



PUBLIC NOTICE

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AUCTION OF FLEXIBLE-USE SERVICE LICENSES IN THE 3.45–3.55 GHz BAND FOR NEXT-GENERATION WIRELESS SERVICES

NOTICE AND FILING REQUIREMENTS, MINIMUM OPENING BIDS, UPFRONT PAYMENTS, AND OTHER PROCEDURES FOR AUCTION 110

BIDDING IN AUCTION 110 SCHEDULED TO BEGIN OCTOBER 5, 2021

AU Docket No. 21-62

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I. GENERAL INFORMATION

A. Introduction

1. By this Public Notice, the Office of Economics and Analytics (OEA), jointly with the Wireless Telecommunications Bureau (WTB),¹ establishes the procedures to be used for Auction 110, the auction of new flexible-use licenses in the 3.45–3.55 GHz band (the 3.45 GHz Service). Auction 110 is the Commission’s third scheduled auction of mid-band spectrum, which is intended to further the deployment of fifth-generation (5G) wireless, the Internet of Things (IoT), and other advanced spectrum-based services across the country. With this Public Notice, we continue implementing Section 905 of the Consolidated Appropriations Act, 2021, which required the Commission to start an auction to grant new initial licenses subject to flexible use in the 3450-3550 MHz (3.45 GHz) band by December 31, 2021.²

¹ The Office of Economics and Analytics and the Wireless Telecommunications Bureau have delegated authority over auction design and implementation issues. 47 CFR §§ 0.21(m), 0.131(c). Nothing in this Public Notice raises new or novel questions of fact, law, or policy that cannot be resolved under existing precedents and guidelines. See 47 CFR § 0.271.

² Consolidated Appropriations Act, 2021, Pub. L. 116-260, Division FF, Title IX, Sec. 905.

2. The bidding for new licenses in Auction 110 is scheduled to commence on October 5, 2021. This Public Notice provides details regarding the procedures, terms, conditions, dates, and deadlines governing participation in Auction 110 bidding, as well as an overview of the post-auction application and payment processes.

B. Background and Relevant Authority

3. In the *3.45 GHz Second Report and Order*, the Commission made available 100 megahertz of spectrum in the 3.45–3.55 GHz band for licensed use within the contiguous United States.³ In that Order, the Commission allocated the 3.45–3.55 GHz band for new non-federal fixed and mobile (except aeronautical mobile) operations in the contiguous United States.⁴ Among other things, the Commission authorized both fixed and mobile operations in the 3.45–3.55 GHz band using geographic area licensing, established licensing and operating rules for the new 3.45 GHz Service, and decided to use its competitive bidding rules to assign 3.45 GHz Service licenses.⁵

4. On March 18, 2021, in accordance with section 309(j)(3) of the Communications Act of 1934, as amended (Communications Act),⁶ the Commission released a public notice seeking comment on certain competitive bidding procedures and various other procedures to be used in Auction 110.⁷ The Commission received comments from eight parties in response to the *Auction 110 Comment Public Notice*, and eight reply comments.⁸ In this Public Notice, we resolve all open issues raised in the *Auction 110 Comment Public Notice* and address the comments received.

5. Other Commission rules and decisions provide the underlying authority for the procedures we adopt today for Auction 110. Among other things, prospective applicants should familiarize themselves with the Commission's general competitive bidding rules,⁹ including recent amendments and clarifications thereto, as well as Commission decisions regarding competitive bidding procedures, application requirements, and obligations of Commission licensees.¹⁰ Prospective applicants

³ See generally *Facilitating Shared Use in the 3100-3550 MHz Band*, WT Docket No. 19-348, Second Report and Order, Order on Reconsideration, and Order of Proposed Modification, FCC 21-32 (Mar. 18, 2021) (*3.45 GHz Second Report & Order*).

⁴ *Id.* at 9-11, paras. 15-19.

⁵ See generally, *id.*

⁶ 47 U.S.C. § 309(j)(3)(E)(i) (requiring Commission to seek comment on proposed auction procedures); see also *id.* § 309(j)(4)(F) (authorizing Commission to prescribe reserve price or minimum bid); 47 CFR § 1.2104(c)-(d).

⁷ See *Auction of Flexible-Use Service Licenses in the 3.45–3.55 GHz Band for Next-Generation Wireless Services; Comment Sought on Competitive Bidding Procedures for Auction 110*, AU Docket No. 21-62, Public Notice, FCC 21-33 (Mar. 18, 2021) (*Auction 110 Comment Public Notice*). A summary of the *Auction 110 Comment Public Notice* was published in the Federal Register at 86 Fed. Reg. 18000 (Apr. 7, 2021).

⁸ These comments are available in AU Docket No. 21-62 in the Commission's Electronic Comment Filing System (ECFS). The ECFS home page is publicly accessible at www.fcc.gov/ecfs. We generally note in the context of discussing particular issues whether any commenter addressed those issues.

⁹ 47 CFR Part 1, Subpart Q.

¹⁰ See, e.g., *Updating Part 1 Competitive Bidding Rules; Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, WT Docket Nos. 14-170 and 05-211, GN Docket No. 12-268, RM-11395, Report and Order; Order on Reconsideration of the First Report and Order; Third Order on Reconsideration of the Second Report and Order; Third Report and Order, 30 FCC Rcd 7493 (2015) (*Updating Part 1 Report and Order*) (modified by Erratum, 30 FCC Rcd 8518 (2015)); *Amendment of Part 1 of the Commission's Rules—Competitive Bidding Procedures*, WT Docket No. 97-82, Order, Memorandum Opinion and Order and Notice of Proposed Rule Making, 12 FCC Rcd 5686 (1997) (*Part 1 Order*); Order on Reconsideration of the Third Report and Order, Fifth Report and Order, and Fourth Further Notice of Proposed Rule Making, 15 FCC Rcd 15293 (2000) (*Part 1 Fifth Report and Order*) (modified by Erratum, 15 FCC Rcd 21520 (2000)); Seventh Report and Order, 16 FCC Rcd

(continued....)

also should familiarize themselves with the Commission's rules regarding the 3.45 GHz Service, as well as the licensing and operating rules that are applicable to all part 27 services.¹¹ In addition, applicants must be thoroughly familiar with the procedures, terms, and conditions contained in this Public Notice and any future public notices that may be released in this proceeding.¹²

6. The terms contained in the Commission's rules, relevant orders, and public notices are not negotiable. The Commission may amend or supplement the information contained in its public notices at any time and will issue public notices to convey any new or supplemental generally applicable information to applicants. Pursuant to the Commission's rules, OEA and WTB also retain the authority to implement further procedures during the course of this auction.¹³ It is the responsibility of all applicants to remain current with all Commission rules and with all public notices pertaining to Auction 110.¹⁴

C. Description of Licenses to Be Offered in Auction 110

7. Auction 110 will offer 4,060 new flexible-use licenses for spectrum in the 3.45–3.55 GHz band throughout the contiguous United States. The 100 megahertz of spectrum in this band will be licensed on an unpaired basis and divided into ten 10-megahertz blocks in partial economic area (PEA)-based geographic areas located in the contiguous 48 states and the District of Columbia (PEAs 1–41, 43–211, 213–263, 265–297, 299–359, and 361–411).¹⁵ These 10-megahertz blocks are designated as A through J.

8. All 3.45 GHz Service licenses will be issued for 15-year, renewable license terms,¹⁶ and certain licenses are subject to cooperative sharing requirements, as described in the *3.45 GHz Second* (Continued from previous page)

17546 (2001) (*Part 1 Seventh Report and Order*); Eighth Report and Order, 17 FCC Rcd 2962 (2002); Second Order on Reconsideration of the Third Report and Order and Order on Reconsideration of the Fifth Report and Order, 18 FCC Rcd 10180 (2003) (*Part 1 Third R&O Second Recon/Part 1 Fifth R&O Recon*); Second Order on Reconsideration of the Fifth Report and Order, 20 FCC Rcd 1942 (2005) (*Part 1 Fifth R&O Second Recon*).

¹¹ See generally 47 CFR § 2.106 US431B, Part 27, Subpart Q. US431B and sections of Part 27 applicable to the 3.45 GHz Service will become effective June 7, 2021, see Federal Communications Commission, Facilitating Use in the 3100-3550 MHz Band, 86 Fed. Reg. 17920 (Apr. 7, 2021) (3.45 GHz Rules Federal Register Publication).

¹² OEA and WTB adopted in a separate Public Notice a requirement that each applicant certify, under penalty of perjury, “that the applicant has read the public notice adopting procedures for the auction and that it has familiarized itself both with the auction procedures and with the requirements for obtaining a license and operating facilities in the 3.45–3.55 GHz band.” *Certification Adopted for Auction of Flexible-Use Service Licenses in the 3.45–3.55 GHz Band for Next-Generation Wireless Services (Auction 110)*, AU Docket No. 21-62, DA 21-567, at 3, para. 7 (OEA/WTB Mar. 18, 2021) (*Auction 110 Certification Requirement Public Notice*). This certification requirement was proposed in the *Auction 110 Comment Public Notice*. *Auction 110 Comment Public Notice*, at 6, para. 12. This requirement is subject to approval by the Office of Management and Budget (OMB), pursuant to the Paperwork Reduction Act of 1995, Public Law 104-13. 44 U.S.C. §§ 3501, et seq. The certification requirement will therefore apply to Auction 110 only if it has been approved by OMB and notice of such approval has been published in the Federal Register prior to the opening of the short-form application window for Auction 110.

¹³ See generally 47 CFR §§ 0.21(m), 0.131(c).

¹⁴ Copies of most auctions-related Commission documents, including public notices, can be retrieved from the Commission's FCC Auctions Internet site at www.fcc.gov/auctions. Additionally, documents are available at the Commission's headquarters during normal business hours when the building is open to the public.¹⁴ Contact Auctions Division staff at au110@fcc.gov or (202) 418-0660 for guidance. See Section VI (Procedural Matters), below.

¹⁵ *3.45 GHz Second Report & Order* at 2, 22, 37-38, paras. 1, 58, 108-09. At this time, the Commission will not issue flexible-use licenses for the following PEAs: Honolulu, Anchorage, Kodiak, Fairbanks, Juneau, Puerto Rico, Guam-Northern Mariana Islands, U.S. Virgin Islands, American Samoa, and the Gulf of Mexico (PEAs numbers 42, 212, 264, 298, 360, 412–416). *Id.* at 38, para. 111.

¹⁶ See *id.* at 39, para. 113.

*Report and Order*¹⁷ and below,¹⁸ as well as any other conditions that may be established in related proceedings.¹⁹ Interested parties will be able to find additional information about the cooperative sharing requirements, including information about the encumbrances in specific PEAs, on the National Telecommunications and Information Administration’s (NTIA) 3450-3550 MHz webpage at <https://www.ntia.doc.gov/category/3450-3550-mhz>. Interested parties can also find additional guidance and information on federal/non-federal coordination procedures in the public notice issued jointly by NTIA and the Commission.²⁰ We understand that the Department of Defense (DoD) will hold one or more workshops to provide further information on transition and coordination plans, as well as guidance on anticipated received power levels from the DoD’s high-powered operations, methods and means for sharing proprietary and classified information (e.g., through “Trusted Agents”), and descriptions of potential national emergency scenarios.²¹

9. Licensees may hold up to four 10-megahertz blocks (out of a total of ten) in the 3.45–3.55 GHz band within any PEA at any given time for the first four years after the close of the auction.²² A licensee in the 3.45–3.55 GHz band may provide any services permitted under terrestrial fixed or mobile, except aeronautical mobile, allocations (as set forth in the non-Federal Government column of the Table of Frequency Allocations in section 2.106 of the Commission’s rules, as modified by the *3.45 GHz Second Report and Order*), so long as it complies with the relevant licensing, operating, and technical rules.²³

D. Auction Specifics

1. Auction Title and Start Date

10. The auction of licenses in the 3.45–3.55 GHz band will be referred to as “Auction 110.” Bidding in Auction 110 will begin on Tuesday, October 5, 2021. Pre-bidding dates and deadlines are listed below. The initial schedule for bidding rounds in Auction 110 will be announced by public notice at least one week before bidding begins.

11. The Rural Wireless Association, Inc. (RWA) and the Blooston Rural Carriers (Blooston) argue that the timeline for Auction 110 is “too aggressive given the recent C-band auction” and that the short-form deadline for Auction 110 should be delayed until the end of the first quarter of 2022.²⁴ We disagree. When establishing an auction schedule, including its proximity to other Commission auctions, we must balance a number of potentially competing statutory objectives.²⁵ The roughly four months between the March 24, 2021, deadline for final payments in Auction 107²⁶ and the July 21, 2021, short-

¹⁷ See *id.* at 5-6, 11-14, paras. 8-9, 21, 23-25.

¹⁸ See Section III.B.1.a (Cooperative Sharing in the 3.45–3.55 GHz Band).

¹⁹ See Section III.B.1.b (AIA Petition’s for Reconsideration and Lockheed Martin Corporation’s Waiver Request), below.

²⁰ See *The Federal Communications Commission and the National Telecommunications and Information Administration: Coordination Procedures in the 3.45–3.55 Band*, WT Docket No. 19-348, Public Notice, DA 21-645 (WTB Jun. 2, 2021) (*Joint Coordination Public Notice*).

²¹ See *3.45 GHz Second Report & Order* at 23, para. 56.

²² See *id.* at 35-38, paras. 99-104.

²³ See *id.* at 9-10, paras. 17-19; see also 47 CFR § 2.106.

²⁴ The Rural Wireless Association, Inc. Comments (RWA Comments) at 1-3; see also The Blooston Rural Carriers Reply at 2-3.

²⁵ See 47 U.S.C. § 309(j)(3)(A)-(F).

²⁶ *Auction of Flexible-Use Service Licenses in the 3.7–3.98 GHz Band for Next-Generation Wireless Services; Winning Bidders Announced*, AU Docket No. 20-25, Public Notice, DA 21-207, at 4, para. 14 (Feb. 24, 2021).

form application deadline for Auction 110 that we adopt here is not only consistent with the Commission's historical timing between spectrum auctions,²⁷ it is actually considerably longer than the period between most recent spectrum auctions. The short-form application deadline for Auction 103²⁸ was roughly two months after the deadline for final payments in Auction 102,²⁹ while the short-form deadline for Auction 105³⁰ was less than one month after the final payment deadline for Auction 103.³¹ Also, the deadline for final payments in Auction 105,³² which, like Auctions 107 and 110 involved mid-band spectrum, occurred two weeks *after* the deadline for short-form applications in Auction 107.³³ Neither RWA nor Blooston have made any attempt to explain how this auction differs from previous spectrum auctions such that potential applicants need an entire year³⁴ to prepare for Auction 110. We therefore decline their requests to delay the short-form application deadline and will commence bidding in Auction 110 on October 5, 2021.

12. Unless otherwise announced, bidding on all licenses will be conducted on each business day until bidding has stopped on all licenses.

2. Auction Dates and Deadlines

13. The following dates and deadlines apply to Auction 110:

²⁷ For example, the November 5, 2013, short-form application deadline for Auction 96 was roughly two months after the September 9, 2013, deadline for final payments in Auction 95. *See Auction of H Block Licenses in the 1915–1920 MHz and 1995–2000 MHz Bands Scheduled for January 14, 2014; Notice and Filing Requirements, Reserve Price, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 96*, AU Docket No. 13-178, Public Notice, 28 FCC Rcd 13019, 13035, para. 54 (WTB 2013) (announcing a short-form application deadline of Nov. 5, 2013) (*Auction 96 Procedures Public Notice*); *cf. Auction of Lower and Upper Paging Bands Licenses Closes; Winning Bidders Announced for Auction 95*, Public Notice, 28 FCC Rcd 11848, 11849-50, paras. 7-8 (WTB 2013) (announcing a final payment deadline of September 9, 2013).

²⁸ *Incentive Auction of Upper Microwave Flexible Use Service Licenses in the Upper 37 GHz, 39 GHz, and 47 GHz Bands for Next-Generation Wireless Services; Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 103; Bidding in Auction 103 Scheduled to Begin December 10, 2019*, AU Docket No. 19-59, GN Docket No. 14-177, Public Notice, 34 FCC Rcd 5532, 5538, para. 11 (2019) (*Auction 103 Procedures Public Notice*) (announcing a short-form application deadline of August 26, 2019).

²⁹ *Auction of 24 GHz Upper Microwave Flexible Use Service Licenses Closes; Winning Bidders Announced for Auction 102*, AU Docket No. 18-85, Public Notice, 34 FCC Rcd 4294, 4297, para. 12 (WTB 2019) (announcing a final payment deadline of July 1, 2019).

³⁰ *Auction of Priority Access Licenses for the 3550–3650 MHz Band Rescheduled to Begin July 23, 2020; Auction 105 Short-Form Application Deadline Postponed to May 7, 2020*, AU Docket No. 19-244, Public Notice, 35 FCC Rcd 2891, para. 2 (OEA/WTB 2020) (announcing a short-form application deadline of May 7, 2020).

³¹ *Incentive Auction of Upper Microwave Flexible Use Service Licenses in the Upper 37 GHz, 39 GHz, and 47 GHz Bands for Next-Generation Wireless Services Closes; Winning Bidders Announced for Auction 103*, AU Docket No. 19-59, Public Notice, 35 FCC Rcd 2015, 2021, para. 21 (OEA/WTB 2020) (announcing a final payment deadline of April 9, 2020).

³² *Auction of Priority Access Licenses in the 3550-3650 MHz Band Closes; Winning Bidders Announced for Auction 105*, AU Docket No. 19-244, Public Notice, 35 FCC Rcd 9287, 9290, para. 13 (Sep. 2, 2020) (OEA/WTB 2020) (announcing a final payment deadline of October 1, 2020) (*Auction 105 Closing Public Notice*).

³³ *Auction of Flexible-Use Service Licenses in the 3.7–3.98 GHz Band for Next-Generation Wireless Services; Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 107; Bidding in Auction 107 Scheduled to Begin December 8, 2020*, AU Docket No. 20-25, Public Notice, 35 FCC Rcd 8404, 8408-09, para. 11 (2020) (*Auction 107 Procedures Public Notice*) (announcing a short-form application deadline of September 22, 2020).

³⁴ Both the *3.45 GHz Second Report and Order* and the *Auction 110 Comment Public Notice* informing the public of the Commission's intent to auction licenses in the 3.45–3.55 GHz band were released on March 18, 2021.

Auction Application Tutorial Available (via Internet).....	No later than June 22, 2021
Short-Form Application (FCC Form 175)	
Filing Window Opens.....	July 8, 2021, 12:00 p.m. Eastern Time (ET)
Short-Form Application (FCC Form 175)	
Filing Window Deadline	July 21, 2021, 6:00 p.m. ET
Upfront Payments (via wire transfer)	September 2, 2021, 6:00 p.m. ET
Bidding Tutorial Available (via Internet)	No later than September 16, 2021
Mock Auction.....	September 30, 2021
Bidding Begins in Auction 110	October 5, 2021

3. Requirements for Participation

14. Those wishing to participate in Auction 110 must:

- Submit a short-form application (FCC Form 175) electronically prior to 6:00 p.m. ET on July 21, 2021, following the electronic filing procedures set forth in the FCC Form 175 Instructions.³⁵
- Submit a sufficient upfront payment and an FCC Remittance Advice Form (FCC Form 159) by 6:00 p.m. ET on September 2, 2021, following the procedures and instructions set forth in the FCC Form 159 Instructions.
- Comply with all provisions outlined in this Public Notice and applicable Commission rules.

II. APPLYING TO PARTICIPATE IN AUCTION 110

A. General Information Regarding Short-Form Applications

15. An application to participate in Auction 110, referred to as a short-form application or FCC Form 175, provides information that the Commission uses to determine whether the applicant has the legal, technical, and financial qualifications to participate in a Commission auction for spectrum licenses.³⁶ The short-form application is the first part of the Commission's two-phased auction application process. In the first phase, a party seeking to participate in Auction 110 must file a short-form application in which it certifies, under penalty of perjury, that it is qualified to participate.³⁷ Eligibility to participate in Auction 110 is based on an applicant's short-form application and certifications and on the applicant's submission of a sufficient upfront payment for the auction.³⁸ After bidding closes, in the second phase of the process, each winning bidder must file a more comprehensive post-auction, long-form application (FCC Form 601) for the licenses it wins in the auction, and it must have a complete and accurate ownership disclosure information report (FCC Form 602) on file with the Commission.³⁹

³⁵ OEA will prepare and make publicly available detailed instructions for submitting an FCC Form 175 for Auction 110 (FCC Form 175 Instructions) in the Education section of the Auction 110 website at www.fcc.gov/auction/110.

³⁶ See 47 CFR § 1.2105; see also *Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, PP Docket No. 93-253, Second Report and Order, 9 FCC Rcd 2348, 2376-77, para. 166 (1994) (*Competitive Bidding Second Report and Order*).

³⁷ *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2376, para. 165.

³⁸ See Section III.F (Upfront Payments), below.

³⁹ 47 CFR § 1.2107. We remind applicants that being deemed qualified to bid in Auction 110 does not constitute a determination that a party is qualified to hold a Commission license or is eligible for a designated entity bidding credit.

16. A party seeking to participate in Auction 110 must file an FCC Form 175 electronically via the Auction Application System prior to 6:00 p.m. ET on July 21, 2021, following the procedures prescribed in the FCC Form 175 Instructions. If an applicant claims eligibility for a bidding credit, then the information provided in its FCC Form 175 as of the filing date will be used to determine whether the applicant may request the claimed bidding credit. Below we describe more fully the information disclosures and certifications required in the short-form application. An applicant that files an FCC Form 175 for Auction 110 will be subject to the Commission's rule prohibiting certain communications.⁴⁰ An applicant is subject to the prohibition beginning at the deadline for filing short-form applications—6:00 p.m. ET on July 21, 2021.⁴¹

17. An applicant bears full responsibility for submitting an accurate, complete, and timely short-form application. Pursuant to the Commission's competitive bidding rules, each applicant must make a series of certifications under penalty of perjury on its FCC Form 175 related to the information provided in its application and its participation in the auction, and it must confirm that it is legally, technically, financially, and otherwise qualified to hold a license.⁴² Additionally, each participant in Auction 110 must certify that it has read this Public Notice and has familiarized itself both with the auction procedures and with the requirements for obtaining a license and operating facilities in the 3.45–3.55 GHz band).⁴³ If an Auction 110 applicant fails to make the required certifications in its FCC Form 175 by the filing deadline, then its application will be deemed unacceptable for filing and cannot be corrected after the filing deadline.⁴⁴

18. An applicant should note that submitting an FCC Form 175 (and any amendments thereto) constitutes a representation by the certifying official that he or she is an authorized representative of the applicant with authority to bind the applicant, that he or she has read the form's instructions and certifications, and that the contents of the application, its certifications, and any attachments are true and correct.⁴⁵ Submitting a false certification to the Commission may result in penalties, including monetary forfeitures, license forfeitures, ineligibility to participate in future auctions, and/or criminal prosecution.

19. Applicants are cautioned that, because the required information submitted in FCC Form 175 bears on each applicant's qualifications, requests for confidential treatment will not be routinely granted. The Commission generally has held that it may publicly release confidential business information where the party has put that information at issue in a Commission proceeding or where the Commission has identified a compelling public interest in disclosing the information.⁴⁶ In this regard, the Commission specifically has held that information submitted in support of receiving bidding credits in auction proceedings should be made available to the public.⁴⁷

⁴⁰ *Id.* § 1.2105(c).

⁴¹ The prohibition will end for applicants on the post-auction down payment deadline for Auction 110. *See* Section II.G.2 (Prohibition Applies Until Down Payment Deadline), below.

⁴² 47 CFR § 1.2105(a)(2).

⁴³ *See generally, Auction 110 Certification Requirement Public Notice.*

⁴⁴ *See* 47 CFR § 1.2105(b)(1).

⁴⁵ As more fully explained below in Section II.K (Modifications to FCC Form 175), applicants are not permitted to make major modifications to their FCC Form 175 applications after the filing deadline. *See* 47 CFR § 1.2105(b)(2). A change in the required certifications is considered a major change and would therefore not be permitted.

⁴⁶ *See Examination of Current Policy Concerning Treatment of Confidential Information Submitted to the Commission*, GC Docket No. 96-55, Report and Order, 13 FCC Rcd 24816, 24822-23, para. 8 (1998).

