast programming); Petition at 3.

stream beyond the station's NLSC is incidental and may not be considered for securing any rights or benefits, now or in the future.⁷⁷

B. Non-Simulcast 1.0 Multicast Streams

16. We also adopt our tentative conclusion and will allow a Next Gen TV broadcaster to seek modification of its license to include its 1.0 non-simulcast multicast streams, whether they are hosted together with its primary stream on the primary simulcast host or on different simulcast host(s). That is, a Next Gen TV station broadcasting in 3.0 on its own channel may seek modification of its license to include one or more 1.0 multicast streams aired on a 1.0 host or hosts, even when it is *not* simulcasting that multicast stream on a paired stream in a 3.0 format, so long as it is otherwise complying with the capacity, coverage, and other requirements discussed below. Broadcaster commenters support allowing the licensing of 1.0 non-simulcast multicast streams, while MVPD commenters do not oppose such licensing, provided it is subject to reasonable limitations. Like the licensing of 1.0 simulcast multicast streams, we find that permitting the licensing of 1.0 non-simulcast multicast streams will help preserve existing service and will achieve the goals discussed above, including by allowing NCE stations to host commercial multicast streams without violating section 399B. We agree with broadcasters that allowing

(continued....)

⁷⁷ *Infra* Section III.H ("Timing"). At the conclusion of the transition, each Next Gen TV station will resume service exclusively from its own facility, serving its existing NLSC. Because any service beyond this area will be temporary, such service will not be considered by the Commission in other contexts (*e.g.*, must carry demands, market modifications, petitions for rulemaking to change a community of license, etc.).

⁷⁸ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16096, para. 14. BitPath asked that we permit the licensing of multicast streams on different hosts with identical programming when necessary in order to preserve service. BitPath Multicast Licensing Comments at 21. We do not adopt a specific rule addressing such streams, but we note that all guest multicast streams must serve the originating station's community of license (*infra* Section III.H, "Coverage"), and each of a station's hosted streams will be considered when determining its compliance with the limitations on host capacity (*infra* section III.D). In order to provide flexibility to preserve existing multicast streams, we also decline to restrict the number of 1.0 hosts with which a station may partner, so long as it does not exceed its licensed capacity and complies with the coverage requirements discussed below for each of its streams. *Infra* Sections III.D and III.H.

⁷⁹ Non-simulcast 1.0 multicast streams licensed pursuant to our rules are not required to comply with 47 CFR §§ 73.3801(b), 73.6029(b), and 74.782(b) (the "Simulcasting Requirement").

⁸⁰ Broadcaster commenters uniformly and enthusiastically support the licensing of non-simulcast streams and, to the extent the Commission adopts any limits, they support NAB's proposed host capacity limit. *See, e.g.*, CMG Multicast Licensing Comments at 1-3; Gray Multicast Licensing Comments at 3; NAB Multicast Licensing Comments at 4-5; PTV Multicast Licensing Comments at 3; Broadcasting Alliance Multicast Licensing Reply at 3; Scripps Multicast Licensing Reply at 3; TEGNA Multicast Licensing Reply at 1-2. See also Evoca Multicast Licensing Reply at 4.

⁸¹ MVPDs do not oppose the licensing of non-simulcast streams, provided there are reasonable limits on the number and types of multicast streams a Next Gen TV station may license on a host station. See NCTA Multicast Licensing Comments at 2-3 (stating that "[w]e generally do not oppose the Commission's proposal to ... permit a 3.0 station to license non-simulcast 1.0 multicast streams on a host station(s)," but adding that "the Commission should adopt reasonable limits on the number and types of multicast streams a station may broadcast through a host station"); ATVA Multicast Licensing Comments at 8.

⁸² Supra note 76 and accompanying text. Section 399B of the Communications Act provides that "[n]o public broadcast station may make its facilities available to any person for the broadcasting of any advertisement." 47 U.S.C. § 399B(b)(2). Under a private arrangement, an NCE station would be prohibited from hosting the simulcast programming of a commercial station because the stream would be aired on the "facilities" of the NCE licensee. However, under a licensed approach, the "facilities" are no longer exclusively the facilities of the NCE station, as each station has a right to use the facilities pursuant to its separate license and contractual rights. A commercial stream aired on a partner NCE station will be separately licensed and authorized to use the host's channel, therefore

multicast licensing for 1.0 non-simulcast multicast streams will benefit consumers by preserving viewer access to 1.0 multicast streams, 83 particularly in situations where broadcasters that have transitioned to 3.0 on their own channels lack capacity to air their multicast streams on their 3.0 facilities. As observed in the Next Gen TV Multicast Licensing FNPRM, at this early stage of the transition ATSC 3.0 capacity will be limited.84 During the initial roll-out of 3.0 service, we expect markets will generally start with one or two ATSC 3.0 "lighthouse" stations, leaving capacity on 3.0 lighthouse stations mostly – if not entirely – for Next Gen TV stations' primary streams. 85 We agree with broadcasters that denying them this flexibility would likely lead them to stop broadcasting some 1.0 multicast streams altogether. 86 We therefore find that, by extending our multicast licensing approach to non-simulcast 1.0 multicast streams, we will not only encourage Next Gen TV broadcasters to preserve the multicast streams viewers watch today, but also facilitate their transition to 3.0 by making it easier for them to continue serving their existing viewers even while 3.0 spectrum is limited. While we expect that capacity constraints will be the primary reason for this relief, given the strong public interest in facilitating broadcasters' preservation of the best possible 1.0 service during the transition period, and our limit on the amount of host capacity that may be licensed, we see no reason to require broadcasters to demonstrate 3.0 capacity constraints in order to license 1.0 non-simulcast multicast streams.⁸⁷ Finally, we again emphasize that hosting arrangements for multicast streams are temporary ones made to facilitate the transition to 3.0 service.⁸⁸

C. Non-Simulcast 3.0 Multicast Streams

17. Our current rules do not provide for the licensing of 3.0 non-simulcast multicast streams aired as guest streams on a 3.0 host station. In the *Next Gen TV Multicast Licensing FNPRM*, we specifically declined to seek comment on NAB's proposal asking us to allow a Next Gen TV station (that continues to broadcast in 1.0 on its own channel) to seek modification of its license to include 3.0 multicast (guest) streams aired on a 3.0 host station, even if it is not simulcasting those multicast streams

⁸³ See, e.g., CMG Multicast Licensing Comments at 1-3; Gray Multicast Licensing Comments at 3; NAB Multicast Licensing Comments at 4-5; Pearl Multicast Licensing Comments at 4-5; PTV Multicast Licensing Comments at 3; Broadcasting Alliance Multicast Licensing Reply at 3; Scripps Multicast Licensing Reply at 3; TEGNA Multicast Licensing Reply at 1-2.

⁸⁴ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16096, para. 15.

⁸⁵ Id.

⁸⁶ See, e.g., TEGNA Multicast Licensing Reply at 3 ("[W]ithout the flexibility to arrange for non-simulcast ATSC 1.0 hosting of their multicast streams, these lighthouse stations would have had to either forego their conversion to Next Gen TV service (thus impeding the launch of advanced services in the market entirely) or else eliminate their broadcast of some or all of their multicast streams altogether. Neither option would serve the public interest.").

⁸⁷ See, e.g., Pearl Multicast Licensing Comments at 4 ("There are many reasons why a broadcaster may not be simulcasting a multicast stream in both ATSC 1.0 and ATSC 3.0. While broadcasters cannot at this time envision every circumstance, we note that capacity issues are a major factor and other concerns such as rights and licensing issues could be at play. Broadcasters need the flexibility that the proposal would provide without the limitation based on demonstrated capacity in order to manage the transition."). We thus reject NCTA's suggestion that we require a broadcaster to demonstrate 3.0 capacity constraints as a prerequisite to receiving authorization for non-simulcast 1.0 streams. We find that concerns regarding the need for limits on any one broadcaster's use of spectrum will be adequately addressed by the capacity constraints that we adopt below. See NCTA Comments at 2-3.

⁸⁸ Infra Section III.H ("Timing").

⁸⁹ Because at this time our rules do not allow Next Gen TV stations to license host capacity for 3.0 non-simulcast multicast streams, we do not address the issue of a 3.0 host capacity limit.

in a 1.0 format. 90 Thus, we do not address the comments we nevertheless received on this issue. 91 We note, however, that under our existing rules, a Next Gen TV station may air 3.0 non-simulcast multicast streams on its own 3.0 facility. This is because, under our existing rules, a Next Gen TV broadcaster does not have to simulcast its multicast streams in 1.0 and does not need separate license authorization to air its own multicast streams on its own 3.0 facility. 92

D. Limits on Licensing of Host Capacity

18. In response to our request for comment on ensuring that a Next Gen TV broadcaster does not use the interim flexibility proposed in this FNPRM to aggregate capacity beyond that which is legally permissible today, we find that it is appropriate to limit a Next Gen TV station's 1.0 host capacity to that which it could deploy on its own 1.0 channel and adopt a modified version of NAB's proposal in order to effectuate this limit.⁹³ Specifically, a Next Gen TV station that has converted its own facility to 3.0 must not license more capacity on partner host stations, in the aggregate, than the station could use if it were still operating its own facility in 1.0. A Next Gen TV station must demonstrate compliance with this rule in its license application and may do so by either: (1) showing that it is seeking hosting only for streams it was broadcasting on its own 1.0 facility prior to its transition to 3.0; or (2) by providing an example of another 1.0 station that is carrying or has carried the same or a similar programming lineup to that which it seeks to provide on host stations and at the same resolutions. To enable the Commission and other interested parties to evaluate compliance with the host capacity limit, a Next Gen TV station applicant

⁹⁰ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16097, para. 18. See NAB Petition at 1-2.

⁹¹ See, e.g., BitPath Multicast Licensing Comments at 26-27; Gray Multicast Licensing Comments at 4; NAB Multicast Licensing Comments at 6; ONE Media Multicast Licensing Comments at 8-9; Pearl Multicast Licensing Comments at 10-11; PTV Multicast Licensing Comments at 4-5; Broadcasting Alliance Multicast Licensing Reply at 3; NAB Multicast Licensing Reply at 11; Scripps Multicast Licensing Reply at 3; TEGNA Multicast Licensing Reply at 5.

⁹² See 47 CFR §§ 73.3801(b), 73.6029(b), 74.782(b). Consequently, a Next Gen TV station that converts its own facility to 3.0 could air a "demo" multicast stream without simulcasting such stream in 1.0. Pearl Multicast Licensing Comments at 11 (stating that allowing licensing of a 3.0 non-simulcast multicast stream is needed to provide a "'barker channel' or 'demo channel' that would contain highlights or a 'sizzle reel' of ATSC 3.0 programming showcasing the new technology and how viewers can unlock the many advanced features ATSC 3.0 makes possible"). See also, e.g., Gray Multicast Licensing Comments at 6.

⁹³ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16101, para. 26 (seeking comment "on how to ensure that a Next Gen TV broadcaster does not use the interim flexibility proposed in this FNPRM to aggregate spectrum beyond that which is legally permissible today" and stating that "[a] single station may generally use no more than 6 MHz under its license"). We also sought comment on a specific NAB proposal to address this concern, limiting the scope of hosting arrangements by requiring that "[i]n arranging for the hosting of its programming, no individual broadcaster shall partner with other stations to host, in the aggregate, more programming than such station could broadcast on its own facilities based on the then-current state of the art for television broadcasting as evidenced by other television stations then operating with the same standard." *Id.* at para. 24. Even at the time, of proposing this language, however, NAB noted that it did not consider such a limitation necessary. Letter from Patrick McFadden, Deputy General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 1-2 (filed Apr. 9, 2021). We note that one 6 MHz channel provides a station with approximately 19.4 Mbps of capacity. Although the FNPRM referred to "spectrum aggregation," we agree with NAB (NAB Multicast Licensing Comments at 9-10) that this concern is more accurately described as *capacity* aggregation and that this concept, and our implementation of NAB's proposal, also encompasses many of the concerns discussed in the FNPRM about "programming aggregation." Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16099-100, para. 22. As noted in the Ownership Issues section, infra Section III.F, some concerns about "programming aggregation" are better addressed in the quadrennial proceeding.

will be required to provide information regarding each of its licensed streams.⁹⁴ Stations may also be asked to submit additional information to the Commission upon request.

- 19. We agree with commenters asserting that a reasonable limit on the amount of host capacity that may be licensed by an individual Next Gen TV (guest) station is appropriate. As these commenters suggest, this is needed in order to ensure that no station abuses the flexibility permitted by 1.0 non-simulcast multicasting to aggregate capacity beyond that which is physically possible or legally permissible when broadcasting from a single facility. 95 We believe this is necessary because it is not our intention to upend the entire structure of broadcast television licenses for this transition period, and we are conscious of the consumer confusion that may be inadvertently caused by the coverage changes inherent in a multiple-host approach. We see no reason, as a matter of spectrum policy, to permit stations to use more capacity on hosts than they could on their own stations. Indeed, no commenter argues that a single station should have the ability to aggregate host capacity beyond that which it could use if it were still operating on its own facility in 1.0.96 Broadcaster commenters merely argue that the likelihood of such aggregation is small, asserting that there will be less total 1.0 capacity in a given market when a station transitions and such capacity will only further diminish as more stations in the market transition.⁹⁷ We believe it is appropriate for our rules to ensure this eventuality does not occur even if the likelihood is low, especially in light of the fact that reduced available capacity would only amplify any concerns about harms to competition and diversity of viewpoints if one station were to occupy more capacity through hosts than its license would otherwise permit. Accordingly, it is our intention that the capacity limitation operate hand in hand with our rule permitting licensing of 1.0 non-simulcast multicast streams.
- 20. We agree with NAB that any capacity restriction we adopt should limit stations to the capacity they could have used if they were still broadcasting in 1.0 on their own facilities, without restricting their ability to add or change programming streams during the transition. Accordingly, we decline to adopt alternative proposals to the extent they seek to address issues beyond that scope.⁹⁸ To

⁹⁴ Infra Section III.H ("Form 2100"); Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16106, para. 36. See also Letter from Michael Nilsson, Counsel to the American Television Alliance, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 6 (filed Sept. 21, 2017) (ATVA Sept. 21, 2017 Ex Parte Letter).

⁹⁵ See, e.g., ATVA Multicast Licensing Comments at 2 (stating that "the Commission should place reasonable limits on non-simulcast multicasting"); NCTA Multicast Licensing Comments at 2-3 (urging the Commission to "adopt reasonable limits on the number and types of multicast streams a station may broadcast through a host station"); NAB Multicast Licensing Comments at 10-12 (proposing a limit on the use of host capacity).

⁹⁶ See, e.g., BitPath Multicast Licensing Reply at 10 (stating that "nobody has proposed to allow any station to use the hosting rules to transmit more streams than it could otherwise transmit on a single ATSC 1.0 station"). We also reject APTS' proposal to exempt NCE stations from the host capacity limit. APTS Multicast Licensing Comments at 5. We find our rationale for establishing the host capacity limit applies to both commercial and NCE stations.

⁹⁷ See Letter from Patrick McFadden, Deputy General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 1-2 (filed May 12, 2022) (NAB May 12 Ex Parte Letter) (stating that "because there will be less aggregate ATSC 1.0 capacity in any market deploying ATSC 3.0 service, and because no station has the ability to exert intra-market leverage over any other during the transition, concerns that broadcasters would abuse this rule are unfounded and unrealistic"). See also BitPath Multicast Licensing Comments at 22 ("The most basic reason not to fear spectrum aggregation is that the unfortunate result of transition hosting is less spectrum to go around as some stations are taken offline for ATSC 1.0 purposes.").

⁹⁸ For example, while our rule addresses NCTA's call for "meaningful and enforceable limits on the hosting of multicast streams," we believe the group's concerns about the impact on multicast signal carriage are better resolved in the context of private retransmission consent negotiations or, if appropriate, the carriage complaint process. NCTA Multicast Licensing Comments at 3. Also, Edge Networks (Evoca) commented "[t]he Commission should address anticompetitive practices of broadcasters who use their control of content to restrict new market entry and video competition." *See* Edge Networks (Evoca) Multicast Licensing Comments at 14. Evoca has clarified, however, that its recommendations regarding retransmission consent in its initial comments were not intended to be proposals for rulemaking. Edge Networks (Evoca) Multicast Licensing Reply at 4.

this end, we adopt the substance of NAB's proposal, modifying it only to require that stations demonstrate compliance by submitting a limited amount of specific information at the time of application, rather than in response to complaints. In the *Next Gen TV Multicast Licensing FNPRM*, the Commission expressed concern about the specific language of NAB's proposal, stating that "an effective rule ... would need to be objective, simple for stakeholders to understand and apply, and amenable to enforcement." MVPD commenters agree with this concern and suggest an objective capacity limit based on a set number of streams, whether a generally applicable limit or one based on the number of streams the station provided prior to its transition to 3.0. 100 Upon review of the record, we are persuaded that such alternatives would be overly restrictive 101 and that the best metric will be the number and resolution of streams actually airing (or that previously actually aired) on specific 1.0 facilities. 102

21. We agree with ATVA that ensuring compliance with capacity limits associated with a single 1.0 station does not require the Commission to engage in a technical bit-by-bit analysis of a broadcaster's service. Rather, we conclude that reviewing basic information about each proposed stream (particularly its network affiliation and resolution) and considering an appropriate capacity comparison (either the prior capacity of the station itself or the reference point of another 1.0 station with a similar lineup at the same resolutions and on the same type of facility (individual or shared)) will suffice to enable the Commission to ensure a particular broadcaster is not expanding its capacity beyond that which it could use pursuant to the Commission's traditional 1.0 licensing regime. We find that it is reasonable

⁹⁹ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16100-01, para. 24.

¹⁰⁰ See ATVA Multicast Licensing Comments at ii (seeking "[a] limitation on programming streams—either reflecting what the station had done before or some generally applicable limit—with a rule of thumb to compare bandwidth consumed by various types of feeds"); NCTA Multicast Licensing Comments at 3 (seeking "a limit on the total number of multicast streams an originating station is permitted to license on host stations"); NCTA Multicast Licensing Reply at 2 (proposing that "the Commission adopt a rule providing that no individual broadcaster should be permitted to partner with other stations to host, in the aggregate, more multicast programming than such station was broadcasting on its own facilities at the time the Second Further Notice was adopted"); Letter from Michael Nilsson, Counsel to the American Television Alliance, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 2 (filed May 31, 2022) (ATVA May 31 Ex Parte Letter) (stating that NAB's proposed rule "needs to explicitly reference picture quality or some other measure of 'capacity' in order to work" and suggesting a station's demonstration of compliance with the rule must "tak[e] into account reasonable comparisons of bitrate and picture quality").

¹⁰¹ See, e.g., BitPath Multicast Licensing Reply at i, 2 ("Limiting hosting to the streams a station was broadcasting at the time of the ATSC 3.0 conversion would create a significant disincentive for stations to convert. Stations converting to ATSC 3.0 often have ample capacity to launch new streams before they convert, and there is no policy reason to require them to forfeit that option and thereby limit competition in the local market simply because they made the investment to convert to ATSC 3.0."); NAB Multicast Licensing Comments at 11 (stating that "selecting an arbitrary cap on the number of streams a station can air on host stations ... may serve to deprive the public of desired programming, and will not factually reflect broadcast technology because streams are not a remotely accurate proxy for capacity"); ONE Media Multicast Licensing Reply at 5-6 ("NAB's proposed limitation on hosting arrangements would wholly resolve [ATVA's and NCTA's ownership, spectrum aggregation, and program aggregation] concerns" ... and "it would do so without imposing arbitrary caps on host stations or hosted streams or otherwise frustrating the Commission's goals and Next Gen broadcasters' efforts to minimize viewer disruption."); TEGNA Multicast Licensing Reply at 5 ("A station that does not participate in a Next Gen TV launch is free to broadcast as many program streams on its channel – in any format and regardless of content – as its encoders can accommodate. Indeed, ATSC 1.0 encoder technology continues to improve, which has allowed stations to expand their over-the-air offerings.").

¹⁰² NAB May 12 *Ex Parte* Letter at 1-2 (clarifying that NAB's proposed limit was intended to cover essentially two situations: (1) when a station was going to provide the same programming lineup that it did prior to its transition; or (2) when a station was going to provide the same or a similar programming lineup as another 1.0 station).

¹⁰³ ATVA Sept. 21, 2017 Ex Parte Letter at 6. See also Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16106, para. 36. This approach also captures the "state of the art," as contemplated by NAB's proposed rule

to require Next Gen TV station applicants to provide this information, which is largely consistent with the information currently required in the Legal STA process, ¹⁰⁴ and therefore reject NAB's proposal that Next Gen TV station applicants provide only a certification without further information at the time of application. ¹⁰⁵

22. We reject NAB's contention that it would be more appropriate for the burden of discovering excessive use of capacity to be on MVPDs and that comparison information should be provided by stations only in response to complaints. 106 As justification for this approach, NAB asserts that providing the capacity information in the absence of a complaint would be a waste of both Commission and broadcaster resources. We disagree. This capacity information – asking whether the proposed lineup could fit within a 1.0 channel by comparing it to a similar one that has actually aired – is necessary to make an informed objection to a proposed use of host capacity. Further, we fail to see how providing this information requires materially more resources than NAB's certification proposal. Any ex ante certification of the type proposed by NAB would require the applicant to certify that it has a reasonable belief that all of the proposed streams could be simultaneously broadcast by the station on its own 1.0 facility if it had one. This reasonable belief presumably would need to be based upon the collection of the same information we are asking the broadcaster to provide. And we are persuaded by NAB that broadcasters will necessarily base such a belief on the actual experience of specific stations. rather than on any sort of detailed technical analysis. Therefore, requiring that stations preemptively share the same public information that would be the basis of their certification – that is, whether the same or a similar lineup has ever previously aired – is reasonable and would not "waste" broadcaster resources. Furthermore, we believe this requirement provides greater certainty to broadcasters than a complaint process, because the showing submitted will demonstrate compliance with the rule. 107 Moreover, as discussed below, providing the required information about a station's operations during the transition period will provide much needed transparency for the public and stakeholders. 108

¹⁰⁵ NAB May 12 *Ex Parte* Letter at 1-2 ("NAB's proposal would require broadcasters to certify on their applications that they would not arrange for hosting of more content than they could host on their own facility."); Letter from Patrick McFadden, Deputy General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 1 (filed June 14, 2022) (NAB June 14 *Ex Parte* Letter) ("NAB has proposed that the Commission allow a station to demonstrate that it had not acquired access to more capacity than it would otherwise have by demonstrating that it could successfully transmit all hosted programming on a single ATSC 1.0 facility. To prevent the abuse of the Commission's processes and the waste of both Commission and broadcaster resources, NAB has proposed that a broadcaster should only be required to submit such a showing in response to a Commission inquiry or a complaint that made a prima facie case the Commission deems worth of a response.").