⁴⁷ *See, e.g., SAL Spectrum, LLC—Request for Confidential Treatment of Subscriber Information Provided in FCC Form 175*, Letter Order, 31 FCC Rcd 3726 (WTB 2016) (denying a request for confidentiality of the number of

20. An applicant must designate between one and three individuals as authorized bidders in its FCC Form 175. The Commission's rules prohibit an individual from serving as an authorized bidder for more than one auction applicant.⁴⁸

21. No individual or entity may file more than one short-form application or have a controlling interest in more than one short-form application.⁴⁹ If a party submits multiple short-form applications for an auction, then only one application may form the basis for that party to become qualified to bid in that auction.⁵⁰

22. Similarly, and consistent with the Commission's general prohibition on joint bidding agreements, a party generally is permitted to participate in a Commission auction only through a single bidding entity.⁵¹ Accordingly, the filing of applications in Auction 110 by multiple entities controlled by the same individual or set of individuals generally will not be permitted.⁵² As noted by the Commission in adopting the prohibition on applications by commonly controlled entities, this rule, in conjunction with the prohibition against joint bidding agreements, protects the competitiveness of the Commission's auctions.⁵³

23. After the initial short-form application filing deadline, Commission staff will review all timely submitted applications for Auction 110 to determine whether each application complies with the application requirements and whether the applicant has provided all required information concerning its qualifications for bidding. After this review is completed, a public notice will be released announcing the status of applications and identifying the applications that are complete and those that are incomplete because of minor defects that may be corrected. That public notice also will establish an application resubmission filing window, during which an applicant may make permissible minor modifications to its application to address identified deficiencies.⁵⁴ The public notice will include the deadline for resubmitting modified applications. To become a qualified bidder, an applicant must have a complete application (i.e., have timely filed an application that is deemed complete after the deadline for correcting any identified deficiencies), and must make a timely and sufficient upfront payment. Qualified bidders will be identified by public notice at least 10 days prior to the mock auction.

24. We discuss below additional details regarding certain information required to be submitted in the FCC Form 175. An applicant should consult the Commission's rules to ensure that, in addition to the materials described below, all required information is included in its short-form application. To the extent the information in this Public Notice does not address a potential applicant's specific operating structure, or if the applicant needs additional information or guidance concerning the

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wireless, wireline, broadband, and cable subscribers submitted by an applicant for only those affiliates operating in the United States).

⁴⁸ See 47 CFR § 1.2105(a)(2)(iii).

⁴⁹ See *id.* § 1.2105(a)(3); see also *Updating Part 1 Report and Order*, 30 FCC Rcd at 7579, para. 205.

⁵⁰ See 47 CFR § 1.2105(a)(3), (b)(1)(ii).

⁵¹ See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7580-81, paras. 206-08.

⁵² See 47 CFR § 1.2105(a)(3), (a)(4)(i), (b)(1)(ii); *Updating Part 1 Report and Order*, 30 FCC Rcd at 7580-81, paras. 206-08. This restriction applies across all applications, without regard to the geographic areas selected. See *id.* at 7580, para. 206. The Commission adopted a limited exception to the general prohibition on the filing of multiple applications by commonly controlled entities for qualified rural wireless partnerships and individual members of such partnerships. See 47 CFR § 1.2105(a)(3). Under this limited exception, each qualifying rural wireless partnership and its individual members will be permitted to participate separately in an auction. See *id.*; see also *Updating Part 1 Report and Order*, 30 FCC Rcd at 7582, para. 210.

⁵³ See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7580, para. 206.

⁵⁴ 47 CFR § 1.2105(b)(2).

described disclosure requirements, the applicant should review the educational materials for Auction 110 (see the Education section of the Auction 110 website at www.fcc.gov/auction/110) and/or use the contact information provided in this Public Notice to consult with Commission staff to better understand the information it must submit in its short-form application.

B. License Area Selection

25. An applicant must select all of the license areas on which it may want to bid from the list of available PEAs on its FCC Form 175. An applicant must carefully review and verify its PEA selections before the FCC Form 175 filing deadline because those selections cannot be changed after the auction application filing deadline.⁵⁵ An applicant is not required to place bids on any or all of the license areas selected, but the FCC Auction Bidding System (bidding system) will not accept bids for blocks located in PEAs that the applicant did not select in its FCC Form 175. The auction application system, however, will provide an applicant the option to select all 406 available PEAs at one time using an “all PEAs” feature.

C. Disclosure of Agreements and Bidding Arrangements

26. An applicant must provide in its FCC Form 175 a brief description of, and identify each party to, any partnerships, joint ventures, consortia or agreements, arrangements, or understandings of any kind relating to the licenses being auctioned, including any agreements that address or communicate directly or indirectly bids (including specific prices), bidding strategies (including the specific licenses on which to bid or not to bid), or the post-auction market structure, to which the applicant, or any party that controls or is controlled by the applicant, is a party.⁵⁶ In connection with the agreement disclosure requirement, the applicant must certify under penalty of perjury in its FCC Form 175 that it has described, and identified each party to, any such agreements, arrangements, or understandings to which it (or any party that controls it or that controls) is a party.⁵⁷ If, after the FCC Form 175 filing deadline, an auction applicant enters into any agreement relating to the licenses being auctioned, then it is subject to these same disclosure obligations. Each applicant must maintain the accuracy and completeness of the information in its pending auction application.⁵⁸

27. For purposes of making the required agreement disclosures on the FCC Form 175, if parties agree in principle on all material terms prior to the application filing deadline, then each party to the agreement that is submitting an auction application must provide a brief description of, and identify the other party or parties to, the agreement on its respective FCC Form 175,⁵⁹ even if the agreement has not been reduced to writing.⁶⁰ Parties that have not agreed in principle by the FCC Form 175 filing deadline should not describe, or include the names of parties to, the discussions on their applications.⁶¹

⁵⁵ *Id.*

⁵⁶ *Id.* § 1.2105(a)(2)(viii), (a)(4). As defined for purposes of this rule, a controlling interest includes all individuals or entities with positive or negative *de jure* or *de facto* control of the applicant. *See id.* § 1.2105(a)(4)(i). This definition is modeled on a similar term used in section 1.2110(c) (definitions for designated entities), though it differs in some respects from that rule. *Compare id.* § 1.2105(a)(4)(i) *with id.* § 1.2110(c)(2).

⁵⁷ *Id.* § 1.2105(a)(2)(viii). As discussed below, an applicant may continue negotiating, discussing, or communicating with respect to a new agreement after the FCC Form 175 filing deadline, provided that the communications involved do not relate both to the licenses being auctioned and to bids or bidding strategies or post-auction market structure. *See* Section II.G.3 (Scope of Prohibition on Certain Communications; Prohibition on Joint Bidding Agreements), below.

⁵⁸ 47 CFR § 1.65; *see also id.* § 1.2105(b)(4).

⁵⁹ 47 CFR § 1.2105(a)(2)(viii), (c)(1).

⁶⁰ *See Wireless Telecommunications Bureau Clarifies Spectrum Auction Anti-Collusion Rules*, Public Notice, 11 FCC Rcd 9645, 9646 (WTB 1995) (clarifying standard for determining when a disclosable agreement exists,

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28. The Commission's rules generally prohibit joint bidding and other arrangements involving auction applicants (including any party that controls or is controlled by such applicants).⁶² For purposes of the prohibition, a joint bidding arrangement includes any arrangement relating to the licenses being auctioned that addresses or communicates, directly or indirectly, bidding at the auction, bidding strategies, including arrangements regarding price or the specific licenses on which to bid, and any such arrangement relating to the post-auction market structure.⁶³

29. This prohibition applies to joint bidding arrangements involving two or more nationwide providers,⁶⁴ as well as joint bidding arrangements involving a nationwide provider and one or more non-nationwide providers,⁶⁵ where at least one party to the arrangement is an applicant for the auction.⁶⁶ In the *Updating Part 1 Report and Order*, the Commission stated that entities that qualify as nationwide providers generally would be identified in procedures public notices released before each auction.⁶⁷ To that end, and consistent with the Commission's decisions in recent spectrum auctions,⁶⁸ we consider AT&T, T-Mobile, and Verizon to be "nationwide providers" for the purpose of implementing the competitive bidding rules in Auction 110.⁶⁹

30. Under certain circumstances, a non-nationwide provider may enter into an agreement to form a consortium or a joint venture (as applicable) that results in a single party applying to participate in an auction.⁷⁰ Specifically, a designated entity (DE) can participate in one consortium or joint venture in an auction,⁷¹ and non-nationwide providers that are not designated entities may participate in an auction through only one joint venture.⁷² A non-nationwide provider may enter into only one agreement to form a

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discussed in connection with an earlier version of section 1.2105 of the Commission's rules).

⁶¹ See *id.*

⁶² See 47 CFR § 1.2105(a)(2)(ix); see also *Updating Part 1 Report and Order*, 30 FCC Rcd at 7569-77, paras. 177-99.

⁶³ See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7575, para. 195.

⁶⁴ *Id.* at 7571, 7573, paras. 182, 186.

⁶⁵ A "non-nationwide provider" refers to any provider of communications services that is not a "nationwide provider." See *id.*

⁶⁶ See 47 CFR § 1.2105(a)(2)(ix); see also *Updating Part 1 Report and Order*, 30 FCC Rcd at 7574-75, paras. 191-193.

⁶⁷ *Updating Part 1 Report and Order*, 30 FCC Rcd at 7571, para. 182 n.596.

⁶⁸ See, e.g., *Auctions of Upper Microwave Flexible Use Licenses for Next-Generation Wireless Services; Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auctions 101 (28 GHz) and 102 (24 GHz); Bidding in Auction 101 Scheduled to Begin November 14, 2018*, AU Docket No. 18-85, Public Notice, 33 FCC Rcd 7575, 7593, para. 44 (2018) (*Auctions 101 and 102 Procedures Public Notice*); *Auction 103 Procedures Public Notice*, 34 FCC Rcd at 5547, para. 43; *Auction 107 Procedures Public Notice*, 35 FCC Rcd at 8413, para. 27.

⁶⁹ *Auction 110 Comment Public Notice* at 10, para. 21.

⁷⁰ See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7573-74, 7576, paras. 187, 190, 198. While two or more non-nationwide providers may participate in an auction through a joint venture, a nationwide and a non-nationwide provider may not do so. See *id.* at 7575, para. 194.

⁷¹ See *id.* at 7576-77, para. 198. Pursuant to section 1.2105(a)(4)(ii), a consortium is an entity formed to apply as a single applicant to bid at auction pursuant to an agreement by two or more separate and distinct legal entities that individually are eligible to claim the same designated entity benefits under section 1.2110, provided that no member of the consortium may be a nationwide provider. 47 CFR § 1.2105(a)(4)(ii).

⁷² See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7576-77, para. 198. Under the Commission's rules, a
(continued....)

consortium or joint venture (as applicable), and such consortium or joint venture shall be the exclusive bidding vehicle for its members in the auction.⁷³ The general prohibition on joint bidding arrangements excludes certain agreements, including those that are solely operational in nature,⁷⁴ as defined in section 1.2105(a)(2)(ix)(A)-(C) of the Commission's rules.⁷⁵

31. To implement the prohibition on joint bidding arrangements, the Commission's rules require each applicant to certify in its short-form application that it has disclosed any arrangements or understandings of any kind relating to the licenses being auctioned to which it (or any party that controls or is controlled by it) is a party.⁷⁶ The applicant must also certify that it (or any party that controls or is controlled by it) has not entered and will not enter into any arrangement or understanding of any kind relating directly or indirectly to bidding at auction with, among others, any other applicant or a nationwide provider.⁷⁷

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 joint venture means a legally cognizable entity formed to apply as a single applicant to bid at auction pursuant to an agreement by two or more separate and distinct legal entities, provided that no member of the joint venture may be a nationwide provider. 47 CFR § 1.2105(a)(4)(iii); *see also Updating Part 1 Report and Order*, 30 FCC Rcd at 7575, para. 194.

⁷³ *Updating Part 1 Report and Order*, 30 FCC Rcd at 7576-77, para. 198.

⁷⁴ *See* 47 CFR § 1.2105(a)(2)(ix)(A). Under the Commission's rules, agreements that are solely operational in nature are those that address operational aspects of providing a mobile service, such as agreements for roaming, device acquisition, and spectrum leasing and other spectrum use arrangements, provided that any such agreement does not both relate to the licenses at auction and address or communicate, directly or indirectly, bidding at auction (including specific prices to be bid) or bidding strategies (including the specific licenses on which to bid or not to bid) or post-auction market structure. *See id.* § 1.2105(a)(4); *see also Updating Part 1 Report and Order*, 30 FCC Rcd at 7576, para. 197.

⁷⁵ *See* 47 CFR § 1.2105(a)(2)(ix); *see also Updating Part 1 Report and Order*, 30 FCC Rcd at 7575-76, paras. 195-97.

⁷⁶ 47 CFR § 1.2105(a)(2)(viii).

⁷⁷ "The short-form application must contain . . .

(viii) Certification that the applicant has provided in its application a brief description of, and identified each party to, any partnerships, joint ventures, consortia or other agreements, arrangements or understandings of any kind relating to the licenses being auctioned, including any agreements that address or communicate directly or indirectly bids (including specific prices), bidding strategies (including the specific licenses on which to bid or not to bid), or the post-auction market structure, to which the applicant, or any party that controls as defined in paragraph (a)(4) of this section or is controlled by the applicant, is a party.

(ix) Certification that the applicant (or any party that controls as defined in paragraph (a)(4) of this section or is controlled by the applicant) has not entered and will not enter into any partnerships, joint ventures, consortia or other agreements, arrangements, or understandings of any kind relating to the licenses being auctioned that address or communicate, directly or indirectly, bidding at auction (including specific prices to be bid) or bidding strategies (including the specific licenses on which to bid or not to bid), or post-auction market structure with: any other applicant (or any party that controls or is controlled by another applicant); with a nationwide provider that is not an applicant (or any party that controls or is controlled by such a nationwide provider); or, if the applicant is a nationwide provider, with any non-nationwide provider that is not an applicant (or with any party that controls or is controlled by such a non-nationwide provider), other than:

(A) Agreements, arrangements, or understandings of any kind that are solely operational as defined under paragraph (a)(4) of this section;

(B) Agreements, arrangements, or understandings of any kind to form consortia or joint ventures as defined under paragraph (a)(4) of this section;

(continued...)

32. Although the Commission's rules do not prohibit auction applicants from communicating about matters that are within the scope of an excepted agreement that has been disclosed in an FCC Form 175,⁷⁸ the Commission reminds applicants that certain discussions or exchanges could nonetheless touch upon impermissible subject matters,⁷⁹ and that compliance with the Commission's rules will not insulate a party from enforcement of the antitrust laws.⁸⁰

33. Applicants should bear in mind that a winning bidder will be required to disclose in its FCC Form 601 post-auction application the specific terms, conditions, and parties involved in any agreement relating to the licenses being auctioned into which it had entered prior to the time bidding was completed.⁸¹ This applies to any bidding consortium, joint venture, partnership, or other agreement, arrangement, or understanding of any kind entered into relating to the competitive bidding process, including any agreements relating to the licenses being auctioned that address or communicate directly or indirectly bids (including specific prices), bidding strategies (including the specific licenses on which to bid or not to bid), or the post-auction market structure, to which the applicant, or any party that controls or is controlled by the applicant, is a party.⁸²

D. Ownership Disclosure Requirements

34. Each applicant must comply with the applicable Part 1 ownership disclosure requirements and provide information required by sections 1.2105 and 1.2112, and, where applicable, section 1.2110, of the Commission's rules.⁸³ Specifically, in completing FCC Form 175, an applicant must fully disclose information regarding the real party- or parties-in-interest in the applicant or application and the ownership structure of the applicant, including both direct and indirect ownership interests of 10% or more, as prescribed in sections 1.2105 and 1.2112 and, where applicable, section 1.2110 of the Commission's rules.⁸⁴ Each applicant is responsible for ensuring that information submitted in its short-form application is complete and accurate.

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(C) Agreements, arrangements or understandings of any kind with respect to the transfer or assignment of licenses, provided that such agreements, arrangements or understandings do not both relate to the licenses at auction and address or communicate, directly or indirectly, bidding at auction (including specific prices to be bid), or bidding strategies (including the specific licenses on which to bid or not to bid), or post-auction market structure.”

47 CFR § 1.2105(a)(2)(viii)-(ix); *see also Updating Part 1 Report and Order*, 30 FCC Rcd at 7570-78, paras. 180-201.

⁷⁸ 47 CFR § 1.2105(a)(2)(viii), (a)(2)(ix)(A)-(C), (c)(1).

⁷⁹ *See Amendment of Part 1 of the Commission's Rules—Competitive Bidding Procedures*, Third Report and Order and Second Further Notice of Proposed Rule Making, 13 FCC Rcd 374, 467-68, para. 163 (1997) (*Part 1 Third Report and Order*); *see generally Guidance Regarding the Prohibition of Certain Communications During the Incentive Auction, Auction 1000*, AU Docket No. 14-252, GN Docket No. 12-269, WT Docket No. 12-269, 30 FCC Rcd 10794 (WTB 2015) (*Prohibited Communications Guidance Public Notice*).

⁸⁰ 47 CFR § 1.2105(a)(2)(ix)(A)-(C), (a)(2)(viii); *see also Updating Part 1 Report and Order*, 30 FCC Rcd at 7571, para. 181; *Prohibited Communications Guidance Public Notice*, 30 FCC Rcd at 10809, para. 43.

⁸¹ 47 CFR § 1.2107(d); *see also id.* § 1.2105(a)(2)(ix)(A)-(C), (a)(2)(viii).

⁸² *Id.* § 1.2107(d); *see also id.* § 1.2105(a)(2)(ix)(A)-(C), (a)(2)(viii).

⁸³ Section 1.2105 requires the disclosure on the FCC Form 175 of the applicant's ownership information as set forth in sections 1.2105 and 1.2112. *See id.* § 1.2105(a)(2)(ii)(B). In addition, each applicant should ensure that its disclosures comply with the ownership disclosure requirements in the Part 1 rules. *See generally Updating Part 1 Report and Order*, 30 FCC Rcd 7493.

⁸⁴ 47 CFR §§ 1.2105(a)(2)(ii)(B), 1.2112.

35. In certain circumstances, an applicant may have previously filed an FCC Form 602 ownership disclosure information report or filed an auction application for a previous auction in which ownership information was disclosed. The most current ownership information contained in any FCC Form 602 or previous auction application on file with the Commission that used the same FCC Registration Number (FRN) the applicant is using to submit its FCC Form 175 will automatically be pre-filled into certain ownership sections on the applicant's FCC Form 175,⁸⁵ if such information is in an electronic format compatible with FCC Form 175.⁸⁶ Each applicant must carefully review any ownership information automatically entered into its FCC Form 175, including any ownership attachments, to confirm that all information supplied on FCC Form 175 is complete and accurate as of the application filing deadline. Any information that needs to be corrected or updated must be changed directly in FCC Form 175.

E. Foreign Ownership Disclosure Requirements

36. Section 310 of the Communications Act requires the Commission to review foreign investment in radio station licenses and imposes specific restrictions on who may hold certain types of radio licenses.⁸⁷ Section 310 applies to applications for initial radio licenses, applications for assignments and transfers of control of radio licenses, and spectrum leasing arrangements under the Commission's secondary market rules.⁸⁸ In completing FCC Form 175, an applicant is required to disclose information concerning foreign ownership of the applicant. If an applicant has foreign ownership interests in excess of the applicable limit or benchmark set forth in section 310(b), then it may seek to participate in Auction 110 as long as it has filed a petition for declaratory ruling with the Commission prior to the FCC Form 175 filing deadline.⁸⁹ An applicant must certify in its FCC Form 175 that, as of the deadline for filing its application to participate in the auction, the applicant either is in compliance with the foreign ownership provisions of section 310 or has filed a petition for declaratory ruling requesting Commission approval to exceed the applicable foreign ownership limit or benchmark in section 310(b) that is pending before, or has been granted by, the Commission.⁹⁰

F. Information Procedures During the Auction Process

37. Consistent with past practice in many prior spectrum license auctions,⁹¹ we adopt the Commission's proposal to limit information available in Auction 110 in order to prevent the identification

⁸⁵ The FCC Form 175 Instructions provide additional details on pre-filled information.

⁸⁶ Applicants are encouraged to submit an FCC Form 602 ownership report or update any ownership information on file with the Commission in an FCC Form 602 ownership report prior to starting a short-form application for Auction 110 to ensure that their most recent ownership information is pre-filled into their short-form application.

⁸⁷ See 47 U.S.C. § 310(a), (b).

⁸⁸ See *Review of Foreign Ownership Policies for Common Carrier and Aeronautical Radio Licensees under Section 310(b)(4) of the Communications Act of 1934, as Amended*, IB Docket No. 11-133, Second Report and Order, 28 FCC Rcd 5741, 5747-48, para. 7 (2013). The Commission amended its foreign ownership rules in *Review of Foreign Ownership Policies for Broadcast, Common Carrier and Aeronautical Radio Licensees under Section 310(b)(4) of the Communications Act of 1934, as Amended*, GN Docket No. 15-236, Report and Order, 31 FCC Rcd 11272 (2016). The rules are now codified in 47 CFR §§ 1.5000-1.5004.

⁸⁹ 47 CFR § 1.2105(a)(2)(vi).

⁹⁰ See *id.* § 1.2105(a)(2)(v), (vi). Additional information concerning foreign ownership disclosure requirements is provided in the FCC Form 175 Instructions.

⁹¹ See, e.g., *Auction 107 Procedures Public Notice*, 35 FCC Rcd at 8417, paras. 35-36; *Auction of Priority Access Licenses for the 3550–3650 MHz Band; Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 105; Bidding in Auction 105 Scheduled to Begin June 25, 2020*, AU Docket No. 19-244, Public Notice, 35 FCC Rcd 2140, 2153, paras. 36-37 (2020) (*Auction 105 Procedures Public Notice*); *Auction 103 Procedures Public Notice*, 34 FCC Rcd at 5546, paras. 35-36; see also 47 CFR § 1.2104(h).

of bidders placing particular bids until after the bidding has closed.⁹² More specifically, we will not make public until after bidding has closed: (1) the PEAs that an applicant selects for bidding in its short-form application, (2) the amount of any upfront payment made by or on behalf of an applicant for Auction 110, (3) any applicant's bidding eligibility, and (4) any other bidding-related information that might reveal the identity of the bidder placing a bid.

38. The limited information procedures used in past auctions have helped safeguard against potential anticompetitive behavior such as retaliatory bidding and collusion.⁹³ No commenters objected to this proposal, and we find nothing in the record to suggest that we depart from the Commission's now-established practice of implementing these procedures in wireless spectrum auctions.⁹⁴ We find that the competitive benefits associated with limiting information disclosure support adoption of such procedures and outweigh the potential benefits of full disclosure.⁹⁵

39. Once the bidding begins in Auction 110, under the limited information procedures (sometimes also referred to as anonymous bidding), information to be made public after each round of bidding will include, for licenses in each geographic area, the supply, the aggregate demand, the price at the end of the last completed round, and the price for the next round. The identities of bidders placing specific bids and the net bid amounts (reflecting bidding credits) will *not* be disclosed until after the close of bidding.⁹⁶

40. Throughout the auction, bidders will have access to additional information related to their own bidding and bidding eligibility through the Commission's bidding system. For example, bidders will be able to view their own level of eligibility, both before and during the auction.

41. After the close of bidding, bidders' PEA selections, upfront payment amounts, bidding eligibility, bids, and other bidding-related actions will be made publicly available.

42. We warn applicants that direct or indirect communication to other applicants or the public disclosure of non-public information (e.g., reductions in eligibility, identities of bidders) could violate the Commission's rule prohibiting certain communications.⁹⁷ **Therefore, to the extent an applicant believes that such a disclosure is required by law or regulation, including regulations issued by the U.S. Securities and Exchange Commission (SEC), we strongly urge that the applicant consult with the Commission staff in the Auctions Division before making such disclosure.**

G. Prohibited Communications and Compliance with Antitrust Laws

43. The rules prohibiting certain communications set forth in section 1.2105(c) apply to each applicant that files a short-form application (FCC Form 175) in Auction 110.⁹⁸ Section 1.2105(c)(1) of

⁹² See *Auction 110 Comment Public Notice* at 10-11, para. 22.

⁹³ See *Auction of AWS-1 and Broadband PCS Licenses Rescheduled for August 13, 2008; Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 78*, AU Docket No. 08-46, Public Notice, 23 FCC Rcd 7496, 7536, para. 157 (WTB 2008) (recognizing that limited information procedures may have overall competitive benefits from reduced opportunities for bid signaling, retaliatory bidding, or other anti-competitive strategic bidding) (*Auction 78 Procedures Public Notice*); *Auction of 700 MHz Band Licenses Scheduled for July 19, 2011; Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 92*, AU Docket No. 10-248, Public Notice, 26 FCC Rcd 3342, 3372, para. 128 (WTB 2011) (finding that the competitive benefits associated with limited information disclosure procedures support adoption of such procedures).