¹⁰⁶ NAB June 14 *Ex Parte* Letter at 2 ("Representatives of cable companies are the only parties to have objected to the substance of NAB's proposal because these companies assert they will be uniquely injured by broadcasters' entirely theoretical abuse of this rule because it will unduly burden cable companies' capacity constraints.... ATVA's members are also uniquely qualified to know whether broadcasters are indeed abusing it since, according to the cable lobby, the potential harm resulting from any violation would be a devastating burden on cable capacity."). Because we do not rely on claims of harm to cable companies in our decision, we do not address NAB's objections to those claims.

¹⁰⁷ We note that, while NAB identifies these as "examples" of ways to demonstrate compliance, neither they nor any other commenter have proposed any other way for a station to demonstrate "that it could successfully transmit all hosted programming on a single ATSC 1.0 facility." NAB May 12 *Ex Parte* Letter.

¹⁰⁴ Infra Section III.H ("Form 2100").

¹⁰⁸ Infra Section III.H ("Form 2100").

E. Use of Multicast Streams to Minimize 1.0 Primary Stream Service Loss

- 23. We adopt rules providing that, in certain circumstances, a Next Gen TV station may simulcast its primary stream programming both on its primary stream host and on a multicast stream carried by a different partner station in order to minimize the impact of 1.0 primary service loss that would result if an originating station were only able to air its primary stream on a single host.¹⁰⁹ We also adopt our tentative conclusion that such streams will be considered a "simulcast multicast stream" and count toward the host capacity limit established herein. Accordingly, we adopt our tentative conclusion that a multicast stream that is a second (or additional) simulcast of a primary stream must be "substantially similar" to the 3.0 primary stream.¹¹⁰ Broadcasters largely support this proposal,¹¹¹ and no commenter objected to it.¹¹² We agree with broadcasters that preserving 1.0 primary service is critically important during the transition period and that this relief supports that goal.¹¹³
- 24. We therefore affirm the earlier Bureau decision approving this method of mitigating 1.0 service loss and bring such streams within the transition licensing regime discussed herein without the need for case-specific STAs.¹¹⁴ We expect this situation will arise only when an applicant intends to

¹⁰⁹ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16098-99, para. 19. While the Bureau will consider proposals that would use more than one multicast stream (airing primary programming), such proposals will require the public interest showing under the non-expedited processing standard. We expect this situation will arise only when such streams are aired on low-power TV 1.0 hosts. See BitPath Multicast Licensing Comments at 21.

¹¹⁰ Next Gen TV Multicast Licensing FNPRM, 2021 WL 518291436 FCC Rcd at 16098 at *7, para. 19. Indeed, by definition as a second (or additional) simulcast of a 3.0 primary stream, we expect this stream will be identical to the simulcast of the primary stream (which, by rule, must be substantially similar to the 3.0 primary stream). See 47 CFR §§ 73.3801(b)(1), 73.6029(b)(1), 74.782(b)(1). In addition, we adopt our tentative conclusion that this multicast stream, like all hosted streams, will count toward the host capacity limit established in this Order. Supra Section III.D.

¹¹¹ See, e.g., Pearl Multicast Licensing Comments at 4-6; NAB Multicast Licensing Comments at 6; BitPath Multicast Licensing Comments at 20-22; CMG Multicast Licensing Comments at 4; ONE Media Multicast Licensing Comments 11-14; PTV Multicast Licensing Comments at 4; ATBA Multicast Licensing Comments at 5-6. We note that ONE Media and ATBA contend that this proposal does not go far enough and that we should afford such an application expedited processing. See ONE Media Multicast Licensing Comments 11-14; ATBA Multicast Licensing Comments at 5-6. We reject this proposal. Considering whether the use of a multicast stream to supplement the primary stream is appropriate requires consideration on a case-by-case basis. The non-expedited process allows the Bureau to collect additional information that will be used to ensure the proposed use is in the public interest.

¹¹² Although the *WNUV STA* called this stream a "supplemental primary ATSC 1.0 simulcast stream," we decline to use this term and emphasize that, contrary to the argument advanced by ONE Media, such a stream is a *multicast* stream and *not* an additional *primary* stream. *See* ONE Media Multicast Licensing Comments at 12. As a multicast stream, this signal has no carriage rights. *See Next Gen TV Multicast Licensing FNPRM*, 36 FCC Rcd at 16098, para. 19, n.72; NCTA Multicast Licensing Comments at 5-6. Furthermore, as noted above, any service provided by such a multicast stream beyond the station's NLSC is incidental and may not be considered for securing any rights or benefits, now or in the future. For example, we will reject a request by a broadcaster to modify its market to add communities based on the service of this multicast stream. *See* NCTA Multicast Licensing Comments at 5-6.

¹¹³ See, e.g., Pearl Multicast Licensing Comments at 6 ("Allowing broadcasters to place their primary signal on two stations, as the Further Notice proposes to do, supports the goal of the Commission and broadcasters to maximize the ability of viewers to receive a signal.").

¹¹⁴ Authorization for Application of WNUV-TV for Modification of License as Amended and Application of WNUV-TV for Legal Special Temporary Authority as Amended, Letter Order, LMS File Nos. 0000136472 and 0000136473, at 1, 6 (VD June 22, 2021) (WNUV STA). As noted in that decision, applicants whose applications are reviewed under the non-expedited processing standard are required to minimize the impact of the expected service loss, but the Commission did not require a specific method for doing so. Next Gen TV Report and Order, 32 FCC Rcd at 9947-48, para. 34.

broadcast in 3.0 on its own channel and is unable to find a partner 1.0 host that could, on its own, provide coverage of its primary stream to 95 percent of the applicant's 1.0 service area. Applications seeking to use a multicast stream to supplement the service provided by their primary stream will be considered by the Media Bureau under the process for non-expedited applications.¹¹⁵

Contrary to our tentative conclusion in the Next Gen TV Multicast Licensing FNPRM, we do not limit this relief only to NCE stations or commercial stations airing multicast streams on NCE partner hosts. 116 The Next Gen TV Multicast Licensing FNPRM asked whether this approach would be an acceptable method for mitigating ATSC 1.0 service loss for any other types or groups of applicants.¹¹⁷ No commenter opposed extending this relief to other types or groups of applicants and we are persuaded by broadcasters' comments that other similarly situated stations may be able to show that their use of multicast streams to minimize service loss of the primary 1.0 stream is in the public interest. 118 We therefore allow any Next Gen TV station to apply for this relief under the non-expedited process, but emphasize that all applicants must demonstrate why this relief is in the public interest and outweighs any potential harms. As discussed in the Next Gen TV Multicast Licensing FNPRM, we recognize that each programming stream devoted to simulcasting a primary stream is one fewer that could be devoted to multicast programming, potentially reducing the diversity of programming available to viewers in order to ensure the widest availability of the most popular programming. 119 We also note that a station airing its primary stream programming on two hosts could be reaching many viewers previously outside its 1.0 footprint.¹²⁰ Thus, the Bureau must consider whether the benefits of a given proposal outweigh any harms, including any impacts on localism, diversity of programming offerings, and/or viewer confusion. Finally, we emphasize that service temporarily provided by a multicast stream that is used as a second

¹¹⁵ In the *Next Gen TV Report and Order*, the Commission established a presumption that it would favor grant of an application demonstrating that the station would provide ATSC 1.0 simulcast service to at least 95 percent of the predicted population within the station's original NLSC and afford "expedited processing" to such applications. *Next Gen TV Report and Order*, 32 FCC Rcd at 9946, para. 29. *See also* 47 CFR §§ 73.3801(f)(5)-(6), 73.6029(f)(5)-(6). A Next Gen TV applicant whose ATSC 1.0 simulcast signal will not satisfy this 95 percent threshold ("non-expedited applicant") will be considered on a case-by-case basis and must provide the following information: (1) whether there is another possible simulcast partner(s) in the market that would result in less 1.0 service loss to existing viewers and, if so, why the Next Gen TV broadcaster chose to partner with a station creating a larger service loss; (2) what steps, if any, the station plans to take to minimize the impact of the 1.0 service loss (e.g., providing ATSC 3.0 dongles, set-top boxes, or gateway devices to viewers in the loss area); and (3) the public interest benefits of the simulcast arrangement and a showing of why the station believes the benefit(s) of granting the application outweigh the harm(s). *See Next Gen TV Report and Order*, 32 FCC Rcd at 9947-48, para. 34; 47 CFR §§ 73.3801(f)(6)(iii), 73.6029(f)(6)(iii).

¹¹⁶ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16098, para. 19, n.74 ("For the purposes of this tentative conclusion, we consider similarly situated originating stations to be NCEs, or commercial stations working with NCE partner hosts, transitioning their own channel to 3.0, who are unable to find a partner 1.0 host that could, on its own, provide coverage of its primary stream to 95 percent of the applicant's 1.0 service area."). In proposing this approach, we supported the Bureau's prior decision, which found that "permitting NCE stations to participate in the ATSC 3.0 rollout arrangements in this manner is critical to the success of the transition," in large part because NCE stations make up over 20% of all full power broadcasters. WNUV STA, at page 6.

¹¹⁷ Id. at 20.

¹¹⁸ See, e.g., Pearl Multicast Licensing Comments at 4-6; BitPath Multicast Licensing Comments at 21. Pearl contends that "this [relief] is a particularly good solution for various scenarios, such as: small markets that are spectrum constrained; geographically large markets with a small population, like the Butte-Bozeman DMA in Montana; and markets where some broadcasters rely on a single full power station to serve the market and other broadcasters have multiple stations serving the same market, such as La Crosse-Eau Claire in Wisconsin or Birmingham, Alabama." *Id.*

¹¹⁹ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16099, para. 20.

¹²⁰ *Id*.

simulcast of a primary stream will not give rise to any rights for the broadcaster or impose any obligations on MVPDs, and may not be considered for purposes of securing any rights or benefits, now or in the future.

F. Ownership Issues

26 Consistent with our decision with regard to hosted primary streams of NextGen TV stations, hosting multicast streams on a temporary host station's facility will not result in attribution under our broadcast ownership rules or for any other requirements related to television stations attribution (e.g., filing ownership reports). 121 In the Next Gen TV Multicast Licensing FNPRM, we asked whether the temporary nature of the exemption and our desire to minimize viewer disruption while facilitating the 3.0 transition made the hosting of multicast streams similar enough to the hosting of primary streams to warrant the same approach.¹²² We are persuaded by the record that they do. Broadcaster commenters support this approach, maintaining that the hosting of multicast streams would further the same objectives as primary stream hosting. 123 Consistent with the need articulated by broadcasters, we emphasize that the new flexibility we grant herein is intended to serve the purpose of minimizing viewer disruption, and we find that the clear benefits of such an approach for viewers outweigh any potential for abuse under our ownership rules that some commenters have raised.¹²⁴ This decision does not change the Commission's broadcast ownership rules in any substantive way and certainly does not alter the number of stations a broadcaster can own in a particular market. 125 As discussed in the Next Gen TV Multicast Licensing FNPRM, ATVA and others have raised concerns in the 2018 Quadrennial Review proceeding about the practical impact of the ownership rules in light of the growing practice of placing Big-four network programming on multicast streams. 126 We find that those concerns are best addressed in the Quadrennial Review context, 127 not least because any decision made in that proceeding with respect to Big-four network affiliations will apply to all licensed multicast streams, hosted or otherwise.

¹²¹ Next Gen TV First Report and Order, 32 FCC Rcd at 9972, n.237. See also Broadcast Internet Declaratory Ruling and NPRM, 35 FCC Rcd at 5924, para. 15.

¹²² Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16102-03, paras 27-28.

¹²³ See, e.g., Pearl TV Multicast Licensing Comments at 6 (contending that "[t]he Commission should extend the waiver of the local broadcast ownership rules that it adopted along with the ATSC 3.0 rules to apply to the multicast arrangements discussed herein") (internal footnotes omitted); Cox Multicast Licensing Comments at 4 (requesting that the Commission "extend the waiver of the local broadcast ownership rules to multicast stream hosting partnerships for the duration of the transition"); NAB Multicast Licensing Comments at 8 (arguing that "there is no reason to take a different approach with respect to multicast streams, whether simulcast or not, than the Commission has taken with respect to simulcast primary streams with respect to the Commission's ownership rules"). See also Scripps Multicast Licensing Reply at 7 (arguing that the Commission should instead describe temporary hosting arrangements as "not subject to" the broadcast ownership rules).

¹²⁴ ATVA Multicast Licensing Comments at 5, 8-9 ("Non-simulcast multicasting could also create a new loophole that could permit stations to evade the local ownership rules... broadcasters here seek to disturb the *status quo* by creating a *new* loophole.") (emphasis in original).

¹²⁵ Supra Section III.F. See also One Media Multicast Licensing Comments at 16 (contending that "the proposed administrative change of licensing the temporary hosting arrangements discussed above rather than continuing to approve them through STAs does not create any 'loopholes' to any Commission ownership rules").

¹²⁶ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16099-100, paras 22-23.

¹²⁷ See, e.g., Pearl TV Multicast Licensing Comments at 12 ("[T]o the extent there are any concerns about programming aggregation as related to ownership issues, these concerns are more productively addressed in the Quadrennial Review."); BitPath Multicast Licensing Reply at 10-11.

G. Same-Service (or "Lateral") Hosting

- 27. We adopt our tentative conclusion declining at this time to license same service (or "lateral") hosting arrangements, though we are open to considering such arrangements in limited circumstances. Same-service (or "lateral") 1.0 hosting refers to a situation in which a Next Gen TV station still operating its own facility in 1.0 and serving as a 1.0 host for another Next Gen TV station that converted its facility to 3.0 seeks to relocate one or more of its own multicast streams to another 1.0 host station. We are not convinced that a general rule as proposed that would permit this practice is necessary to minimize viewer disruption during the transition. Even advocates for a rule concede that the hypothetical problems it could resolve would occur only rarely. Given the lack of any demonstrated need to allow such arrangements in all markets, we refrain from adopting a general rule at this time. Nonetheless, as discussed below, we will entertain requests for special temporary authority to permit 1.0 same-service hosting and may revisit this decision once we have more experience with situations in which such flexibility may be necessary to enable a market to transition.
- 28. BitPath and other commenters contemplate scenarios in which multiple Next Gen TV stations across a market would shift streams from station to station in order to facilitate their move toward 3.0.132 For example, broadcasters in the New York DMA (the New York City market) have argued that multiple stations engaging in same-service hosting is a business necessity in order to maximize the number of stations willing to transition simultaneously.133 On the current record, however, there is no evidence that same-service hosting is technically necessary to make any market's transition possible. Indeed, there has only been one instance in which a Next Gen TV broadcaster sought Commission approval to keep its facility in 1.0 while shifting some 1.0 programming to a host.134 That station and that

¹²⁸ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16096, para 14.

¹²⁹ Letter from Patrick McFadden, Deputy General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 1 (filed Aug. 10, 2022) (NAB Aug. 10 *Ex Parte* Letter) (explaining that this refers to a situation in which "a station transmitting in ATSC 1.0 might arrange for the hosting of one or more of its multicasts on another 1.0 station in the market to ensure that the first station has sufficient capacity to host the programming of an ATSC 3.0 station in the market"). Such a scenario could theoretically also arise among 3.0 hosts.

¹³⁰ NAB Aug. 10 Ex Parte Letter (stating that "such arrangements would be a last resort").

¹³¹ We recognize that most broadcasters strongly support lateral hosting, seeking maximum flexibility under our licensing regime. *See, e.g.*, BitPath Multicast Licensing Comments at I, 11, 12; NAB Multicast Licensing Comments at 5; Pearl Multicast Licensing Comments at 5; NAB Aug. 10 *Ex Parte* Letter; Letter from Patrick McFadden, Deputy General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 1 (filed Oct. 3, 2022) (NAB Oct. 3 *Ex Parte* Letter) (meeting also included representatives from NBCUniversal, Fox corporation and Paramount); Letter from Sally A. Buckman, Counsel, WNET, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 1 (filed Oct. 21, 2022) (WNET Oct. 21 *Ex Parte* Letter); Letter from Patrick McFadden, Deputy General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 1 (filed Jan. 13, 2023) (NAB Jan. 13 *Ex Parte* Letter). *See also, e.g.*, Letter from Patrick McFadden, Deputy General Counsel, NAB, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 1 (filed Feb. 1, 2023) (proposing minimal geographic limits on unrestricted lateral hosting). *But see* Letter from Mary Beth Murphy, Vice President & Deputy General Counsel, NCTA, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142, at 2 (filed Feb. 23, 2023) (supporting a waiver approach to lateral hosting).

¹³² See, e.g., BitPath Multicast Licensing Comments at I, 11, 12; NAB Oct. 3 Ex Parte Letter, WNET Oct. 21 Ex Parte Letter.

¹³³ NAB Oct. 3 Ex Parte Letter, WNET Oct. 21 Ex Parte Letter.

¹³⁴ LMS File No. 0000125644.

market, however, were ultimately able to begin the transition without any "lateral" hosting, and the station also retained enough capacity that it has since added yet another 1.0 stream to its lineup. 135

- 29. Furthermore, there is potential for abuse in a lateral hosting scenario, particularly given the continuing uncertainty around the ultimate duration of the transition. For instance, preventing the aggregation of excess capacity in such a scenario would require a more complex capacity limitation rule than is supported by our record. This is particularly true given the need to consider not just programming but any ancillary and supplementary services being provided over a station's own facility. In the absence of such protections, a station relying on same-service hosts could potentially use significantly more capacity than is permitted under its license, even while complying with the capacity limit rule adopted today. The record simply does not demonstrate that creating such potential for confusion and abuse is justified by any countervailing need.
- We will, however, consider requests for special temporary authority in those rare circumstances in which relief may be necessary to ensure that a market can transition effectively. We expect that addressing any potential issues using this process will allow us to monitor the changing state of the market as the transition moves forward and to collect more information about any situations that arise in which there is a technical need for this type of "lateral" flexibility. Indeed, the STA process provided valuable, real-world information that helped inform our decisions in this item. Finally, broadcasters have argued in this proceeding that the appropriate measure of how much programming a 1.0 station is capable of airing is whether any 1.0 station is airing or has previously aired the same or a similar programming lineup at the same resolutions.¹³⁷ We agree and we direct Media Bureau staff to review and process any potential STA requests (and the inherent potential of any such requests to expand broadcasters' capacity as described above) in light of this "historical" approach, which we have adopted elsewhere in this Order to limit capacity in the multicast hosting context.¹³⁸ Furthermore, as noted above, same-service hosting is limited to a host station's multicast stream (i.e., a host station's own primary stream is not eligible for lateral hosting). And while the Media Bureau will have flexibility to review the particular circumstances of each case, we expect that staff will consider the potential impact on over-theair availability of programming that has significant viewership (e.g., the stream is ranked in the top 4 in the market or would cause viewers to lose their only source of noncommercial or major network programming) or specifically provides children's programming in the station's service area.¹³⁹

H. Rules Applicable to Multicast Streams Aired on a Host Station

31. With respect to the other ATSC 3.0 transition rules, except as detailed in this Order, we will apply the same rules to simulcast and non-simulcast licensed multicast streams as we currently apply to primary simulcast streams, consistent with our tentative conclusions. These rules are intended to

¹³⁵ WXYZ & WMYD TV Schedules, https://www.wxyz.com/entertainment/television/schedule (last visited Jan. 1, 2023).

¹³⁶ See also supra para. 13 (discussing the harms inherent to all hosting of streams during the transition).

¹³⁷ NAB May 12 Ex Parte Letter.

¹³⁸ See supra para. 18 (implementing limits on hosting capacity). Such requests must clearly identify any programming that would be discontinued in the absence of an STA and explain why there is no reasonable alternative to the requested reliance on a same-service host and how viewer impacts will be minimized (e.g., is the same stream available to viewers in any loss area from another station in the same or adjacent market). STAs will be granted for a period of 180 days and must be subsequently renewed. See 74 CFR § 73.1635.

¹³⁹ 47 CFR § 73.671.

¹⁴⁰ The rules at issue are those found in sections 73.3801, 73.6029, and 74.782 of the Commission's rules (each entitled "Television Simulcasting"). These include simulcast arrangements and agreements (47 CFR §§ 73.3801(a) and (e), 73.6029(a) and (e), 74.782(a) and (f)); the simulcasting requirement (47 CFR §§ 73.3801(b), 73.6029(b), 74.782(b)); contour, DMA, and community of license coverage requirements (47 CFR §§ 73.3801(d) and (f)(5)-(6), 73.6029(d) and (f)(5)-(6), 74.782(e) and (g)(5)-(6)); MVPD notice requirements (47 CFR §§ 73.3801(h),

protect consumers from service disruption, especially the loss of access to the 1.0 television programming they currently watch, without restricting broadcasters' ability to choose to participate in the voluntary, market-driven transition to ATSC 3.0. We believe these proposals best balance the goal of preserving maximum availability of multicast streams with the reality that broadcasters could simply decline to air multicast streams if our rules are too burdensome.

- 32. Coverage rules. As proposed in the Next Gen TV Multicast Licensing FNPRM, we will apply the DMA and community of license coverage requirements to all multicast streams but will not consider those streams when determining whether a station qualifies for expedited processing. Thus, 1.0 multicast streams aired on a host channel must continue to cover the guest station's entire community of license and the host station must be assigned to the same DMA as the originating station. For 3.0 multicast streams aired on a host channel, as with 3.0 primary streams aired on a host channel, only the DMA requirement applies. When determining whether a station seeking to transition is eligible for expedited processing, however, we will continue to ask only whether the primary stream will remain available in 1.0 to at least 95% of a station's current OTA audience.
- 33. Although commenters generally do not oppose this approach, some commenters support variations to it. A small number of broadcasters suggest that the rule should require only a host in the same DMA without a requirement regarding the community of license. They express concern that it will be challenging in the future for stations to find host partners that can fully cover their community of license. ATVA, on the other hand, contends that no station should receive expedited processing unless all of its multicast streams meet the 95% coverage threshold or if the station pledges to deliver signals to MVPDs. We reject these proposals. With respect to both of these concerns, we emphasize that retaining a station's 1.0 service to its community of license remains our priority under current marketplace conditions. We will review each application including any unique characteristics of the market involved as it arises.
- 34. Finally, as proposed in the *Next Gen TV Multicast Licensing FNPRM*, for children's programming on a multicast stream to count toward the originating station's children's television Core Programming requirement, the multicast stream must either be carried on the same host as the originating station's primary stream or on a host that serves at least 95% of the predicted population served by the

¹⁴¹ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16104-05, paras. 32-33, n.104.

¹⁴² As proposed in the *Next Gen TV Multicast Licensing FNPRM* and noted below in the paragraphs discussing updates to Form 2100, Next Gen TV applications must note the predicted percentage of population within the station's NLSC that will be served by each multicast stream host. *Next Gen TV Multicast Licensing FNPRM*, 36 FCC Rcd at 16104, 16106, paras. 32, 36.

 $^{^{143}}$ See Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16104, n.104. No commenter specifically addressed this proposal.

¹⁴⁴ In the *Next Gen TV Report and Order*, the Commission established a presumption that it would favor grant of an application demonstrating that the station would provide ATSC 1.0 simulcast service to at least 95 percent of the predicted population within the station's original NLSC and afford "expedited processing" to such applications. *Next Gen TV Report and Order*, 32 FCC Rcd at 9946, para. 29. *See also* 47 CFR §§ 73.3801(f)(5)-(6), 73.6029(f)(5)-(6).

¹⁴⁵ See, e.g., One Media Multicast Licensing Comments at 15; Pearl Multicast Licensing Comments at 5.

¹⁴⁶ ATVA Multicast Licensing Comments at 13-14.

¹⁴⁷ Next Gen TV First Report and Order, 32 FCC Rcd at 9944, paras. 25-26.

applicant's pre-transition 1.0 signal.¹⁴⁸ Commenters do not oppose this proposal, although the Broadcasting Alliance proposed that we combine hosts of multiple "copies" of a multicast stream to determine whether that stream is reaching 95% of the relevant population.¹⁴⁹ While we do not bar stations from airing identical content on multiple hosted multicast streams,¹⁵⁰ we decline to adopt this alternative on the grounds that it would incentivize inefficient use of limited 1.0 capacity.

- 35. Licensing. As proposed in the Next Gen TV Multicast Licensing FNPRM, we will apply our licensing process for primary simulcast streams to guest multicast streams aired on a host station.¹⁵¹ No commenter opposes this proposal. Thus, upon grant of an application, each of an originating station's multicast streams aired as a guest stream on a host will be licensed as an additional temporary channel of the originating broadcaster.¹⁵² We also adopt our unopposed tentative conclusion that commonly owned stations are not required to enter into written agreements for the hosting of either primary or multicast streams,¹⁵³ consistent with the process the Bureau uses for handling the hosting of primary streams on commonly owned stations.¹⁵⁴
- 36. Form 2100. We adopt the Next Gen TV Multicast Licensing FNPRM's proposal to modify our Next Gen TV license application form (FCC Form 2100) to accommodate multicast licensing by collecting information similar to that already collected in the STA process.¹⁵⁵ Broadcasters generally support a requirement to file the same information they currently provide when seeking to transition, though other commenters suggest the filing should be more extensive.¹⁵⁶ NAB asserts that licensees should not have to file any information at all about multicast streams.¹⁵⁷ We reject NAB's argument. We

¹⁴⁸ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16105, para. 34.

¹⁴⁹ Broadcasting Alliance Multicast Licensing Reply at 5-6.

¹⁵⁰ Supra note 78.

¹⁵¹ Under these rules, a Next Gen TV station could seek to obtain separate authorizations for each host station used to air any programming stream and would no longer be limited to the two authorizations contemplated in the *Next Gen TV First Report and Order*. *Next Gen TV First Report and Order*, 32 FCC Rcd at 9953-54, para. 48.

¹⁵² Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16105-06, para. 35, citing Next Gen TV First Report and Order, 32 FCC Rcd at 9953-54, para. 48.

¹⁵³ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16094, n.42.

¹⁵⁴ Media Bureau Announces That It Will Begin Accepting Next Generation Television (ATSC 3.0) License Applications in the Commission's Licensing and Management System on May 28, 2019, GN Docket No. 16-142, Public Notice, 34 FCC Rcd 3684, 3685 n.5 (MB 2019).

¹⁵⁵ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16106, para. 36. We direct the Media Bureau to revise Form 2100 as needed to implement these changes, and to process applications filed using Form 2100.

¹⁵⁶ See, e.g., One Media Multicast Licensing Comments at 10 ("[T]here is no reason to impose additional requirements on multicast stream hosting arrangements than what currently apply to primary stream hosting arrangements or what has been collected thus far under the interim STA process."); NCTA Multicast Licensing Comments at 4-5 ("At a minimum, the Commission should require broadcasters to identify, for each market they serve, their partner host station(s); the network affiliation, broadcast standard, and format (HD or SD) for each stream being hosted; and to the extent hosting of non-simulcast streams is allowed, whether the streams are being simulcast on the originating broadcaster's station in the alternate standard."); Pearl TV Multicast Licensing Comments at 9 ("[T]his additional requirement [proposed by NCTA] is unnecessary because of the information already submitted through the STA process or which will be required on Form 2100 should the FCC implement the Further Notice proposals.").

¹⁵⁷ See, e.g., NAB Multicast Licensing Comments at 12-13 (requesting that the Commission not "add new information collection requirements as part of this proceeding"). See also Cox Multicast Licensing Comments at 4 (stating that the Commission should "simply add more spaces for broadcasters to list additional host stations – no further information collection is needed").

note that our rules do not prohibit the use of private contractual arrangements for partner stations to air their multicast streams. For regulatory compliance purposes, such streams would be considered multicast streams of the host partner station, not the originator station.¹⁵⁸ To the extent stations seek instead to modify their license to include multicast streams hosted by partner stations, both the Commission and the public need visibility into the basic terms of that hosting relationship. Such transparency will ensure compliance with our rules, particularly compliance with the host capacity limit (*see* section III.D, above.). We therefore will require certain additional information as an addendum to Form 2100 if stations seek to include hosted multicast streams within their license.¹⁵⁹ We also clarify and slightly modify the requirements of our rules governing Form 2100 to reflect the possibility of reliance on multiple hosts.

- 37. Specifically, applicants must prepare an exhibit identifying each proposed hosted stream and provide the following information about each stream, as broadcast:
 - the host station;
 - channel number (RF and virtual);
 - network affiliation (or type of programming if unaffiliated);
 - resolution (e.g., 1080i, 720p, 480p, or 480i);
 - the predicted percentage of population within the noise limited service contour served by the station's original ATSC 1.0 signal that will be served by the host, with a contour overlay map identifying areas of service loss and, in the case of 1.0 streams, coverage of the originating station's community of license; and
 - whether the stream will be simulcast, and if so, the "paired" stream in the other service.

Finally, the exhibit must either state that the applicant will be airing the same programming that it is airing in 1.0 at the time of the application or identify the station that has aired or is airing the same or a similar programming lineup at the same resolutions on the same type of facility (individual or shared), as well as that station's lineup (with resolutions). This exhibit must be placed on the applicant's public website or in the applicant's online public inspection file if the station does not have a dedicated website, ¹⁶⁰ with a link provided in the application. This information is consistent both with that currently collected in STA applications ¹⁶¹ and the approach identified in the *Next Gen TV Multicast Licensing FNPRM*. ¹⁶² As with broadcast licenses generally, modifications to this license application or its accompanying exhibit (with respect to the primary or multicast streams) must be preceded by the filing and approval of a new application. Changes to the affiliation or content of a stream, or the elimination of a stream, however, do not implicate the concerns raised in this proceeding if they would not result in the use of additional capacity and if information about the change is easily available to the public. Therefore,

¹⁵⁸ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16090-91, para. 5.

¹⁵⁹ See Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16106, para. 36.

¹⁶⁰ See https://publicfiles.fcc.gov/. If a station has neither a public website nor an online public inspection file, it will be considered in compliance with this requirement if it publishes the exhibit in a local newspaper identified in its application. Any changes to the exhibit will require publication of the revised exhibit.

¹⁶¹ See, e.g., Authorization for Application of WNUV-TV for Modification of License as Amended and Application of WNUV-TV for Legal Special Temporary Authority as Amended, Letter Order, LMS File Nos. 0000136472 and 0000136473, at 1, 6 (VD June 22, 2021).

¹⁶² Next Gen TV Multicast Licensing FNPRM, 36 FCC Red at 16106, para. 36. While the Next Gen TV Multicast Licensing FNPRM did not specifically mention identification of the "pair" of each simulcast stream (that is, the specific stream in the other service that is carrying substantially similar programming), we believe the need for this information logically arises from the question about whether a stream will be simulcast in situations where there is more than one simulcast stream.

in order to streamline this process for both broadcasters and the Commission, such changes may be implemented without prior Commission approval. They need only be reflected in a timely update to the exhibit that the applicant makes available on its public website or in the applicant's online public inspection file and in an email notice to the Chief of the Media Bureau's Video Division.

38. *Timing*. As proposed in the *Next Gen TV Multicast Licensing FNPRM*, the rules adopted in this Order will apply until and unless the Commission eliminates the mandatory local simulcasting requirement. Commenters generally support this approach, which will preserve existing 1.0 viewership while giving broadcasters the flexibility to transition to 3.0. MVPD commenters support the proposed timing with respect to simulcast multicast streams, but propose that the rule permitting non-simulcast 1.0 multicast streams should sunset after five years. Broadcasters oppose this proposal, arguing it is contrary to the public interest. We agree that establishing a prescribed sunset for the non-simulcast multicast licensing rules adopted in this Order could lead to a sudden reduction in the availability of 1.0 programming, harming consumers. We therefore decline to adopt a sunset of the non-simulcast multicast and will continue to encourage broadcasters to maximize their 1.0 service throughout the transition in order to minimize the disruption to consumers.

I. Substantially Similar Rule

39. Based on the existing record, we retain the substantially similar rule at this time and extend the sunset date to July 17, 2027.¹⁶⁷ In the *Sunsets FNRPM*, we sought comment on whether we should retain the substantially similar rule or permit it to sunset in July, 2023.¹⁶⁸ After consideration of the state of the transition reflected in the record of this proceeding, we find this rule continues to be necessary at this time for the same reasons it was adopted, to protect consumers by ensuring that OTA viewers who rely on 1.0 are able to continue watching the same programming they watch today, as well as any new programming offerings on a broadcaster's primary channel that can be reasonably provided in 1.0 format.¹⁶⁹ Based on the current record, we find that broadcasters' market incentives alone are insufficient to protect OTA viewers from potential loss of 1.0 service. Furthermore, we find that there has not yet been a sufficient shift in the marketplace that would justify elimination or modification of the substantially similar rule. Moreover, we see no evidence on the record that the substantially similar rule is currently impeding, or is likely in the near future to impede, the provision of innovative 3.0 features

¹⁶³ Next Gen TV Multicast Licensing FNPRM, 36 FCC Rcd at 16106, para. 37.

¹⁶⁴ See, e.g., NAB Multicast Licensing Comments at 3; Cox Multicast Licensing Comments at 5; Pearl Multicast Licensing Comments at 7.

¹⁶⁵ NCTA Multicast Licensing Comments at 4; ATVA Multicast Licensing Comments at 12; NTCA Multicast Licensing Reply at 3.

¹⁶⁶ APTS Multicast Licensing Reply at 3; NAB Multicast Licensing Reply at 8.

¹⁶⁷ See Appendix B – Final Rules; 47 CFR §§ 73.3801(b)(1), 73.6029(b)(1), 74.782(b)(1). We note that the requirement to simulcast in 1.0 is intended to be temporary and will be eliminated when the transition to 3.0 is complete. First Next Gen TV Report and Order, 32 FCC Rcd at 9938, para. 14.

¹⁶⁸ Sunsets FNPRM, 2022 WL 2290237 at *9, para. 24.

¹⁶⁹ The Commission has explained that it will not apply the substantially similar rule to certain enhanced capabilities that cannot reasonably be provided in ATSC 1.0 format. *See First Next Gen TV Report and Order*, 32 FCC Rcd at 9943, para. 23. These capabilities include "hyper-localized" content (e.g., geo-targeted weather, targeted emergency alerts, and hyper-local news), programming features or improvements created for the 3.0 service (e.g., emergency alert "wake up" ability and interactive programming features), enhanced formats made possible by 3.0 technology (e.g., 4K or HDR), and any personalization of programming performed by the viewer and at the viewer's discretion. *Id. See also* 47 CFR §§ 73.3801(b)(1), 73.6029(b)(1), 74.782(b)(1). While some of these capabilities may be theoretically possible within the ATSC 1.0 framework, they are not currently part of the ATSC 1.0 standards, are unlikely to be included in current consumer equipment, and as such cannot reasonably be provided via ATSC 1.0. *First Next Gen TV Report and Order*, 32 FCC Rcd at 9943, para. 23, n.78.

and content. The rule as it stands affords significant flexibility for broadcasters to innovate and experiment with new programming features using 3.0 technology because it does not require broadcasters to duplicate enhanced content or features that cannot reasonably be provided in the 1.0 format. Furthermore, broadcasters provide no reason why programming aired on the 3.0 primary stream that can reasonably be provided in 1.0 format should not be provided in such format. On the other hand, eliminating the substantially similar rule at this time, in light of the current state of the transition, poses a risk of harm to OTA viewers who rely on 1.0, particularly vulnerable consumers, who without the rule could be forced to either purchase new 3.0 equipment or lose access to stations' primary programming.

- 40. The purpose of the substantially similar rule is to give effect to the underlying requirement to "simulcast" 3.0 programming in 1.0, protecting 1.0 viewers from losing access to a Next Gen TV station's programming when that station transitions its facility to 3.0.170 While the underlying simulcast requirement that a Next Gen TV broadcaster must continue to air a primary 1.0 signal (when deploying that signal in 3.0) ensures 1.0 viewers continue to receive one free OTA TV signal during the transition, the substantially similar rule ensures that 1.0 viewers actually receive the same primary programming as that aired on the 3.0 channel, including new programming to the extent that such programming can reasonably be provided in 1.0 format. Thus, these rules work in tandem to ensure that viewers are protected during the transition period. As the Commission explained in the 2017 *First Next Gen TV Report and Order*, "it is important not only to require that television broadcasters continue to broadcast in the current ATSC 1.0 standard while ATSC 3.0 is being deployed, but also that they continue to air in ATSC 1.0 format the programming that viewers most want and expect to receive. We seek to ensure that broadcasters air their most popular, widely-viewed programming on their 1.0 simulcast channels so that viewers are not forced to purchase 3.0 capable equipment simply to continue to receive this programming rather than because they find the ATSC 3.0 technology particularly attractive." 171
- 41. The record of this proceeding does not provide a basis for us to conclude that the substantially similar rule is no longer needed at this time for the same purposes it was originally adopted. Without the substantially similar rule, Next Gen TV broadcasters would be free to air the most desirable programming, including popular existing programming and new program offerings that could reasonably be provided in 1.0 format, only on their 3.0 primary programming stream.¹⁷² This could create two different tiers of free, OTA television service, which we find would not be in the public interest.¹⁷³ We

(continued....)

¹⁷⁰ See First Next Gen TV Report and Order, 32 FCC Rcd at 9943, 9944, para. 22, 25.

¹⁷¹ First Next Gen TV Report and Order, 32 FCC Rcd at 9944, para. 25.

¹⁷² Sunsets FNPRM, 2022 WL 2290237 at *10, para. 26. See PK/OTI Sunsets Comments at 8 ("Without the substantially similar rule, broadcasters are not required to offer anything beyond a single standard definition broadcast on their ATSC 1.0 airwayes.").

¹⁷³ In recognition of the capacity constraints imposed by the transition, the Commission has already given broadcasters flexibility with respect to the resolution and coverage of 1.0 primary streams, and the availability of 1.0 multicast streams. In contrast to these situations, 1.0 capacity constraints do not prevent the provision of substantially similar programming, particularly since Next Gen TV broadcasters are not required to simulcast programming that cannot reasonably be aired in 1.0 format. NAB contends the Commission's discussion of the potential development of two tiers of programming ignores that "[t]here already are two tiers of programming service: pay and free." NAB Sunsets Comments at 14. NAB asserts that "the Commission does not require other actors in the communications marketplace, including those with which broadcasters compete, to intentionally slow the pace of innovation when they upgrade their technology to avoid creating different tiers of service." Id. (citing the 5G context). NAB further states that "[b]roadcasters are the only entities the Commission regulates that are required to provide a free service." *Id.* at 14-15. We remind broadcasters that, as trustees of the public airwaves, they are required by statute to serve the "public interest, convenience, and necessity." 47 U.S.C. § 309(k)(1). Next Gen TV stations may have only one primary programming stream, which they are required to simulcast in 1.0. Finally, we note that broadcasters are not the only regulatees with public interest obligations. For example, cable operators and satellite carriers are required to carry qualified broadcast stations that request mandatory carriage. 47 U.S.C. §§ 338, 534, 535. Also, satellite carriers are required to reserve a percentage of channel capacity for

agree with NCTA and PK/OTI that this would "plac[e] viewers at risk of losing access to popular programming should they be unwilling or unable to pay for this new [3.0] equipment." In particular, PL/OTI notes that lower-income consumers could be especially vulnerable. Furthermore, at this stage of the transition, we agree that many consumers may find there to be a lack of affordable 3.0 TV equipment.

42. We find that broadcasters' market incentives alone cannot be relied upon to ensure that all 1.0 viewers are able to continue to access stations' primary programming without incurring significant costs; this is particularly of concern with respect to vulnerable consumers who are often slow to adopt new technology.¹⁷⁷ We recognize that broadcasters may have strong incentives to offer substantially similar simulcast programming early in the transition. Broadcasters contend that the market will protect all viewers,¹⁷⁸ but as discussed below these assertions often come with qualifications and caveats. Broadcasters have willingly made significant investments in ATSC 3.0 technology, claiming it is necessary to remain competitive in the video marketplace.¹⁷⁹ Thus, while they do have incentives to provide their most popular programming to all of their viewers, they also have incentives to promote their ATSC 3.0 offerings. We recognize that broadcasters do incur some costs by offering programming in both 1.0 and 3.0 to ensure uninterrupted service to current OTA viewers. If the transition progresses and the number of OTA viewers who rely on 1.0 declines, broadcaster incentives to serve 1.0 viewers may weaken as the benefits shrink relative to those costs. These weakened incentives would be a direct result of the success of the transition as more and more OTA viewers migrate to 3.0. Some broadcasters state

- ¹⁷⁷ See, e.g., BitPath Sunsets Comments at 15-16; CMG Sunsets Reply at 3; Evoca Sunsets Reply at 5-6; Graham Sunsets Reply at 4-5; NAB Sunsets Comments at 13; Pearl Sunsets Comments at 22; Scripps Sunsets Reply at 5. We note that if it were true that broadcasters have no incentive to favor their 3.0 offerings, then our rule would simply codify broadcasters' commitment and would not impede any innovations.
- ¹⁷⁸ See, e.g., Pearl Sunsets Comments at 22 ("Broadcaster revenue is maximized by reaching the maximum number of viewers. Thus, broadcasters would only harm their own bottom line by restricting their most popular programming to a subset of their viewership. The FCC does not need a rule to require broadcasters to act in their own financial interest."); CMG Sunsets Reply at 3-4 ("[A]n advertiser-supported free-to-the viewer service, broadcasters have a strong incentive to air popular programming on their most widely viewed programming stream."); BitPath Sunsets Comments at 15 ("It is a business imperative for broadcasters to make the best programming, which closely corresponds to the most expensive programming, available to the widest possible audience.").

¹⁷⁴ NCTA Sunsets Comments at 3; PK/OTI Sunsets Reply at 4.

¹⁷⁵ See, e.g., PK/OTI Comments at 8 (stating that without the substantially similar rule "[a] large proportion of lower-income consumers—and even many other consumers who recently purchased a non-compatible TV—could end up with no access to their local over-the-air channels, including what remains of local broadcast station public interest obligations concerning local news and emergency weather and other alerts").

tuners available in the United States from four manufacturers, but these are mid- to high-end TV sets. *See, e.g.*, Pearl Sunsets Comments at 14; NAB Sunsets Comments at 4-5; NCTA Sunsets Comments at 3. According to Pearl, the lowest cost 3.0 TV set is available to consumers at retail for \$549.00. *See* Pearl Comments at 15 (citing the Sony X80K 4K HDR LED TV with smart Google TV, https://electronics.sony.com/tv video/televisions/all-tvs/p/kd43x80k (last visited Aug. 8, 2022)). The lowest cost separate 3.0 receiver (gateway device) is available at retail for \$199. *See* SiliconDust HDHomeRun 4K Flex, https://www.silicondust.com/product/hdhomerun-flex-4k/ (last visited Dec. 13, 2022). *See also* NAB Comments at 5.

¹⁷⁹ See, e.g., NAB Sunsets Comments at 16 (stating that broadcasters "view ATSC 3.0 as critical to the future success of their industry and their ability to serve their customers"); Pearl Sunsets Reply at 7 (stating that ATSC 3.0 will "enhance the long-term viability of free, over the air broadcast television").

that they have every incentive to "maximize" viewership, ¹⁸⁰ but those arguments more correctly appear to focus on maximizing profits, which will not necessarily support the needs of OTA 1.0 viewers for the length of the transition, particularly when that audience is split between two different services. ¹⁸¹ Broadcaster commenters acknowledge that even these incentives hold only "while the vast majority of viewers continue to watch [1.0 signals]." Given our decision herein to extend the sunset date, the Commission can consider the status of incentives based on the viewership at the time the requirement is set to expire. The current record demonstrates that the substantially similar element of the simulcast rule remains important to the transition at this time, in order to provide certainty to those who continue to rely on 1.0.

43. Furthermore, most broadcasters are not committing to make new programming available to all viewers.¹⁸³ Indeed, many seem to indicate that, if the substantially similar rule were eliminated, they would provide new, 3.0-exclusive programming on their primary streams even if such programming could reasonably be provided in 1.0 format.¹⁸⁴ We recognize that broadcasters are incurring costs by simulcasting and are eager to complete the transition to pursue higher OTA viewership and new revenue opportunities (via broadcast internet services) in the long term.¹⁸⁵ Thus, it is not surprising that

¹⁸⁰ Supra note 184.