⁹⁴ Blooston expressed support for this proposal. The Blooston Rural Carriers Comments (Blooston Comments) at 3.

⁹⁵ See *Auction 78 Procedures Public Notice*, 23 FCC Rcd at 7536, para. 157.

⁹⁶ See *Auction 110 Comment Public Notice* at 10-11, para. 22.

⁹⁷ See 47 CFR § 1.2105(c); see also Section II.G (Prohibited Communications and Compliance with Antitrust Laws), below.

the Commission’s rules provides that, subject to specified exceptions, “[a]fter the short-form application filing deadline, all applicants are prohibited from cooperating or collaborating with respect to, communicating with or disclosing, to each other or any nationwide provider [of communications services] that is not an applicant, or, if the applicant is a nationwide provider, any non-nationwide provider that is not an applicant, in any manner the substance of their own, or each other’s, or any other applicants’ bids or bidding strategies (including post-auction market structure), or discussing or negotiating settlement agreements, until after the down payment deadline”⁹⁹

1. Entities Subject to Section 1.2105(c)

44. An “applicant” for purposes of this rule includes all “controlling interests” in the entity submitting the FCC Form 175 auction application, as well as all holders of interests amounting to 10% or more of the entity (including institutional investors and asset management companies), and all officers and directors of that entity.¹⁰⁰ Under section 1.2105(c), a party that submits an application becomes an “applicant” under the rule at the application deadline, and that status does not change based on later developments.¹⁰¹

45. As the Commission proposed in the *Auction 110 Comment Public Notice*,¹⁰² we consider AT&T, T-Mobile, and Verizon to be “nationwide providers” for the purposes of the prohibited communications rule for Auction 110.¹⁰³

2. Prohibition Applies Until Down Payment Deadline

46. The prohibition in section 1.2105(c) on certain communications begins at an auction’s short-form application filing deadline and ends at the auction’s down payment deadline after the auction closes, which will be announced in a future public notice.¹⁰⁴

3. Scope of Prohibition on Certain Communications; Prohibition on Joint Bidding Agreements

47. Section 1.2105(c) of the Commission’s rules prohibits certain communications between applicants for an auction, regardless of whether the applicants seek permits or licenses in the same geographic area or market.¹⁰⁵ The rule also applies to communications by applicants with non-applicant nationwide providers of communications services and by nationwide applicants with non-applicant non-nationwide providers.¹⁰⁶ The rule further prohibits “joint bidding arrangements,” including arrangements relating to the permits or licenses being auctioned that address or communicate, directly or indirectly, bidding at the auction, bidding strategies, including arrangements regarding price or the specific permits or licenses on which to bid, and any such arrangements relating to the post-auction market structure.¹⁰⁷

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⁹⁸ See 47 CFR § 1.2105(c).

⁹⁹ *Id.* § 1.2105(c)(1).

¹⁰⁰ *Id.* § 1.2105(c)(5)(i).

¹⁰¹ See *Star Wireless, LLC v. FCC*, 522 F.3d 469, 473-74 (D.C. Cir. 2008). Thus, an auction applicant that does not correct deficiencies in its application, fails to submit a timely and sufficient upfront payment, or does not otherwise become qualified, remains an “applicant” for purposes of the rule and remains subject to the prohibition on certain communications until the Auction 110 down payment deadline.

¹⁰² *Auction 110 Comment Public Notice* at 10, para. 21. No commenters objected to this proposal.

¹⁰³ See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7571, para. 140 & n.596; see also Section II.C (Disclosure of Agreements and Bidding Arrangements), above; note 53, above.

¹⁰⁴ 47 CFR § 1.2105(c)(1).

¹⁰⁵ See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7577, para. 199; 47 CFR § 1.2105(a)(2)(ix), (c)(1).

¹⁰⁶ 47 CFR § 1.2105(c)(1); see also *Updating Part 1 Report and Order*, 30 FCC Rcd at 7577, para. 199.

The rule allows for limited exceptions for communications within the scope of any arrangement consistent with the exclusion from the Commission's rule prohibiting joint bidding, provided such arrangement is disclosed on the applicant's auction application.¹⁰⁸ Applicants may communicate pursuant to any pre-existing agreements, arrangements, or understandings relating to the licenses being auctioned that are solely operational or that provide for the transfer or assignment of licenses, provided that such agreements, arrangements, or understandings are disclosed on their applications and do not both relate to the licenses at auction and address or communicate bids (including amounts), bidding strategies, or the particular permits or licenses on which to bid or the post-auction market structure.¹⁰⁹

48. In addition to express statements of bids and bidding strategies, the prohibition against communicating "in any manner" includes public disclosures as well as private communications and indirect or implicit communications.¹¹⁰ Consequently, an applicant must take care to determine whether its auction-related communications may reach another applicant.¹¹¹

49. Parties subject to section 1.2105(c) should take special care in circumstances where their officers, directors, and employees may receive information directly or indirectly relating to any applicant's bids or bidding strategies. Such information may be deemed to have been received by the applicant under certain circumstances. For example, Commission staff have found that, where an individual serves as an officer and director for two or more applicants, the bids and bidding strategies of one applicant are presumed to be conveyed to the other applicant through the shared officer, which creates an apparent violation of the rule.¹¹²

50. Subject to the limited exceptions for communications within the scope of any arrangement consistent with the exclusion from the Commission's rule prohibiting joint bidding, section 1.2105(c)(1) prohibits applicants from communicating with specified other parties only with respect to "their own, or each other's, or any other applicant's bids or bidding strategies . . ."¹¹³ The *Prohibited Communications Guidance Public Notice* released in advance of the broadcast incentive auction (Auction 1000) reviewed the scope of the prohibition generally, as well as in that specific auction's forward auction of spectrum licenses and reverse auction to relinquish broadcast licenses.¹¹⁴ As the Commission explained therein, a communication conveying "bids or bidding strategies (including post-auction market structure)" must also relate to the "licenses being auctioned" in order to be covered by the prohibition.¹¹⁵ (Continued from previous page)

¹⁰⁷ See 47 CFR § 1.2105(a)(2)(ix); *Updating Part 1 Report and Order*, 30 FCC Rcd at 7575-76, para. 195.

¹⁰⁸ See 47 CFR § 1.2105(a)(2)(viii), (ix)(A)-(C); *Updating Part 1 Report and Order*, 30 FCC Rcd at 7576-77, paras. 197-99.

¹⁰⁹ See 47 CFR § 1.2105(a)(2)(ix)(A)-(C); see generally *Prohibited Communications Guidance Public Notice*, 30 FCC Rcd 10794.

¹¹⁰ See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7577, para. 199; *Cascade Access, LLC*, Forfeiture Order, 28 FCC Rcd 141, 144, para. 7 (EB 2013) (rejecting argument that the communication was not prohibited because it did not reveal the "substance" of Cascade's bids or bidding strategies).

¹¹¹ We remind applicants that they must determine whether their communications with other parties are permissible under the rule once the prohibition begins at the deadline for submitting applications, even before the public notice identifying applicants is released.

¹¹² See, e.g., *Low Power Television-Television Translator Auction No. 81 TCCSA, Inc., d/b/a Trinity Broadcasting Network National Minority TV, Inc.*, Letter Order, 20 FCC Rcd 14648, 14648-49 (2005) (finding apparent violation of communication prohibitions of section 1.2105(c) where applicants with mutually exclusive applications reported sharing same individual as an officer and director and reported having no bidding agreement, which under the rule then in effect would have made an exception to the prohibition applicable).

¹¹³ 47 CFR § 1.2105(c)(1).

¹¹⁴ See generally *Prohibited Communications Guidance Public Notice*, 30 FCC Rcd 10794.

¹¹⁵ *Id.* at 10806, para. 33.

Thus, the prohibition is limited in scope and does not apply to all communications between or among the specified parties. The Commission consistently has made clear that application of the rule prohibiting communications has never required total suspension of essential ongoing business.¹¹⁶ Entities subject to the prohibition may negotiate agreements during the prohibition period, provided that the communications involved do not relate to both: (1) the licenses being auctioned and (2) bids or bidding strategies or post-auction market structure.¹¹⁷

51. Accordingly, business discussions and negotiations that are *unrelated* to bidding in Auction 110 and that do not convey information about the bids or bidding strategies, including the post-auction market structure, of an applicant are not prohibited by the rule. Moreover, not all auction-related information is covered by the prohibition. For example, communicating merely whether a party has or has not applied to participate in Auction 110 will not violate the rule.¹¹⁸ In contrast, communicating, among other things, how a party will participate, including specific geographic areas selected, specific bid amounts, and/or whether or not the party is placing bids, would convey bids or bidding strategies and would be prohibited.¹¹⁹

52. While section 1.2105(c) does not prohibit business discussions and negotiations among auction applicants that are unrelated to the auction, each applicant must remain vigilant not to communicate, directly or indirectly, information that affects, or could affect, bids or bidding strategies. Certain discussions might touch upon subject matters that could convey price or geographic information related to bidding strategies. Such subject areas include, but are not limited to, management, sales, local marketing agreements, and other transactional agreements.

53. We caution applicants that bids or bidding strategies may be communicated outside of situations that involve one party subject to the prohibition communicating privately and directly with another such party. For example, the Commission has warned that prohibited “communications concerning bids and bidding strategies may include communications regarding capital calls or requests for additional funds in support of bids or bidding strategies to the extent such communications convey information concerning the bids and bidding strategies directly or indirectly.”¹²⁰ Moreover, the Commission found a violation of the rule against prohibited communications when an applicant used the Commission’s bidding system to disclose “its bidding strategy in a manner that explicitly invited other auction participants to cooperate and collaborate . . . in specific markets,”¹²¹ and it has placed auction participants on notice that the use of its bidding system “to disclose market information to competitors will not be tolerated and will subject bidders to sanctions.”¹²²

54. Likewise, when completing a short-form application, each applicant should avoid any statements or disclosures that may violate section 1.2105(c), particularly in light of the limited information procedures in effect for Auction 110. Specifically, an applicant should avoid including any information in its short-form application that might convey information regarding its PEA selections, such as referring to certain markets in describing agreements, including any information in application

¹¹⁶ See, e.g., *Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions*, GN Docket No. 12-268, Report and Order, 29 FCC Rcd 6567, 6770-71, para. 492 (2014).

¹¹⁷ *Prohibited Communications Guidance Public Notice*, 30 FCC Rcd at 10806-07, paras. 33-34.

¹¹⁸ *Id.* at 10796, paras. 6-7.

¹¹⁹ *Id.* at 10796-97, paras. 8-9.

¹²⁰ *Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, PP Docket No. 93-253, Memorandum Opinion and Order, 9 FCC Rcd 7684, 7689, para. 12 (1994) (*Competitive Bidding Memorandum Opinion and Order*).

¹²¹ *Mercury PCS II, LLC*, Notice of Apparent Liability for Forfeiture, 12 FCC Rcd 17970, 17976, para. 17 (1997).

¹²² *Mercury PCS II, LLC*, Memorandum Opinion and Order, 13 FCC Rcd 23755, 23760, para. 11 (1998).

attachments that will be publicly available that may otherwise disclose the applicant's PEA selections, or using applicant names that refer to licenses being offered.

55. Applicants also should be mindful that communicating non-public application or bidding information publicly or privately to another applicant may violate section 1.2105(c) even though that information subsequently may be made public during later periods of the application or bidding processes.

4. Communicating with Third Parties

56. Section 1.2105(c) does not prohibit an applicant from communicating bids or bidding strategies to a third party, such as a consultant or consulting firm, counsel, or lender. The applicant should take appropriate steps, however, to ensure that any third party it employs for advice pertaining to its bids or bidding strategies does not become a conduit for prohibited communications to other specified parties, as that would violate the rule.¹²³ For example, an applicant might require a third party, such as a lender, to sign a non-disclosure agreement before the applicant communicates any information regarding bids or bidding strategy to the third party.¹²⁴ Within third-party firms, separate individual employees, such as attorneys or auction consultants, may advise individual applicants on bids or bidding strategies, as long as such firms implement firewalls and other compliance procedures that prevent such individuals from communicating the bids or bidding strategies of one applicant to other individuals representing separate applicants.¹²⁵ Although firewalls and/or other procedures should be used, their existence is not an absolute defense to liability if a violation of the rule has occurred.¹²⁶

57. As the Commission has noted in other spectrum auctions, in the case of an individual, the objective precautionary measure of a firewall is not available.¹²⁷ As a result, an individual that is privy to bids or bidding information of more than one applicant presents a greater risk of becoming a conduit for a prohibited communication.¹²⁸ We will take the same approach to interpreting the prohibited communications rule in Auction 110. We emphasize that whether a prohibited communication has taken place in a given case will depend on all the facts pertaining to the case, including who possessed what information, what information was conveyed to whom, and the course of bidding in the auction.¹²⁹

58. We remind potential applicants that they may discuss the short-form application or bids for specific licenses or license areas with the counsel, consultant, or expert of their choice *before* the short-form application deadline. Furthermore, the same third-party individual could continue to give advice after the short-form deadline regarding the application, provided that no information pertaining to bids or bidding strategies, including PEAs selected on the short-form application, is conveyed to that individual.

¹²³ See, e.g., *Prohibited Communications Guidance Public Notice*, 30 FCC Rcd at 10798, para. 13 (describing the use of non-disclosure agreements and, for third parties that may be advising multiple applicants, firewalls).

¹²⁴ *Id.*

¹²⁵ *Id.*; see also *Application of Nevada Wireless for a License to Provide 800 MHz Specialized Mobile Radio Service in the Farmington, NM-CO Economic Area (EA 155) Frequency Band A*, Memorandum Opinion and Order, 13 FCC Rcd 11973, 11978, para. 12 (1998) (*Nevada Wireless Order*) (strongly encouraging applicants to implement any firewall procedures necessary and to provide information in their auction applications regarding the procedures).

¹²⁶ See *Prohibited Communications Guidance Public Notice*, 30 FCC Rcd at 10799, para. 14; *Nevada Wireless Order*, 13 FCC Rcd at 11978, para. 13.

¹²⁷ See, e.g., *Auction 101 and 102 Procedures Public Notice*, 33 FCC Rcd at 7602, para. 72 (citing *Prohibited Communications Guidance Public Notice*, 30 FCC Rcd at 10800, para. 15).

¹²⁸ *Prohibited Communications Guidance Public Notice*, 30 FCC Rcd at 10800, para. 15.

¹²⁹ See *id.*

59. Applicants also should use caution in their dealings with other parties, such as members of the press, financial analysts, or others who might become conduits for the communication of prohibited bidding information. For example, even though communicating that it has applied to participate in the auction will not violate the rule, an applicant's statement to the press that it intends to stop bidding in an auction could give rise to a finding of a section 1.2105 violation.¹³⁰ Similarly, an applicant's public statement of intent not to place bids during bidding in Auction 110 could also violate the rule.

5. Section 1.2105(c) Certifications

60. By electronically submitting its FCC Form 175 auction application, each applicant for Auction 110 certifies its compliance with section 1.2105(c) of the rules.¹³¹ The mere filing of a certifying statement as part of an application, however, will not outweigh specific evidence that a prohibited communication has occurred, nor will it preclude the initiation of an investigation when warranted.¹³² Any applicant found to have violated these communication prohibitions may be subject to sanctions.¹³³

6. Duty to Report Prohibited Communications

61. Section 1.2105(c)(4) requires that any applicant that makes or receives a communication that appears to violate section 1.2105(c) must report such communication in writing to the Commission immediately, and in no case later than five business days after the communication occurs.¹³⁴ Each applicant's obligation to report any such communication continues beyond the five-day period after the communication is made, even if the report is not made within the five-day period.¹³⁵

7. Procedures for Reporting Prohibited Communications

62. A party reporting any information or communication pursuant to sections 1.65, 1.2105(a)(2), or 1.2105(c)(4) must take care to ensure that any report of a prohibited communication does not itself give rise to a violation of section 1.2105(c). For example, a party's report of a prohibited communication could violate the rule by communicating prohibited information to other parties specified under the rule through the use of Commission filing procedures that allow such materials to be made available for public inspection.

63. Parties must file only a single report concerning a prohibited communication and must file that report with the Commission personnel expressly charged with administering the Commission's

¹³⁰ Cf. *Wireless Telecommunications Bureau Responds to Questions About the Local Multipoint Distribution Service Auction*, Public Notice, 13 FCC Rcd 341, 347-48 (WTB 1998) ("Public statements can give rise to collusion concerns. This has occurred in the antitrust context, where certain public statements can support other evidence which tends to indicate the existence of a conspiracy.").

¹³¹ See 47 CFR § 1.2105(a)(2)(ix). In accordance with the *Updating Part 1 Report and Order*, if an applicant has a non-controlling interest with respect to more than one application, then the applicant must certify that it has established internal control procedures to preclude any person acting on behalf of the applicant from possessing information about the bids or bidding strategies of more than one applicant or communicating such information with respect to either applicant to another person acting on behalf of and possessing such information regarding another applicant. *Updating Part 1 Report and Order*, 30 FCC Rcd at 7577, para. 199.

¹³² *Nevada Wireless Order*, 13 FCC Rcd at 11978, para. 13; see also *Competitive Bidding Memorandum Opinion and Order*, 9 FCC Rcd at 7689, para. 12.

¹³³ See 47 CFR §§ 1.2105(c), 1.2107(d), 1.2109(d).

¹³⁴ *Id.* § 1.2105(c)(4); see also *Part 1 Seventh Report and Order*, 16 FCC Rcd at 17553-55, paras. 13-17.

¹³⁵ See *Service Rules for the 698-746, 747-762 and 777-792 MHz Bands et al.*, WT Docket No. 06-150 et al., Second Report and Order, 22 FCC Rcd 15289, 15395, paras. 285-86 (2007); *Procedural Amendments to Commission Part 1 Competitive Bidding Rules*, WT Docket No. 10-18, Order, 25 FCC Rcd 521, 523, para. 8 (2010) (*Part 1 Procedural Amendments Order*); see also 47 CFR § 1.65; *Part 1 Seventh Report and Order*, 16 FCC Rcd at 17550-51, para. 9.

auctions.¹³⁶ This rule is designed to minimize the risk of inadvertent dissemination of information in such reports. Any reports required by section 1.2105(c) must be filed consistent with the instructions set forth in this Public Notice.¹³⁷ For Auction 110, such reports must be filed with the Chief of the Auctions Division, Office of Economics and Analytics, by the most expeditious means available. Any such report should be submitted by email to the Auctions Division Chief and sent to auction110@fcc.gov. If you choose instead to submit a report in hard copy, contact Auctions Division staff at auction110@fcc.gov or (202) 418-0660 for guidance.

64. Given the potential competitive sensitivity of public disclosure of information in such a report, a party seeking to report such a prohibited communication should consider submitting its report with a request that the report or portions of the submission be withheld from public inspection by following the procedures specified in section 0.459 of the Commission's rules.¹³⁸ We encourage such parties to coordinate with the Auctions Division staff about the procedures for submitting such reports.¹³⁹

8. Winning Bidders Must Disclose Terms of Agreements

65. Each applicant that is a winning bidder will be required to provide as part of its long-form application any agreement or arrangement it has entered into and a summary of the specific terms, conditions, and parties involved in any agreement it has entered into.¹⁴⁰ This applies to any bidding consortia, joint venture, partnership, or agreement, understanding, or other arrangement entered into relating to the competitive bidding process, including any agreement relating to the post-auction market structure.¹⁴¹ Failure to comply with the Commission's rules can result in enforcement action.

9. Additional Information Concerning Prohibition on Certain Communications in Commission Auctions

66. A summary listing of documents issued by the Commission and OEA/WTB addressing the application of section 1.2105(c) is available on the Commission's auction web page at www.fcc.gov/summary-listing-documents-addressing-application-rule-prohibiting-certain-communications.

¹³⁶ *Part 1 Procedural Amendments Order*, 25 FCC Rcd at 522, para. 4. This process differs from filing procedures used in connection with other Commission rules and processes, which may call for submission of filings to the Commission's Office of the Secretary or ECFS. Filing through the Office of Secretary or ECFS could allow the report to become publicly available and might result in the communication of prohibited information to other auction applicants.

¹³⁷ *Id.*

¹³⁸ See 47 CFR § 0.459. Filers requesting confidential treatment of documents must be sure that the cover page of the filing prominently displays that the documents seek confidential treatment. For example, a filing might include a cover page stamped with "Request for Confidential Treatment Attached" or "Not for Public Inspection." Any such request must cover all the material to which the request applies. *Id.* § 0.459(a)(1). On July 7, 2020, the Commission announced that the hand-delivery filing location at FCC Headquarters: Open Window Counter, 445 12th Street, S.W., Room TW-A325, Washington, D.C. 20554, was permanently closed, effective immediately. *FCC Announces Closure of Filing Window at FCC Headquarters and Permanent Change in the Location and Hours for Receiving Hand-Carried Filings*, Public Notice (OMD July 7, 2020). Because hand-delivery of confidential materials is no longer possible, the public is directed to submit such materials in accordance with the procedures described in that public notice and in *Amendment of the Commission's Rules of Practice and Procedure*, Order, DA 20-562 (OMD May 28, 2020).

¹³⁹ See Section VI (Procedural Matters), below.

¹⁴⁰ 47 CFR § 1.2107(d); see also Section V.C (Long-Form Application (FCC Form 601)), below. Such agreements must have been entered into prior to the filing of short-form applications pursuant to section 1.2105. 47 CFR § 1.2107(d); see *id.* § 1.2105.

¹⁴¹ 47 CFR § 1.2107(d).

10. Antitrust Laws

67. Regardless of compliance with the Commission's rules, applicants remain subject to the antitrust laws, which are designed to prevent anticompetitive behavior in the marketplace.¹⁴² Compliance with the disclosure requirements of section 1.2105(c)(4) will not insulate a party from enforcement of the antitrust laws.¹⁴³ For instance, a violation of the antitrust laws could arise out of actions taking place well before any party submits a short-form application.¹⁴⁴ The Commission has cited a number of examples of potentially anticompetitive actions that would be prohibited under antitrust laws: for example, actual or potential competitors may not agree to divide territories in order to minimize competition, regardless of whether they split a market in which they both do business, or whether they merely reserve one market for one and another market for the other.¹⁴⁵

68. To the extent we become aware of specific allegations that suggest that violations of the federal antitrust laws may have occurred, we may refer such allegations to the United States Department of Justice for investigation.¹⁴⁶ If an applicant is found to have violated the antitrust laws or the Commission's rules in connection with its participation in the competitive bidding process, then it may be subject to a forfeiture and may be prohibited from participating further in Auction 110 and in future auctions, among other sanctions.¹⁴⁷

H. Provisions for Small Businesses and Rural Service Providers

69. A bidding credit represents an amount by which a bidder's overall payment across all the licenses won will be discounted, subject to the caps discussed below.¹⁴⁸ As set forth in section 1.2110 of the Commission's rules,¹⁴⁹ and as described below, these rule revisions include, but are not limited to: (1) adopting a two-pronged standard for evaluating eligibility for small business benefits,¹⁵⁰ (2) establishing a new attribution rule for certain disclosable interest holders of applicants claiming designated entity benefits,¹⁵¹ (3) updating the gross revenue amounts defining eligibility for small business benefits,¹⁵² (4)

¹⁴² See, e.g., *Amendment of Part 1 of the Commission's Rules—Competitive Bidding Procedures*, WT Docket No. 97-82, Third Further Notice of Proposed Rulemaking, 14 FCC Rcd 21558, 21560-61, para. 4 & n.17 (1999).

¹⁴³ See *Competitive Bidding Memorandum Opinion and Order*, 9 FCC Rcd at 7689, para. 12; see also Press Release, Dep't of Justice, Justice Department Sues Three Firms Over FCC Auction Practices (Nov. 10, 1998), https://www.justice.gov/archive/atr/public/press_releases/1998/2068.htm.

¹⁴⁴ See, e.g., *Implementation of Section 309(j) of the Communications Act*, PP Docket No. 93-253, Fourth Memorandum Opinion and Order, 9 FCC Rcd 6858, 6869, para. 59 & n.134 (1994).

¹⁴⁵ *Id.*

¹⁴⁶ *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2388, para. 226.

¹⁴⁷ See *id.*; 47 CFR § 1.2109(d).

¹⁴⁸ Applicants should note that all references to a "winning bid" discussed herein in the context of designated entity bidding credits for Auction 110 (e.g., the application of a small business discount to an applicant's winning bid) refer to the calculated license price discussed in Section IV.D (Calculating Individual "Per-License" Prices), below.