¹⁸¹ There is no evidence in the record regarding the financial impact on broadcasters of losing a declining number of 1.0 OTA viewers, particularly older and lower income viewers who may not be favored by advertisers. We also note that many broadcasters receive significant revenue from retransmission consent fees, which would not seem to be directly impacted by any loss in OTA viewership. *See* S&P Global, *US TV station industry total revenue projections, 2009-2027* (June 2022) (stating that, in 2021, retransmission consent fees made up 41% of TV station revenues, while spot advertising made up 51%, and digital/online revenue made up 8%.); Nielsen, *OTA + OTT: The new TV Bundle* (May 2022), https://www.nielsen.com/insights/2022/ota-ott-the-new-tv-bundle/ (stating that 57% of TV households have traditional MVPD service, while only 15% of TV households have OTA TV service, and 27% of TV households are broadband-only households).

¹⁸² See, e.g., Scripps Sunsets Reply at 5 ("[T]here would be no business value, and rather a significant cost, to ceasing distribution of a station's most desired programming in ATSC 1.0 while the vast majority of viewers continue to watch via the legacy standard."); NAB Sunsets Comments at 13 ("Broadcasters cannot afford to eliminate the majority of their OTA audience by shifting their most popular programming exclusively to ATSC 3.0."); Pearl Sunsets Reply at 2 ("[B]roadcasters' market incentives virtually guarantee that they will provide their most popular, widely viewed programming on their 1.0 simulcasts, which by any measure remain the most widely viewed streams.").

¹⁸³ But see Graham Sunsets Reply at 5 (stating that it "is fully committed to ensuring that its stations' programming continues to reach all viewers in their markets, not only those that are able to access programming broadcast in the 3.0 standard").

¹⁸⁴ See, e.g., NAB Sunsets Comments at 14 (stating the most likely result of sunsetting the substantially similar requirement is not that broadcasters will alter the programming transmitted on their ATSC 1.0 signals; rather it is that broadcasters take the opportunity to try different programming or features on their ATSC 3.0 signals to entice viewers to voluntarily upgrade their equipment); Graham Sunsets Reply at 4 ("With the requirement lifted, broadcasters can do the sort of experimenting and innovating with unique NextGen TV content and features that will ultimately drive adoption of ATSC 3.0 technologies and NextGen TV programming."); Scripps Sunsets Reply at 6 ("[R]emoval of the substantially similar rule would allow broadcasters to expand offerings that make full use of the enhanced capabilities of ATSC 3.0."). As discussed below, to the extent such 3.0 content cannot reasonably be provided in 1.0, broadcasters are free to provide such programming only in 3.0 under the current rule. However, if such content can reasonably be provided in 1.0, then it illustrates the benefits of the current rule for viewers. See also supra Section III.C (noting that a Next Gen TV station that converts its own facility to 3.0 can "experiment" with non-simulcast multicast streams).

¹⁸⁵ See BitPath Sunsets Comments at 8 (stating the transition "is expensive and cumbersome. No broadcaster wants the transition to go on one hour longer than necessary. But the sine qua non of an end to hosting is widespread adoption of ATSC 3.0 receivers."). See also NAB Sunsets Comments at 16 ("To offer competitive services, and to (continued....)

broadcasters are already contemplating "trade-offs" like the "loss or degradation of 1.0 programming" in the near future absent regulatory requirements to the contrary. Given the above, and based on the current record, we are not convinced market incentives alone will protect viewers who rely on 1.0. Moreover, we remind broadcasters that, as trustees of the public airwaves, they have a statutory obligation to serve the public interest, even where market incentives might temporarily push in a contrary direction. 187

44. Furthermore, we find that the substantially similar rule is not presently impeding innovation in broadcast programming. Broadcasters assert that the rule is preventing them from innovating with 3.0 content and features. However, nothing in the current record supports this. However trule expressly allows broadcasters to innovate and experiment with new, innovative Next Gen TV programming features, including on their primary streams. Proadcasters identify only two specific examples of potential innovation hampered by the rule, neither of which withstands scrutiny. First, Pearl seems to suggest that the rule prevents broadcasters from airing

(Continued from previous page) ————
offer new services that may generate additional revenue to support broadcasters' ability to serve their local
communities, broadcasters must make this transition work.").

- ¹⁸⁶ See, e.g., BitPath Sunsets Comments at ii-iii ("It is inevitable that tradeoffs will have to be made to accomplish a non-backward compatible rollout of new technology with no transition channels. The Commission should give broadcasters maximum flexibility to pursue hosting in a way that eliminates loss or degradation of 1.0 programming where possible and minimizes it when it is inevitable.").
- ¹⁸⁷ See 47 U.S.C. § 309(a) (requiring the Commission to determine, in the case of applications for licenses, "whether the public interest, convenience, and necessity will be served by granting such application"); 47 U.S.C. § 307(b) (requiring the Commission to "make such distribution of licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same").
- ¹⁸⁸ See ATVA Sunsets Comments at 6; NCTA Sunsets Reply at 4; PK/OTI Sunsets Comments at 8-9.
- ¹⁸⁹ See Graham Sunsets Reply at 4 ("With the requirement lifted, broadcasters can do the sort of experimenting and innovating with unique NextGen TV content and features that will ultimately drive adoption of ATSC 3.0 technologies and NextGen TV programming."); NAB Sunsets Comments at 14 (stating that broadcasters seek "the opportunity to try different programming or features on their ATSC 3.0 signals to entice viewers to voluntarily upgrade their equipment"); BitPath Sunsets Comments at 16 ("[A] government rule that inhibits broadcasters from introducing, at appropriate times, new or dissimilar programming to take advantage of the full capabilities of new technology actually dampens the pro-consumer benefits of ATSC 3.0."); Scripps Sunsets Reply at 6 ("[R]emoval of the substantially similar rule would allow broadcasters to expand offerings that make full use of the enhanced capabilities of ATSC 3.0."). See also Airwayz Sunsets Reply at 1 ("sunset 'substantially similar' content on legacy ATSC 1.0 by July 2023").
- ¹⁹⁰ See ATVA Sunsets Comments at 6 ("Broadcasters have suggested that they need to eliminate the rule in order to offer enhanced services. To date, however, they have failed to explain with specificity what the rule prevents them from doing."); NCTA Sunsets Reply at 4; PK/OTI Sunsets Comments at 8-9. See 47 CFR §§ 73.3801(b)(1), 73.6029(b)(1), 74.782(b)(1). Next Gen TV broadcasters do not have to duplicate enhanced content or features that cannot reasonably be provided in the 1.0 format. First Next Gen TV Report and Order, 32 FCC Rcd at 9943, para. 23. As stated above, this includes: "hyper-localized" content (e.g., geo-targeted weather, targeted emergency alerts, and hyper-local news), programming features or improvements created for the 3.0 service (e.g., emergency alert "wake up" ability and interactive programming features), enhanced formats made possible by 3.0 technology (e.g., 4K or HDR), and any personalization of programming performed by the viewer and at the viewer's discretion. See 47 CFR §§ 73.3801(b)(1), 73.6029(b)(1), 74.782(b)(1).
- ¹⁹¹ See id. Stations broadcasting in 3.0 over their own facilities can experiment with innovative 3.0 multicast streams that are not subject to simulcast requirements. Supra Section III.C.

"a 'barker' or demo channel of 3.0 programming, showcasing the new technology and demonstrating how viewers can unlock the many advanced features that ATSC 3.0 makes possible." 192

We observe that a "demo channel" would presumably not be a station's primary stream. ¹⁹³ As for a multicast stream, we reiterate our clarification that any Next Gen TV station that converts its own facility to 3.0 (including a 3.0 host) could air a "demo" multicast stream, including content from its guest partners and other stations in the market, without simulcasting such a stream in 1.0. ¹⁹⁴ Second, Graham seems to suggest that the rule prevents broadcasters from airing "alternate interactive programming or expanded local programming" only in 3.0. ¹⁹⁵ It is unclear what Graham means by "expanded local programming" as a unique 3.0 feature, but the substantially similar rule expressly permits "hyper-local news" and "interactive program features." ¹⁹⁶ To the extent any "expanded local programming" provided on a primary stream could reasonably be provided in 1.0 format, we agree such programming must be simulcast in substantially similar fashion in 1.0 format to comply with the rule. However, to the extent programming can reasonably be provided in 1.0 format, we fail to see how such programming could be considered innovative programming reliant on the enhanced capabilities of 3.0 technology.

45. As a result of the current status of the transition reflected in the record, we conclude that the sunset of the substantially similar rule is unnecessary at this time. We note, however, that the pace of the transition has necessarily been impacted by the recent pandemic. As the transition continues and the consumer equipment market evolves, the impact of eliminating or modifying the substantially similar requirement may change. We therefore find that it would be appropriate to revisit this issue in the future once the transition has had more time to advance. Moreover, we anticipate that the Commission's recently announced "Future of TV" public-private initiative, which will be led by the National Association of Broadcasters (NAB), will provide additional information on the pace and nature of the transition. These insights, including any proposals discussed by partnership stakeholders in this initiative, can help inform any potential changes to the substantially similar requirement. Accordingly, we adopt a new sunset date of July 17, 2027. Given the ongoing transition, we believe at this time that this is an appropriate sunset period. This date will allow for the opportunity of material changes to the

¹⁹² See Letter from Gerard J. Waldron, Counsel to Pearl TV, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 16-142 (filed Apr. 11, 2022) at 2; Pearl Multicast Licensing Comments at 11.

¹⁹³ We note, however, that "demo" programming aired on a primary stream would likely be covered by the rule's exception for "advertisements, promotions for upcoming programs, and programming features that are based on the enhanced capabilities of ATSC 3.0." *See* 47 CFR §§ 73.3801(b)(1), 73.6029(b)(1), 74.782(b)(1).

¹⁹⁴ Supra Section III.C. To the extent that 3.0 guests can show good cause why they need to license a "demo" channel on a host (rather than having the host air such demo channel), we will consider limited waiver requests to license such non-simulcast 3.0 multicast guest streams.

¹⁹⁵ Graham Sunsets Reply at 5.

¹⁹⁶ See 47 CFR §§ 73.3801(b)(1)(i)-(ii), 73.6029(b)(1)(i)-(ii), 74.782(b)(1)(i)-(ii).

¹⁹⁷ Press Release, Federal Communications Commission, FCC Chairwoman Announces Launch of 'Future of TV' Public-Private Initiative Focused on Transition to NextGen TV (Apr. 17, 2023).

¹⁹⁸ While, at present, a small number of converter devices that work with the television sets in viewers' homes are available for purchase, we expect more will come to market in coming years and that the price should come down. For example, another 3.0-to-1.0 set-top-box has recently been announced by ADTH, which would be the lowest priced converter device to date. According to ADTH, its "NEXTGEN TV Box" is scheduled to ship in July 2023. It costs \$119.99, but it is available for pre-order at the discounted price of \$79.99 for a limited time. Atlanta DTH (ADTH), Press Release, "ADTH and Tolka Awarded First Certification as NEXTGEN TV Upgrade Accessory Receiver," (May 9, 2023); https://adth.com/adth-and-tolka-awarded-first-certification-as-nextgen-tv-upgrade-accessory-receiver/. The Commission can consider the availability and cost of such devices in subsequent reviews of the substantially similar rule.

transition such that a subsequent review is warranted. Consistent with the previous sunset, the Commission will initiate a review approximately one year before the requirement is set to expire to seek comment on whether it should be extended based on marketplace conditions at that time. This balanced approach will provide 1.0 viewers with needed certainty while giving broadcasters an additional opportunity to demonstrate that the substantially similar requirement should be eliminated or modified.

J. Requirement to Comply with the ATSC A/322 Standard

- 46. Based on the existing record, we retain the A/322 requirement at this time and extend the sunset date to July 17, 2027.¹⁹⁹ In the *Sunsets FNPRM*, we sought comment on whether we should retain the requirement that Next Gen TV broadcasters' primary video programming stream must comply with the ATSC A/322 standard and, if so, for how long.²⁰⁰ In response to the record, we find the A/322 requirement remains necessary to protect consumers and other stakeholders. We further find that the rule does not presently impede broadcasters' ability to innovate. As discussed below, the record shows that the standard itself provides broadcasters with significant flexibility, and the requirement to comply with the standard applies only to a broadcaster's primary programming streams. Consistent with the rule, broadcasters have ample opportunity to innovate with other broadcast streams, as well as with non-broadcast 3.0 services (also known as Broadcast Internet).
- 47. We find that the A/322 requirement remains essential at this time for protecting both innovators and investors in the 3.0 space, allowing stakeholders to develop and purchase equipment with confidence. As Pearl TV notes, the rule gives "key certainty" to television receiver manufacturers, affording them the confidence to build Next Gen TV equipment and bring it to market knowing that it will reliably work with 3.0 signals now and in the future.²⁰¹ It likewise protects consumer investments in 3.0 technology by ensuring that 3.0 TV sets and other 3.0 equipment they purchase are, and will remain, compatible with primary 3.0 signals.²⁰² We agree with LG that "[c]onsumers have purchased ATSC 3.0-enabled equipment with the good faith expectation that it will be able to properly receive and decode an ATSC 3.0 signal not just at the time of purchase, but for years to come."²⁰³ For similar reasons, the rule will also benefit MVPDs as they begin to receive and retransmit 3.0 broadcast signals to their subscribers.²⁰⁴ Indeed, broadcasters themselves benefit from the certainty the rule provides, by knowing

¹⁹⁹ See Appendix B – Final Rules; 47 CFR § 73.682(f)(2).

²⁰⁰ Sunsets FNPRM, 2022 WL 2290237 at *11, para. 30.

²⁰¹ Pearl Sunsets Reply at 4-5 ("Pearl agrees that the requirement provides key certainty to device manufacturers who are working to scale up the retail market for ATSC 3.0-compatible devices."). *See also, e.g.*, LG Sunsets Comments at 6 ("A/322 allows device manufacturers to confidently develop their products and bring them to market."); NAB Sunsets Comments at 12-13 (stating the rule "has been helpful in encouraging television manufacturers to design and build television sets that incorporate ATSC 3.0 receivers").

²⁰² See, e.g., CTA Sunsets Comments at 8 ("Sunsetting the A/322 standard requirement could ... jeopardize the provision of NEXTGEN TV as a free and universally available digital broadcast television service."); LG Sunsets Comments at 5 ("By not permanently incorporating A/322 into its rules, the Commission risks stranding consumers who have already purchased ATSC 3.0-enabled devices or disenfranchising consumers who purchase devices capable of receiving some, but not all, ATSC 3.0 signals.").

²⁰³ LG Sunsets Comments at 1.

²⁰⁴ See NCTA Sunsets Comments at 5 ("[W]ithout a requirement to follow A/322, 'device manufacturers and MVPDs may not be able to reliably predict what signal modulation a broadcaster is using' which could 'cause manufacturers to inadvertently build equipment that cannot receive Next Gen TV broadcasts or could render MVPDs unable to receive and retransmit the signals of Next Gen TV stations.") (quoting *First Next Gen TV Report and Order*, 32 FCC Rcd at 9980, para. 99); LG Sunsets Comments at 6 ("MVPDs also rely on the A/322 requirement to ensure that the broadcast signals they receive over-the-air are free from interference. If MVPDs do not know or cannot reliably predict the transmission scheme a broadcaster is using, they may not be able to properly receive the broadcaster's signal, which in turn would limit their ability to provide the signal on their systems, thereby causing the public interest to suffer.").

that every viewer in their markets who purchases a 3.0 set will be able to receive their primary programming.²⁰⁵ Compliance with A/322 may also help prevent harmful interference to and by broadcasters, which benefits every stakeholder and consumer.²⁰⁶ Given these benefits, almost all commenters support retention of the A/322 rule.²⁰⁷ We agree with LG that "if a broadcaster used a standard other than A/322 for transmission of its primary broadcast stream, consumers would be unable to obtain the broadcaster's programming because support for that bespoke standard would not be incorporated into the consumers' devices."²⁰⁸

- 48. Furthermore, the record does not demonstrate any current or likely harms arising from the rule at this time.²⁰⁹ The only commenter to oppose even an extension of the requirement, One Media, identifies no harms associated with this specific rule and makes no effort to grapple with its benefits. Instead, One Media contends that broadcasters should not have "to keep coming back to seek government approval each time the standard changes" and should not have "standards codified into their services' rules" but should instead simply be required to avoid interference.²¹⁰ With respect to the first concern, the Commission has and will independently monitor the evolution of the ATSC 3.0 standard and will act to update our rules as necessary and appropriate, as we do in this Order. As for One Media's general objection to codified standards, adoption of A/322 into our rules will ensure that broadcasters are serving the public interest, for the reasons above.²¹¹
- 49. Ultimately, we find that the current record does not support sunsetting the A/322 standard at this time. The rule currently provides needed protection to consumers, while also affording significant flexibility to broadcasters. Nevertheless, we agree with commenters that urge the Commission to continue to monitor the marketplace and the standard as they develop.²¹² Accordingly, in order to align

²⁰⁵ WNET Sunsets Reply at 5 (asserting that "sunsetting the requirement now could lead to confusion, particularly if a broadcaster were to use its spectrum to broadcast a service that does not use the A/322 standard"); LG Comments at 6 (stating that A/322 "ensures that all broadcasters operate from the same ATSC 3.0 playbook").

²⁰⁶ See LG Sunsets Comments at 5 ("A/322 ensures that an ATSC 3.0 signal is reliably transmitted and received, as it describes the interference characteristics of the signal and ensures that it does not interfere with ATSC 1.0 signals or other 3.0 signals. Thus, to ensure a stable, reliable, and predictable RF environment, the Commission should incorporate A/322 into its rules permanently."). See also Qualcomm Sunsets Comments at 9 (stating that "5G Broadcast signals and ATSC 3.0 signals can co-exist over the same six-megahertz channel via time-division multiplexing (TDM). Since broadcasters are required to comply with the A/322 standard, Qualcomm used the characteristics of that standard to ensure successful co-existence."). But see ONE Media Sunsets Comments at 16 (stating that "[t]he interference criteria currently applicable to broadcasters are and will remain more than adequate to meet the goal of non-interference").

²⁰⁷ See, e.g., CTA Sunsets Comments at 2; LG Sunsets Comments at 1; NAB Sunsets Comments at 12-13; NCTA Sunsets Comments at 5-6; Pearl Sunsets Reply at 4-5; Qualcomm Sunsets Comments at 1-2; Scripps Sunsets Reply at 7; WNET Sunsets Reply at 5; Rohde & Schwarz Sunsets Reply at 3.

²⁰⁸ LG Sunsets Comments at 5.

²⁰⁹ See, e.g., NAB Sunsets Comments at 12 ("To date, the Commission's approach [A/322 rule] has not interfered with broadcasters' efforts to deploy ATSC 3.0 service.").

²¹⁰ ONE Media Sunsets Comments at 16. Airwavz.tv also references A/322, but appears to be conflating the two rules scheduled to sunset in 2022. We read Airwavz.tv's comments as supporting the sunset of the substantially similar rule. Airwavz Sunsets Reply at 1 (stating it "is in favor of the FCC permitting the ATSC A/322 standard to sunset 'substantially similar' content on legacy ATSC 1.0 by July 2023"); *supra* note 191.

²¹¹ See supra para. 47.

²¹² The *Sunsets FNPRM* sought comment on whether to update our rules to incorporate the 2021 version of the A/322 standard. *Sunsets FNPRM*, 2022 WL 2290237 at *12, para. 32. Commenters on this issue support updating our rules, but pointed out that a more recent version of A/322 was published by ATSC in March 2022. ATSC Comments at 6; LG Sunsets Comments at 8. However, since the comment period closed, there have been two more updates to A/322, and we have not received any comments about this new version. *See* ATSC A/322:2022,

this review with that of the substantially similar requirement, we adopt a new sunset date of July 17, 2027. As noted above, the Commission will initiate a review approximately one year before the requirement is set to expire to seek comment on whether it should be extended based on marketplace conditions at that time. This balanced approach will provide needed certainty while also providing an additional opportunity to demonstrate that the A/322 standard should be eliminated or modified.

IV. FOURTH FURTHER NOTICE OF PROPOSED RULEMAKING

- 50. With this Further Notice of Proposed Rulemaking, we seek to further our understanding of the current marketplace for ATSC 3.0 Standard Essential Patents (SEPs) and the ability of third parties to develop products that rely upon them. As the Commission has previously observed in this proceeding, the Advanced Television Systems Committee (ATSC), which developed the ATSC 3.0 standard, requires patent owners to disclose that they hold essential patents and to commit to licensing them on reasonable and non-discriminatory (RAND) terms.²¹³ The Commission decided in 2017 that "[w]ith no evidence of patent licensing issues, ... it [was] premature to impose regulations on the private licensing marketplace."²¹⁴ After reviewing the record developed in response to the *Sunsets FNPRM*, we invite additional comments about both the specific issues raised below and the general state of the market. This will inform the Commission's consideration of its authority to act on these issues, as well as the need for, appropriateness of, and potential benefits of rules governing the RAND licensing of SEPs.
- 51. A number of commenters identify issues with the current ATSC 3.0 patent marketplace and encourage the Commission to "closely monitor" the market or even to immediately adopt Commission rules formalizing RAND requirements for SEPs. The Alliance for Automotive Innovation (AAI), for example, explains that "[t]he ability to license patents declared essential to technical standards on reasonable and non-discriminatory...terms is critical to enabling automotive companies to deploy new technologies."²¹⁵ However, they contend that, despite the ATSC RAND requirement, "some ATSC 3.0 SEP holders have refused to license to some willing implementers on RAND terms."²¹⁶ AAI thus proposes that the Commission not just monitor the market to ensure compliance with the existing ATSC requirements, but also actively inquire into the licensing practices of SEP holders and their representatives.²¹⁷ Likewise, other commenters urge the Commission to take an active role.²¹⁸ Finally, Public Knowledge/Open Technology Institute (PK) goes further, proposing that the Commission should immediately adopt enforceable RAND requirements for SEPs.²¹⁹ PK argues that reliance on third party

²¹³ Sunsets FNPRM, 2022 WL 2290237 at *3, note 29 (citing ATSC's Patent Policy, Doc. B/04 at https://www.atsc.org/policies/policy-documents/) ("It shall be the policy of [ATSC] that Essential Claims included in ATSC Specification Documents be available to implementers on reasonable and non-discriminatory terms.")).

²¹⁴ First Next Gen TV Report and Order, 32 FCC Rcd at 9981, n.300.

²¹⁵ AAI Ex Parte at 2.

²¹⁶ *Id*. at 3.

²¹⁷ *Id*.

²¹⁸ See, e.g., Airwavz.tv Sunsets Reply at 7 (specifically expressing concern about the potential fees charged for access to ATSC 3.0 "patent pools," like the one coordinated by commenter MPEG LA, which function as "one-stop shops" for essential patents); NCTA Sunsets Comments at 6 (contending, without providing evidence of abuse, that the Commission should "respond as necessary to evidence of licensing abuses, which could result in an unfair windfall to patent owners and higher costs for consumers."); V Box Communications Sunsets Comments at 3 ("Lack of [information about] patent licensing required and costs information may result in delays with final end-user products arrival on the market.").

²¹⁹ PK Sunsets Comments at 12; PK Sunsets Reply at 7.

enforcement of the ATSC RAND requirement is insufficient. They note that the standard leaves resolution of patent disputes to the courts but contend that third party enforcement may not always be possible or effective, as courts must find that a disclosure and licensing commitment like ATSC's was actually intended to bind members against third parties.²²⁰ Furthermore, courts would look to the intent of the contracting parties, not broader case law, when interpreting the relevant terms in ATSC's policy, meaning the very definition of "reasonable and non-discriminatory" could be up for debate.²²¹ PK therefore proposes that the Commission adopt rules of its own.

- 52. On the other hand, several other commenters oppose Commission involvement in what they describe as a still-nascent market showing no signs of market failure.²²² Other commenters contend that adoption of RAND requirements by the Commission is unnecessary at best and potentially even harmful to the consumer market for ATSC 3.0 devices.²²³ We seek additional comment on the state of this market, particularly from the perspective of parties, or the representatives of parties, that do not hold SEPs but have licensed or attempted to license them. Are SEP holders complying with the ATSC RAND requirements? If not, how are disputes currently resolved? Are the existing ATSC RAND requirements imposing any adverse economic impacts? Why or why not? Patent pool operator MPEG LA states that it is unaware of any SEP outside of its ATSC 3.0 patent pool,²²⁴ and the Commission is not aware of any similar alternative patent pool. AAI claims that MPEG LA is focused exclusively on "downstream" users of SEPs, which "inhibits upstream suppliers from securing the license rights necessary to develop products, offer them for sale, or even determine whether to enter the market without the ability to know what a license's cost would be."²²⁵ Is MPEG LA or any other party in a position to refute or address these concerns raised by AAI?
- 53. Some commenters also assert that, regardless of the state of the market, the Commission does not have authority to impose RAND requirements on ATSC 3.0 patent licenses. For example, ONE Media and MPEG LA contend that the Commission may not have jurisdiction over all SEP holders. Other commenters emphasize the lack of explicit statutory authority for the imposition of RAND requirements, while acknowledging that the Commission has taken action in the past to prevent the abuse of patent rights. We invite comment on the specific arguments raised by commenters regarding jurisdiction.

²²⁰ PK Comments at 10.

²²¹ *Id*.

²²² See, e.g., ONE Media Sunsets Comments at iii and 21; MPEG LA Sunsets Comments at 10; InterDigital, Inc. Sunsets Comments at 3; NAB Sunsets Comments at 12; IP Europe Sunsets Reply generally.

²²³ Ericsson Sunsets Comments at 4 (supporting a voluntary RAND regime but arguing that "[r]egulatory interventions in the RAND licensing regime risks harming both innovation and standards development to the detriment of U.S. consumers"); Qualcomm Sunsets Comments at 11-12 (contending that interventions in the patent market should be left to "U.S. federal and state court systems and expert federal agencies"); and Scripps Sunsets Reply at 4 (asserting that Commission RAND rules "could have a detrimental rather than beneficial effect").

²²⁴ MPEG LA Sunsets Comments at 4. *But see* One Media Sunsets Comments at 20 (claiming that "not all holders of ATSC 3.0 patents have joined this pool" but not identifying the holdouts or whether the patents they hold are "essential").

²²⁵ AAI Ex Parte at 3.

²²⁶ ONE Media Sunsets Comments at 18; MPEG LA Sunsets Comments at 5.

²²⁷ See, e.g., Ericsson Sunsets Comments at 5-8; Qualcomm Sunsets Comments at 11-12. See also Basic Service Tier Encryption et al., MB Docket No. 11-169; PP Docket No. 00-67; CSR-8483-Z; CSR-8525-Z; CSR-8334-Z; CSR-8528-Z, Report and Order, 27 FCC Rcd 12786, 12803-04, para. 24 (2012) (declining to impose RAND requirements, but imposing a "good faith" licensing requirement on cable operators).

- If the Commission were to find problems in the SEP marketplace that—consistent with 54. the Commission's existing authority—could be ameliorated by the application of RAND requirements, how could those requirements be crafted to minimize any potential adverse economic impact while maximizing the opportunity for participation in the ATSC market? PK proposes that the Commission adopt RAND rules in line with the policy established by the Institute of Electrical and Electronics Engineers (IEEE), which PK argues provide sufficient detail to minimize costly disputes.²²⁸ Other commenters emphasize that in 2019 the Department of Justice expressed concern that the IEEE policy had "dampened enthusiasm for the IEEE process" causing delays in standards adoption,"229 though PK points out that the Fair Standards Alliance praised the IEEE policy as recently as last year.²³⁰ Commenters also note that the Departments of Justice and Commerce recently endorsed a "case-by-case" approach to addressing patent disputes.²³¹ Were the Commission to adopt regulations, would the IEEE approach, a case by case approach, or another approach be best suited to administration by the Commission? What are the competitive impacts of these different approaches? If the Commission were to establish specific standards, are there sources instead of or in addition to the IEEE policy to which the Commission should look? Regardless of the approach adopted, if any, how could the Commission ensure speedy resolution of complaints? For example, should resolution of such complaints be delegated to a bureau, office, or administrative judge? Should complaints be deemed denied if not acted upon within a certain time frame? To what extent should any Commission rules consider the non-price terms and conditions of licensing agreements?
- 55. Are there other issues the Commission should consider with respect to the possible application of RAND rules to the licensing of SEPs? We invite comment on the questions above and any others related to the current SEP marketplace and possible Commission rules relating to the RAND licensing of SEPs.
- 56. Digital Equity and Inclusion. The Commission, as part of its continuing effort to advance digital equity for all,²³² including people of color, people with disabilities, people who live in rural or Tribal areas, and others who are or have been historically underserved, marginalized, or adversely affected by persistent poverty or inequality, invites comment on any equity-related considerations²³³ and benefits (if any) that may be associated with the proposals and issues discussed herein. Specifically, we seek comment on how our proposals may promote or inhibit advances in diversity, equity, inclusion, and accessibility, as well the scope of the Commission's relevant legal authority.

²²⁸ PK Sunsets Comments at 11 (citing IEEE SA, https://standards.ieee.org/about/policies/bylaws/sect6-7).

²²⁹ Ericsson Sunsets Comments at 5.

²³⁰ PK Sunsets Comments at 11.

²³¹ See, e.g., Oualcomm Sunsets Comments at 11.

²³² Section 1 of the Communications Act of 1934 as amended provides that the FCC "regulat[es] interstate and foreign commerce in communication by wire and radio so as to make [such service] available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex." 47 U.S.C. § 151.

²³³ The term "equity" is used here consistent with Executive Order 13985 as the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. *See* Exec. Order No. 13985, 86 Fed. Reg. 7009, Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (January 20, 2021).

V. PROCEDURAL MATTERS

- 57. Regulatory Flexibility Analysis. The Regulatory Flexibility Act of 1980, as amended (RFA),²³⁴ requires that an agency prepare a regulatory flexibility analysis for notice and comment rulemakings, unless the agency certifies that "the rule will not, if promulgated, have a significant economic impact on a substantial number of small entities."²³⁵ Accordingly, we have prepared a Final Regulatory Flexibility Analysis (FRFA) concerning the possible impact of rule and/or policy changes contained in this Third Report and Order on small entities. The FRFA is set forth in Appendix C. We have also prepared an Initial Regulatory Flexibility Analysis (IRFA) concerning the potential impact of rule and policy changes in the Fourth Further Notice of Proposed Rulemaking on small entities. The IRFA is set forth in Appendix D.
- 58. Final PRA Analysis. This document contains new information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA).²³⁶ The requirements will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies will be invited to comment on the information collection requirements contained in this proceeding. The Commission will publish a separate document in the Federal Register at a later date seeking these comments. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002 (SBPRA),²³⁷ we will seek specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees.
- 59. *Initial PRA Analysis*. This *FNPRM* may result in new or modified information collection requirements. If the Commission adopts any new or modified information collection requirements, the Commission will publish a notice in the Federal Register inviting the public to comment on such requirements, as required by the Paperwork Reduction Act of 1995 (PRA).²³⁸ In addition, pursuant to the Small Business Paperwork Relief Act of 2002,²³⁹ the Commission will seek specific comment on how it might "further reduce the information collection burden for small business concerns with fewer than 25 employees."
- 60. Congressional Review Act. The Bureau has determined, and the Administrator of the Office of Information and Regulatory Affairs, Office of Management and Budget, concurs that these rules are non-major under the Congressional Review Act, 5 U.S.C. § 804(2). The Commission will send a copy of this Third Report and Order to Congress and the Government Accountability office, pursuant to 5 U.S.C. § 801(a)(1)(A).
- 61. Ex Parte Rules Permit-But-Disclose. This proceeding shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's ex parte rules. Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the

²³⁴ See 5 U.S.C. § 603.

²³⁵ See id. § 605(b).

²³⁶ The Paperwork Reduction Act of 1995 (PRA), Pub. L. No. 104-13, 109 Stat. 163 (1995) (codified in Chapter 35 of title 44 U.S.C.).

²³⁷ The Small Business Paperwork Relief Act of 2002 (SBPRA), Pub. L. No. 107-198, 116 Stat. 729 (2002) (codified in Chapter 35 of title 44 U.S.C.). *See* 44 U.S.C. § 3506(c)(4).

²³⁸ The Paperwork Reduction Act of 1995 (PRA), Pub. L. No. 104-13, 109 Stat 163 (1995) (codified in Chapter 35 of title 44 U.S.C.).

²³⁹ The Small Business Paperwork Relief Act of 2002 (SBPRA), Pub. L. No. 107-198, 116 Stat. 729 (2002) (codified in Chapter 35 of title 44 U.S.C.); see 44 U.S.C. § 3506(c)(4).

²⁴⁰ 47 CFR §§ 1.1200 et seq.

Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda, or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's *ex parte* rules.

- 62. Filing Requirements—Comments and Replies. Pursuant to sections 1.415 and 1.419 of the Commission's rules,²⁴¹ interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS).²⁴²
 - Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://apps.fcc.gov/ecfs/.
 - Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
 - Filings can be sent by commercial overnight courier or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - o Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
 - U.S. Postal Service first-class, Express, and Priority mail must be addressed to 45 L
 Street NE, Washington, DC 20554.
 - Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19.²⁴³
 - During the time the Commission's building is closed to the general public and until
 further notice, if more than one docket or rulemaking number appears in the caption
 of a proceeding, paper filers need not submit two additional copies for each
 additional docket or rulemaking number; an original and one copy are sufficient.
 - After COVID-19 restrictions are lifted, the Commission has established that handcarried documents are to be filed at the Commission's office located at 9050 Junction

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²⁴¹ *Id.* §§ 1.415, 1419.

²⁴² Electronic Filing of Documents in Rulemaking Proceedings, GC Docket No. 97-113, Report and Order, 13 FCC Rcd 11322 (1998).

²⁴³ FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy, Public Notice, 35 FCC Rcd 2788 (OMD 2020). *See* https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy.

Drive, Annapolis Junction, MD 20701. This will be the only location where hand-carried paper filings for the Commission will be accepted.²⁴⁴

- 63. *People with Disabilities*. To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (TTY).
- 64. *Media Bureau Contact Information*. For additional information, contact Evan Baranoff, Evan.Baranoff@fcc.gov, of the Media Bureau, Policy Division, (202) 418-7142. Direct press inquiries to Janice Wise at (202) 418-8165.

VI. ORDERING CLAUSES

- 65. **IT IS ORDERED**, pursuant to the authority found in sections 1, 4, 7, 301, 303, 307, 308, 309, 316, 319, 325(b), 336, 338, 399b, 403, 534, and 535 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154, 157, 301, 303, 307, 308, 309, 316, 319, 325(b), 336, 338, 399b, 403, 534, and 535, this Third Report and Order and Fourth Further Notice of Proposed Rulemaking **IS HEREBY ADOPTED**, effective thirty (30) days after the date of publication in the *Federal Register*.
- 66. **IT IS FURTHER ORDERED** that the Commission's rules **ARE HEREBY AMENDED** as set forth in Appendix B and **WILL BECOME EFFECTIVE** 30 days after publication in the Federal Register, except for 47 C.F.R. §§ 73.3801, 73.6029, and 74.782 which contain new or modified information collection requirements that require approval by the OMB under the PRA and which shall become effective after the Commission publishes a notice in the *Federal Register* announcing OMB approval and the effective date of the rules.
- 67. **IT IS FURTHER ORDERED** that, pursuant to 47 U.S.C. 155(c), the Chief, Media Bureau, is granted delegated authority for the purpose of amending FCC Form 2100 as necessary to implement the licensing process adopted herein.
- 68. **IT IS FURTHER ORDERED** that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, **SHALL SEND** a copy of this Third Report and Order and Fourth Further Notice of Proposed Rulemaking, including the Initial and Final Regulatory Flexibility Analyses, to the Chief Counsel for Advocacy of the Small Business Administration.
- 69. **IT IS FURTHER ORDERED**, that pursuant to section 801(a)(1)(A) of the Congressional Review Act, 5 U.S.C. § 801(a)(1)(A), the Commission **SHALL SEND** a copy of this Third Report and Order to Congress and to the Government Accountability Office.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch Secretary

²⁴⁴ See Amendment of the Commission's Rules of Practice and Procedure, Order, 35 FCC Rcd 5450 (OMD 2020).

APPENDIX A

LIST OF COMMENTERS AND REPLY COMMENTERS

Multicast Licensing FNPRM¹

- 1. America's Public Television Stations (APTS) and the Public Broadcasting Service (PBS), collectively "Public Television Stations" or "PTV"
- 2. Advanced Television Broadcasting Alliance (Broadcasting Alliance)
- 3. American Television Alliance (ATVA)
- 4. Spectrum Co. LLC, dba "BitPath"
- 5. CMG Media Corporation dba Cox Media Group (CMG or Cox)
- 6. Edge Networks Inc. dba "Evoca"
- 7. Gray Television, Inc. (Gray)
- 8. LPTV Broadcasters Association (LPTV Assoc.)
- 9. National Association of Broadcasters (NAB)
- 10. NCTA The Internet & Television Association (NCTA)
- 11. NTCA The Rural Broadband Association (NTCA)
- 12. ONE Media 3.0, LLC (ONE Media)
- 13. Pearl TV, LLC (Pearl)²
- 14. The E. W. Scripps Company (Scripps)
- 15. TEGNA Inc. (TEGNA)

Sunsets FNPRM³

- 1. Accessibility Advocacy and Research Organizations
- 2. Advanced Television Systems Committee (ATSC)
- 3. Airwavz.tv
- 4. Alliance for Automotive Innovation (Auto Innovators)
- 5. America's Public Television Stations (APTS), the Corporation for Public Broadcasting, (CPB), and the Public Broadcasting Service (PBS) (collectively, "PTV")
- 6. American Television Alliance (ATVA)
- 7. AWARN Alliance
- 8. CMG Media Corporation dba Cox Media Group (CMG or Cox)
- 9. Consumer Technology Association (CTA)
- 10. E. W. Scripps Company (Scripps)
- 11. Edge Networks (Evoca)
- 12. Ericsson
- 13. Graham Media Group, Inc. (Graham)

¹ Comments dated on or before February 11, 2022; replies dated on or before March 14, 2022.

² Pearl TV group consists of eight of the largest broadcast companies in America: CMG, Scripps, Graham Media Group, Hearst Television Inc., Meredith Local Media Group, Nexstar Media Group, Gray, TEGNA, and Sinclair Broadcast Group, Inc.

³ Comments dated on or before August 8, 2022; replies dated on or before September 6, 2022.

- 14. Hank Bovis, individual
- 15. Interdigital
- 16. IP Europe
- 17. Jon M. Peha, Professor and Center Director, Carnegie Mellon University
- 18. LG Electronics Inc. (LG)
- 19. LPTV Broadcaster Association
- 20. MPEG LA
- 21. National Association of Broadcasters (NAB)
- 22. NCTA- The Internet & Television Association (NCTA)
- 23. ONE Media 3.0 LLC (ONE Media)
- 24. Pearl TV
- 25. Public Knowledge (PK)/ Open Technology Institute (PK/OTI)
- 26. Qualcomm Inc.
- 27. Rhode and Schwarz
- 28. Roger Davis, individual
- 29. Saankhya Labs Pvt. Ltd. (Saankhya Labs)
- 30. Spectrum Co LLC d/b/a BitPath (BitPath)
- 31. VBox Communications (VBox)
- 32. WNET

APPENDIX B

Final Rule Changes

The Federal Communications Commission proposes to amend 47 CFR parts 73 and 74 as follows:

PART 73 – RADIO BROADCAST SERVICE

1.	The authority	citation 1	for part 73	continues to	read as fo	ollows:
			P			

Authority: 47 U.S.C. 154, 155, 301, 303, 307, 309, 310, 334, 336, 339.

2. Section 73.682 is amended by revising paragraph (f)(2)(iii) to read as follows:

\$ 73.682 TV transmission standards. ***** (f) *** (2) *** (iii) Paragraph (f)(2)(ii) of this section will sunset on July 17, 2027. 3. Section 73.3801 is amended by revising paragraphs (b)(3), (f)(5) and (6), and by adding paragraph (i) to read as follows: \$ 73.3801 Full Power Television Simulcasting During the ATSC 3.0 (Next Gen TV) Transition ***** (b) *** (3) The "substantially similar" requirement in paragraph (b)(1) of this section will sunset on July 17, 2027July 17, 2023. ***** (f) ***

- (5) Expedited processing. An application filed in accordance with the streamlined process in paragraph (f)(3) of this section will receive expedited processing provided, for stations requesting to air an ATSC 1.0 primary signal on the facilities of a host station, the that station will provide ATSC 1.0 service to at least 95 percent of the predicted population within the noise limited service contour of its original ATSC 1.0 facility.
- (6) Required information.
 - (i) An application in paragraph (f)(2) of this section must include the following information:
 - (A) The station or stations serving as the host or hosts, identified by call sign and facility identification number, if applicable;

- (B) The technical facilities of each host station, if applicable;
- (C) The DMA of the originating broadcaster's facility and the DMA of each host station, if applicable; and
- (D) A web link to the exhibit described in paragraph (i) of this section, if applicable; and
- (E) Any other information deemed necessary by the Commission to process the application.
- (ii) If an application in paragraph (f)(2) of this section includes a request to air an ATSC 1.0 signal on the facilities of a host station **or stations**, the broadcaster must, in addition to the information in paragraph (f)(6)(i), also indicate on the application:
 - (A) The predicted population within the noise limited service contour served by the station's original ATSC 1.0 signal;
 - (B) The predicted population within the noise limited service contour served by the station's original ATSC 1.0 signal that will lose the station's ATSC 1.0 service as a result of the **hosting** simuleasting arrangement **or arrangements**, including identifying areas of service loss by providing a contour overlap map; and
 - (C) Whether the ATSC 1.0 **primary stream** simulcast signal aired on the host station will serve at least 95 percent of the population in paragraph (f)(6)(ii)(A) of this section.

* * * * *

- (i) Multicast Streams. A Next Gen TV station is not required to license, under paragraph (f) of this section, a "guest" multicast programming stream that it originates and which is aired on a host station. If it chooses to do so, it and each of its licensed guest multicast streams must comply with the requirements of this section (including those otherwise applicable only to primary streams), except for paragraph (f)(5) and as otherwise provided in this paragraph. For purposes of this section, a "multicast" stream refers to a video programming stream other than the primary video programming stream.
- (1) 1.0 Multicast Streams. A Next Gen TV station may license its guest ATSC 1.0 multicast stream(s) aired on one or more ATSC 1.0 hosts pursuant to paragraph (f) of this section. Non-simulcast streams are not required to comply with paragraph (b) of this section.
 - (i) Host Capacity Limit. A Next Gen TV station that has converted its own facility to 3.0 must not license more capacity on one or more partner host stations, in the aggregate, than the station could use if it were still operating on its own facility in 1.0. It must demonstrate compliance with this limit in its license application exhibit.
- (2) 3.0 Multicast Streams. A Next Gen TV station may license its guest ATSC 3.0 multicast stream(s) aired on one or more ATSC 3.0 hosts pursuant to paragraph (f) of this section.
- (3) Children's Television. A Next Gen TV station may rely on a multicast stream it is airing via a host partner to comply with the Commission's children's television programming requirement in Section 73.671 of this Part. Such a stream must either be carried on the same host as the Next Gen TV station's primary stream, or on a host that serves at least 95 percent of the predicted population served by the Next Gen TV station's pre-transition 1.0 signal.