¹⁴⁹ 47 CFR § 1.2110.

¹⁵⁰ *Id.* § 1.2110(b)(3); see *Updating Part 1 Report and Order*, 30 FCC Rcd at 7507-10, paras. 29-34.

¹⁵¹ 47 CFR § 1.2110(c)(2)(ii)(J); see *Updating Part 1 Report and Order*, 30 FCC Rcd at 7512-16, paras. 42-52. For purposes of this rule, a disclosable interest holder of an applicant seeking designated entity benefits is defined as any individual or entity holding a 10% or greater interest of any kind in the applicant, including but not limited to, a 10% or greater interest in any class of stock, warrants, options, or debt securities in the applicant or licensee. 47 CFR § 1.2110(c)(2)(ii)(J). The Commission also clarified its designated entity reporting requirements under 47 CFR § 1.2110(n). See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7562-63, paras. 162-67.

¹⁵² 47 CFR § 1.2110(f)(2); see *Updating Part 1 Report and Order*, 30 FCC Rcd at 7523-25, paras. 72-75.

creating a separate bidding credit for eligible rural service providers,¹⁵³ and (5) establishing caps on the total amount of designated entity benefits any eligible winning bidder may receive.¹⁵⁴

70. In Auction 110, designated entity bidding credits will be available to applicants demonstrating eligibility for a small business or a rural service provider bidding credit and subsequently winning license(s). These bidding credits will not be cumulative—an applicant is permitted to claim either a small business bidding credit or a rural service provider bidding credit, but not both.¹⁵⁵ Each applicant must also certify that it is eligible for the claimed bidding credit in its FCC Form 175. In addition to the information provided below, each applicant should review carefully the Commission’s decisions regarding the designated entity provisions as well as the Part 1 rules.¹⁵⁶

71. In particular, we remind applicants applying for designated entity bidding credits that they should take due account of the requirements of the Commission’s rules and implementing orders regarding *de jure* and *de facto* control of such applicants.¹⁵⁷ These rules include a prohibition, which applies to all applicants (whether they seek bidding credits or not), against changes in ownership of the applicant that would constitute an assignment or transfer of control.¹⁵⁸ **Applicants should not expect to receive any opportunities to revise their ownership structure after the filing of their short- and long-form applications, including making revisions to their agreements or other arrangements with interest holders, lenders, or others in order to address potential concerns relating to compliance with the designated entity bidding credit requirements.** This policy will help to ensure compliance with the Commission’s rules applicable to the award of bidding credits prior to the conduct of the auction, which will involve competing bids from those that do and do not seek bidding credits, and thus preserves the integrity of the auction process. We also believe that this will meet the Commission’s objectives in awarding licenses through the competitive bidding process.¹⁵⁹

1. Small Business Bidding Credit

72. For Auction 110, bidding credits will be available to eligible small businesses and consortia thereof, subject to the caps discussed below. Under the service rules applicable to the 3.45 GHz Service licenses to be offered in Auction 110, the level of bidding credit available is determined as follows:

¹⁵³ 47 CFR § 1.2110(f)(4); *see Updating Part 1 Report and Order*, 30 FCC Rcd at 7530-38, paras. 88-108.

¹⁵⁴ *See* 47 CFR § 1.2110(f)(2)(ii), (f)(4)(ii); *see also Updating Part 1 Report and Order*, 30 FCC Rcd at 7539-48, paras. 110-30.

¹⁵⁵ *See Updating Part 1 Report and Order*, 30 FCC Rcd at 7538, para. 108; *see also* 47 CFR § 1.2110(f)(4)(i).

¹⁵⁶ *See generally Updating Part 1 Report and Order*, 30 FCC Rcd 7493; *see also, e.g., Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission’s Competitive Bidding Rules and Procedures*, WT Docket No. 05-24, Report and Order, 21 FCC Rcd 891 (2006) (*CSEA/Part 1 Report and Order*); Second Report and Order and Second Further Notice of Proposed Rule Making, 21 FCC Rcd 4753 (2006); Order on Reconsideration of the Second Report and Order, 21 FCC Rcd 6703 (2006).

¹⁵⁷ *See, e.g.,* 47 CFR §§ 1.2110, 1.2111.

¹⁵⁸ *Id.* § 1.2105(b)(2). Pursuant to 47 CFR § 1.929(a)(2), any substantial change in ownership or control is classified as a major amendment. *See id.* § 1.927(a)-(b), (h). This may, in some circumstances, include changes of an applicant’s officers or directors.

¹⁵⁹ The Commission’s objectives when awarding licenses through competitive bidding include “the development and rapid deployment of new technologies, products, and services for the benefit of the public . . . without administrative or judicial delays” and “promoting economic opportunity and competition and ensuring that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses.” 47 U.S.C. § 309(j)(3)(A)-(B); *see also 3.45 GHz Second Report and Order* at 36-37, para. 102.

- A bidder that qualifies as a “small business”—i.e., one with attributed average annual gross revenues that do not exceed \$55 million for the preceding five years¹⁶⁰—is eligible to receive a 15% discount on its overall payment.¹⁶¹
- A bidder that qualifies as a “very small business”—i.e., one with attributed average annual gross revenues that do not exceed \$20 million for the preceding five years¹⁶²—is eligible to receive a 25% discount on its overall payment.¹⁶³

73. In adopting this two-tiered approach in the *3.45 GHz Second Report and Order*, the Commission observed that this approach would provide consistency and predictability for small businesses.¹⁶⁴

74. Small business bidding credits are not cumulative; an eligible applicant may receive either the 15% or the 25% bidding credit on its overall payment, but not both. The Commission’s unjust enrichment provisions also apply to a winning bidder that uses a bidding credit and subsequently seeks to assign or transfer control of its license within a certain period to an entity not qualifying for at least the same level of small business bidding credit.¹⁶⁵

75. Each applicant claiming a small business bidding credit must disclose the gross revenues for the preceding five years for each of the following: (1) the applicant, (2) its affiliates, (3) its controlling interests, and (4) the affiliates of its controlling interests.¹⁶⁶ The applicant must also submit an attachment that lists all parties with which the applicant has entered into any spectrum use agreements or arrangements for any licenses that may be won by the applicant in Auction 110.¹⁶⁷ In addition, to the extent that an applicant has an agreement with any disclosable interest holder for the use of more than 25% of the spectrum capacity of any license that may be won in Auction 110, the applicant must disclose the identity and the attributable gross revenues of any such disclosable interest holder.¹⁶⁸ This attribution rule will be applied on a license-by-license basis.¹⁶⁹ As a result, an applicant may be eligible for a bidding credit on some, but not all, of the licenses for which it is bidding in Auction 110.¹⁷⁰ If an

¹⁶⁰ 47 CFR § 27.1601(a)(1)(i); *see also id.* § 1.2110(f)(2)(i)(C). The rules adopted in the *3.45 GHz Second Report and Order* will become effective June 7, 2021. *See* 3.45 GHz Rules Federal Register Publication.

¹⁶¹ *Id.* § 27.1601(a)(2).

¹⁶² *Id.* § 27.1601(a)(1)(ii); *see also id.* § 1.2110(f)(2)(i)(B).

¹⁶³ *Id.* § 27.1601(a)(2).

¹⁶⁴ *3.45 GHz Second Report and Order* at 53-54, para. 146.

¹⁶⁵ 47 CFR § 1.2111. Thus, for example, the Commission’s unjust enrichment provisions would not apply to a winning bidder that uses the 15% small business bidding credit and seeks to transfer control of its license to an entity that qualifies for either the 15% small business bidding credit or the rural service provider bidding credit. *See* Section II.H.2 (Rural Service Provider Bidding Credit), below. The provisions would apply, however, if that same winning bidder uses the 25% small business bidding credit, unless the proposed transferee also qualifies for the 25% small business bidding credit.

¹⁶⁶ 47 CFR §§ 1.2110(b)(1)(i), 1.2112(b)(1)(iv).

¹⁶⁷ *See id.* § 1.2112(b)(1)(iii).

¹⁶⁸ *See id.* § 1.2110(c)(2)(ii)(J).

¹⁶⁹ *Id.*

¹⁷⁰ *See id.*

applicant is applying as a consortium of small businesses, then the disclosures described in this paragraph must be provided for each consortium member.¹⁷¹

2. Rural Service Provider Bidding Credit

76. An eligible applicant may request a 15% discount on its overall payment using a rural service provider bidding credit,¹⁷² subject to the cap discussed below. To be eligible for a rural service provider bidding credit, an applicant must: (1) be a service provider that is in the business of providing commercial communications services and, together with its controlling interests, affiliates, and the affiliates of its controlling interests, has fewer than 250,000 combined wireless, wireline, broadband, and cable subscribers; and (2) serve predominantly rural areas.¹⁷³ Rural areas are defined as counties with a population density of 100 or fewer persons per square mile.¹⁷⁴ An applicant seeking a rural service provider bidding credit must provide the number of subscribers served as of the short-form application deadline.¹⁷⁵ An applicant may count any subscriber as a single subscriber even if that subscriber receives more than one service.¹⁷⁶

77. Each applicant seeking a rural service provider bidding credit must disclose the number of its subscribers, along with the number of subscribers of its affiliates, controlling interests, and the affiliates of its controlling interests.¹⁷⁷ The applicant must also submit an attachment that lists all parties with which the applicant has entered into any spectrum use agreements or arrangements for any licenses that may be won by the applicant in Auction 110.¹⁷⁸ In addition, to the extent that an applicant has an agreement with any disclosable interest holder for the use of more than 25% of the spectrum capacity of any license that may be won in Auction 110, the identity and the attributable subscribers of any such disclosable interest holder must be disclosed.¹⁷⁹ Like applicants seeking eligibility for small business bidding credits, eligible rural service providers may also form a consortium.¹⁸⁰ If an applicant is applying as a consortium of rural service providers, then the disclosures described in this paragraph, including the certification, must be provided for each consortium member.¹⁸¹

3. Caps on Bidding Credits

78. Eligible applicants claiming either a small business or rural service provider bidding credit will be subject to specified caps on the total amount of bidding credit discounts that they may receive.¹⁸² We adopt the bidding credit caps for Auction 110 at the amounts proposed and for the reasons

¹⁷¹ See *id.* §§ 1.2110(b)(4)(i), 1.2110(c)(6), 1.2110(k), 1.2112(b)(1)(vi).

¹⁷² See *3.45 GHz Second Report and Order* at 54, paras. 147-48; see also 47 CFR § 27.1601(b). The Commission determines eligibility for bidding credits, including the rural service provider bidding credit, on a service-by-service basis. See 47 CFR § 1.2110(f)(1); see also *Updating Part 1 Report and Order*, 30 FCC Rcd at 7529, para. 85.

¹⁷³ 47 CFR § 1.2110(f)(4)(i)(A)-(B).

¹⁷⁴ *Id.* § 1.2110(f)(4)(i)(B); see also *Updating Part 1 Report and Order*, 30 FCC Rcd at 7536-37, para. 104.

¹⁷⁵ 47 CFR § 1.2110(f)(4)(i)(A).

¹⁷⁶ For instance, a subscriber receiving both wireline telephone service and broadband service would be counted as a single subscriber. *Updating Part 1 Report and Order*, 30 FCC Rcd at 7534, para. 98 & n.326.

¹⁷⁷ 47 CFR § 1.2112(b)(1)(v); see also *id.* § 1.2110(f)(4)(i)(C).

¹⁷⁸ See *id.* § 1.2112(b)(1)(iii).

¹⁷⁹ See *id.* § 1.2110(c)(2)(ii)(J).

¹⁸⁰ See *id.* § 1.2110(b)(4)(i), (c)(6).

¹⁸¹ *Id.* § 1.2112(b)(1)(vi).

described by the Commission in the *Auction 110 Comment Public Notice*.¹⁸³ Specifically, we adopt a \$25 million cap on the total amount of bidding credit discounts that may be awarded to an eligible small business,¹⁸⁴ and a \$10 million cap on the total amount of bidding credit discounts that may be awarded to an eligible rural service provider. Additionally, to create parity among eligible small businesses and rural service providers competing against each other in smaller markets, no winning designated entity bidder may receive more than \$10 million in bidding credit discounts in total for licenses won in PEAs with populations of 500,000 or less.¹⁸⁵ Two parties—RWA¹⁸⁶ and Blooston¹⁸⁷—support the caps as they were proposed in the *Auction 110 Comment PN*, while three others—Moise Advisory (Moise),¹⁸⁸ Whitewater Wireless, L.P. and N Squared Wireless LLC (together, Whitewater),¹⁸⁹ and the Competitive Carriers Association (CCA)¹⁹⁰—request that the cap be adjusted upward.

79. We are unpersuaded by comments suggesting that the adoption of a \$25 million cap has inhibited participation by small businesses in recent auctions.¹⁹¹ Whitewater, for example, argues that the results of recent auctions support the use of a \$150 million cap as used in the broadcast incentive auction, citing lower numbers of winning bidders that were small businesses and a lower percentage of winning bids by small businesses in our most recently-concluded auction, Auction 107, relative to that earlier auction.¹⁹² Whitewater, however, fails to show any meaningful correlation between auction results and the specific caps that applied.¹⁹³ Whitewater does not consider differences in frequency bands, available spectrum amounts, incumbencies, capital requirements for deployment, and other considerations that may

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¹⁸² See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7541, para. 114; see also 47 CFR § 1.2110(f)(2)(ii), (4)(ii).

¹⁸³ See *Auction 110 Comment Public Notice* at 7-9, paras. 15-17.

¹⁸⁴ Bidding credit discounts of 15% are available to entities whose average gross revenues for the preceding five years does not exceed \$55 million, and discounts of 25% are available to entities whose average gross revenues for the preceding five years does not exceed \$20 million. See *3.45 GHz Second Report and Order* at 52-53, paras. 144-46.

¹⁸⁵ *Auction 110 Comment Public Notice* at 8-9, para. 17. If an applicant seeking a small business bidding credit does not claim the full \$10 million in bidding credits in those smaller markets, then it may apply the remaining balance to its winning bids on licenses in larger markets, up to the aggregate \$25 million cap.

¹⁸⁶ See RWA Comments at 5.

¹⁸⁷ Blooston Comments at 4-5. Blooston also requests that we create an additional 25% bidding credit for qualified rural carriers providing commercial communication services to a customer base of fewer than 125,000 combined wireless, wireline, broadband, and cable subscribers serving primarily rural areas. This request is beyond the scope of this proceeding, however, as the bidding credits for Auction 110 were established in the *3.45 GHz Second Report and Order*. See *3.45 GHz Second Report and Order* at 51-54, paras. 142-48. Moreover, the small business and rural service provider bidding credits adopted in the *3.45 GHz Second Report and Order* were established pursuant to section 1.2110(f) of the Commission's rules, which makes no provision for a "Small Rural Service Provider" bidding credit, as proposed by Blooston.

¹⁸⁸ See Moise Comments at 13 (seeking a small business cap of "at least \$200 million.").

¹⁸⁹ See Whitewater Reply at 6 (seeking a small business cap of \$150 million).

¹⁹⁰ See Competitive Carriers Association Comments at 4-6 (seeking higher caps of \$40 million for small businesses and \$25 million for rural service providers) (CCA Comments).

¹⁹¹ Moise Comments at 10-11; Whitewater Reply at 3-4.

¹⁹² Whitewater Reply at 3-4.

¹⁹³ See *id.* Similarly, Moise asserts that "only 11% of [small business bidders] were successful in Auction 107," but does not explain how the \$25 million cap for that auction may have impacted small business bidders' decisions concerning their bids or participation. See Moise Comments at 10.

have affected small business bidders' decisions concerning their participation in those auctions. Moise contends that a significant increase in the cap is needed to facilitate the abilities of small businesses to "acquire a sufficient number of licenses to develop scale."¹⁹⁴ In this regard, it is worth recalling that the bidding credit caps were adopted pursuant to the mandate of section 309(j) of the Act to provide "meaningful opportunities for *bona fide* small businesses and rural service providers to participate at auction."¹⁹⁵ Accordingly, the Commission established a framework of bidding credit caps with the principle that caps would be "parameters significant enough to assist eligible entities to have the opportunity to compete at auction, but reasonable enough to ensure that ineligible entities are not encouraged to undercut our rules," and thus would "achieve [the Commission's] dual statutory goals of benefitting DEs and at the same time preventing unjust enrichment."¹⁹⁶

80. Moreover, while Moise takes issue with the Commission's statement in the *Auction 110 Comment Public Notice* that the proposed caps would be consistent with potential use cases that "may permit deployment of smaller scale networks with lower total costs,"¹⁹⁷ its comments fail to "identify unique circumstances and characteristics of this mid-band auction that should guide us in establishing alternative bidding credit caps," nor does it "provide specific, data-driven arguments" to support its contentions, as the Commission had specifically requested.¹⁹⁸ Although Moise asserts that a much higher cap is justified by "analyses of both spectrum acquisition costs and mid-band network deployment costs," Moise offers only its own estimates of spectrum acquisition and network deployment costs without convincing evidence.¹⁹⁹ Further, we note that proponents of higher caps fail to address that the Commission's small business bidding cap proposal for Auction 110 was made in light of the fact that no bidder exceeded the \$25 million small business cap in Auction 101, Auction 102, Auction 103, or Auction 105, and only one winning bidder did so in Auction 107.²⁰⁰

¹⁹⁴ Moise Comments at 7.

¹⁹⁵ See *Updating Part 1 Report and Order*, 30 FCC Rcd at 7493, para. 1, citing 47 U.S.C. §§ 309(j)(4)(E) and(3)(C).

¹⁹⁶ *Updating Part 1 Report and Order*, 30 FCC Rcd at 7544, para. 121.

¹⁹⁷ See Moise Comments at 6-7.

¹⁹⁸ *Auction 110 Comment Public Notice* at 9, para. 18. While Moise's criticizes that "the Commission did not appear to attempt any assessment or analysis of the costs of mid-band network deployment over PEA-sized license areas before concluding that low costs justify setting the bidding credit cap at the lowest possible level," (Moise Comments at 6) we note that such specifics are precisely the kind of information that the Commission invited commenters to provide in the record in support of any alternative cap levels.

¹⁹⁹ With respect to capital requirements, Moise estimates that Auction 110 will generate proceeds of \$29 billion for 100 megahertz of spectrum based on results from Auction 107, which offered 280 megahertz of spectrum and generated \$81.2 billion. However, this estimate does not take into account the many differences between the licenses offered in Auctions 107 and 110. Moreover, in basing its analysis strictly on the winning bids in Auction 107, Moise ignores that Auction 105, which offered licenses for 70 megahertz of mid-band spectrum, generated gross revenues of under \$4.6 billion. See *Auction 105 Closing Public Notice*, 35 FCC Rcd at 9287, para. 1. With respect to network deployment costs, Moise asserts without further support or comparison to actual costs for other bands that the costs of deployment in the mid-band are higher than for networks using low-band spectrum. Moise Comments at 11. With respect to inventory, Moise states that "the 3.45 Band auction will be the second largest offering of sub-6 GHz spectrum behind the C-Band Auction," and therefore "its rank qualifies it to be considered at the top of, if not exceed, the bidding credit cap associated with any of these auctions." Moise Comments at 12. Moise does not, however, explain why Auction 110's "rank" among spectrum auctions should be weighted so heavily in establishing small business bidding credit caps, particularly when not one of the 136 qualified small business bidders in Auction 105 (113 of which were winning bidders) came even close to hitting the \$25 million cap used in that auction.

²⁰⁰ See *Auction 110 Comment Public Notice* at 8, para. 16, n.43.

81. We also decline CCA's request to set the small business bidding credit cap at \$40 million and the rural service provider cap at \$25 million.²⁰¹ CCA contends that lower cap amounts act as a constraint and that small and rural bidders "might have bid more aggressively with more generous bidding credits" in past auctions.²⁰² Again, given that auction results show that bidders have not even come close to the caps in recent auctions, we are unpersuaded that any increase is warranted for Auction 110. In short, the record in this proceeding provides no basis to disturb the Commission's thinking in the *Auction 110 Comment Public Notice* that these cap amounts "will promote the statutory goals of providing meaningful opportunities for *bona fide* small businesses to compete in auctions and in the provision of spectrum-based services, without compromising our responsibility to prevent unjust enrichment and ensure efficient and intensive use of spectrum."²⁰³

4. Attributable Interests

a. Controlling Interests and Affiliates

82. Pursuant to section 1.2110 of the Commission's rules, an applicant's eligibility for designated entity benefits is determined by attributing the gross revenues (for those seeking small business benefits) or subscribers (for those seeking rural service provider benefits) of the applicant, its affiliates, its controlling interests, and the affiliates of its controlling interests.²⁰⁴ Controlling interests of an applicant include individuals and entities with either *de facto* or *de jure* control of the applicant.²⁰⁵ Typically, ownership of greater than 50% of an entity's voting stock evidences *de jure* control.²⁰⁶ *De facto* control is determined on a case-by-case basis based on the totality of the circumstances.²⁰⁷ The following are some common indicia of *de facto* control:

- the entity constitutes or appoints more than 50% of the board of directors or management committee;
- the entity has authority to appoint, promote, demote, and fire senior executives that control the day-to-day activities of the licensee; and
- the entity plays an integral role in management decisions.²⁰⁸

²⁰¹ See CCA Comments at 4.

²⁰² *Id.* at 5-6.

²⁰³ *Auction 110 Comment Public Notice* at 8, para. 16, citing 47 U.S.C. §§ 309(j)(3), 309(j)(4)(D).

²⁰⁴ 47 CFR § 1.2110(b)(1), (f)(4)(i)(C)(1).

²⁰⁵ *Id.* § 1.2110(c)(2)(i).

²⁰⁶ *Id.*

²⁰⁷ See *id.*; see also, e.g., *Implementation of Section 309(j) of the Communications Act—Competitive Bidding*, PP Docket No. 93-253, Fifth Memorandum Opinion and Order, 10 FCC Rcd 403, 447-49, 451, 455-56, paras. 80-82, 85-86, 95-96 (1994); *Intermountain Microwave*, Public Notice, 12 FCC 2d 559, 559-60 (1963) (*Intermountain Microwave*); *Application of Ellis Thompson Corp.*, CC Docket No. 94-136, Memorandum Opinion and Order and Hearing Designation Order, 9 FCC Rcd 7138, 7138-39, paras. 9-11 (1994); *Baker Creek Commc'ns, L.P.*, Memorandum Opinion and Order, 13 FCC Rcd 18709, 18713-14, paras. 7-8 (WTB 1998); *Northstar Wireless, LLC, SNR Wireless LicenseCo, LLC, Applications for New Licenses in the 1695-1710 MHz, 1755-1780 MHz and 2155-2180 MHz Bands*, Memorandum Opinion and Order, 30 FCC Rcd 8887, 8889-91, paras. 4-9 (2015), *aff'd on this issue and remanded on other grounds sub nom. SNR Wireless LicenseCo, LLC et al. v. FCC*, 868 F.3d 1021 (D.C. Cir. 2017), *cert. denied*, No. 17-1058, 138 S. Ct. 2674 (2018).

²⁰⁸ 47 CFR § 1.2110(c)(2)(i)(A)-(C).

83. Additionally, for attribution purposes, officers and directors of an applicant seeking a bidding credit are considered to have a controlling interest in the applicant.²⁰⁹ Applicants should refer to section 1.2110(c)(2) of the Commission's rules and the FCC Form 175 Instructions to understand how certain interests are calculated in determining control for purposes of attributing gross revenues.

84. Affiliates of an applicant or controlling interest include an individual or entity that: (1) directly or indirectly controls or has the power to control the applicant, (2) is directly or indirectly controlled by the applicant, (3) is directly or indirectly controlled by a third party that also controls or has the power to control the applicant, or (4) has an "identity of interest" with the applicant.²¹⁰ The Commission's definition of an affiliate of the applicant encompasses both controlling interests of the applicant and affiliates of controlling interests of the applicant.²¹¹ For more information on the application requirements regarding controlling interests and affiliates, applicants should refer to sections 1.2110(c)(2) and (c)(5) respectively,²¹² as well as the FCC Form 175 Instructions.