- (4) Application Exhibit Required. A Next Gen TV station seeking to license hosted multicast streams must prepare and host on its public website (or its Online Public Inspection File if the station does not have a dedicated website) the exhibit referenced in paragraph (f)(6)(i)(D) of this section. The exhibit must contain the following:
 - (i) for each hosted stream: channel number (RF and virtual); network affiliation (or type of programming if unaffiliated); resolution (e.g., 1080i, 720p, 480p, or 480i); whether the stream will be simulcast; and if so, the identity of the paired stream in the other service; and
 - (ii) for a station that has converted its own facility to 3.0, the exhibit must also demonstrate compliance with the host capacity limit. It may do so by either showing that it is seeking hosting only for streams it was broadcasting on its own 1.0 facility prior to its transition to 3.0, or identifying another 1.0 station that is carrying or has carried the same or a similar programming lineup at the same resolutions on the same type of facility (individual or shared);
 - (iii) for a station that has converted its own facility to 3.0, the exhibit must also demonstrate compliance with the coverage requirement for guest multicast streams, including by providing a contour map showing the guest multicast stream will continue to serve the station's community of license; and
 - (iv) Changes to the exhibit. Changes to the affiliation or content of a stream that would not result in the use of additional capacity, the elimination of a stream, or non-substantive corrections may be made at the discretion of the applicant but must be reflected in a timely update to the existing public exhibit and an emailed notice to the Chief of the Media Bureau's Video Division or their designee. No other changes, including to the location of the exhibit itself, may be made without the filing and approval of a new application.
- 4. Section 73.6029 is amended by revising paragraphs (b)(3), (f)(5) and (6), and by adding paragraph (i) to read as follows:

§ 73.6029 Class A Television Simulcasting During the ATSC 3.0 (Next Gen TV) Transition

* * * * *

(b) * * *

(3) The "substantially similar" requirement in paragraph (b)(1) of this section will sunset on July 17, 2027 July 17, 2023.

* * * * *

(f) * * *

(5) Expedited processing. An application filed in accordance with the streamlined process in paragraph (f)(3) of this section will receive expedited processing provided, for stations requesting to air an ATSC 1.0 **primary** signal on the facilities of a host station, the **that** station will provide ATSC 1.0 service to at least 95 percent of the predicted population within the noise limited service contour of its original ATSC 1.0 facility.

- (6) Required information.
 - (i) An application in paragraph (f)(2) of this section must include the following information:
 - (A) The station or stations serving as the host or hosts, identified by call sign and facility identification number, if applicable;
 - (B) The technical facilities of each host station, if applicable;
 - (C) The DMA of the originating broadcaster's facility and the DMA of each host station, if applicable; and
 - (D) A web link to the exhibit described in paragraph (i) of this section, if applicable; and
 - (E) Any other information deemed necessary by the Commission to process the application.
 - (ii) If an application in paragraph (f)(2) of this section includes a request to air an ATSC 1.0 signal on the facilities of a host station **or stations**, the broadcaster must, in addition to the information in paragraph (f)(6)(i), also indicate on the application:
 - (A) The predicted population within the noise limited service contour served by the station's original ATSC 1.0 signal;
 - (B) The predicted population within the noise limited service contour served by the station's original ATSC 1.0 signal that will lose the station's ATSC 1.0 service as a result of the **hosting** simulcasting arrangement **or arrangements**, including identifying areas of service loss by providing a contour overlap map; and
 - (C) Whether the ATSC 1.0 **primary stream** simulcast signal aired on the host station will serve at least 95 percent of the population in paragraph (f)(6)(ii)(A) of this section.
 - (iii) * * *
- * * * * *
- (i) Multicast Streams. A Next Gen TV station is not required to license, under paragraph (f) of this section, a "guest" multicast programming stream that it originates and which is aired on a host station. If it chooses to do so, it and each of its licensed guest multicast streams must comply with the requirements of this section (including those otherwise applicable only to primary streams), except for paragraph (f)(5) and as otherwise provided in this paragraph. For purposes of this section, a "multicast" stream refers to a video programming stream other than the primary video programming stream.
- (1) 1.0 Multicast Streams. A Next Gen TV station may license its guest ATSC 1.0 multicast stream(s) aired on one or more ATSC 1.0 hosts pursuant to paragraph (f) of this section. Non-simulcast streams are not required to comply with paragraph (b) of this section.
 - (i) Host Capacity Limit. A Next Gen TV station that has converted its own facility to 3.0 must not license more capacity on one or more partner host stations, in the aggregate, than the station could use if it were still operating on its own facility in 1.0. It must demonstrate compliance with this limit in its license application exhibit.

- (2) 3.0 Multicast Streams. A Next Gen TV station may license its guest ATSC 3.0 multicast stream(s) aired on one or more ATSC 3.0 hosts pursuant to paragraph (f) of this section.
- (3) Children's Television. A Next Gen TV station may rely on a multicast stream it is airing via a host partner to comply with the Commission's children's television programming requirement in Section 73.671 of this Part. Such a stream must either be carried on the same host as the Next Gen TV station's primary stream, or on a host that serves at least 95 percent of the predicted population served by the Next Gen TV station's pre-transition 1.0 signal.
- (4) Application Exhibit Required. A Next Gen TV station seeking to license hosted multicast streams must prepare and host on its public website (or its Online Public Inspection File if the station does not have a dedicated website) the exhibit referenced in paragraph (f)(6)(i)(D) of this section. The exhibit must contain the following:
 - (i) for each hosted stream: channel number (RF and virtual); network affiliation (or type of programming if unaffiliated); resolution (e.g., 1080i, 720p, 480p, or 480i); whether the stream will be simulcast; and if so, the identity of the paired stream in the other service; and
 - (ii) for a station that has converted its own facility to 3.0, the exhibit must also demonstrate compliance with the host capacity limit. It may do so by either showing that it is seeking hosting only for streams it was broadcasting on its own 1.0 facility prior to its transition to 3.0, or identifying another 1.0 station that is carrying or has carried the same or a similar programming lineup at the same resolutions on the same type of facility (individual or shared);
 - (iii) for a station that has converted its own facility to 3.0, the exhibit must also demonstrate compliance with the coverage requirement for guest multicast streams, including by providing a contour map showing the guest multicast stream will continue to serve the station's community of license; and
 - (iv) Changes to the exhibit. Changes to the affiliation or content of a stream that would not result in the use of additional capacity, the elimination of a stream, or non-substantive corrections may be made at the discretion of the applicant but must be reflected in a timely update to the existing public exhibit and an emailed notice to the Chief of the Media Bureau's Video Division or their designee. No other changes, including to the location of the exhibit itself, may be made without the filing and approval of a new application.

PART 74 – EXPERIMENTAL RADIO, AUXILIARY, SPECIAL BROADCAST AND OTHER PROGRAM DISTRIBUTIONAL SERVICES

5. The authority citation for part 74 is revised to read as follows:

Authority: 47 U.S.C. 154, 302a, 303, 307, 309, 310, 325, 336 and 554.

6. Section 74.782 is amended by revising paragraphs (b)(3), (g)(5) and (6), and by adding paragraph (j) as follows:

§ 74.782 Low Power Television and TV Translator Simulcasting During the ATSC 3.0 (Next Gen TV) Transition

* * * * *

- (b) * * *
- (3) The "substantially similar" requirement in paragraph (b)(1) of this section will sunset on July 17, 2027 July 17, 2023.
- (g) * * *
- (5) Expedited processing. An application filed in accordance with the streamlined process in paragraph (f)(3) of this section will receive expedited processing provided, for stations requesting to air an ATSC 1.0 primary signal on the facilities of a host station, the that station will provide ATSC 1.0 service to at least 95 percent of the predicted population within the noise limited service contour of its original ATSC 1.0 facility.
- (6) Required information.
 - (i) An application in paragraph (f)(2) of this section must include the following information:
 - (A) The station or stations serving as the host or hosts, identified by call sign and facility identification number, if applicable;
 - (B) The technical facilities of each host station, if applicable;
 - (C) The DMA of the originating broadcaster's facility and the DMA of each host station, if applicable; and
 - (D) A web link to the exhibit described in paragraph (i) of this section, if applicable; and
 - (E) Any other information deemed necessary by the Commission to process the application.
 - (ii) If an application in paragraph (f)(2) of this section includes a request to air an ATSC 1.0 signal on the facilities of a host station **or stations**, the broadcaster must, in addition to the information in paragraph (f)(6)(i), also indicate on the application:
 - (A) The predicted population within the noise limited service contour served by the station's original ATSC 1.0 signal;
 - (B) The predicted population within the noise limited service contour served by the station's original ATSC 1.0 signal that will lose the station's ATSC 1.0 service as a result of the **hosting** simulcasting arrangement **or arrangements**, including identifying areas of service loss by providing a contour overlap map; and
 - (C) Whether the ATSC 1.0 **primary stream** simulcast signal aired on the host station will serve at least 95 percent of the population in paragraph (f)(6)(ii)(A) of this section.

* * * * *

(j) Multicast Streams. A Next Gen TV station is not required to license, under paragraph (f) of this section, a "guest" multicast programming stream that it originates and which is aired on a host station. If it chooses to do so, it and each of its licensed guest multicast streams must comply with the requirements of this section (including those otherwise applicable only to primary streams), except for paragraph (f)(5) and as otherwise provided in this paragraph. For purposes of this

section, a "multicast" stream refers to a video programming stream other than the primary video programming stream.

- (1) 1.0 Multicast Streams. A Next Gen TV station may license its guest ATSC 1.0 multicast stream(s) aired on one or more ATSC 1.0 hosts pursuant to paragraph (f) of this section. Non-simulcast streams are not required to comply with paragraph (b) of this section.
 - (i) Host Capacity Limit. A Next Gen TV station that has converted its own facility to 3.0 must not license more capacity on one or more partner host stations, in the aggregate, than the station could use if it were still operating on its own facility in 1.0. It must demonstrate compliance with this limit in its license application exhibit.
- (2) 3.0 Multicast Streams. A Next Gen TV station may license its guest ATSC 3.0 multicast stream(s) aired on one or more ATSC 3.0 hosts pursuant to paragraph (f) of this section.
- (3) Children's Television. A Next Gen TV station may rely on a multicast stream it is airing via a host partner to comply with the Commission's children's television programming requirement in Section 73.671 of this Part. Such a stream must either be carried on the same host as the Next Gen TV station's primary stream, or on a host that serves at least 95 percent of the predicted population served by the Next Gen TV station's pre-transition 1.0 signal.
- (4) Application Exhibit Required. A Next Gen TV station seeking to license hosted multicast streams must prepare and host on its public website (or its Online Public Inspection File if the station does not have a dedicated website) the exhibit referenced in paragraph (f)(6)(i)(D) of this section. The exhibit must contain the following:
 - (i) for each hosted stream: channel number (RF and virtual); network affiliation (or type of programming if unaffiliated); resolution (e.g., 1080i, 720p, 480p, or 480i); whether the stream will be simulcast; and if so, the identity of the paired stream in the other service; and
 - (ii) for a station that has converted its own facility to 3.0, the exhibit must also demonstrate compliance with the host capacity limit. It may do so by either showing that it is seeking hosting only for streams it was broadcasting on its own 1.0 facility prior to its transition to 3.0, or identifying another 1.0 station that is carrying or has carried the same or a similar programming lineup at the same resolutions on the same type of facility (individual or shared);
 - (iii) for a station that has converted its own facility to 3.0, the exhibit must also demonstrate compliance with the coverage requirement for guest multicast streams, including by providing a contour map showing the guest multicast stream will continue to serve the station's community of license; and
 - (iv) Changes to the exhibit. Changes to the affiliation or content of a stream that would not result in the use of additional capacity, the elimination of a stream, or non-substantive corrections may be made at the discretion of the applicant but must be reflected in a timely update to the existing public exhibit and an emailed notice to the Chief of the Media Bureau's Video Division or their designee. No other changes, including to the location of the exhibit itself, may be made without the filing and approval of a new application.

APPENDIX C

Final Regulatory Flexibility Analysis (FRFA) for the Third Report and Order

1. As required by the Regulatory Flexibility Act of 1980 (RFA),¹ as amended, an Initial Regulatory Flexibility Analysis (IRFA) was incorporated in the Second Further Notice of Proposed Rulemaking (FNPRM) and Third FNPRM in this proceeding.² The Federal Communications Commission (Commission) sought written public comment on the proposals in the FNPRMs, including comment on the IRFAs. The Commission received no comments in response to either IRFA. This present Final Regulatory Flexibility Analysis (FRFA) conforms to the RFA.³

A. Need for, and Objectives of, the Third Report and Order

- 2. In the first *Next Gen TV Report and Order*, the Commission authorized television broadcasters to use the Next Gen TV transmission standard, also called "ATSC 3.0" or "3.0," on a voluntary, market-driven basis. ATSC 3.0 is the new TV transmission standard developed by the Advanced Television Systems Committee as the world's first Internet Protocol (IP)-based broadcast transmission platform. The Commission determined in the *Next Gen TV Report and Order* that broadcasters that deploy ATSC 3.0 generally must continue to deliver current-generation digital television (DTV) service, using the ATSC 1.0 transmission standard, also called "ATSC 1.0" or "1.0," to their viewers through local simulcasting. Specifically, the Commission required full power and Class A TV stations deploying ATSC 3.0 service to simulcast the primary video programming stream of their ATSC 3.0 channel in an ATSC 1.0 format.
- The Commission determined in the Next Gen TV Report and Order that the local simulcasting requirement is crucial to the deployment of Next Gen TV service in order to minimize viewer disruption. The Next Gen TV standard is not backward-compatible with existing TV sets or receivers, which have only ATSC 1.0 and analog tuners. This means that consumers will not be able to view ATSC 3.0 transmissions on their existing televisions without additional equipment. Thus, it is critical that Next Gen TV broadcasters continue to provide service using the current ATSC 1.0 standard while the marketplace adopts devices compatible with the new 3.0 transmission standard in order to avoid either forcing viewers to acquire new equipment or depriving them of television service. A TV station cannot, as a technical matter, broadcast in both 1.0 and 3.0 format from the same facility. Therefore, local simulcasting will be effectuated through voluntary partnerships that broadcasters that wish to provide Next Gen TV service must enter into with other broadcasters in their local markets. Next Gen TV broadcasters must partner with another television station (i.e., a temporary "host" station) in their local market to either: (1) air an ATSC 3.0 channel at the temporary host's facility, while using their original facility to continue to provide an ATSC 1.0 simulcast channel, or (2) air an ATSC 1.0 simulcast channel at the temporary host's facility, while converting their original facility to the ATSC 3.0 standard in order to provide a 3.0 channel.
- 4. In this *Third Report and Order*, we adopt changes to our ATSC 3.0 (3.0 or Next Gen TV) rules considered in both the Second FNPRM (or *Multicast Licensing FNPRM*) and Third FNPRM (or *Sunsets FNPRM*). In the first part of this Order, the Commission generally adopts the rules proposed in the *Next Gen TV Multicast Licensing FNPRM*, establishing a licensing regime for Next Gen TV stations' multicast streams that are aired on host stations during the transition period. These rules facilitate and

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¹ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² Authorizing Permissive Use of the "Next Generation" Broadcast Television Standard, Second Further Notice of Proposed Rulemaking, 36 FCC Rcd at 16113, Appendix B (2021) (Next Gen TV Multicast Licensing FNPRM); Third Further Notice of Proposed Rulemaking, FCC 22-47, 2022 WL 2290237, Appendix A (rel. Jun. 22, 2022) (Next Gen TV Sunsets FNPRM).

³ See 5 U.S.C. § 604.

encourage Next Gen TV stations to preserve consumer access to multicast programming in 1.0 format during the voluntary ATSC 3.0 transition. They will provide the industry with regulatory certainty about the legal treatment of licensed multicast streams; clarify that the originating station (and not the host station) is responsible for regulatory compliance regarding a multicast stream being aired on a host station; give the Commission clear enforcement authority over the originating station in the event of a rule violation on the hosted multicast programming stream; and facilitate NCE stations' 3.0 deployment by allowing them to serve as hosts to commercial stations' multicast streams. The Commission recognizes that allowing Next Gen TV stations to seek modification of their license to include capacity on multiple host stations represents a significant departure from its present licensing regime. The Commission finds that doing so is appropriate because it is limited to the temporary broadcast transition to 3.0 and to specific situations for which there is a clear need.

In the second part of this Order, the Commission retains the substantially similar rule and requirement to comply with the ATSC A/322 standard until July 17, 2027. The substantially similar rule requires that the programming aired on a Next Gen TV station's ATSC 1.0 simulcast channel be "substantially similar" to that of the primary video programming stream on the ATSC 3.0 channel.⁴ This means that the programming must be the same, except for programming features that are based on the enhanced capabilities of ATSC 3.0 and promotions for upcoming programs.⁵ In this Order, the Commission finds that this rule remains necessary to protect consumers by ensuring that over-the-air (OTA) viewers who rely on 1.0 are able to continue watching the same programming they watch today, as well as any new programming offerings on a broadcaster's primary channel that can be reasonably provided in 1.0 format. The Commission finds that there has not yet been a sufficient shift in the marketplace that would justify elimination or modification of the substantially similar rule. The requirement to comply with the ATSC A/322 standard, which applies only to Next Gen TV broadcasters' primary video programming stream, provides certainty to consumers, television receiver manufacturers, and MVPDs that 3.0 TV sets or other 3.0 TV equipment will be able to receive all 3.0 primary broadcast signals. In this Order, the Commission finds that this rule remains necessary at this time to protect consumers and other stakeholders.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

6. There were no comments filed that specifically addressed the rules and policies proposed in the IRFA of either the Second or Third FNPRM.

C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

7. Pursuant to the Small Business Jobs Act of 2010, which amended the RFA, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments.⁶

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⁴ 47 CFR §§ 73.3801(b)(1), 73.6029(b)(1), 74.782(b)(1); First Next Gen TV Report and Order, 32 FCC Rcd at 9942-43, para. 22. The substantially similar rule is independent of the requirement for Next Gen TV broadcasters to simulcast in 1.0 format, a requirement that does not have a sunset date. See 47 CFR §§ 73.3801(b), 73.6029(b), 74.782(b).

⁵ Such enhanced content or features that cannot reasonably be provided in ATSC 1.0 format include: targeted advertisements, "hyper-localized" content (e.g., geo-targeted weather, targeted emergency alerts, and hyper-local news), programming features or improvements created for the 3.0 service (e.g., emergency alert "wake up" ability and interactive programming features), enhanced formats made possible by 3.0 technology (e.g., 4K or HDR), and any personalization of programming performed by the viewer and at the viewer's discretion. *See* 47 CFR §§ 73.3801(b)(1), 73.6029(b)(1), 74.782(b)(1).

⁶ 5 U.S.C. § 604(a)(3).

8. The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

D. Description and Estimate of the Number of Small Entities to Which the Rules Will Apply

- 9. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁷ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act. A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA. Below, we provide a description of such small entities, as well as an estimate of the number of such small entities, where feasible.
- 10. Television Broadcasting. This industry is comprised of "establishments primarily engaged in broadcasting images together with sound." These establishments operate television broadcast studios and facilities for the programming and transmission of programs to the public. These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studio, from an affiliated network, or from external sources. The SBA small business size standard for this industry classifies businesses having \$41.5 million or less in annual receipts as small. 2017 U.S. Census Bureau data indicate that 744 firms in this industry operated for the entire year. Of that number, 657 firms had revenue of less than \$25,000,000. Based on this data we estimate that the majority of television broadcasters are small entities under the SBA small business size standard.
- 11. As of December 31, 2022, there were 1,375 licensed commercial television stations. Of this total, 1,282 stations (or 93.2%) had revenues of \$41.5 million or less in 2021, according to

⁷ 5 U.S.C. § 603(b)(3).

⁸ Id. § 601(6).

⁹ *Id.* § 601(3) (incorporating by reference the definition of "small-business concern" in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

¹⁰ 15 U.S.C. § 632.

¹¹ See U.S. Census Bureau, 2017 NAICS Definition, "515120 Television Broadcasting," https://www.census.gov/naics/?input=515120&year=2017&details=515120.

¹² *Id*

¹³ See 13 CFR § 121.201, NAICS Code 515120 (as of 10/1/22 NAICS Code 516120).

¹⁴ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 515120, https://data.census.gov/cedsci/table?y=2017&n=515120&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

¹⁵ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

¹⁶ Broadcast Station Totals as of December 31, 2022, Public Notice, DA 22-721 (rel. Jan. 11, 2022), https://www.fcc.gov/document/broadcast-station-totals-december-31-2022.

Commission staff review of the BIAKelsey Media Access Pro Online Television Database (MAPro) on January 13, 2023, ¹⁷ and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates as of December 31, 2022, there were 383 licensed noncommercial educational (NCE) television stations, 383 Class A TV stations, 1,912 LPTV stations and 3,122 TV translator stations. ¹⁸ The Commission, however, does not compile and otherwise does not have access to financial information for these television broadcast stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of these television station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

- 12. Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks.¹⁹ Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services.²⁰ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.²¹ Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.²²
- 13. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.²³ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.²⁴ Of this number, 2,964 firms operated with fewer than 250 employees.²⁵ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 5,183 providers that reported they were engaged

¹⁷ BIA Advisory Services, BIAKelsey Media Access Pro Online Television Database, http://www.biakelsey.com/data-platforms/media-access-pro (last visited on Jan. 13, 2023).

¹⁸ Broadcast Station Totals as of December 31, 2022, Public Notice, DA 22-721 (rel. Jan. 11, 2022), https://www.fcc.gov/document/broadcast-station-totals-december-31-2022.

¹⁹ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

²⁰ *Id*.

²¹ *Id*

²² Fixed Local Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, and Other Local Service Providers. Local Resellers fall into another U.S. Census Bureau industry group and therefore data for these providers is not included in this industry.

²³ See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

²⁴ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

²⁵ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

in the provision of fixed local services.²⁶ Of these providers, the Commission estimates that 4,737 providers have 1,500 or fewer employees.²⁷ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

- 14. *Cable Companies and Systems (Rate Regulation)*. The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.²⁸ Based on industry data, there are about 420 cable companies in the U.S.²⁹ Of these, only seven have more than 400,000 subscribers.³⁰ In addition, under the Commission's rules, a "small system" is a cable system serving 15,000 or fewer subscribers.³¹ Based on industry data, there are about 4,139 cable systems (headends) in the U.S.³² Of these, about 639 have more than 15,000 subscribers.³³ Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.
- 15. Cable System Operators (Telecom Act Standard). The Communications Act of 1934, as amended, contains a size standard for a "small cable operator," which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."³⁴ For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 677,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator based on the cable subscriber count established in a 2001 Public Notice. Based on industry data, only six cable system operators have more than 677,000 subscribers. Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250

²⁶ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

²⁷ *Id*.

²⁸ 47 CFR § 76.901(d).

²⁹ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

³⁰ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022); S&P Global Market Intelligence, Multichannel Video Subscriptions, Top 10 (April 2022).

³¹ 47 CFR § 76.901(c).

³² S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

³³ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022).

³⁴ 47 U.S.C. § 543(m)(2).

³⁵ FCC Announces New Subscriber Count for the Definition of Small Cable Operator, Public Notice, 16 FCC Rcd 2225 (CSB 2001) (2001 Subscriber Count PN). In this Public Notice, the Commission determined that there were approximately 67.7 million cable subscribers in the United States at that time using the most reliable source publicly available. Id. We recognize that the number of cable subscribers changed since then and that the Commission has recently estimated the number of cable subscribers to traditional and telco cable operators to be approximately 58.1 million. See Communications Marketplace Report, GN Docket No. 20-60, 2020 Communications Marketplace Report, 36 FCC Rcd 2945, 3049, para. 156 (2020) (2020 Communications Marketplace Report). However, because the Commission has not issued a public notice subsequent to the 2001 Subscriber Count PN, the Commission still relies on the subscriber count threshold established by the 2001 Subscriber Count PN for purposes of this rule. See 47 CFR § 76.901(e)(1).

³⁶ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022); S&P Global Market Intelligence, Multichannel Video Subscriptions, Top 10 (April 2022).

million.³⁷ Therefore, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

- 16. Direct Broadcast Satellite ("DBS") Service. DBS service is a nationally distributed subscription service that delivers video and audio programming via satellite to a small parabolic "dish" antenna at the subscriber's location. DBS is included in the Wired Telecommunications Carriers industry which comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks.³⁸ Transmission facilities may be based on a single technology or combination of technologies.³⁹ Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution; and wired broadband internet services.⁴⁰ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.⁴¹
- 17. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁴² U.S. Census Bureau data for 2017 show that 3,054 firms operated in this industry for the entire year.⁴³ Of this number, 2,964 firms operated with fewer than 250 employees.⁴⁴ Based on this data, the majority of firms in this industry can be considered small under the SBA small business size standard. According to Commission data however, only two entities provide DBS service DIRECTV (owned by AT&T) and DISH Network, which require a great deal of capital for operation.⁴⁵ DIRECTV and DISH Network both exceed the SBA size standard for classification as a small business. Therefore, we must conclude based on internally developed Commission data, in general DBS service is provided only by large firms.
- 18. Satellite Master Antenna Television (SMATV) Systems, also known as Private Cable Operators (PCOs). SMATV systems or PCOs are video distribution facilities that use closed transmission paths without using any public right-of-way. They acquire video programming and

³⁷ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(e) of the Commission's rules. *See* 47 CFR § 76.910(b).

³⁸ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

³⁹ *Id*.

⁴⁰ See id. Included in this industry are: broadband Internet service providers (e.g., cable, DSL); local telephone carriers (wired); cable television distribution services; long-distance telephone carriers (wired); closed-circuit television (CCTV) services; VoIP service providers, using own operated wired telecommunications infrastructure; direct-to-home satellite system (DTH) services; telecommunications carriers (wired); satellite television distribution systems; and multichannel multipoint distribution services (MMDS).

⁴¹ *Id*.

⁴² See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

⁴³ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁴⁴ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁴⁵ See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eighteenth Report, Table III.A.5, 32 FCC Rcd 568, 595 (Jan. 17, 2017).

distribute it via terrestrial wiring in urban and suburban multiple dwelling units such as apartments and condominiums, and commercial multiple tenant units such as hotels and office buildings. SMATV systems or PCOs are included in the Wired Telecommunications Carriers' industry which includes wireline telecommunications businesses. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. It is total, 2,964 firms operated with fewer than 250 employees. Thus under the SBA size standard, the majority of firms in this industry can be considered small.

- 19. Home Satellite Dish (HSD) Service. HSD or the large dish segment of the satellite industry is the original satellite-to-home service offered to consumers and involves the home reception of signals transmitted by satellites operating generally in the C-band frequency. Unlike DBS, which uses small dishes, HSD antennas are between four and eight feet in diameter and can receive a wide range of unscrambled (free) programming and scrambled programming purchased from program packagers that are licensed to facilitate subscribers' receipt of video programming. Because HSD provides subscription services, HSD falls within the industry category of Wired Telecommunications Carriers. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated for the entire year. Of this total, 2,964 firms operated with fewer than 250 employees. Thus, under the SBA size standard, the majority of firms in this industry can be considered small.
- 20. Open Video Systems. The open video system (OVS) framework was established in 1996 and is one of four statutorily recognized options for the provision of video programming services by local exchange carriers. The OVS framework provides opportunities for the distribution of video programming other than through cable systems. OVS operators provide subscription services and therefore fall within the SBA small business size standard for the cable services industry, which is "Wired Telecommunications Carriers." The SBA small business size standard for this industry classifies firms having 1,500 or fewer employees as small. 55 U.S. Census Bureau data for 2017 show that there were

⁴⁶ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁴⁷ See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

⁴⁸ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁴⁹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁵⁰ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁵¹ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

⁵² See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁵³ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁵⁴ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁵⁵ See 13 CFR § 121.201, NAICS Code 517311 (as of 10/1/22, NAICS Code 517111).

- 3,054 firms in this industry that operated for the entire year.⁵⁶ Of this total, 2,964 firms operated with fewer than 250 employees.⁵⁷ Thus, under the SBA size standard the majority of firms in this industry can be considered small. Additionally, we note that the Commission has certified some OVS operators who are now providing service and broadband service providers (BSPs) are currently the only significant holders of OVS certifications or local OVS franchises. The Commission does not have financial or employment information for the entities authorized to provide OVS however, the Commission believes some of the OVS operators may qualify as small entities.
- 21. Broadband Radio Service and Educational Broadband Service. Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and "wireless cable," transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service (ITFS)). Wireless cable operators that use spectrum in the BRS often supplemented with leased channels from the EBS, provide a competitive alternative to wired cable and other multichannel video programming distributors. Wireless cable programming to subscribers resembles cable television, but instead of coaxial cable, wireless cable uses microwave channels. 60
- 22. In light of the use of wireless frequencies by BRS and EBS services, the closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (*except* Satellite).⁶¹ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.⁶² U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁶³ Of this number, 2,837 firms employed

⁵⁶ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁵⁷ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁵⁸ The use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

⁵⁹ See 47 CFR § 27.4; see also Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

⁶⁰ Generally, a wireless cable system may be described as a microwave station transmitting on a combination of BRS and EBS channels to numerous receivers with antennas, such as single-family residences, apartment complexes, hotels, educational institutions, business entities and governmental offices. The range of the transmission depends upon the transmitter power, the type of receiving antenna and the existence of a line-of-sight path between the transmitter or signal booster and the receiving antenna.

⁶¹ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

⁶² See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁶³ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

fewer than 250 employees.⁶⁴ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.

- 23. According to Commission data as December 2021, there were approximately 5,869 active BRS and EBS licenses.⁶⁵ The Commission's small business size standards with respect to BRS involves eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of BRS licenses, the Commission adopted criteria for three groups of small businesses. A very small business is an entity that, together with its affiliates and controlling interests, has average annual gross revenues exceed \$3 million and did not exceed \$15 million for the preceding three years, a small business is an entity that, together with its affiliates and controlling interests, has average gross revenues exceed \$15 million and did not exceed \$40 million for the preceding three years, and an entrepreneur is an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$3 million for the preceding three years.⁶⁶ Of the ten winning bidders for BRS licenses, two bidders claiming the small business status won 4 licenses, one bidder claiming the very small business status won three licenses and two bidders claiming entrepreneur status won six licenses.⁶⁷ One of the winning bidders claiming a small business status classification in the BRS license auction has an active licenses as of December 2021.⁶⁸
- 24. The Commission's small business size standards for EBS define a small business as an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$55 million for the preceding five (5) years, and a very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$20 million for the preceding five (5) years.⁶⁹ In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.
- 25. *Incumbent Local Exchange Carriers (Incumbent LECs)*. Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers.

⁶⁴ *Id*. The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁶⁵ Based on a FCC Universal Licensing System search on December 10, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR, ED; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

⁶⁶ See 47 CFR § 27.1218(a).

⁶⁷ *See* Federal Communications Commission, Economics and Analytics, Auctions, Auction 86: Broadband Radio Service, Summary, Reports, All Bidders, https://www.fcc.gov/sites/default/files/wireless/auctions/86/charts/86bidder.xls.

⁶⁸ Based on a FCC Universal Licensing System search on December 10, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

⁶⁹ See 47 CFR § 27.1219(a).

Wired Telecommunications Carriers⁷⁰ is the closest industry with an SBA small business size standard.⁷¹ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁷² U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁷³ Of this number, 2,964 firms operated with fewer than 250 employees.⁷⁴ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 1,227 providers that reported they were incumbent local exchange service providers.⁷⁵ Of these providers, the Commission estimates that 929 providers have 1,500 or fewer employees.⁷⁶ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.

26. Competitive Local Exchange Carriers (LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include several types of competitive local exchange service providers. Wired Telecommunications Carriers is the closest industry with a SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 3,956 providers that reported they were competitive local

⁷⁰ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁷¹ See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

⁷² *Id*.

⁷³ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁷⁴ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁷⁵ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf.

⁷⁶ *Id*.

⁷⁷ Competitive Local Exchange Service Providers include the following types of providers: Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

⁷⁸ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁷⁹ See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

⁸⁰ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁸¹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

exchange service providers. ⁸² Of these providers, the Commission estimates that 3,808 providers have 1,500 or fewer employees. ⁸³ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.

- *Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing.* This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment.⁸⁴ Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.⁸⁵ The SBA small business size standard for this industry classifies businesses having 1,250 employees or less as small.⁸⁶ U.S. Census Bureau data for 2017 show that there were 656 firms in this industry that operated for the entire year.⁸⁷ Of this number, 624 firms had fewer than 250 employees.⁸⁸ Thus, under the SBA size standard, the majority of firms in this industry can be considered small.
- 28. Audio and Video Equipment Manufacturing. This industry comprises establishments primarily engaged in electronic audio and video equipment for home entertainment, motor vehicles, and public address and musical instrument amplification. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems. The SBA small business size standard for this industry classifies firms with 750 employees or less as small. According to 2017 U.S. Census Bureau data, 464 firms in this industry operated that year. Of this number, 399 firms operated with less than 250 employees. Based on this data and the associated SBA size standard, we conclude that the majority of firms in this industry are small.

⁸² Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

⁸³ *Id*.

⁸⁴ See U.S. Census Bureau, 2017 NAICS Definition, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing," https://www.census.gov/naics/?input=334220&year=2017&details=334220.

⁸⁵ *Id*.

⁸⁶ See 13 CFR § 121.201, NAICS Code 334220.

⁸⁷ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 334220, https://data.census.gov/cedsci/table?y=2017&n=334220&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false. https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012 US/31SG2//naics~334220

⁸⁸*Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁸⁹ See U.S. Census Bureau, 2017 NAICS Definition, "334310 Audio and Video Equipment Manufacturing," https://www.census.gov/naics/?input=334310&year=2017&details=334310.

⁹⁰ See 13 CFR 121.201, NAICS Code 334310.

⁹¹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 334310, https://data.census.gov/cedsci/table?y=2017&n=334310&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁹² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that the U.S. Census Bureau withheld publication of the number of firms that operated for the entire year and the number of firms that operated with 5 to 9 employees, to avoid disclosing data for individual companies (see Cell Notes for "Firms operated for the entire year" and "Firms operated for the

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

- 29. The Order modifies our Next Gen TV licensing processes to include additional reporting, recordkeeping, and other compliance for small entities that seek to include hosted multicast streams within their license. While the Commission is not in a position to determine whether small entities will have to hire professionals to comply with our decisions and cannot quantify the cost of compliance for small entities, as discussed in the Order, the approaches we have taken to implement the requirements for Next Gen TV multicasting have minimal cost implications for impacted entities.
- 30. As discussed in section A of this FRFA, this Order establishes a licensing regime for Next Gen TV stations' *multicast* streams that are aired on host stations (as guest streams) during the transition period. The Order applies the licensing process for primary simulcast streams to guest multicast streams. Thus, Next Gen TV broadcasters that choose to deploy ATSC 3.0 service and seek to license guest multicast streams aired on a host station are subject to certain reporting, recordkeeping, or other compliance requirements.
- 31. A Next Gen TV broadcaster seeking to license one or more guest multicast streams aired on a host station (multicast license applicant) is subject to the host capacity limit (discussed in section III.D. of this Order). That is, a Next Gen TV station may not use more 1.0 host capacity than it could have used if it were still broadcasting in 1.0 on its own facilities. A multicast license applicant is also subject to most requirements applicable to primary streams, including rules concerning signal coverage, simulcast agreements, MVPD notice and on-air consumer notice requirements for each guest multicast stream (discussed in section III.H. of this Order).⁹³
- 32. All multicast license applicants, including small entities, must file an application (Form 2100) to modify its license with the Commission and receive prior Commission approval. This requires the applicant must prepare an exhibit identifying each guest stream and provide the following information about each stream, as broadcast: the host station; channel number (RF and virtual); network affiliation (or type of programming if unaffiliated); resolution (e.g., 1080i, 720p, 480p, or 480i); the predicted percentage of population within the noise limited service contour served by the station's original ATSC 1.0 signal that will be served by the host, with a contour overlay map identifying areas of service loss and, in the case of 1.0 streams, coverage of the originating station's community of license; and whether the stream will be simulcast, and if so, the "paired" stream in the other service. Finally, the exhibit must either state that the applicant will be airing the same programming that it is airing in 1.0 at the time of the application or identify the station that has aired or is airing the same or a similar programming lineup at the same resolutions on the same type of facility (individual or shared), as well as that station's lineup (with resolutions). This exhibit must be placed on the applicant's public website, with a link provided in the application.

⁹³ See 47 CFR §§ 73.3801(a) and (e), 73.6029(a) and (e), 74.782(a) and (f) (simulcast arrangements and agreements); 47 CFR §§ 73.3801(d) and (f)(5)-(6), 73.6029(d) and (f)(5)-(6), 74.782(e) and (g)(5)-(6) (DMA and community of license coverage requirements); 47 CFR §§ 73.3801(h), 73.6029(h), 74.782(i) (MVPD notice requirements); 47 CFR §§ 73.3801(g), 73.6029(g), 74.782(h) (on-air viewer notices); and 47 CFR §§ 73.3801(f)(2), 73.6029(f)(2), 74.782(g)(2) (licensing procedures). Regarding coverage, a Next Gen TV station's 1.0 guest multicast streams aired on a host must continue to cover its (the guest station's) entire community of license and the host and guest stations must be assigned to the same DMA. For 3.0 multicast streams aired on a host channel, only the DMA requirement applies. When determining whether a station seeking to transition is eligible for expedited processing, the Commission will consider only whether the primary stream will remain available in 1.0 to at least 95% of a station's current OTA audience. A multicast license applicant generally must enter into a written simulcast agreement and provide such agreement to the Commission upon request.

33. The Order also retains for another four years two existing compliance requirements for all stations, including small entities, and eliminates the sunset dates for these requirements. The Order retains the "substantially similar" rule (see section III.I. of this Order). This rule requires that the programming aired on a Next Gen TV station's ATSC 1.0 simulcast channel be "substantially similar" to that of the primary video programming stream on the ATSC 3.0 channel. This means that the programming must be the same, except for programming features that are based on the enhanced capabilities of ATSC 3.0, including targeted advertisements, and promotions for upcoming programs. This rule will now expire in 2027absent Commission action. The Order retains the requirement to comply with the ATSC A/322 standard ("Physical Layer Protocol") (A/322) (see section III.J of this Order), which is the standard that defines the waveforms that ATSC 3.0 signals may take. The requirement to comply with A/322 will now expire in 2027 absent Commission action.

F. Steps Taken to Minimize Significant Economic Impact on Small Entities and Significant Alternatives Considered

- 34. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities." ⁹⁴
- 35. The Commission has authorized television broadcasters to use the Next Gen TV (ATSC 3.0) standard on a voluntary, market-driven basis. As observed in the Final Regulatory Flexibility Analysis of the 2017 *First Next Gen TV Report and Order*, 95 this means that broadcasters decide whether (and if so when) to deploy ATSC 3.0 service and bear the costs associated with such deployment. All broadcasters, including small entities, will need to undertake any costs or burdens associated with ATSC 3.0 service should they choose to do so.
- 36. The rules concerning multicast licensing provide increased flexibility to broadcasters without imposing additional obligations. By expanding the ability of broadcasters to place licensed streams on additional host partners, the rules may allow small broadcast entities transitioning to ATSC 3.0 to experience positive economic impacts through partnerships with unaffiliated third parties. NCE television stations in particular, both large and small, will experience positive benefits from the rules, which could improve their ability to participate in the transition to Next Gen TV. Although we intended to limit certain simulcast multicast stream relief only to NCE stations or commercial stations airing multicast streams on NCE partner hosts, ⁹⁶ we will instead allow any Next Gen TV station to apply for this relief under the non-expedited process, but emphasize that all applicants, including small entities, must demonstrate why this relief is in the public interest and outweighs any potential harms. In addition, the multicast licensing approach minimizes administrative burdens for all broadcasters, including small broadcasters. The rules streamline the current process whereby broadcasters request special temporary authority on a case-by-case basis. We also considered concerns regarding the potential abuse of these rules in that the multicast streams may allow stations to evade local ownership rules. Consistent with our previous decisions, hosting multicast streams on a temporary host station's facility will not result in any

95 First Next Gen TV Report and Order, 32 FCC Rcd at 10026-27, para. 32.

^{94 5} U.S.C. § 603(c)(1)-(c)(4).

⁹⁶ Next Gen TV Multicast Licensing FNPRM, 2021 WL 5182914 at *7, para. 19, n.74 ("For the purposes of this tentative conclusion, we consider similarly situated originating stations to be NCEs, or commercial stations working with NCE partner hosts, transitioning their own channel to 3.0, who are unable to find a partner 1.0 host that could, on its own, provide coverage of its primary stream to 95 percent of the applicant's 1.0 service area."). In proposing this approach, we supported the Bureau's prior decision, which found that "permitting NCE stations to participate in the ATSC 3.0 rollout arrangements in this manner is critical to the success of the transition." WNUV STA, at page 6.

additional requirements for small entities related to television stations attribution (e.g., filing ownership reports). In finding that it is appropriate to limit a Next Gen TV station's 1.0 host capacity to that which it could deploy on its own 1.0 channel, we determined that other alternatives related to proposed capacity limits would be overly restrictive to all stations, including small entities, and that the best metric will be the number and resolution of streams actually airing (or that previously actually aired) on specific 1.0 facilities. In retaining the rules that require stations, including small entities, to broadcast substantially similar programing to their primary streams, we rejected the alternatives presented by broadcasters that argued that market incentives would ensure OTA viewers have access to this programming.

G. Report to Congress

37. The Commission will send a copy of the Third Report and Order, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.⁹⁸ In addition, the Commission will send a copy of the Third Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the SBA. The Order and FRFA (or summaries thereof) will also be published in the Federal Register.⁹⁹

⁹⁷ Next Gen TV First Report and Order, 32 FCC Rcd at 9972, n.237. See also Promoting Broadcast Internet Innovation through ATSC 3.0, MB Docket No. 20-145, Declaratory Ruling and Notice of Proposed Rulemaking, 35 FCC Rcd 5916, 5924, para. 15 (2020).

⁹⁸ See 5 U.S.C. § 801(a)(1)(A).

⁹⁹ See id. § 604(b).

APPENDIX D

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Commission has prepared this Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies proposed in this *Fourth Further Notice of Proposed Rulemaking (FNPRM or Fourth FNPRM)*. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *FNPRM* provided on the first page of the *FNPRM*. The Commission will send a copy of this entire *FNPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the *FNPRM* and the IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for, and Objectives of, the Proposed Rules

2. In this Fourth Further Notice of Proposed Rulemaking (FNPRM), the Commission seeks to further its understanding of the current marketplace for ATSC 3.0 Standard Essential Patents (SEPs) and the ability of third parties to develop products that rely upon them. As the Commission has previously observed in this proceeding, the Advanced Television Systems Committee (ATSC), which developed the ATSC 3.0 standard, requires patent owners to disclose that they hold essential patents and to commit to licensing them on reasonable and non-discriminatory (RAND) terms. The record developed in response to the Sunsets FNPRM, however, raises questions both about whether patentees are respecting these commitments and about the challenges faced in court by third parties seeking their enforcement. In light of these concerns and the limits of the existing record, the Commission seeks additional comments about the general state of the market, particularly from parties that do not hold SEPs but have licensed or attempted to license them. This will inform the Commission's consideration of the need for, appropriateness of, and potential benefits of Commission rules governing the RAND licensing of SEPs.

B. Legal Basis.

3. The proposed action is authorized pursuant to sections 1, 4, 7, 301, 303, 307, 308, 309, 316, 319, 325(b), 336, 338, 399b, 403, 534, and 535 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154, 157, 301, 303, 307, 308, 309, 316, 319, 325(b), 336, 338, 399b, 403, 534, and 535.

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply.

4. The RFA directs agencies to provide a description of, and where feasible, an estimate of the number of small entities that may be affected by the rules adopted herein.⁴ The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.⁶ A small business concern is one

¹ 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, was amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² 5 U.S.C. § 603(a).

³ *Id*.

⁴ 5 U.S.C. § 603(b)(3).

⁵ *Id.* § 601(6).

⁶ *Id.* § 601(3) (incorporating by reference the definition of "small-business concern" in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes (continued....)

which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.⁷ Below, we provide a description of such small entities, as well as an estimate of the number of such small entities, where feasible.

- 5. Television Broadcasting. This industry is comprised of "establishments primarily engaged in broadcasting images together with sound." These establishments operate television broadcast studios and facilities for the programming and transmission of programs to the public. These establishments also produce or transmit visual programming to affiliated broadcast television stations, which in turn broadcast the programs to the public on a predetermined schedule. Programming may originate in their own studio, from an affiliated network, or from external sources. The SBA small business size standard for this industry classifies businesses having \$41.5 million or less in annual receipts as small. 2017 U.S. Census Bureau data indicate that 744 firms in this industry operated for the entire year. Based on this data we estimate that the majority of television broadcasters are small entities under the SBA small business size standard.
- 6. As of December 31, 2022, there were 1,375 licensed commercial television stations.¹³ Of this total, 1,282 stations (or 93.2%) had revenues of \$41.5 million or less in 2021, according to Commission staff review of the BIAKelsey Media Access Pro Online Television Database (MAPro) on January 13, 2023, ¹⁴ and therefore these licensees qualify as small entities under the SBA definition. In addition, the Commission estimates as of December 31, 2022, there were 383 licensed noncommercial educational (NCE) television stations, 383 Class A TV stations, 1,912 LPTV stations and 3,122 TV translator stations.¹⁵ The Commission, however, does not compile and otherwise does not have access to financial information for these television broadcast stations that would permit it to determine how many of these stations qualify as small entities under the SBA small business size standard. Nevertheless, given the SBA's large annual receipts threshold for this industry and the nature of these television station licensees, we presume that all of these entities qualify as small entities under the above SBA small business size standard.