85. An applicant seeking a small business bidding credit must demonstrate its eligibility for the bidding credit by: (1) meeting the applicable small business size standard, based on the controlling interest and affiliation rules discussed above; and (2) retaining control, on a license-by-license basis, over the spectrum associated with the licenses for which it seeks small business benefits.²¹³ For purposes of the first prong of the standard, applicants should note that control and affiliation may arise through, among other things, ownership interests, voting interests, management and other operating agreements, or the terms of any other types of agreements—including spectrum lease agreements—that independently or together create a controlling, or potentially controlling, interest in the applicant's or licensee's business as a whole.²¹⁴ In addition, once an applicant demonstrates eligibility as a small business under the first prong, it must also be eligible for benefits on a license-by-license basis under the second prong. As part of making the FCC Form 175 certification that it is qualified as a designated entity under section 1.2110, an applicant is certifying that it does not have any spectrum use or other agreements that would confer either *de jure* or *de facto* control of any license it seeks to acquire with bidding credits.²¹⁵

86. Applicants should note that, under this standard for evaluating eligibility for small business bidding credits, if an applicant executes a spectrum use agreement that does not comply with the

²⁰⁹ *Id.* § 1.2110(c)(2)(ii)(F).

²¹⁰ *Id.* § 1.2110(c)(5).

²¹¹ *Id.* For example, if an applicant's officer or director owns or controls a business that is separate from the applicant, then that entity would be considered an affiliate of the applicant.

²¹² *Id.* § 1.2110(c)(2), (c)(5).

²¹³ *See id.* § 1.2110(b)(3); *see also Updating Part 1 Report and Order*, 30 FCC Rcd at 7507-10, paras. 29-34.

²¹⁴ *See* 47 CFR § 1.2105(a)(2)(iv); *Updating Part 1 Report and Order*, 30 FCC Rcd at 7507-09, paras. 29-33; *see also, e.g.*, 47 CFR § 1.2110(c)(5)(vii)-(x) (explaining how affiliation can arise where one concern has the power to control or potentially control the other concern). As discussed below, except under the limited provisions provided for spectrum manager lessors, the Commission's decision to discontinue its policy requiring designated entity licensees to operate as primarily facilities-based providers of service directly to the public does not alter the rules that require the Commission to consider whether any particular use agreement may confer control of or create affiliation with the applicant. *See Updating Part 1 Report and Order*, 30 FCC Rcd at 7509, para. 33.

²¹⁵ *See* 47 CFR § 1.2105(a)(2)(iv); *Updating Part 1 Report and Order*, 30 FCC Rcd at 7509-10, paras. 33-34; *see also* 47 CFR § 1.2110(c)(2)(ii)(A). For instance, if an applicant has a spectrum use agreement on a particular license that calls into question whether, under the Commission's affiliation rules, the user's revenues should be attributed to the applicant for that particular license, rather than for its overall business operations, the applicant could be ineligible to acquire or retain benefits with respect to that particular license. By taking this license-by-license approach, an applicant need not be eligible for small business benefits on each of the spectrum licenses it holds in order to demonstrate its overall eligibility for such benefits. *Updating Part 1 Report and Order*, 30 FCC Rcd at 7509, para. 33.

Commission's relevant standard of *de facto* control,²¹⁶ then it will be subject to unjust enrichment obligations for the benefits associated with that particular license, as well as the penalties associated with any violation of section 310(d) of the Communications Act and related regulations, which require Commission approval of transfers of control.²¹⁷ If that spectrum use agreement (either alone or in combination with the designated entity controlling interest and attribution rules described above) goes so far as to confer control of the applicant's overall business, then the gross revenues of the additional interest holders will be attributed to the applicant, which could render the applicant ineligible for all current and future small business benefits on all licenses.²¹⁸

b. Limitation on Spectrum Use

87. Under section 1.2110(c)(2)(ii)(J) of the Commission's rules, the gross revenues (or the subscribers, in the case of a rural service provider) of an applicant's disclosable interest holder are attributable to the applicant, on a license-by-license basis, if the disclosable interest holder has an agreement with the applicant to use, in any manner, more than 25% of the spectrum capacity of any license won by the applicant and acquired with a bidding credit during the five-year unjust enrichment period for the applicable license.²¹⁹ For purposes of this requirement, a disclosable interest holder of an applicant seeking designated entity benefits is defined as any individual or entity holding a 10% or greater interest of any kind in the applicant, including but not limited to, a 10% or greater interest in any class of stock, warrants, options, or debt securities in the applicant or licensee.²²⁰ Any applicant seeking a bidding credit for licenses won in Auction 110 will be subject to this attribution rule and must make the requisite disclosures.²²¹

88. Certain disclosable interest holders may be excluded from this attribution rule. Specifically, an applicant claiming the rural service provider bidding credit may have spectrum license use agreements with a disclosable interest holder, without having to attribute the disclosable interest holder's subscribers, so long as the disclosable interest holder is independently eligible for a rural service provider credit and the use agreement is otherwise permissible under the Commission's existing rules.²²² If applicable, the applicant must attach to its FCC Form 175 any additional information as may be required to indicate any license (or license area) that may be subject to this attribution rule or to demonstrate its eligibility for the exception from this attribution rule.²²³ Consistent with the

²¹⁶ See 47 CFR § 1.9010 (defining *de facto* control for spectrum leasing arrangements); see also *Intermountain Microwave*, 12 FCC 2d at 559-60 (describing *de facto* control for non-leasing situations); 47 CFR § 1.2110(c)(2) (defining *de facto* control for designated entities); *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15324, para. 61 (incorporating the *Intermountain Microwave* principles of control into section 1.2110 of the Commission's rules).

²¹⁷ Although in this scenario the applicant may not be eligible for a bidding credit and may be subject to the Commission's unjust enrichment rules, the applicant need not be eligible for small business benefits on each of the spectrum licenses it holds in order to demonstrate its overall eligibility for such benefits.

²¹⁸ This rule does not alter the requirement of full dilution in 47 CFR § 1.2110(c)(2)(ii)(A). Except where the leasing standard of *de facto* control applies under sections 1.9010 and 1.9020 of the secondary market rules, the criteria of *Intermountain Microwave* and *Ellis Thompson* will continue to apply to every Commission licensee for purposes of assessing whether it can demonstrate that it retains *de facto* control of its business venture and spectrum license. 47 CFR §§ 1.9010, 1.9020; *Application of Ellis Thompson Corporation*, CC Docket No. 94-136, Summary Decision, 10 FCC Rcd 12554, 12555-56, para. 9 (ALJ 1995). In the *Updating Part 1 Report and Order*, the Commission also modified section 1.9020 of its rules to apply the same *de facto* control standard to designated entity spectrum manager lessors that it applies to non-designated entity spectrum manager lessors. *Updating Part 1 Report and Order*, 30 FCC Rcd at 7510-11, paras. 35-39; see 47 CFR § 1.9020.

²¹⁹ 47 CFR § 1.2110(c)(2)(ii)(J); see also *Updating Part 1 Report and Order*, 30 FCC Rcd at 7512-16, paras. 42-53.

²²⁰ 47 CFR § 1.2110(c)(2)(ii)(J).

²²¹ See Sections II.H.1 (Small Business Bidding Credit) and II.H.2 (Rural Service Provider Bidding Credit), above.

²²² See 47 CFR § 1.2110(c)(2)(ii)(J); see also *Updating Part 1 Report and Order*, 30 FCC Rcd at 7513, para. 46.

Commission's limited information procedures, the Commission intends to withhold from public disclosure all information contained in any such attachments until after the close of Auction 110.

c. Exceptions from Attribution Rules for Small Businesses and Rural Service Providers

89. Applicants claiming designated entity benefits may be eligible for certain exceptions from the Commission's attribution rules.²²⁴ For example, in calculating an applicant's gross revenues under the controlling interest standard, the Commission will not attribute to the applicant the personal net worth, including personal income, of its officers and directors.²²⁵ However, to the extent that the officers and directors of the applicant are controlling interest holders of other entities, the gross revenues of those entities will be attributed to the applicant. Moreover, if an officer or director operates a separate business, then the gross revenues derived from that business would be attributed to the applicant.²²⁶

90. The Commission has also exempted from attribution to the applicant the gross revenues of the affiliates of a rural telephone cooperative's officers and directors, if certain conditions specified in section 1.2110(b)(4)(iii) of the Commission's rules are met.²²⁷ An applicant claiming this exemption must provide, in an attachment, an affirmative statement that the applicant, affiliate and/or controlling interest is an eligible rural telephone cooperative within the meaning of section 1.2110(b)(4)(iii), and the applicant must supply any additional information as may be required to demonstrate eligibility for the exemption from the attribution rule.²²⁸

91. An applicant claiming a rural service provider bidding credit may be eligible for an exception from the Commission's attribution rules as an existing rural partnership. To qualify for this exception, an applicant must be a rural partnership providing service as of July 16, 2015, and each member of the rural partnership must individually have fewer than 250,000 combined wireless, wireline, broadband, and cable subscribers.²²⁹ Because each member of the rural partnership must individually qualify for the bidding credit, by definition, a partnership that includes a nationwide provider as a member will not be eligible for the benefit.²³⁰

92. Finally, a consortium of small businesses or rural service providers may seek an exception from the Commission's attribution rules. Under the Commission's rules, a consortium of small
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²²³ To the extent an Auction 110 applicant is required to submit any such additional information, the applicant must not disclose details of its submission to others as it could reveal information regarding its PEA selection(s) or other bidding information. 47 CFR § 1.2105(c).

²²⁴ See, e.g., 47 CFR § 1.2110(b)(4).

²²⁵ See *id.* § 1.2110(c)(2)(ii)(F); see also *Part 1 Third R&O Second Recon/Part 1 Fifth R&O Recon*, 18 FCC Rcd at 10185-86, paras. 8-9.

²²⁶ See *Part 1 Third R&O Second Recon/Part 1 Fifth R&O Recon*, 18 FCC Rcd at 10186, para. 9.

²²⁷ See 47 CFR § 1.2110(b)(4)(iii); see also *Part 1 Third R&O Second Recon/Part 1 Fifth R&O Recon*, 18 FCC Rcd at 10186-94, paras. 10-18; *Part 1 Fifth R&O Second Recon*, 20 FCC Rcd at 1945-50, paras. 9-18.

²²⁸ 47 CFR § 1.2110(b)(4)(iii); see also *Part 1 Third R&O Second Recon/Part 1 Fifth R&O Recon*, 18 FCC Rcd at 10186-95, paras. 10-20; *Part 1 Fifth R&O Second Recon*, 20 FCC Rcd at 1945-50, paras. 9-18.

²²⁹ See 47 CFR § 1.2110(f)(4)(i)(C)(2); *Updating Part 1 Report and Order*, 30 FCC Rcd at 7536, para. 102. Thus, the Commission will evaluate eligibility for an existing rural wireless partnership on the same basis as it would for an applicant applying for a bidding credit as a consortium of rural service providers. See *id.* at 7536, para. 102 & n.336.

²³⁰ *Updating Part 1 Report and Order*, 30 FCC Rcd at 7536, para. 103. We also note that members of such partnerships that fall under this exception may also apply as individual applicants or members of a consortium (to the extent that it is otherwise permissible to do so under the Commission's rules) and seek eligibility for a rural service provider bidding credit. *Id.* at 7536, 7582, paras. 102-03, 210.

businesses or rural service providers is a conglomerate organization composed of two or more entities, each of which individually satisfies the definition of small business or rural service provider.²³¹ A consortium must provide additional information for each member demonstrating each member's eligibility for the claimed bidding credit in order to show that the applicant satisfies the eligibility criteria for the bidding credit.²³² The gross revenue or subscriber information of each consortium member will not be aggregated for purposes of determining the consortium's eligibility for the claimed bidding credit. This information must be provided, however, to ensure that each consortium member qualifies for the bidding credit sought by the consortium.

I. Provisions Regarding Former and Current Defaulters

93. Pursuant to the rules governing competitive bidding, each applicant must make certifications regarding whether it is a current or former defaulter or delinquent. A current defaulter or delinquent is not eligible to participate in Auction 110,²³³ but a former defaulter or delinquent may participate so long as it is otherwise qualified and makes an upfront payment that is 50% more than would otherwise be necessary.²³⁴ Accordingly, each applicant must certify under penalty of perjury on its FCC Form 175 that it, its affiliates, its controlling interests, and the affiliates of its controlling interests are not in default on any payment for a Commission construction permit or license (including down payments) and that it is not delinquent on any non-tax debt owed to any Federal agency.²³⁵ Additionally, an applicant must certify under penalty of perjury whether it (along with its controlling interests) has ever been in default on any payment for a Commission construction permit or license (including down payments) or has ever been delinquent on any non-tax debt owed to any Federal agency, subject to the

²³¹ 47 CFR § 1.2110(c)(6).

²³² See Sections II.H.1 (Small Business Bidding Credit) and II.H.2 (Rural Service Provider Bidding Credit), above.

²³³ An applicant is considered a "current defaulter" or a "current delinquent" when it, any of its affiliates, any of its controlling interests, or any of the affiliates of its controlling interests, is in default on any payment for any Commission construction permit or license (including a down payment) or is delinquent on any non-tax debt owed to any Federal agency as of the filing deadline for auction applications. See *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15317, para. 42 & n.142; *Wireless Telecommunications Bureau Reminds Prospective Broadband PCS Spectrum Auction Applicants of Default and Delinquency Disclosure Requirements*, Public Notice, 19 FCC Rcd 21920 (2004) (*Auction Default Disclosure Public Notice*). This public notice may be found at www.fcc.gov/auction/58.

²³⁴ 47 CFR §§ 1.2105(a)(2)(xi), (xii), (b)(1), 1.2106(a). For purposes of evaluating the certifications under sections 1.2105(a)(2)(xi) and (xii), we clarify that "non-tax debt owed to any Federal agency" includes, within the meaning of the rule, all amounts owed under Federal programs, including contributions to the Universal Service Fund (USF), Telecommunications Relay Services Fund, and the North American Numbering Plan Administration, notwithstanding that the administrator of any such fund may not be considered a Federal "agency" under the Debt Collection Improvement Act of 1996, Pub. L. No. 104-134, 110 Stat. 1321 (1996) (codified in relevant parts at 31 U.S.C. §§ 3716 (administrative offset), 3717 (interest and penalty on claims)); see also 47 CFR §§ 1.1901, 1.1911, 1.1912, 1.1940. For example, an applicant with a past due USF contribution as of the auction application filing deadline would be disqualified from participating in Auction 110 under the Commission's rules. 47 CFR § 1.2105(a)(2)(xi), (b)(1). If, however, the applicant cures the overdue debt prior to the auction application filing deadline (and such debt does not fall within one of the exclusions described in paragraph 89 of this Public Notice), then it may be eligible to participate in Auction 110 as a former defaulter under the Commission's rules. See *id.* §§ 1.2105(a)(2)(xii), 1.2106(a). For additional information on upfront payments and related forms, see Section III.F (Upfront Payments), below.

²³⁵ 47 CFR § 1.2105(a)(2)(xi); see also *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15317, para. 42 & n.142 ("If any one of an applicant's controlling interests or their affiliates . . . is in default on any Commission licenses or is delinquent on any non-tax debt owed to any Federal agency at the time the applicant files it[s] FCC Form 175, the applicant will not be able to make the certification required by Section 1.2105(a)(2)(x) . . . and will not be eligible to participate in Commission auctions.").

exclusions described below.²³⁶ For purposes of making these certifications, the term “controlling interest” is defined in section 1.2105(a)(4)(i) of the Commission rules.²³⁷

94. Under the Commission’s rule regarding applications by former defaulters, an applicant is considered a “former defaulter” or a “former delinquent” when, as of the FCC Form 175 deadline, the applicant or any of its controlling interests has defaulted on any Commission construction permit or license or has been delinquent on any non-tax debt owed to any Federal agency, but has since remedied all such defaults and cured all of the outstanding non-tax delinquencies.²³⁸ For purposes of the certification under section 1.2105(a)(2)(xii), the applicant may exclude from consideration any cured default on a Commission construction permit or license or cured delinquency on a non-tax debt owed to a Federal agency for which any of the following criteria are met: (1) the notice of the final payment deadline or delinquency was received more than seven years before the FCC Form 175 filing deadline, (2) the default or delinquency amounted to less than \$100,000, (3) the default or delinquency was paid within two quarters (i.e., six months) after receiving the notice of the final payment deadline or delinquency, or (4) the default or delinquency was the subject of a legal or arbitration proceeding and was cured upon resolution of the proceeding.²³⁹ With respect to the first exclusion, notice to a debtor may include notice of a final payment deadline or notice of delinquency and may be express or implied depending on the origin of any Federal non-tax debt giving rise to a default or delinquency.²⁴⁰ Additionally, for the third exclusion, the date of receipt of the notice of a final default deadline or delinquency by the intended party or debtor will be used for purposes of verifying receipt of notice.²⁴¹

95. In addition to this Public Notice, applicants are encouraged to review previous guidance on default and delinquency disclosure requirements in the context of the auction short-form application process.²⁴² Parties are also encouraged to consult with Auctions Division staff if they have any questions about default and delinquency disclosure requirements.

²³⁶ 47 CFR § 1.2105(a)(2)(xii).

²³⁷ *Id.* § 1.2105(a)(4)(i).

²³⁸ In 2015, the Commission narrowed the scope of the individuals and entities to be considered for purposes of the former defaulter rule. *Updating Part 1 Report and Order*, 30 FCC Rcd at 7568, para. 175; *see* 47 CFR § 1.2105(a)(2)(xii), (a)(4).

²³⁹ 47 CFR § 1.2105(a)(2)(xii), (a)(4); *see also Updating Part 1 Report and Order*, 30 FCC Rcd at 7566-68, paras. 173-75. Additionally, for purposes of the certification required on an FCC Form 175, a debt will not be deemed to be in default or delinquent until after the expiration of a final payment deadline. *See, e.g., Expedited Clarification of Sections 1.2105(a) and 1.2106(a) of the Commission's Rules*, Letter Order, 19 FCC Rcd 22907 (WTB 2004). Thus, to the extent that the rules providing for payment of a specific federal debt permit payment after an original payment deadline accompanied by late fee(s), such debts would not be in default or delinquent for purposes of applying the former defaulter rules until after the late payment deadline. In addition, the Commission provides the following regarding defaults on Commission licenses: any winning bidder that fails to timely pay its post-auction down payment or the balance of its final winning bid amount(s) or is disqualified for any reason after the close of an auction will be in default and subject to a default payment. 47 CFR § 1.2109(c). Commission staff provide individual notice of the amount of such a default payment as well as procedures and information required by the Debt Collection Improvement Act of 1996, including the payment due date and any charges, interest, and/or penalties that accrue in the event of delinquency. *See, e.g.,* 31 U.S.C. §§ 3716, 3717; 47 CFR §§ 1.1911, 1.1912, 1.1940. For purposes of the certifications required on an FCC Form 175, such notice provided by Commission staff assessing a default payment arising out of a default on a winning bid constitutes notice of the final payment deadline with respect to a default on a Commission license.

²⁴⁰ *Updating Part 1 Report and Order*, 30 FCC Rcd at 7566, para. 173 & n.556.

²⁴¹ *Id.* at 7567, para. 173 & n.559.

²⁴² *See Auction Default Disclosure Public Notice*, 19 FCC Rcd at 21920.

96. The Commission considers outstanding debts owed to the United States Government, in any amount, to be a serious matter. The Commission has previously adopted rules, including a provision referred to as the “red light rule,” that implement its obligations under the Debt Collection Improvement Act of 1996, which governs the collection of debts owed to the United States.²⁴³ Under the red light rule, applications and other requests for benefits filed by parties that have outstanding debts owed to the Commission will not be processed. When adopting that rule, the Commission explicitly declared, however, that its competitive bidding rules “are not affected” by the red-light rule.²⁴⁴ As a consequence, the Commission’s adoption of the red light rule does not alter the applicability of any of its competitive bidding rules, including the provisions and certifications of sections 1.2105 and 1.2106, with regard to current and former defaults or delinquencies.

97. We remind each applicant, however, that any indication in the Commission’s Red Light Display System, which provides information regarding debts currently owed to the Commission, may not be determinative of an auction applicant’s ability to comply with the default and delinquency disclosure requirements of section 1.2105.²⁴⁵ Thus, while the red light rule ultimately may prevent the processing of long-form applications by auction winners, an auction applicant’s lack of current “red light” status is not necessarily determinative of its eligibility to participate in an auction (or whether it may be subject to an increased upfront payment obligation). Moreover, a prospective applicant in Auction 110 should note that any long-form applications filed after the close of bidding will be reviewed for compliance with the Commission’s red light rule,²⁴⁶ and such review may result in the dismissal of a winning bidder’s long-form application.²⁴⁷ We encourage each applicant to carefully review all records and other available Federal agency databases and information sources to determine whether the applicant, or any of its affiliates, or any of its controlling interests, or any of the affiliates of its controlling interests, owes or was ever delinquent in the payment of non-tax debt owed to any Federal agency.

J. Optional Applicant Status Identification

98. Applicants owned by members of minority groups and/or women, as defined in section 1.2110(c)(3),²⁴⁸ and rural telephone companies, as defined in section 1.2110(c)(4),²⁴⁹ may identify themselves regarding this status in filling out their FCC Form 175 applications. This applicant status information is collected for statistical purposes only and assists the Commission in monitoring the participation of various groups in its auctions.²⁵⁰

²⁴³ *Amendment of Parts 0 and 1 of the Commission's Rules; Implementation of the Debt Collection Improvement Act of 1996 and Adoption of Rules Governing Applications or Requests for Benefits by Delinquent Debtors*, MD Docket No. 02-339, Report and Order, 19 FCC Rcd 6540 (2004) (*Debt Collection Report and Order*).

²⁴⁴ *Id.* at 6541, para. 3 & n.11 (specifically noting the current defaulter and former defaulter certifications of 47 CFR § 1.2105(a)(2)(x) and (xi) and stating that “[t]hese rules are not affected by the red light rule”).

²⁴⁵ *Auction Default Disclosure Public Notice*, 19 FCC Rcd at 21920 (addressing relationship between Commission’s Red Light Display System and short-form application default and delinquency disclosure requirements for auction applicants). To access the Commission’s Red Light Display System, go to <https://apps.fcc.gov/redlight/login.cfm>.

²⁴⁶ *Debt Collection Report and Order*, 19 FCC Rcd at 6540-42, paras. 1, 3-5; *see also* 47 CFR § 1.1114.

²⁴⁷ Applicants that have their long-form applications dismissed will be deemed to have defaulted and will be subject to default payments under 47 CFR §§ 1.2104(g) and 1.2109(c).

²⁴⁸ 47 CFR § 1.2110(c)(3).

²⁴⁹ *Id.* § 1.2110(c)(4).

²⁵⁰ For instance, designated entities are defined as small businesses (including businesses owned by members of minority groups and/or women), rural telephone companies, and rural service providers. *Id.* § 1.2110(a).

K. Modifications to FCC Form 175**1. Only Minor Modifications Allowed**

99. After the initial FCC Form 175 filing deadline, an Auction 110 applicant will be permitted to make only minor changes to its application consistent with the Commission's rules.²⁵¹ Examples of minor changes include the deletion or addition of authorized bidders (to a maximum of three) and the revision of addresses and telephone numbers of the applicant, its responsible party, and its contact person. Major modification to an FCC Form 175 (e.g., change of PEA selection, certain changes in ownership that would constitute an assignment or transfer of control of the applicant, change in the required certifications, change in applicant's legal classification that results in a change in control, or change in claimed eligibility for a higher percentage of bidding credit) will not be permitted after the initial FCC Form 175 filing deadline.²⁵² If an amendment reporting changes is a "major amendment," as described in section 1.2105(b)(2), the major amendment will not be accepted and may result in the dismissal of the application.²⁵³

2. Duty to Maintain Accuracy and Completeness of FCC Form 175

100. Pursuant to section 1.65 of the Commission's rules, each applicant has a continuing obligation to maintain the accuracy and completeness of information furnished in a pending application, including a pending application to participate in Auction 110.²⁵⁴ Consistent with the requirements for spectrum auctions, an applicant for Auction 110 must furnish additional or corrected information to the Commission within five business days after a significant occurrence, or amend its FCC Form 175 no more than five business days after the applicant becomes aware of the need for the amendment.²⁵⁵ An applicant is obligated to amend its pending application even if a reported change may result in the dismissal of the application because it is subsequently determined to be a major modification.

3. Modifying an FCC Form 175

101. As noted above, a party seeking to participate in Auction 110 must file an FCC Form 175 electronically via the FCC's Auction Application System. During the initial filing window, an applicant will be able to make any necessary modifications to its FCC Form 175 in the Auction Application System. An applicant that has certified and submitted its FCC Form 175 before the close of the initial filing window may continue to make modifications as often as necessary until the close of that window; however, the applicant must re-certify and re-submit its FCC Form 175 before the close of the initial

²⁵¹ See *id.* § 1.2105(b)(2). Minor amendments include any changes that are not major, such as correcting typographical errors and supplying or correcting information as requested to support the certifications made in the application. *Id.*

²⁵² See *id.*; see also *Two Way Radio of Carolina, Inc.*, Memorandum Opinion and Order, 14 FCC Rcd 12035 (1999) (*Two Way Radio*) (holding that auction applicant was not allowed to change its designated entity status after application filing deadline).