⁷ 15 U.S.C. § 632.

⁸ See U.S. Census Bureau, 2017 NAICS Definition, "515120 Television Broadcasting," https://www.census.gov/naics/?input=515120&year=2017&details=515120.

⁹ *Id*.

¹⁰ See 13 CFR § 121.201, NAICS Code 515120 (as of 10/1/22 NAICS Code 516120).

¹¹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Sales, Value of Shipments, or Revenue Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEREVFIRM, NAICS Code 515120, https://data.census.gov/cedsci/table?y=2017&n=515120&tid=ECNSIZE2017.EC1700SIZEREVFIRM&hidePreview=false.

¹² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that according to the U.S. Census Bureau glossary, the terms receipts and revenues are used interchangeably, see https://www.census.gov/glossary/#term_ReceiptsRevenueServices.

¹³ Broadcast Station Totals as of December 31, 2022, Public Notice, DA 22-721 (rel. Jan. 11, 2022), https://www.fcc.gov/document/broadcast-station-totals-december-31-2022.

¹⁴ BIA Advisory Services, BIAKelsey Media Access Pro Online Television Database, http://www.biakelsey.com/data-platforms/media-access-pro (last visited on Jan. 13, 2023).

¹⁵ Broadcast Station Totals as of December 31, 2022, Public Notice, DA 22-721 (rel. Jan. 11, 2022), https://www.fcc.gov/document/broadcast-station-totals-december-31-2022.

- 7. Wired Telecommunications Carriers. The U.S. Census Bureau defines this industry as establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired communications networks. Transmission facilities may be based on a single technology or a combination of technologies. Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution, and wired broadband internet services. By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry. Wired Telecommunications Carriers are also referred to as wireline carriers or fixed local service providers.
- 8. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.²⁰ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year.²¹ Of this number, 2,964 firms operated with fewer than 250 employees.²² Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 5,183 providers that reported they were engaged in the provision of fixed local services.²³ Of these providers, the Commission estimates that 4,737 providers have 1,500 or fewer employees.²⁴ Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 9. Cable Companies and Systems (Rate Regulation). The Commission has developed its own small business size standard for the purpose of cable rate regulation. Under the Commission's rules, a "small cable company" is one serving 400,000 or fewer subscribers nationwide.²⁵ Based on industry data, there are about 420 cable companies in the U.S.²⁶ Of these, only seven have more than 400,000 subscribers.²⁷ In addition, under the Commission's rules, a "small system" is a cable system serving

¹⁶ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

¹⁷ *Id*.

¹⁸ *Id*.

¹⁹ Fixed Local Service Providers include the following types of providers: Incumbent Local Exchange Carriers (ILECs), Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, and Other Local Service Providers. Local Resellers fall into another U.S. Census Bureau industry group and therefore data for these providers is not included in this industry.

²⁰ See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

²¹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

²² *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

²³ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

²⁴ *Id*.

²⁵ 47 CFR § 76.901(d).

²⁶ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

²⁷ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022); S&P Global Market Intelligence, Multichannel Video Subscriptions, Top 10 (April 2022).

15,000 or fewer subscribers.²⁸ Based on industry data, there are about 4,139 cable systems (headends) in the U.S.²⁹ Of these, about 639 have more than 15,000 subscribers.³⁰ Accordingly, the Commission estimates that the majority of cable companies and cable systems are small.

- 10. Cable System Operators (Telecom Act Standard). The Communications Act of 1934, as amended, contains a size standard for a "small cable operator," which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than one percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate exceed \$250,000,000."³¹ For purposes of the Telecom Act Standard, the Commission determined that a cable system operator that serves fewer than 677,000 subscribers, either directly or through affiliates, will meet the definition of a small cable operator based on the cable subscriber count established in a 2001 Public Notice.³² Based on industry data, only six cable system operators have more than 677,000 subscribers.³³ Accordingly, the Commission estimates that the majority of cable system operators are small under this size standard. We note however, that the Commission neither requests nor collects information on whether cable system operators are affiliated with entities whose gross annual revenues exceed \$250 million.³⁴ Therefore, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.
- 11. Direct Broadcast Satellite (DBS) Service. DBS service is a nationally distributed subscription service that delivers video and audio programming via satellite to a small parabolic "dish" antenna at the subscriber's location. DBS is included in the Wired Telecommunications Carriers industry which comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks.³⁵ Transmission facilities may be based on a single technology or combination of technologies.³⁶ Establishments in this industry use the wired

²⁸ 47 CFR § 76.901(c).

²⁹ S&P Global Market Intelligence, S&P Capital IQ Pro, U.S. MediaCensus, *Operator Subscribers by Geography* (last visited May 26, 2022).

³⁰ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022).

³¹ 47 U.S.C. § 543(m)(2).

³² FCC Announces New Subscriber Count for the Definition of Small Cable Operator, Public Notice, 16 FCC Rcd 2225 (CSB 2001) (2001 Subscriber Count PN). In this Public Notice, the Commission determined that there were approximately 67.7 million cable subscribers in the United States at that time using the most reliable source publicly available. Id. We recognize that the number of cable subscribers changed since then and that the Commission has recently estimated the number of cable subscribers to traditional and telco cable operators to be approximately 58.1 million. See Communications Marketplace Report, GN Docket No. 20-60, 2020 Communications Marketplace Report, 36 FCC Rcd 2945, 3049, para. 156 (2020) (2020 Communications Marketplace Report). However, because the Commission has not issued a public notice subsequent to the 2001 Subscriber Count PN, the Commission still relies on the subscriber count threshold established by the 2001 Subscriber Count PN for purposes of this rule. See 47 CFR § 76.901(e)(1).

³³ S&P Global Market Intelligence, S&P Capital IQ Pro, *Top Cable MSOs 12/21Q* (last visited May 26, 2022); S&P Global Market Intelligence, Multichannel Video Subscriptions, Top 10 (April 2022).

³⁴ The Commission does receive such information on a case-by-case basis if a cable operator appeals a local franchise authority's finding that the operator does not qualify as a small cable operator pursuant to § 76.901(e) of the Commission's rules. *See* 47 CFR § 76.910(b).

³⁵ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

³⁶ *Id*.

telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services, wired (cable) audio and video programming distribution; and wired broadband internet services.³⁷ By exception, establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.³⁸

- 12. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.³⁹ U.S. Census Bureau data for 2017 show that 3,054 firms operated in this industry for the entire year.⁴⁰ Of this number, 2,964 firms operated with fewer than 250 employees.⁴¹ Based on this data, the majority of firms in this industry can be considered small under the SBA small business size standard. According to Commission data however, only two entities provide DBS service DIRECTV (owned by AT&T) and DISH Network, which require a great deal of capital for operation.⁴² DIRECTV and DISH Network both exceed the SBA size standard for classification as a small business. Therefore, we must conclude based on internally developed Commission data, in general DBS service is provided only by large firms.
- 13. Satellite Master Antenna Television (SMATV) Systems, also known as Private Cable Operators (PCOs). SMATV systems or PCOs are video distribution facilities that use closed transmission paths without using any public right-of-way. They acquire video programming and distribute it via terrestrial wiring in urban and suburban multiple dwelling units such as apartments and condominiums, and commercial multiple tenant units such as hotels and office buildings. SMATV systems or PCOs are included in the Wired Telecommunications Carriers' industry which includes wireline telecommunications businesses.⁴³ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁴⁴ U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁴⁵

³⁷ See id. Included in this industry are: broadband Internet service providers (e.g., cable, DSL); local telephone carriers (wired); cable television distribution services; long-distance telephone carriers (wired); closed-circuit television (CCTV) services; VoIP service providers, using own operated wired telecommunications infrastructure; direct-to-home satellite system (DTH) services; telecommunications carriers (wired); satellite television distribution systems; and multichannel multipoint distribution services (MMDS).

³⁸ *Id*.

³⁹ See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

⁴⁰ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁴¹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁴² See Annual Assessment of the Status of Competition in the Market for the Delivery of Video Programming, Eighteenth Report, Table III.A.5, 32 FCC Rcd 568, 595 (Jan. 17, 2017).

⁴³ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁴⁴ See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

⁴⁵ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

Of this total, 2,964 firms operated with fewer than 250 employees.⁴⁶ Thus under the SBA size standard, the majority of firms in this industry can be considered small.

- 14. *Home Satellite Dish (HSD) Service.* HSD or the large dish segment of the satellite industry is the original satellite-to-home service offered to consumers and involves the home reception of signals transmitted by satellites operating generally in the C-band frequency. Unlike DBS, which uses small dishes, HSD antennas are between four and eight feet in diameter and can receive a wide range of unscrambled (free) programming and scrambled programming purchased from program packagers that are licensed to facilitate subscribers' receipt of video programming. Because HSD provides subscription services, HSD falls within the industry category of Wired Telecommunications Carriers.⁴⁷ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁴⁸ U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated for the entire year.⁴⁹ Of this total, 2,964 firms operated with fewer than 250 employees.⁵⁰ Thus, under the SBA size standard, the majority of firms in this industry can be considered small.
- and is one of four statutorily recognized options for the provision of video programming services by local exchange carriers. The OVS framework provides opportunities for the distribution of video programming other than through cable systems. OVS operators provide subscription services and therefore fall within the SBA small business size standard for the cable services industry, which is "Wired Telecommunications Carriers." The SBA small business size standard for this industry classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year. Of this total, 2,964 firms operated with fewer than 250 employees. Thus, under the SBA size standard the majority of firms in this industry can be considered small. Additionally, we note that the Commission has certified some OVS operators who are now providing service and broadband service providers (BSPs) are currently the only significant holders of OVS certifications or local OVS franchises. The Commission does not have financial or employment information for the entities authorized to provide OVS however, the Commission believes some of the OVS operators may qualify as small entities.

⁴⁶ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁴⁷ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁴⁸ See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

⁴⁹ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁵⁰ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁵¹ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁵² See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

⁵³ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁵⁴ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

- 16. Broadband Radio Service and Educational Broadband Service. Broadband Radio Service systems, previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service (MMDS) systems, and "wireless cable," transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service (ITFS)). Wireless cable operators that use spectrum in the BRS often supplemented with leased channels from the EBS, provide a competitive alternative to wired cable and other multichannel video programming distributors. Wireless cable programming to subscribers resembles cable television, but instead of coaxial cable, wireless cable uses microwave channels. 57
- 17. In light of the use of wireless frequencies by BRS and EBS services, the closest industry with a SBA small business size standard applicable to these services is Wireless Telecommunications Carriers (*except* Satellite).⁵⁸ The SBA small business size standard for this industry classifies a business as small if it has 1,500 or fewer employees.⁵⁹ U.S. Census Bureau data for 2017 show that there were 2,893 firms that operated in this industry for the entire year.⁶⁰ Of this number, 2,837 firms employed fewer than 250 employees.⁶¹ Thus under the SBA size standard, the Commission estimates that a majority of licensees in this industry can be considered small.
- 18. According to Commission data as December 2021, there were approximately 5,869 active BRS and EBS licenses.⁶² The Commission's small business size standards with respect to BRS involves eligibility for bidding credits and installment payments in the auction of licenses for these services. For the auction of BRS licenses, the Commission adopted criteria for three groups of small businesses. A very small business is an entity that, together with its affiliates and controlling interests, has average annual gross revenues exceed \$3 million and did not exceed \$15 million for the preceding three years, a small business is an entity that, together with its affiliates and controlling interests, has

⁵⁵ The use of the term "wireless cable" does not imply that it constitutes cable television for statutory or regulatory purposes.

⁵⁶ See 47 CFR § 27.4; see also Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding, Report and Order, 10 FCC Rcd 9589, 9593, para. 7 (1995).

⁵⁷ Generally, a wireless cable system may be described as a microwave station transmitting on a combination of BRS and EBS channels to numerous receivers with antennas, such as single-family residences, apartment complexes, hotels, educational institutions, business entities and governmental offices. The range of the transmission depends upon the transmitter power, the type of receiving antenna and the existence of a line-of-sight path between the transmitter or signal booster and the receiving antenna.

⁵⁸ See U.S. Census Bureau, 2017 NAICS Definition, "517312 Wireless Telecommunications Carriers (except Satellite)," https://www.census.gov/naics/?input=517312&year=2017&details=517312.

⁵⁹ See 13 CFR § 121.201, NAICS Code 517312 (as of 10/1/22, NAICS Code 517112).

⁶⁰ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517312, https://data.census.gov/cedsci/table?y=2017&n=517312&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁶¹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁶² Based on a FCC Universal Licensing System search on December 10, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR, ED; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

average gross revenues exceed \$15 million and did not exceed \$40 million for the preceding three years, and an entrepreneur is an entity that, together with its affiliates and controlling interests, has average gross revenues not exceeding \$3 million for the preceding three years.⁶³ Of the ten winning bidders for BRS licenses, two bidders claiming the small business status won 4 licenses, one bidder claiming the very small business status won three licenses and two bidders claiming entrepreneur status won six licenses.⁶⁴ One of the winning bidders claiming a small business status classification in the BRS license auction has an active licenses as of December 2021.⁶⁵

- 19. The Commission's small business size standards for EBS define a small business as an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$55 million for the preceding five (5) years, and a very small business is an entity that, together with its affiliates, its controlling interests and the affiliates of its controlling interests, has average gross revenues that are not more than \$20 million for the preceding five (5) years. In frequency bands where licenses were subject to auction, the Commission notes that as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service. Further, the Commission does not generally track subsequent business size unless, in the context of assignments or transfers, unjust enrichment issues are implicated. Additionally, since the Commission does not collect data on the number of employees for licensees providing these services, at this time we are not able to estimate the number of licensees with active licenses that would qualify as small under the SBA's small business size standard.
- 20. Incumbent Local Exchange Carriers (Incumbent LECs). Neither the Commission nor the SBA have developed a small business size standard specifically for incumbent local exchange carriers. Wired Telecommunications Carriers⁶⁷ is the closest industry with an SBA small business size standard.⁶⁸ The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small.⁶⁹ U.S. Census Bureau data for 2017 show that there were 3,054 firms in this industry that operated for the entire year.⁷⁰ Of this number, 2,964 firms operated with fewer than 250 employees.⁷¹ Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 1,227 providers that reported they were incumbent local

⁶³ See 47 CFR § 27.1218(a).

⁶⁴ *See* Federal Communications Commission, Economics and Analytics, Auctions, Auction 86: Broadband Radio Service, Summary, Reports, All Bidders, https://www.fcc.gov/sites/default/files/wireless/auctions/86/charts/86bidder.xls.

⁶⁵ Based on a FCC Universal Licensing System search on December 10, 2021, https://wireless2.fcc.gov/UlsApp/UlsSearch/searchAdvanced.jsp. Search parameters: Service Group = All, "Match only the following radio service(s)", Radio Service =BR; Authorization Type = All; Status = Active. We note that the number of active licenses does not equate to the number of licensees. A licensee can have one or more licenses.

⁶⁶ See 47 CFR § 27.1219(a).

⁶⁷ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁶⁸ See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

⁶⁹ *Id*.

⁷⁰ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁷¹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

exchange service providers.⁷² Of these providers, the Commission estimates that 929 providers have 1,500 or fewer employees.⁷³ Consequently, using the SBA's small business size standard, the Commission estimates that the majority of incumbent local exchange carriers can be considered small entities.

- 21. Competitive Local Exchange Carriers (LECs). Neither the Commission nor the SBA has developed a size standard for small businesses specifically applicable to local exchange services. Providers of these services include several types of competitive local exchange service providers. He SBA small business size standard. The SBA small business size standard for Wired Telecommunications Carriers classifies firms having 1,500 or fewer employees as small. U.S. Census Bureau data for 2017 show that there were 3,054 firms that operated in this industry for the entire year. Of this number, 2,964 firms operated with fewer than 250 employees. Additionally, based on Commission data in the 2021 Universal Service Monitoring Report, as of December 31, 2020, there were 3,956 providers that reported they were competitive local exchange service providers. Of these providers, the Commission estimates that 3,808 providers have 1,500 or fewer employees. Consequently, using the SBA's small business size standard, most of these providers can be considered small entities.
- 22. Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing. This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment.⁸¹ Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment.⁸² The SBA small business size standard for this industry classifies businesses having 1,250 employees or less as small.⁸³ U.S. Census Bureau data for 2017 show that there were 656

⁷² Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/public/attachments/DOC-379181A1.pdf.

⁷³ *Id*.

⁷⁴ Competitive Local Exchange Service Providers include the following types of providers: Competitive Access Providers (CAPs) and Competitive Local Exchange Carriers (CLECs), Cable/Coax CLECs, Interconnected VOIP Providers, Non-Interconnected VOIP Providers, Shared-Tenant Service Providers, Audio Bridge Service Providers, Local Resellers, and Other Local Service Providers.

⁷⁵ See U.S. Census Bureau, 2017 NAICS Definition, "517311 Wired Telecommunications Carriers," https://www.census.gov/naics/?input=517311&year=2017&details=517311.

⁷⁶ See 13 CFR § 121.201, NAICS Code 517311(as of 10/1/22, NAICS Code 517111).

⁷⁷ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 517311, https://data.census.gov/cedsci/table?y=2017&n=517311&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁷⁸ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁷⁹ Federal-State Joint Board on Universal Service, Universal Service Monitoring Report at 26, Table 1.12 (2021), https://docs.fcc.gov/pubId.lic/attachments/DOC-379181A1.pdf.

⁸⁰ *Id*.

⁸¹ See U.S. Census Bureau, 2017 NAICS Definition, "334220 Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing," https://www.census.gov/naics/?input=334220&year=2017&details=334220.

⁸² *Id*.

⁸³ See 13 CFR § 121.201, NAICS Code 334220.

firms in this industry that operated for the entire year.⁸⁴ Of this number, 624 firms had fewer than 250 employees.⁸⁵ Thus, under the SBA size standard, the majority of firms in this industry can be considered small.

23. Audio and Video Equipment Manufacturing. This industry comprises establishments primarily engaged in electronic audio and video equipment for home entertainment, motor vehicles, and public address and musical instrument amplification. Examples of products made by these establishments are video cassette recorders, televisions, stereo equipment, speaker systems, household-type video cameras, jukeboxes, and amplifiers for musical instruments and public address systems. ⁸⁶ The SBA small business size standard for this industry classifies firms with 750 employees or less as small. ⁸⁷ According to 2017 U.S. Census Bureau data, 464 firms in this industry operated that year. ⁸⁸ Of this number, 399 firms operated with less than 250 employees. ⁸⁹ Based on this data and the associated SBA size standard, we conclude that the majority of firms in this industry are small.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements.

24. The Fourth FNPRM considers whether to adopt rules governing the RAND licensing of SEPs. The Fourth FNPRM does not propose any new reporting or recordkeeping requirements. In assessing the cost of compliance for small entities, at this time the Commission cannot quantify the cost of compliance with any of the potential rule changes that may be adopted. Further, the Commission is not in a position to determine whether, if adopted, the proposals and matters upon which we seek comment in the *Fourth FNPRM* will require small entities to hire professionals to comply. We expect the information we receive in comments including where requested, cost information, to help the Commission identify and evaluate relevant compliance matters for small entities, including compliance costs and other burdens that may result from potential changes discussed in the *Fourth FNPRM*.

E. Steps Taken to Minimize Significant Impact on Small Entities and Significant Alternatives Considered.

25. The RFA requires an agency to describe any significant alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account

⁸⁴ See U.S. Census Bureau, 2017 Economic Census of the United States, Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 334220, <a href="https://data.census.gov/cedsci/table?y=2017&n=334220&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.https://factfinder.census.gov/bkmk/table/1.0/en/ECN/2012 US/31SG2//naics~334220

⁸⁵ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard.

⁸⁶ See U.S. Census Bureau, 2017 NAICS Definition, "334310 Audio and Video Equipment Manufacturing," https://www.census.gov/naics/?input=334310&year=2017&details=334310.

⁸⁷ See 13 CFR 121.201, NAICS Code 334310.

⁸⁸ See U.S. Census Bureau, 2017 Economic Census of the United States, Selected Sectors: Employment Size of Firms for the U.S.: 2017, Table ID: EC1700SIZEEMPFIRM, NAICS Code 334310, https://data.census.gov/cedsci/table?y=2017&n=334310&tid=ECNSIZE2017.EC1700SIZEEMPFIRM&hidePreview=false.

⁸⁹ *Id.* The available U.S. Census Bureau data does not provide a more precise estimate of the number of firms that meet the SBA size standard. We also note that the U.S. Census Bureau withheld publication of the number of firms that operated for the entire year and the number of firms that operated with 5 to 9 employees, to avoid disclosing data for individual companies (see Cell Notes for "Firms operated for the entire year" and "Firms operated for the entire year with 5 to 9 employees"). Therefore, the number of firms with employees that meet the SBA size standard would be higher that noted herein.

the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for such small entities; (3) the use of performance, rather than design, standards; and (4) and exemption from coverage of the rule, or any part thereof, for such small entities."⁹⁰

- The Commission has authorized television broadcasters, including small entities, to use 26. the Next Gen TV (ATSC 3.0) standard on a voluntary, market-driven basis, allowing them to decide whether (and if so when) to deploy ATSC 3.0 service and bear the costs associated with such deployment. All stakeholders, including small entities, will need to undertake any costs or burdens associated with ATSC 3.0 service should they choose to do so. The Advanced Television Systems Committee (ATSC). which developed the ATSC 3.0 standard, requires patent owners to disclose that they hold essential patents and to commit to licensing them on RAND terms. In furthering our understanding of the current marketplace for ATSC 3.0 SEPs, we consider whether patentees, including small entities, are respecting these commitments and the challenges faced in court by the third parties seeking their enforcement. Among the alternatives we seek to consider is the degree to which the Commission should simply monitor the market or actively respond to license abuse and formalize RAND requirements for those who hold SEPs, including small entities. Where there are problems in the SEP marketplace that could be improved, we consider if the Commission were to adopt rules requiring RAND licensing of SEPs, where such rules would facilitate licensing by equipment manufacturers. We further consider how to minimize any adverse economic impact on the market, including small entities.
 - F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules
 - None.

⁹⁰ 5 U.S.C. §§ 603(c)(1)-(4).