²⁵³ See 47 CFR § 1.2105(b)(2). Any change in control of an applicant—resulting from a merger, for example—will be considered a major modification, and the application will consequently be dismissed. The Commission reiterates that, even if an applicant's FCC Form 175 is dismissed, the applicant would remain subject to the communication prohibitions of 47 CFR § 1.2105(c) until the down payment deadline for Auction 110.

²⁵⁴ See *id.* §§ 1.65, 1.2105(b)(4). For purposes of sections 1.65 and 1.2105(b)(4), an applicant's FCC Form 175 and associated attachments will remain pending until the release of a public notice announcing the close of the auction. However, we remind Auction 110 applicants that they remain subject to the section 1.2105(c) prohibition on certain communications until the post-auction deadline for making down payments on winning bids. See Section II.G.2 (Prohibition Applies Until Down Payment Deadline), above.

²⁵⁵ See 47 CFR §§ 1.65, 1.2105(b)(4). We remind each applicant of its duty to continuously maintain the accuracy of information submitted in its auction application. See, e.g., *Vermont Telephone Company, Inc.*, Notice of Apparent Liability for Forfeiture, 26 FCC Rcd 14130, 14134, para. 11 (EB 2011).

filing window to confirm and effect its latest application changes. After each submission, a confirmation page will be displayed stating the submission time and submission date.

102. An applicant will also be allowed to modify its FCC Form 175 in the Auction Application System, except for certain fields,²⁵⁶ during the resubmission filing window and after the release of the public notice announcing the qualified bidders for an auction. During these times, if an applicant needs to make permissible minor changes to its FCC Form 175 or must make changes in order to maintain the accuracy and completeness of its application pursuant to sections 1.65 and 1.2105(b)(4), then it must make the change(s) in the Auction Application System and re-certify and re-submit its application to confirm and effect the change(s).

103. An applicant's ability to modify its FCC Form 175 in the Auction Application System will be limited between the closing of the initial filing window and the opening of the application resubmission filing window, and between the closing of the resubmission filing window and the release of the public notice announcing the qualified bidders for an auction. During these periods, an applicant will be able to view its submitted application, but will be permitted to modify only the applicant's address, responsible party address, and contact information (e.g., name, address, telephone number, etc.) in the Auction Application System. An applicant will not be able to modify any other pages of the FCC Form 175 in the Auction Application System during these periods. If, during these periods, an applicant needs to make other permissible minor changes to its FCC Form 175, or changes to maintain the accuracy and completeness of its application pursuant to sections 1.65 and 1.2105(b)(4), then the applicant must submit a letter briefly summarizing the changes to its FCC Form 175 via email to auCTION110@fcc.gov. The email summarizing the changes must include a subject line referring to Auction 110 and the name of the applicant, for example, "Re: Changes to Auction 110 Auction Application of XYZ Corp." Any attachments to the email must be formatted as Adobe® Acrobat® (PDF) or Microsoft® Word documents. An applicant that submits its changes in this manner must subsequently modify, certify, and submit its FCC Form 175 application(s) electronically in the Auction Application System once it is again open and available to applicants.

104. Applicants should also note that even at times when the Auction Application System is open and available to applicants, the system will not allow an applicant to make certain other permissible changes itself (e.g., correcting a misstatement of the applicant's legal classification, name, or certifying official).²⁵⁷ If an applicant needs to make a permissible minor change of this nature, then it must submit a written request by email to the Auctions Division Chief, via auCTION110@fcc.gov requesting that the Commission manually make the change on the applicant's behalf. Once Commission staff has informed the applicant that the change has been made in the Auction Application System, the applicant must then re-certify and re-submit its FCC Form 175 in the Auction Application System to confirm and effect the change(s).

105. As with filing the FCC Form 175, any amendment(s) to the application and related statements of fact must be certified by an authorized representative of the applicant with authority to bind the applicant. Applicants should note that submission of any such amendment or related statement of fact constitutes a representation by the person certifying that he or she is an authorized representative with such authority and that the contents of the amendment or statement of fact are true and correct.

106. Applicants must not submit application-specific material through the Commission's Electronic Comment Filing System. Further, as discussed above, parties submitting information related to their applications should use caution to ensure that their submissions do not contain confidential information or communicate information that would violate section 1.2105(c) or the limited information

²⁵⁶ Specifically, an applicant will not be allowed to modify electronically in the Auction Application System the applicant's legal classification, the applicant's name, or the certifying official.

²⁵⁷ This is the case because certain fields on the FCC Form 175 will no longer be changeable by the applicant after the initial filing window closes.

procedures adopted for Auction 110. An applicant seeking to submit, outside of the Auction Application System, information that might reflect non-public information, such as an applicant's PEA selection(s), upfront payment amount, or bidding eligibility, should consider including in its email a request that the filing or portions of the filing be withheld from public inspection until the end of the prohibition on certain communications pursuant to section 1.2105(c).

107. Questions about FCC Form 175 amendments should be directed to the Auctions Division at (202) 418-0660.

III. PREPARING FOR BIDDING IN AUCTION 110

A. Due Diligence

108. We remind each potential bidder that it is solely responsible for investigating and evaluating all technical and marketplace factors that may have a bearing on the value of the licenses that it is seeking in Auction 110 and that it is required to certify, under penalty of perjury, that it has read this Public Notice and has familiarized itself with the auction procedures and the service rules for the 3.45–3.55 GHz band.²⁵⁸ **The Commission makes no representations or warranties about the use of this spectrum or these licenses for particular services. Each applicant should be aware that a Commission auction represents an opportunity to become a Commission licensee, subject to certain conditions and regulations. This includes the established authority of the Commission to alter the terms of existing licenses by rulemaking, which is equally applicable to licenses awarded by auction.²⁵⁹ A Commission auction does not constitute an endorsement by the Commission of any particular service, technology, or product, nor does a Commission license constitute a guarantee of business success.**

109. An applicant should perform its due diligence research and analysis before proceeding, as it would with any new business venture. In particular, we encourage each potential bidder to perform technical analyses and/or refresh its previous analyses to assure itself that, should it become a winning bidder for any Auction 110 license, it will be able to build and operate facilities that will fully comply with all applicable technical and legal requirements. We urge each applicant to inspect any prospective sites for communications facilities located in, or near, the geographic area for which it plans to bid, confirm the availability of such sites, and to familiarize itself with the Commission's rules regarding the National Environmental Policy Act (NEPA),²⁶⁰ the National Historic Preservation Act (NHPA),²⁶¹ and other environmental statutes.²⁶²

110. We also encourage each applicant in Auction 110 to continue to conduct its own research throughout the auction in order to determine the existence of pending or future administrative or judicial proceedings that might affect its decision on continued participation in the auction.²⁶³ Each applicant is

²⁵⁸ See *Auction 110 Certification Requirement Public Notice*. As indicated in note 12, above, the certification will apply only if the information collection requirement has been approved by OMB and notice of such approval has been published in the Federal Register prior to the opening of the short-form application window for Auction 110.

²⁵⁹ See, e.g., *Cellco P'ship v. FCC*, 700 F.3d 534, 542 (D.C. Cir. 2012); *Celtronix Telemetry, Inc. v. FCC*, 272 F.3d 585, 589 (D.C. Cir. 2001) (citing 47 U.S.C. § 309(j)(6)(D)).

²⁶⁰ 42 U.S.C. § 4321 *et seq.*

²⁶¹ 54 U.S.C. § 300101 *et seq.*

²⁶² 47 CFR Chapter 1, Part 1, Subpart I.

²⁶³ Lockheed Martin Corporation has filed a request for waiver of certain Commission rules that is currently pending before the Commission. Lockheed Martin Corporation Request for Waiver, WT Docket No. 19-348, AU Docket No. 21-62 (filed Apr. 29, 2021), <https://ecfsapi.fcc.gov/file/10507200669956/Lockheed%20Martin.pdf> (*Lockheed Waiver Request*). Additionally, three Petitions for Reconsideration of the 3.45 GHz Second Report and Order are currently pending before the Commission. See, Rural Wireless Association, Inc. Petition for Reconsideration, WT

(continued...)

responsible for assessing the likelihood of the various possible outcomes and for considering the potential impact on licenses available in an auction. The due diligence considerations mentioned in this Public Notice do not constitute an exhaustive list of steps that should be undertaken prior to participating in Auction 110. As always, the burden is on the potential bidder to determine how much research to undertake, depending upon the specific facts and circumstances related to its interests. For example, applicants should pay particular attention to the framework adopted in the *3.45 GHz Second Report and Order* that requires new flexible-use licensees to reimburse secondary, non-federal radiolocation operators for the relocation costs associated with their transitions into the 2.9–3.0 GHz band²⁶⁴ and cooperative sharing requirements for certain licenses.²⁶⁵

111. Applicants in Auction 110 should carefully consider the impact of the aggregation limit in the 3.45 GHz Service, discussed further in Section III.B.4, below. In particular, applicants should consider whether any of their own attributable interest holders have permissible overlapping interests in another applicant that could further limit the number of licenses that each applicant may hold in a given PEA. For example, a single individual or entity may be permitted to hold a non-controlling interest of 10% or more in multiple applicants, but the combined holdings of those applicants in any PEA may not exceed the four-license aggregation limit.

112. **Applicants are solely responsible for identifying associated risks and for investigating and evaluating the degree to which such matters may affect their ability to bid on, otherwise acquire, or make use of the licenses available in Auction 110.** Each potential bidder is responsible for undertaking research to ensure that any licenses won in the auction will be suitable for its business plans and needs. Each potential bidder must undertake its own assessment of the relevance and importance of information gathered as part of its due diligence efforts.

113. The Commission makes no representations or guarantees regarding the accuracy or completeness of information in its databases or any third-party databases, including, for example, court docketing systems. To the extent the Commission's databases may not include all information deemed necessary or desirable by an applicant, it must obtain or verify such information from independent sources or assume the risk of any incompleteness or inaccuracy in said databases. Furthermore, the Commission makes no representations or guarantees regarding the accuracy or completeness of information that has been provided by incumbent licensees and incorporated into its databases.

B. Licensing Considerations

1. Transition of Incumbent Operations

114. Potential applicants in Auction 110 should consider carefully the process for transitioning incumbent Federal and non-Federal radiolocation and amateur operations out of the 3.45–3.55 GHz band and to the cooperative sharing requirements within the band when developing business plans, assessing market conditions, and evaluating the availability of equipment for 3.45 GHz Service operations. Each (Continued from previous page)

Docket No. 19-348 (filed May 7, 2021) (*RWA Petition*),

<https://ecfsapi.fcc.gov/file/10507150428973/RWA3.45recon-FINAL.pdf>; Petition for Reconsideration of the Blooston Rural Carriers, WT Docket No. 19-348 (filed May 7, 2021) (*Blooston Petition*),

<https://ecfsapi.fcc.gov/file/1050722306912/Blooston%20PFR%20of%203.45%20GHz%20Band%20Plan%20and%20Rules%20FINAL.pdf>; Petition for Reconsideration of the Aerospace Industries Association, WT Docket No. 29-348 (filed May 7, 2021),

<https://ecfsapi.fcc.gov/file/1050809227391/AIA%20Recon%20Ptn%203450%203550%20MHz%20May%207%202021.pdf> (*AIA Petition*). See Sections III.B.1.b (AIA's Petition for Reconsideration and Lockheed Martin Corporation's Waiver Request), IV.A.2 (Generic License Blocks in Two bidding Categories), IV.B.2 (Acceptable Bids and Bid Processing), below. If the Commission acts on any of these pending matters prior to the auction, we will provide updated information for potential bidders as necessary.

²⁶⁴ See *3.45 GHz Second Report and Order* at 58-59, paras. 160-65.

²⁶⁵ See *id.* at 11-22, paras. 20-57.

applicant should follow closely releases from the Commission concerning these issues,²⁶⁶ and consider carefully the technical and economic implications for commercial use of the 3.45–3.55 GHz band.

a. Cooperative Sharing in the 3.45–3.55 GHz Band

115. The 3.45–3.55 GHz band will operate using a cooperative sharing framework under which existing federal users are prohibited from causing harmful interference to non-federal operations, except in limited circumstances and in locations where current incumbent federal systems will remain indefinitely in the band.²⁶⁷ Under the following circumstances, non-federal systems are not entitled to protection against harmful interference from federal operations (and limited restrictions may be placed on non-federal operations): (1) in “Cooperative Planning Areas” identified by the DoD in which it anticipates that federal operations will continue after the assignment of flexible use licenses in the band;²⁶⁸ and (2) in “Periodic Use Areas” that overlap with certain Cooperative Planning Areas, in which the DoD will need episodic access to all or a portion of the band in specific, limited geographic areas.²⁶⁹ Cooperative Planning Areas and Periodic Use Areas are coordination areas, rather than exclusion areas, meaning that commercial operations within their boundaries are not precluded. Under this framework, incumbent federal operations²⁷⁰ and new flexible use operations must coordinate with each other to facilitate shared use of the band in these specified areas and during specified time periods as described in the *3.45 GHz Second Report and Order*.²⁷¹

b. AIA’s Petition for Reconsideration and Lockheed Martin Corporation’s Waiver Request

116. We note that one of the pending petitions for reconsideration, filed by the Aerospace Industries Association, seeks adoption of a coordination framework for certain existing federal contractor facilities²⁷² and that Lockheed Martin Corporation has filed a request for waiver of certain Commission rules across the lower 75 megahertz of the 3.45–3.55 GHz Band related to its Experimental Radio Service licenses and operations between midnight and 8:00 a.m. ET.²⁷³ Potential bidders should be aware that if relief substantially similar to that sought by Lockheed were granted, it would affect coordination requirements and spectrum use in blocks A through H in PEAs 41, 44, and 227 for the duration of time of any such grant.²⁷⁴

c. Relocation of Secondary Non-Federal Radiolocation Operations

117. In addition to the federal users operating in the 3.45–3.55 GHz band, the 3.3–3.55 GHz band is currently used by secondary non-federal radiolocation licensees²⁷⁵ that will be relocated to the

²⁶⁶ See, e.g., *3.45 GHz Second Report and Order* at 11-23, 50-51, 55-59, paras. 20-57, 140, 154-65.

²⁶⁷ See *id.* at 5-6, 11, paras. 8-9, 21.

²⁶⁸ See *id.* at 12-13, paras. 23-24.

²⁶⁹ See *id.* at 13-14, para. 25.

²⁷⁰ Incumbent federal operations include all current and planned federal use in the 3.45–3.55 GHz band.

²⁷¹ See *3.45 GHz Second Report and Order* at 12-23, paras. 23-57.

²⁷² See *AIA Petition*.

²⁷³ *Lockheed Waiver Request*; see also *Wireless Telecommunications Bureau and Office of Engineering and Technology Seek Comment on Lockheed Martin Corporation Request for Waiver of Certain Experimental Radio Service Rules*, WT Docket No. 19-348, AU Docket No. 21-62, Public Notice, DA 21-539 (rel. May 7, 2021).

²⁷⁴ See *Lockheed Waiver Request* at 17 (proposing to limit testing to the lower 75 megahertz of the band). We note that the pending Petitions for Reconsideration lack sufficient detail to provide similar analysis. See, *RWA Petition*; *Blooston Petition*; *AIA Petition*.

²⁷⁵ 47 CFR § 2.106.

2.9–3.0 GHz band no later than 180 days after the flexible-use licenses won in Auction 110 are granted.²⁷⁶ In order to facilitate the expeditious clearing of the 3.3–3.55 GHz band, in the *3.45 GHz Second Report and Order*, the Commission adopted a requirement that licensees in the new 3.45 GHz Service reimburse the current 3.3–3.55 GHz licensees for their reasonable costs related to the relocation of their operations to the 2.9–3.0 GHz band.²⁷⁷ Auction 110 winning bidders will be required to pay these reimbursement costs in addition to their winning bid amounts. For additional information about cost-sharing and reimbursement procedures related to the licenses offered in Auction 110, potential bidders should review carefully the *3.45 GHz Second Report and Order*.²⁷⁸

d. Commercial Spectrum Enhancement Act/Spectrum Act Requirements and Aggregate Reserve Price

118. The spectrum in the 3.45–3.55 GHz band is covered by a Congressional mandate that requires auction proceeds to be used to fund the estimated relocation or sharing costs of incumbent federal entities.²⁷⁹ In 2004, the Commercial Spectrum Enhancement Act (CSEA) established a Spectrum Relocation Fund (SRF) to reimburse eligible federal agencies operating on certain frequencies that have been reallocated from federal to non-federal use for the cost of relocating their operations.²⁸⁰ The CSEA, as amended by the Spectrum Act, requires that the total cash proceeds from any auction of eligible frequencies must equal at least 110% of the estimated relocation or sharing costs provided to the Commission by NTIA, and it prohibits the Commission from concluding any auction of eligible frequencies that falls short of this amount.²⁸¹ The Commission’s rules therefore require that the establishment of a reserve price in order to meet the CSEA’s requirement that Auction 110’s total cash proceeds amount to at least 110% of NTIA’s estimate of the relevant relocation or sharing costs.²⁸²

119. NTIA provides the Commission with an estimate of eligible federal entities’ relocation or sharing costs and the timelines for such relocation or sharing pursuant to the requirements of the CSEA.²⁸³ On January 14, 2021, NTIA provided to the Commission an estimate of \$13,432,140,300 for the relocation or sharing costs of the incumbent Federal entities currently operating in the 3.45–3.55 GHz

²⁷⁶ See *3.45 GHz Second Report and Order* at 54-55, paras. 150-53. Secondary amateur allocation was also removed from this band in the *3.1-3.55 GHz R&O and FNPRM. Facilitating Shared Use in the 3100-3550 MHz Band*, WT Docket No. 19-348, Report and Order and Further Notice of Proposed Rulemaking, 35 FCC Rcd 11078, 11090, para. 33 (2020) (*3.1-3.55 GHz R&O and FNPRM*).

²⁷⁷ See *id.* at 55-59, paras. 154-65.

²⁷⁸ See *id.*

²⁷⁹ See 47 U.S.C. § 309(j)(8)(D), 923(g).

²⁸⁰ See *id.* § 928.

²⁸¹ See *id.* § 309(j)(16)(A), (B).

²⁸² 47 CFR 1.2104(c).

²⁸³ See *id.* § 923(g)(4). The Spectrum Act amendments to the CSEA require Federal agencies authorized to use eligible frequencies to submit a transition plan no later than 240 days before an auction for such frequencies is scheduled to begin. See 47 U.S.C. § 923(h)(1). The Federal agency transition plans are reviewed by a Technical Panel, which must submit a report on the sufficiency of each transition plan to NTIA and the applying Federal agency no later than 30 days after submission of the plan. See 47 U.S.C. § 923(h)(4)(A); 47 C.F.R. § 301.120(a). If the Technical Panel finds a Federal agency’s plan to be insufficient with respect to the execution, timing, or cost of the agency’s planned transition, the agency must submit a revised plan within 90 days. See 47 U.S.C. § 923(h)(4)(B). NTIA must make the transition plans available on its website (with the exception of any classified information contained therein) no later than 120 days before the auction’s scheduled start date. See 47 U.S.C. § 923(h)(5). Congress exempted the 3.45–3.55 GHz band from requirements of notice to NTIA of the Commission’s intent to auction frequencies subject to CSEA. See Consolidated Appropriations Act, 2021, H.R. 133, 116th Cong., Div. FF, Title IX § 905(d)(2) (2020).

band.²⁸⁴ Accordingly, for Auction 110, we establish a single aggregate reserve price to ensure that total cash proceeds from the auction equal at least \$14,775,354,330, or 110% of NTIA's estimate.²⁸⁵

120. We adopt procedures that have been used in past Commission auctions to determine whether the reserve price is met in Auction 110.²⁸⁶ Although total cash proceeds from Auction 110 will not be known precisely before the conclusion of the auction, these procedures will provide a careful, conservative estimate of whether total cash proceeds meet the reserve price after each bidding round in the clock phase.

121. As in many services, the Commission has established for this auction bidding credits for small business and rural service providers.²⁸⁷ Winning bidders claiming such credits may pay less than the amount of their winning bids for any licenses won. In the CSEA/Part 1 Declaratory Ruling, the Commission determined that "total cash proceeds" for purposes of meeting the CSEA's requirement means winning bids net of any applicable bidding credit discounts at the end of bidding.²⁸⁸ Thus, whether the CSEA's total cash proceeds requirement has been met depends on whether winning bids, net of any applicable bidding credit discounts, equal, in aggregate, at least 110% of estimated relocation costs.

122. As in prior Commission auctions, we will assess whether the reserve price is met—whether the auction will generate sufficient total cash proceeds—based on bids in the clock phase of the auction and not the assignment phase.²⁸⁹ Total cash proceeds from assignment phase payments are expected to be small relative to those from the clock phase and therefore less likely to contribute significantly to meeting the reserve price.²⁹⁰ Given that assignment phase payments will be determined using a second-price rule, an individual bidder will have little ability to boost net winning bids in the assignment phase in order to meet the reserve price. We do not wish to require bidders or Commission staff to invest the additional time in the assignment phase if ultimately no licenses will be assigned.

123. Whether winning bidders in the clock phase claim any bidding credits that may reduce total cash proceeds to less than gross winning bids only can be determined with certainty at the close of the clock phase of bidding. However, we will estimate whether the reserve is met during the clock phase by assuming conservatively that for a category in a PEA with excess demand, blocks will be won by the bidders with the highest bidding credit percentages, to the extent that such bidders still demand blocks in

²⁸⁴ Letter from Carolyn Roddy, Deputy Assistant Secretary for Communications and Information, National Telecommunications and Information Administration, to the Honorable Ajit Pai, Chairman, Federal Communications Commission, Attachment, (January 14, 2021) (*NTIA Letter*).

²⁸⁵ The Commission provides separately for new licensees to fund relocation of secondary non-Federal users separate and apart from auction proceeds. *3.45 GHz Second Report and Order* at 55-59, paras. 154-65. Accordingly, the CSEA reserve to fund relocation and sharing by Federal users from auction proceeds does not take into account those separate costs.

²⁸⁶ See, e.g., *Auction 105 Procedures Public Notice*, 35 FCC Rcd at 2197, para. 192 (aggregate reserve in auction subject to CSEA to be met based on net winning bids); *Auction 103 Procedures Public Notice*, 34 FCC Rcd at 5585-86, paras. 167-70 (using *conservative* estimate of proceeds to announce whether required proceeds will be met); *Auction of Advanced Wireless Services Licenses Scheduled for June 29, 2006; Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments and Other Procedures for Auction No. 66*, AU Docket No. 06-30, Public Notice, 21 FCC Rcd 4562, 4612-15 paras. 188-200 (2006) (Commission adoption of reserve amount for Auction 66 pursuant to the CSEA).

²⁸⁷ *3.45 GHz Second Report and Order* at 55-59, paras. 146-47; see also 47 CFR § 1.2110(f)(2)(i).

²⁸⁸ *Implementation of the Commercial Spectrum Enhancement Act and Modernization of the Commission's Competitive Bidding Rules and Procedures*, WT Docket No. 05-211, Declaratory Ruling and Notice of Proposed Rule Making, 20 FCC Rcd 11268, 11270-72, paras. 5-12 (2005).

²⁸⁹ See *Auction 103 Procedures Public Notice*, 34 FCC Rcd at 5585, para. 167.

²⁹⁰ For example, less than 1% of Auction 1002 revenues were attributable to assignment phase payments.

that category in that PEA. In order to make bidders aware of whether the reserve is likely to be met while they are still bidding in the clock phase, we will indicate on the Public Reporting System (PRS) whether estimated total cash proceeds based on the bids in the most recently completed round would satisfy the reserve. If the reserve has not yet been met, we will make available only to bidders information on the shortfall between the reserve and the estimated total cash proceeds, rounded up to the nearest million.²⁹¹

124. These procedures are designed to avoid a potential situation where the reserve price is assumed to be met, but, when bidding credits are considered, final net winning bids later prove insufficient. For a category in a PEA without excess demand, the requirement will be evaluated based on a true calculation of net revenue after bid processing, rather than on the estimate, since information on how to apply bidding credits precisely will be available in that case.

2. International Coordination

125. Potential bidders seeking licenses for geographic areas adjacent to the Canadian and Mexican borders should be aware that the use of the 3.45 GHz Service frequencies they acquire in Auction 110 are subject to current and future agreements with the governments of Canada and Mexico.²⁹²

126. The Commission routinely works with the United States Department of State and Canadian and Mexican government officials to ensure the efficient use of the spectrum, as well as interference-free operations in the border areas near Canada and Mexico. Until such time as any adjusted agreements, as needed, between the United States, Mexico, and/or Canada can be agreed to, operations in the 3.45–3.55 GHz band must not cause harmful interference across the border, consistent with the terms of the agreements currently in force.

3. Environmental Review Requirements

127. Licensees must comply with the Commission's rules for environmental review under the NEPA,²⁹³ the NHPA,²⁹⁴ and other environmental statutes.²⁹⁵ Licensees and other applicants that propose to build certain types of communications facilities for licensed service must follow Commission procedures implementing obligations under NEPA and NHPA prior to constructing the facilities.²⁹⁶ Under NEPA, a licensee or applicant must assess if certain environmentally sensitive conditions specified in the Commission's rules are relevant to the proposed facilities, and prepare an environmental assessment when applicable.²⁹⁷ If an environmental assessment is required, then facilities may not be constructed until environmental processing is completed. Under NHPA, a licensee or applicant must follow the procedures in section 1.1320 of the Commission's rules,²⁹⁸ the *Nationwide Programmatic Agreement for Collocation of Wireless Antennas* and the *Nationwide Programmatic Agreement*

²⁹¹ See *Auction 103 Procedures Public Notice*, 34 FCC Rcd at 5586, para. 169 (adopting a similar procedure, rounding up to the nearest million).

²⁹² See 47 CFR § 27.57(c). Section 27.57(c) will become effective June 7, 2021, see 3.45 GHz Rules Federal Register Publication.

²⁹³ 42 U.S.C. § 4321 *et seq.*

²⁹⁴ 54 U.S.C. § 300101 *et seq.*

²⁹⁵ 47 CFR Chapter 1, Part 1, Subpart I.

²⁹⁶ See *Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Investment*, WT Docket No. 17-79, Second Report and Order, 33 FCC Rcd 3102 (2018) (amending the Commission's rules concerning the types of deployments that are subject to review pursuant to NHPA and NEPA).

²⁹⁷ 47 CFR § 1.1307. This assessment may require consultation with expert agencies having environmental responsibilities, such as U.S. Fish and Wildlife Service, the U.S. Army Corps of Engineers, and the Federal Emergency Management Agency, among others.

²⁹⁸ *Id.* § 1.1320.

*Regarding the Section 106 National Historic Preservation Act Review Process.*²⁹⁹ Compliance with section 106 of the NHPA requires tribal consultation, and if construction of the communications facilities would have adverse effects on historic or tribally significant properties, an environmental assessment must be prepared.³⁰⁰

4. Spectrum Aggregation Limit

128. In the *3.45 GHz Second Report and Order*, the Commission adopted a spectrum aggregation limit for flexible-use licenses in the 3.45 GHz Service that allows any entity to hold a maximum of 40 megahertz (i.e., four blocks out of ten) in any PEA at any point in time for four years post-auction.³⁰¹ For purposes of spectrum attribution to a particular entity, all controlling interests and non-controlling interests of 10% or more, including institutional investors and asset management companies, are attributable. In addition, interests of less than 10% are attributable if the interest confers *de facto* control, including but not limited to partnership and other ownership interests and any stock interest in a licensee.³⁰²

129. Consistent with this limit on the number of blocks that a single entity can hold in any single PEA, the bidding system will limit to four the number of blocks that a bidder can demand in any given PEA at any point in the auction.³⁰³ Therefore, in each bidding round, a bidder will have the opportunity to bid for a total of up to four blocks of spectrum per PEA. This spectrum aggregation limit will apply across both categories in PEAs that contain Cat1 and Cat2 blocks. As a result, no single entity will be permitted to bid on, for example, two Cat1 blocks and three Cat2 blocks within a single PEA.³⁰⁴ An aggregation limit of four blocks furthers the Commission's interest in promoting greater diversity in participation in the 3.45 GHz Service by ensuring that, if licenses for all blocks in a PEA are awarded, there will be at least three winning bidders in the PEA.

130. The bidding system will not, however, prevent an entity from bidding on more licenses than it may otherwise be permitted to hold under the relevant attribution rules. Applicants **should** therefore conduct the necessary due diligence prior to the short-form application deadline to determine whether any of its attributable interest holders have attributable interests in other potential auction participants, which may limit each applicant's ability to hold up to four licenses in a single PEA.³⁰⁵

²⁹⁹ *Id.* Part 1, Appendices B and C.

³⁰⁰ *Id.* § 1.1307; *see also Implementation of State and Local Governments' Obligation to Approve Certain Wireless Facility Modification Requests Under Section 6409(a) of the Spectrum Act of 2012*, WT Docket No. 19-250, RM-11849, Declaratory Ruling and Notice of Proposed Rulemaking, FCC 20-75 (June 10, 2020) (clarifying that no environmental assessment has to be filed if the parties enter into a memorandum of agreement to resolve all adverse effects).

³⁰¹ *See 3.45 GHz Second Report and Order* at 36-39, paras. 101-06.

³⁰² *See id.* at 39, para. 106, n.258, *citing* 47 U.S.C. § 20.22; *see also* 47 CFR § 20.22.

³⁰³ AT&T (at 8) asks how bidding mechanics will be impacted by the aggregation limit, in particular, in the case of bids that request to shift demand across categories. AT&T Services, Inc. Comments at 8 (AT&T Comments). We clarify that the bidding system will not apply bids that would result in a bidder having processed demand for more than four blocks in total across both categories in a PEA. For further details, *see* Auction 110 Clock Phase Technical Guide, Section 5.3 "Processed Demands."

³⁰⁴ *See 3.45 GHz Second Report and Order* at 37-38, para. 104.

³⁰⁵ Bidders are reminded, however, that section 1.2105(c) of the competitive bidding rules prohibits certain communications between auction participants beginning at the short-form application deadline and continuing until the deadline for winning bidders to make down payments. *See* Section II.G (Prohibited Communications and Compliance with Antitrust Laws), below.

C. Bidder Education

131. Before the opening of the short-form filing window for Auction 110, detailed educational information will be provided in various formats to would-be participants on the Auction 110 web page. Specifically, OEA will provide various materials on the pre-bidding processes in advance of the opening of the short-form application window, beginning with the release of step-by-step instructions for completing the FCC Form 175, which OEA will make available in the Education section of the Auction 110 website at www.fcc.gov/auction/110. In addition, OEA will provide an online application procedures tutorial for the auction, covering information on pre-bidding preparation, completing short-form applications, and the application review process.

132. In advance of the start of the mock auction, OEA will provide educational materials on the bidding procedures for Auction 110, beginning with the release of a user guide for the bidding system and bidding system file formats, followed by an online bidding procedures tutorial.³⁰⁶ We recognize the importance of these materials to applicants' and bidders' comprehension of the bidding procedures we adopt herein. Accordingly, the educational materials shall be released as soon as reasonably possible to provide potential applicants and bidders with time to understand them and ask questions before bidding begins.

133. We believe that parties interested in participating in Auction 110 will find the interactive, online tutorials an efficient and effective way to further their understanding of the application and bidding processes. The online tutorials will allow viewers to navigate the presentation outline, review written notes, and listen to audio of the notes. Additional features of this web-based tool include links to auction-specific Commission releases, email links for contacting Commission staff, and screen shots of the online application and bidding systems. The online tutorials will be accessible in the Education section of the Auction 110 website at www.fcc.gov/auction/110. Once posted, the tutorials will remain continuously accessible.

D. Short-Form Applications: Due Before 6:00 p.m. ET on July 21, 2021

134. In order to be eligible to bid in Auction 110, an applicant must first follow the procedures to submit a short-form application (FCC Form 175) electronically via the Auction Application System, following the instructions set forth in the FCC Form 175 Instructions. The short-form application will become available with the opening of the initial filing window and must be submitted **prior to 6:00 p.m. ET on July 21, 2021. Late applications will not be accepted.** No application fee is required for short-form applications.³⁰⁷

135. Applications may be filed at any time beginning at noon ET on July 8, 2021, until the filing window closes at 6:00 p.m. ET on July 21, 2021. Applicants are strongly encouraged to file early and are responsible for allowing adequate time for filing their applications. There are no limits or restrictions on the number of times an application can be updated or amended until the initial filing deadline on July 21, 2021.

³⁰⁶ As in Auctions 102 and 103, there may be separate materials prepared for the clock and assignment phases of Auction 110.

³⁰⁷ Each Auction 110 winning bidder must, however, submit a filing fee with each separate long-form application. 47 CFR § 1.1102. The Commission recently adopted a new long-form application filing fee that includes an amount to recover costs for processing the short form. *Amendment of the Schedule of Application Fees Set Forth in Sections 1.1102 through 1.1109 of the Commission's Rules*, MD Docket No. 20-270, Report and Order, 35 FCC Rcd 15089, 15104-15106, paras. 45-51 (2020) (adopting a filing fee for geographic-based wireless license long-form applications). Amended section 1.1102, which specifies filing fees for wireless long-form applications, is not yet in effect. No long-form application filing fee will be required if amended section 1.1102 is not in effect by the long-form deadline.

136. An applicant must always click on the CERTIFY & SUBMIT button on the “Certify & Submit” screen to successfully submit its FCC Form 175 and any modifications; otherwise the application or changes to the application will not be received or reviewed by Commission staff. Additional information about accessing, completing, and viewing the FCC Form 175 is provided in the FCC Form 175 Instructions. Applicants requiring technical assistance should contact FCC Auctions Technical Support at (877) 480-3201, option nine; (202) 414-1250; or (202) 414-1255 (text telephone (TTY)); hours of service are Monday through Friday, from 8:00 a.m. to 6:00 p.m. ET.³⁰⁸ In order to provide better service to the public, all calls to Technical Support are recorded.

E. Application Processing and Minor Modifications

1. Public Notice of Applicants’ Initial Application Status and Opportunity for Minor Modifications

137. After the deadline for filing auction applications, the Commission will process all timely submitted applications to determine whether each applicant has complied with the application requirements and provided all information concerning its qualifications for bidding. OEA will issue a public notice with applicants’ initial application status, identifying: (1) those that are complete; and (2) those that are incomplete or deficient because of defects that may be corrected. The public notice will include the deadline for resubmitting corrected applications and an electronic copy of the public notice will be sent by email to the contact address listed in the FCC Form 175 for each applicant. In addition, each applicant with an incomplete application will be sent information on the nature of the deficiencies in its application, along with the name and contact information of a Commission staff member who can answer questions specific to the application.

138. After the initial application filing deadline on July 21, 2021, applicants can make only minor modifications to their applications.³⁰⁹ Major modifications (e.g., change of PEA selection, certain changes in ownership that would constitute an assignment or transfer of control of the applicant, change in the required certifications, change in applicant’s legal classification that results in a change in control, or change in claimed eligibility for a higher percentage of bidding credit) will not be permitted.³¹⁰ After the deadline for resubmitting corrected applications, an applicant will have no further opportunity to cure any deficiencies in its application or provide any additional information that may affect Commission staff’s ultimate determination of whether and to what extent the applicant is qualified to participate in Auction 110.

139. Commission staff will communicate only with an applicant’s contact person or certifying official, as designated on the applicant’s FCC Form 175, unless the applicant’s certifying official or contact person notifies Commission staff in writing that another representative is authorized to speak on the applicant’s behalf.³¹¹ Authorizations may be sent by email to auction110@fcc.gov.

³⁰⁸ We caution applicants that the Commission periodically performs scheduled maintenance of its IT systems. During scheduled maintenance activities, which typically occur over the weekends, every effort is made to minimize any downtime to auction-related systems, including the Auction Application System. However, there are occasions when auction-related systems may be temporarily unavailable.

³⁰⁹ See Section II.K (Modifications to FCC Form 175), above.

³¹⁰ 47 CFR § 1.2105(b); see also *Two Way Radio*, 14 FCC Rcd at 12039, para. 8.

³¹¹ In no event, however, will the Commission send auction registration materials to anyone other than the contact person listed on the applicant’s FCC Form 175 or respond to a request for replacement registration materials from anyone other than the authorized bidder, contact person, or certifying official listed on the applicant’s FCC Form 175. See Section III.G (Auction Registration), below.

2. Public Notice of Applicants' Final Application Status After Upfront Payment Deadline

140. After Commission staff reviews resubmitted applications and upfront payments, OEA will release a public notice identifying applicants that have become qualified bidders for the auction. A *Qualified Bidders Public Notice* will be issued before bidding in the auction begins. Qualified bidders are those applicants with submitted FCC Form 175 applications that are deemed timely filed and complete and that have made a sufficient upfront payment.

F. Upfront Payments

141. In order to be eligible to bid in Auction 110, a sufficient upfront payment and a complete and accurate FCC Remittance Advice Form (FCC Form 159, Revised 2/03) must be submitted before 6:00 p.m. ET on September 2, 2021. After completing its short-form application, an applicant will have access to an electronic pre-filled version of the FCC Form 159. An accurate and complete FCC Form 159 must accompany each payment. Proper completion of this form is critical to ensuring correct crediting of upfront payments. Payers using the pre-filled FCC Form 159 are responsible for ensuring that all the information on the form, including payment amounts, is accurate. Instructions for completing FCC Form 159 for Auction 110 are provided below.

1. Making Upfront Payments by Wire Transfer for Auction 110

142. Upfront payments for Auction 110 must be wired to, and will be deposited in, the U.S. Treasury.³¹²

143. Wire transfer payments for Auction 110 must be received before 6:00 p.m. ET on September 2, 2021.³¹³ No other payment method is acceptable.³¹⁴ To avoid untimely payments, applicants should discuss arrangements (including bank closing schedules and other specific bank wire transfer requirements, such as an in-person written request before a specified time of day) with their bankers several days before they plan to make the wire transfer, and must allow sufficient time for the transfer to be initiated and completed before the deadline. The following information will be needed:

ABA Routing Number: 021030004
 Receiving Bank: TREAS NYC
 33 Liberty Street
 New York, NY 10045

BENEFICIARY: FCC
 45 L Street, NE, 3rd Floor
 Washington, DC 20554

ACCOUNT NUMBER: **827000001001**

Originating Bank Information (OBI Field): (Skip one space between each information item)
"AUCTIONPAY"

APPLICANT FCC REGISTRATION NUMBER (FRN): (use the same FRN as used on the applicant's FCC Form 159, block 21)

PAYMENT TYPE CODE: (same as FCC Form 159, block 24A: **"U110"**)

³¹² See Consolidated Appropriations Act, 2018, Pub. L. No. 115-141, Division P, Title I, 132 Stat. 348, 1080 (2018). For more information on calculating upfront payments and the impact of upfront payments on bidding eligibility, see Section III.F.3 (Upfront Payments and Bidding Eligibility), below.

³¹³ An applicant must initiate the wire transfer through its bank, authorizing the bank to wire funds from the applicant's account to the proper account at the U.S. Treasury.

³¹⁴ The Commission will not accept checks, credit cards, or automated clearing house (ACH) payments.

NOTE: The beneficiary account number (BNF Account Number) is specific to the upfront payments for Auction 110. Do not use a BNF Account Number from a previous auction.

144. At least one hour before placing the order for the wire transfer (but on the same business day), applicants must print and fax a completed FCC Form 159 (Revised 2/03) to the FCC at (202) 418-2843. Alternatively, the completed form can be scanned and sent as an attachment to an email to RROGWireFaxes@fcc.gov. On the fax cover sheet or in the email subject header, write “Wire Transfer—Auction Payment for Auction 110”. To meet the upfront payment deadline, an applicant’s payment must be credited to the Commission’s account for Auction 110 before the deadline.³¹⁵

145. Each applicant is responsible for ensuring timely submission of its upfront payment and for timely filing of an accurate and complete FCC Form 159. An applicant should coordinate with its financial institution well ahead of the due date regarding its wire transfer and allow sufficient time for the transfer to be initiated and completed prior to the deadline.³¹⁶ The Commission repeatedly has cautioned auction participants about the importance of planning ahead to prepare for unforeseen last-minute difficulties in making payments by wire transfer.³¹⁷ **Each applicant also is responsible for obtaining confirmation from its financial institution that its wire transfer to the U.S. Treasury was successful and from Commission staff that its upfront payment was timely received and that it was deposited into the proper account.** As a regulatory requirement, the U.S. Treasury screens all payments from all financial institutions before deposits are made available to specified accounts. If wires are suspended, the U.S. Treasury may direct questions regarding any transfer to the financial institution initiating the wire. Each applicant must take care to assure that any questions directed to its financial institution(s) are addressed promptly. To receive confirmation from Commission staff, contact Scott Radcliffe of the Office of Managing Director’s Revenue & Receivables Operations Group/Auctions at (202) 418-7518 or Theresa Meeks at (202) 418-2945.

146. Please note the following information regarding upfront payments:

- All payments must be made in U.S. dollars.
- All payments must be made by wire transfer.
- Upfront payments for Auction 110 go to an account number different from the accounts used in previous FCC auctions.

147. Failure to deliver a sufficient upfront payment as instructed herein by the upfront payment deadline will result in dismissal of the short-form application and disqualification from participation in the auction.

2. Completing and Submitting FCC Form 159

148. The following information supplements the standard instructions for FCC Form 159 (Revised 2/03) and is provided to help ensure correct completion of FCC Form 159 for upfront payments for Auction 110. Applicants need to complete FCC Form 159 carefully, because:

- **Mistakes may affect bidding eligibility; and**
- **Lack of consistency between information provided in FCC Form 159 (Revised 2/03), FCC Form 175, long-form application (FCC Form 601), and correspondence about an**

³¹⁵ See, e.g., *Four Corners Broadcasting, LLC — Request for Waiver of Section 1.2106(a), Closed Broadcast Auction 88*, Letter Order, 25 FCC Rcd 9046 (WTB 2010).

³¹⁶ Among other things, we caution each applicant to plan ahead regarding any potential delays in its or its financial institution’s ability to complete wire transfers due to the COVID-19 pandemic.

³¹⁷ See, e.g., *Spectrum Acquisitions, Inc. Application to Participate in Auction 73 — Request for Waiver of Upfront Payment Deadline*, Letter Order, 23 FCC Rcd 4765 (WTB 2008).

application may cause processing delays.

149. Therefore, appropriate cross-references between the FCC Form 159 Remittance Advice and the short-form application (FCC Form 175) are described below.

Block Number	Required Information
1	LOCKBOX # — Leave Blank
2	Payer Name — Enter the name of the person or company making the payment. If the applicant itself is the payer, this entry would be the same name as in FCC Form 175.
3	Total Amount Paid — Enter the amount of the upfront payment associated with the FCC Form 159 (Revised 2/03).
4–8	Street Address, City, State, ZIP Code — Enter the street mailing address (not Post Office box number) where mail should be sent to the payer. If the applicant is the payer, these entries would be the same as FCC Form 175 from the Applicant Information section.
9	Daytime Telephone Number — Enter the telephone number of a person knowledgeable about this upfront payment.
10	Country Code — For addresses outside the United States, enter the appropriate postal country code (available from the Mailing Requirements Department of the U.S. Postal Service).
11	Payer FRN — Enter the payer’s 10-digit FCC Registration Number (FRN) registered in the Commission Registration System (CORES).
21	Applicant FRN (Complete only if applicant is different than payer) — Enter the applicant’s 10-digit FRN registered in CORES.
24A	Payment Type Code — Enter “ U110 ”.
25A	Quantity — Enter the number “1”.
26A	Fee Due — Amount of Upfront Payment
27A	Total Fee — Will be the same amount as 26A.
28A	FCC Code 1 — Enter the number “110” (indicating Auction 110).

NOTES:

- Do not use Remittance Advice (Continuation Sheet), FCC Form 159-C, for upfront payments.
- **If applicant is different from the payer, complete blocks 13 through 21 for the applicant, using the same information shown on FCC Form 175.** Otherwise leave them blank.
- No signature is required on FCC Form 159 for auction payments
- Since credit card payments will not be accepted for upfront payments for an auction, leave Section E blank.

3. Upfront Payments and Bidding Eligibility

150. The Commission has delegated authority to OEA and WTB to determine appropriate upfront payments for each license being auctioned, taking into account such factors as the efficiency of

the auction process and the potential value of similar licenses.³¹⁸ An upfront payment is a refundable deposit made by each applicant seeking to participate in bidding to establish its eligibility to bid on licenses. Upfront payments that are related to the inventory of licenses being auctioned protect against frivolous or insincere bidding and provide the Commission with a source of funds from which to collect payments owed at the close of bidding.³¹⁹

151. Applicants that are former defaulters must pay upfront payments 50% greater than non-former defaulters.³²⁰ For purposes of classification as a former defaulter or a former delinquent, defaults and delinquencies of the applicant itself and its controlling interests are included.³²¹

152. An applicant must make an upfront payment sufficient to obtain bidding eligibility on the generic blocks on which it will bid. We adopt the Commission's proposal to set upfront payments based on MHz-pops, and that the amount of the upfront payment submitted by an applicant will determine its initial bidding eligibility, the maximum number of bidding units on which a bidder may place bids in any single round.³²² In order to bid for a block, qualified bidders must have a current eligibility level that meets or exceeds the number of bidding units assigned to that generic block in a PEA. **At a minimum, therefore, an applicant's total upfront payment must be enough to establish eligibility to bid on at least one block in one of the PEAs selected on its FCC Form 175 for Auction 110, or else the applicant will not become qualified to participate in the auction.** The total upfront payment does not affect the total dollar amount the bidder may bid.

153. In the *Auction 110 Comment Public Notice*, the Commission proposed to require applicants to submit upfront payments based on \$0.03 per MHz-pop for PEAs 1-50 and \$0.01 per MHz-pop for all other PEAs, subject to a minimum of \$500.³²³ AT&T asserts that calculating upfront payments and bidding units with a "significant structural break" between the top 50 markets and markets just outside of the top 50 has the potential to create distortions in bidding behavior.³²⁴ We acknowledge this potential in this auction. We decline to adopt AT&T's specific suggested approach for a more gradual transition of the bidding unit structure between large and small markets but, to the same end, we will forgo the discrete break in calculation amounts for large and small markets for upfront payment and bidding unit amounts.

154. Accordingly, we adopt upfront payments for a generic block in a PEA based on \$0.01 per MHz-pop for all PEAs.³²⁵ The upfront payment amount per block in each PEA is set forth in the "Attachment A" file on the Auction 110 website at www.fcc.gov/auction/110.

³¹⁸ See *Part 1 Order*, 12 FCC Rcd at 5697-98, para. 16; see also *Part 1 Third Report and Order*, 13 FCC Rcd at 425, para. 86; *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2377-79, paras. 169-75; 47 CFR §§ 0.271, 0.331.

³¹⁹ See *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2377-79, paras. 169-76.

³²⁰ 47 CFR § 1.2106(a); see also *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15316-18, paras. 40-43; Section II.I (Provisions Regarding Former and Current Defaulters), above.

³²¹ For this purpose, the term "controlling interest" is defined in 47 CFR § 1.2105(a)(4)(i).

³²² See *Auction 110 Comment Public Notice* at 11-12, paras. 26-28.

³²³ *Id.* at 11, para. 26.

³²⁴ AT&T Comments at 9-10.

³²⁵ The results of these calculations will be rounded using the Commission's standard rounding procedures for auctions: results above \$10,000 are rounded to the nearest \$1,000; results below \$10,000 but above \$1,000 are rounded to the nearest \$100; and results below \$1,000 are rounded to the nearest \$10.

155. We also adopt the Commission’s proposal to assign each generic block in a PEA a specific number of bidding units, equal to one bidding unit per \$100 of the upfront payment.³²⁶ The number of bidding units per block in each PEA is set forth in the “Attachment A” file that lists the upfront payment amounts. The number of bidding units for one block in a given PEA is fixed, since it is based on the MHz-pops in the block, and it does not change during the auction as prices change. Thus, in calculating its upfront payment amount, an applicant must determine the **maximum** number of bidding units on which it may wish to bid in any single round and submit an upfront payment amount for the auction covering that number of bidding units.³²⁷ In order to make this calculation, an applicant should add together the bidding units for the number of blocks in PEAs on which it seeks to be active in any given round. **Applicants should check their calculations carefully, as there is no provision for increasing a bidder’s eligibility after the upfront payment deadline.**

Table 1: Upfront Payments, Bidding Eligibility, and Bidding Flexibility Example

PEA	Bidding Units	Upfront Payment
PEA058 — Bloomington, IN	1,070	\$107,000
PEA064 — South Bend, IN	950	\$95,000
If a bidder wishes to bid on one block in both of the above PEAs in a round, it must have selected both PEAs on its FCC Form 175 and purchased at least 2,020 bidding units (1,070 + 950) of bidding eligibility. If a bidder only wishes to bid on a block in one of these PEAs, but not both, purchasing 1,070 bidding units would meet the eligibility requirement for a block in either PEA. The bidder would be able to bid on a block in either PEA, but not both at the same time. If the bidder purchased only 950 bidding units, the bidder would have enough eligibility to bid for a block in PEA064 but not for one in PEA058.		

156. If an applicant is a former defaulter, it must calculate its upfront payment for the maximum amount of generic blocks in each PEA on which it plans to bid by multiplying the number of bidding units on which it wishes to be active by 1.5.³²⁸ In order to calculate the number of bidding units to assign to former defaulters, the Commission will calculate the number of bidding units a non-former defaulter would get for the upfront payment received, divide that number by 1.5, and round the result up to the nearest bidding unit.³²⁹

³²⁶ See *Auction 110 Comment Public Notice* at 11-12, para. 27.

³²⁷ In some cases, a qualified bidder’s maximum eligibility may be less than the amount of its upfront payment because the qualified bidder has either previously been in default on a Commission construction permit or license or delinquent on non-tax debt owed to a Federal agency, see 47 CFR § 1.2106(a), or has submitted an upfront payment that exceeds the total amount of bidding units associated with the license areas it selected on its FCC Form 175.

³²⁸ See 47 CFR § 1.2106(a).

³²⁹ If a former defaulter fails to submit a sufficient upfront payment to establish eligibility to bid on at least one generic block in a PEA, the applicant will not be eligible to participate in Auction 110. *Implementation of Section 309(j) of the Communications Act — Competitive Bidding for Commercial Broadcast and Instructional Television Fixed Service Licenses et al.*, MM Docket No. 97-234, Report and Order, 13 FCC Rcd 15920, 15979-80, para. 153 (1998). The applicant, however, will retain its status as an applicant in Auction 110 and will remain subject to 47 CFR § 1.2105(c). See *Star Wireless, LLC*, Forfeiture Order, 19 FCC Rcd 18626, 18628, para. 4 & n.19 (EB 2004), granted in part sub nom. *Star Wireless, LLC and Northeast Communications of Wisconsin, Inc.*, Order on Review, 22 FCC Rcd 8943 (2007), petition for review denied, *Star Wireless, LLC v. FCC*, 522 F.3d 469 (D.C. Cir. 2008).

G. Auction Registration

157. All qualified bidders for Auction 110 are automatically registered for the auction. Registration materials will be distributed prior to the auction by overnight delivery. The mailing will be sent only to the contact person at the contact address listed in the FCC Form 175 and will include the SecurID® tokens that will be required to place bids.

158. Qualified bidders that do not receive this registration mailing will not be able to submit bids. Therefore, any qualified bidder for Auction 110 that has not received this mailing by noon on September 28, 2021, should call the Auctions Hotline at (717) 338-2868. Receipt of this registration mailing is critical to participating in the auction, and each applicant is responsible for ensuring it has received all the registration materials.

159. In the event that a SecurID® token is lost or damaged, only a person who has been designated as an authorized bidder, the contact person, or the certifying official on the applicant's short-form application may request a replacement. To request a replacement, call the Auction Bidder Line at the telephone number provided in the registration materials or the Auction Hotline at (717) 338-2868.

H. Remote Electronic Bidding via the FCC Auction Bidding System

160. Bidders will be able to participate in Auction 110 over the Internet using the FCC Auction Bidding System (bidding system). During the assignment phase only, bidders will have the option of placing bids by telephone through a dedicated auction bidder line. Please note that telephonic bid assistants are required to use a script when entering bids placed by telephone. Telephonic bidders are therefore reminded to allow sufficient time to bid by placing their calls well in advance of the close of a round. The length of a call to place a telephonic bid may vary; please allow a minimum of 10 minutes. The toll-free telephone number for the auction bidder line will be provided to qualified bidders prior to the start of bidding in the auction.

161. Only qualified bidders are permitted to bid. Each authorized bidder must have his or her own SecurID® token, which the Commission will provide at no charge. Each applicant will be issued three SecurID® tokens. A bidder cannot bid without his or her SecurID® token. In order to access the bidding function of the bidding system, bidders must be logged in during the bidding round using the passcode generated by the SecurID® token and a personal identification number (PIN) created by the bidder. Bidders are strongly encouraged to print a *bid summary* for each round after they have completed all their activity for that round. **For security purposes, the SecurID® tokens and a telephone number for bidding questions are only mailed to the contact person at the contact address listed on the FCC Form 175.** Each SecurID® token is tailored to a specific auction. SecurID® tokens issued for other auctions or obtained from a source other than the FCC will not work for Auction 110. Please note that the SecurID® tokens can be recycled, and the Commission requests that bidders return the tokens to the FCC. Pre-addressed envelopes will be provided to return the tokens once the auction has ended.

162. **The Commission makes no warranties whatsoever, and shall not be deemed to have made any warranties, with respect to the bidding system, including any implied warranties of merchantability or fitness for a particular purpose. In no event shall the Commission, or any of its officers, employees, or agents, be liable for any damages whatsoever (including, but not limited to, loss of business profits, business interruption, loss of use, revenue, or business information, or any other direct, indirect, or consequential damages) arising out of or relating to the existence, furnishing, functioning, or use of the bidding system. Moreover, no obligation or liability will arise out of the Commission's technical, programming, or other advice or service provided in connection with the bidding system.**

163. To the extent an issue arises with the bidding system itself, the Commission will take all appropriate measures to resolve such issues quickly and equitably. Should an issue arise that is outside the bidding system or attributable to a bidder, including, but not limited to, a bidder's hardware, software, or Internet access problem that prevents the bidder from submitting a bid prior to the end of a round, the Commission shall have no obligation to resolve or remediate such an issue on behalf of the bidder.

Similarly, if an issue arises due to bidder error using the bidding system, the Commission shall have no obligation to resolve or remediate such an issue on behalf of the bidder. Accordingly, after the close of a bidding round, the results of bid processing will not be altered absent evidence of any failure in the bidding system.

I. Mock Auction

164. All qualified bidders will be eligible to participate in a mock auction for the clock phase.³³⁰ The mock auction, which will begin on September 30, 2021, will enable qualified bidders to become familiar with the bidding system and to practice submitting bids prior to the auction. We recommend that all qualified bidders, including all their authorized bidders, participate to assure that they can log in to the bidding system and gain experience with the bidding procedures. Participating in the mock auction may reduce the likelihood of a bidder making a mistake during the auction. Details regarding the mock auction will be announced in the *Qualified Bidders Public Notice* for Auction 110.

165. After the clock phase of the auction concludes, a separate mock auction for the assignment phase will be held for those qualified bidders that won generic blocks in the clock phase.

J. Auction Delay, Suspension, or Cancellation

166. At any time before or during the bidding process, OEA, in conjunction with WTB, may delay, suspend, or cancel bidding in Auction 110 in the event of a natural disaster, technical obstacle, network interruption, administrative or weather necessity, evidence of an auction security breach or unlawful bidding activity, or for any other reason that affects the fair and efficient conduct of competitive bidding.³³¹ This approach has proven effective in resolving exigent circumstances in previous auctions and we find no reason to depart from it here. OEA will notify participants of any such delay, suspension, or cancellation by public notice and/or through the bidding system's announcement function. If the bidding is delayed or suspended, then OEA may, in its sole discretion, elect to resume the auction starting from the beginning of the current round or from some previous round, or cancel the auction in its entirety. We emphasize that we will exercise this authority at our discretion.

K. Fraud Alert

167. As is the case with many business investment opportunities, some unscrupulous entrepreneurs may attempt to use Auction 110 to deceive and defraud unsuspecting investors. Common warning signals of fraud include the following:

- The first contact is a “cold call” from a telemarketer or is made in response to an inquiry prompted by a radio or television infomercial.
- The offering materials used to invest in the venture appear to be targeted at IRA funds, for example, by including all documents and papers needed for the transfer of funds maintained in IRA accounts.
- The amount of investment is less than \$25,000.
- The sales representative makes verbal representations that: (a) the Internal Revenue Service, Federal Trade Commission (FTC), Securities and Exchange Commission (SEC), FCC, or other government agency has approved the investment; (b) the investment is not subject to state or federal securities laws; or (c) the investment will yield unrealistically high short-term profits. In addition, the offering materials often include copies of actual FCC releases, or quotes from FCC personnel, giving the appearance of FCC knowledge or approval of the solicitation.

³³⁰ Only those bidders that are qualified to participate in Auction 110 will be eligible to participate in the mock auction.

³³¹ See 47 CFR § 1.2104(i).

168. Information about deceptive telemarketing investment schemes is available from the FCC, as well as the FTC and SEC. Additional sources of information for potential bidders and investors may be obtained from the following sources:

- the FCC's Consumer Call Center at (888) 225-5322 or by visiting www.fcc.gov/general/frauds-scams-and-alerts-guides
- the FTC at (877) FTC-HELP ((877) 382-4357) or by visiting www.consumer.ftc.gov/articles/real-estate-and-investment-scams
- the SEC at (202) 942-7040 or by visiting www.sec.gov/investor

169. Complaints about specific deceptive telemarketing investment schemes should be directed to the FTC, the SEC, or the National Fraud Information Center at (202) 835-0618.

IV. BIDDING PROCEDURES

170. We will conduct Auction 110 using an ascending clock auction design with two phases. The first phase of the auction—the clock phase—will consist of successive clock bidding rounds in which bidders indicate their demands for a number of generic license blocks in specific categories and PEAs. In the second phase—the assignment phase—winning clock phase bidders will have the opportunity to bid for their preferred combinations of frequency-specific license assignments, consistent with their clock phase winnings, in a series of sealed-bid rounds conducted by PEA or, in some cases, PEA group. Commenters support this general framework for an ascending clock auction.³³²

171. In conjunction with WTB, OEA will release shortly updated technical guides that provide the mathematical details of the adopted auction design and algorithms for the clock and assignment phases of Auction 110. The information in the updated technical guides, which will be available shortly in the Education section of the Auction 110 website (www.fcc.gov/auction/110), supplements our decisions in this Public Notice.³³³

A. Clock Phase

1. Clock Auction Design

172. Under the bidding procedures that we adopt, during the clock phase of Auction 110, bidders will indicate their demands for generic license blocks in a bidding category in specific geographic areas—in this case, PEAs. There may be one or two bidding categories in a given PEA. The clock auction format will proceed in a series of rounds, with bidding being conducted simultaneously for all spectrum blocks in all PEAs available in the auction. During each bidding round, the bidding system will announce a per-block clock price for each category in each PEA. Qualified bidders will submit, for each category and PEA for which they wish to bid, the number of blocks they seek at the clock price associated with the current round. Bidding rounds will be open for predetermined periods of time. Bidders will be subject to activity and eligibility rules that govern the pace at which they participate in the auction.

173. As proposed, for each product—a category in a PEA—the clock price for a generic license block will increase from round to round if bidders indicate total demand for blocks in that product that exceeds the number of blocks available. The bidding rounds will continue until, for all products, the total number of blocks that bidders demand does not exceed the supply of available blocks.

³³² See, e.g., AT&T Comments at 1; CCA Comments at 1; CTIA Comments at 2; T-Mobile, USA Inc. Comments at 1 (T-Mobile Comments); United States Cellular Corporation Reply at 1-2 (US Cellular Reply); Verizon Comments at 2.

³³³ The Auction 110 Clock Phase Technical Guide details the adopted procedures for the clock phase of Auction 110. The Auction 110 Assignment Phase Technical Guide details the adopted procedures for the assignment phase.

174. If the aggregate reserve price to satisfy the CSEA requirement has been met at the time that the clock phase bidding stops, those bidders indicating demand for a product at the final clock phase price will be deemed winning bidders, and the auction will proceed to the assignment phase. If the reserve price has not been met at the time bidding stops in the clock phase, the auction will end, and no licenses will be assigned.

175. Following the clock phase, if the reserve price has been met, the assignment phase will offer clock phase winners the opportunity to bid an additional amount for licenses with specific frequencies. All winning bidders, regardless of whether they bid in the assignment phase, will be assigned licenses for contiguous blocks within a category in a PEA.³³⁴

2. Generic License Blocks in Two Bidding Categories

176. As established in the *3.45 GHz Second Report and Order*, the 3.45–3.55 GHz band will be licensed in uniform 10-megahertz sub-blocks in each of the 406 PEAs in the contiguous United States. In most PEAs, new licensees generally will have unrestricted use of all ten frequency blocks. In other areas, specifically in PEAs that wholly or in part cover Cooperative Planning Areas or Periodic Use Areas, licensees must coordinate with incumbent federal operations in the band, as established in the *3.45 GHz Second Report and Order*.³³⁵ In some of the PEAs where coordination is required, all ten blocks will be subject to the same restrictions. In others, the restrictions may vary depending upon the frequency block—specifically, in some PEAs subject to coordination with federal incumbents, the A through D blocks may be subject to different restrictions than the E through J blocks.³³⁶

177. *Categories.* We adopt the proposal to establish categories for bidding such that all the blocks within a category in a PEA are similar in terms of any requirements or restrictions. T-Mobile and US Cellular agree with this approach, and no commenter opposes it.³³⁷ Therefore, for the reasons proposed by the Commission, we adopt bidding categories as follows: in the PEAs where all ten blocks are the same—i.e., all ten generally are unrestricted or all ten are subject to the same restrictions—the ten generic blocks will be considered Category 1, or “Cat1,” blocks. In the PEAs subject to coordination with federal incumbents where the restrictions differ according to the frequency, the four blocks A through D will be considered Category 1, or “Cat1,” while the six blocks E through J will be considered Category 2, or “Cat2,” for bidding.³³⁸ Accordingly, in 334 PEAs, there will be ten generic blocks of a single Cat1 product, and in 72 PEAs, there will be two products.³³⁹

³³⁴ In addition, as set forth in Section IV.B.2 (Acceptable Bids and Bid Processing), below, if in a PEA there are one or more bidders with clock phase winnings in both categories, one of the bidders will be assigned frequency blocks that are contiguous across the two categories. *See also* the Auction 110 Assignment Phase Technical Guide.

³³⁵ *3.45 GHz Second Report and Order* at 12-14, paras. 23-25.

³³⁶ As set forth in the *3.45 GHz Second Report and Order*, the lower 40 megahertz of the band—between 3450-3490 MHz corresponding to the A through D blocks—are affected differently than the upper 60 megahertz in certain PEAs in the band. *See id.* at 15-16, paras. 30-31 (discussing the Fort Bragg and Little Rock CPAs/PUA). In the event Lockheed is granted relief substantially similar to that sought in its waiver request, the A through H blocks will be subject to different conditions than the I and J blocks in the three affected PEAs. *See Lockheed Waiver Request*.

³³⁷ *See* T-Mobile Comments at 3; US Cellular Reply at 2.

³³⁸ In PEAs with two categories, we designate certain blocks as Cat1 and other blocks as Cat2 simply to denote that for these licenses the coordination requirements in a PEA differ between the two categories. For all licenses, we caution potential bidders to investigate carefully the restrictions that may apply to a given PEA. In particular, we note that DoD has created a workbook that specifically describes the coordination requirements for each Cooperative Planning Area and Periodic Use Area. *See* National Telecommunications and Information Administration, *Transition Plans and Transition Data for the 3450-3550 MHz Band*, <https://www.ntia.gov/other-publication/2021/transition-plans-and-transition-data-3450-3550-mhz-band> (last visited Jun. 6, 2021).

178. This approach to determining bidding categories differs somewhat from the approach the Commission has taken in prior clock auctions, in that the coordination requirements on blocks in a given category in a given PEA may differ from the requirements on the same category of blocks in a different PEA. For example, the Cat1 blocks in one PEA may be unrestricted while the Cat1 blocks in another PEA may require some degree of coordination. Similarly, the restrictions on Cat2 blocks will likely vary from PEA to PEA. In previous auctions, blocks in a given bidding category generally have been subject to the same use requirements in all PEAs, but because the restrictions in this auction differ so widely from PEA to PEA, that approach is not feasible. Importantly, however, for Auction 110, within any given PEA, the blocks within a category can be considered generic, and bidding in the clock phase will determine a single price that will apply to each generic block in a category in a PEA.

179. This approach for bidding on generic blocks in two categories is based on the close similarity of the blocks within each bidding category within a PEA. To the extent a bidder has a preference for licenses for specific frequencies, the bidder may bid for its preferred blocks in the assignment phase. However, a bidder for a generic block in a category will not be assured that it will be assigned, or not be assigned, any particular frequency block.

180. *Limit on number of blocks per bidder.* In the *3.45 GHz Second Report and Order*, the Commission adopted a spectrum aggregation limit for flexible-use licenses in the 3.45 GHz band of a maximum of 40 megahertz (i.e., four blocks out of ten) in any PEA at any point in time for four years post-auction.³⁴⁰ Consistent with this limit on the number of blocks that a single entity can hold in any single PEA, the bidding system will limit to four the number of blocks that a bidder can demand in any given PEA at any point in the auction. Therefore, in each bidding round, a bidder will have the opportunity to bid for a total of up to four blocks of spectrum per PEA. This spectrum aggregation limit will apply across both categories in PEAs that contain Cat1 and Cat2 blocks. As a result, no single entity will be permitted to bid on, for example, two Cat1 blocks and three Cat2 blocks within a single PEA.³⁴¹ More specifically, the bidding system will not permit bids to be submitted that, if fully applied, would result in the bidder demanding more than four blocks in the PEA. Further, the system will not fully apply submitted bids if doing so would result in the bidder demanding more than four blocks in the PEA. For example, a requested increase in one category may not be applied if a requested reduction in the other category cannot be applied because of insufficient aggregate demand.³⁴²

181. An aggregation limit of four blocks will further our interest in promoting greater diversity in participation in the 3.45 GHz band by ensuring that, if licenses for all blocks in a PEA are awarded, there will be at least three winning bidders in the PEA.

3. Bidding Rounds

182. As proposed, Auction 110 will consist of sequential bidding rounds, each followed by the release of round results. We will conduct bidding simultaneously for all spectrum blocks in both bidding categories for all PEAs available in the auction. In the first bidding round of Auction 110, a bidder will indicate, for each product, the number of generic license blocks it demands at the minimum opening bid price.

(Continued from previous page) _____

³³⁹ We also note that in the three PEAs that encompass the areas subject to Lockheed's pending waiver request, the eight blocks A through H would be considered Cat1 while the two blocks I and J would be considered Cat2 for bidding should relief substantially similar to that sought by Lockheed be granted.

³⁴⁰ *3.45 GHz Second Report and Order* at 36-39, paras. 101-06.

³⁴¹ *See id.* at 37-38, para. 104.

³⁴² AT&T requests the clarification provided here on how the bidding system will enforce the aggregation limit. AT&T Comments at 8.

183. The initial bidding schedule will be announced in a public notice to be released at least one week before the start of bidding. OEA will retain the discretion to adjust the bidding schedule in order to foster an auction pace that reasonably balances speed with the bidders' need to study round results and adjust their bidding strategies. Such adjustments may include changes in the amount of time for bidding rounds, the amount of time between rounds, or the number of rounds per day, and will depend upon bidding activity and other factors.

184. Auction 110 will be conducted over the Internet. A bidder will be able to submit its bids using the bidding system's *upload* function, which allows bid files in a comma-separated values (CSV) text format to be uploaded. The bidding system will not allow bids to be submitted unless the bidder selected the PEAs on its FCC Form 175, the bidder has sufficient bidding eligibility, and the bids, if applied, are consistent with the aggregation limit of 40 megahertz in a PEA.³⁴³

185. During each round of the bidding, a bidder will also be able to remove bids placed in the current bidding round. If a bidder modifies its bids for blocks in a PEA in a round, the system will take the last bid submission as that bidder's bid for the round.³⁴⁴

4. Stopping Rule

186. We adopt a simultaneous stopping rule for Auction 110, under which all blocks in all PEAs will remain available for bidding until the bidding stops in every PEA.³⁴⁵ Specifically, bidding will close for all blocks after the first round in which there is no excess demand in any product.³⁴⁶ Consequently, under this approach, it is not possible to determine in advance how long Auction 110 will last.

5. Availability of Bidding Information

187. We adopt the proposal to make public after each clock phase bidding round, for each category in each PEA: the supply, the aggregate demand, the posted price of the last completed round,³⁴⁷ and the clock price for the next round. The identities of bidders demanding blocks in a specific category or PEA will not be disclosed until after Auction 110 concludes (i.e., after the close of bidding).³⁴⁸

188. We will also make public after each clock phase bidding round whether the reserve price has been met, that is, whether the estimated total cash proceeds based on the bids in the most recently completed round would satisfy the CSEA requirement. If the reserve has not yet been met, each bidder will be informed about the shortfall between the reserve and the estimated total cash proceeds, rounded up to the nearest million. This shortfall information will not be publicly available during the auction.

³⁴³ See Section III.E (Upfront Payments and Bidding Eligibility), above.

³⁴⁴ No bids may be withdrawn after the close of a round. Unlike an auction conducted using the Commission's simultaneous multiple-round auction format, there are no provisionally winning bids in a clock auction. As a result, the concept of bid withdrawals as used in simultaneous multiple-round auctions does not apply to a clock auction.

³⁴⁵ The Commission has discretion to establish stopping rules before or during multiple round auctions in order to complete the auction within a reasonable time. 47 CFR § 1.2104(e); *see also, e.g., Auction of Advanced Wireless Services (AWS-3) Licenses Scheduled for November 13, 2014; Notice and Filing Requirements, Reserve Prices, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 97*, AU Docket No. 14-78, Public Notice, 29 FCC Rcd 8386, 8434-36, paras. 172-78 (WTB 2014) (*Auction 97 Procedures Public Notice*); *Auction 96 Procedures Public Notice*, 28 FCC Rcd at 13061, paras. 161-63.

³⁴⁶ Excess demand is calculated as the difference between the number of blocks of aggregate demand and supply.

³⁴⁷ The posted price of the previous round is, generally, the start-of-round price if supply exceeds demand; the clock price of the previous round if demand exceeds supply; or the price at which a reduction caused demand to equal supply. *See the Auction 110 Clock Phase Technical Guide* for more details.

³⁴⁸ See Section II.F (Information Procedures During the Auction Process), above.

189. Each bidder will have access to additional information related to its own bidding and bid eligibility. Specifically, after the bids of a round have been processed, the bidding system will inform each bidder of the number of blocks it holds after the round (its processed demand) for every product and its eligibility for the next round.

190. Limiting the availability of bidding information during the auction balances our interest in providing bidders with sufficient information about the status of their own bids and the general level of bidding in all areas and license categories to allow them to bid confidently and effectively, while restricting the availability of information that may facilitate identification of bidders placing particular bids, which could potentially lead to undesirable strategic bidding.³⁴⁹

6. Activity Requirement, Contingent Bidding Limit, and Missing Bids

191. *Activity requirement.* To ensure that the auction closes within a reasonable period of time, an activity rule requires bidders to bid actively throughout the auction, rather than wait until late in the auction before participating. For this clock auction, a bidder's activity in a round for purposes of the activity rule will be the sum of the bidding units associated with the bidder's demands as applied by the auction system during bid processing. Bidders are required to be active on a specific percentage (the *activity requirement percentage*) of their current bidding eligibility during each round of the auction. Failure to maintain the requisite activity level will result in a reduction in the bidder's eligibility, possibly curtailing or eliminating the bidder's ability to place bids in subsequent rounds of the auction.

192. We adopt the proposal to require that bidders maintain a fixed, high level of activity in each round of Auction 110 in order to maintain bidding eligibility. Specifically, bidders must be active on between 90% and 100% of their bidding eligibility in all clock rounds, with the specific percentage within this range to be set for each round. Thus, the activity rule will be satisfied when a bidder has bidding activity on blocks with bidding units that total 90% to 100% of its current eligibility in the round. We will set the activity requirement percentage initially at 95%. If the activity rule is met, then the bidder's eligibility will not change for the next round. If the activity rule is not met in a round, the bidder's eligibility will be reduced. Bidding activity will be based on the bids that are applied by the FCC auction bidding system. That is, if a bidder requests a reduction in the quantity of blocks it demands in a product, but the bidding system cannot apply the request because demand would fall below the available supply, then the bidder's activity will reflect its unreduced demand.³⁵⁰

193. OEA will retain the discretion to change the activity requirement percentage during the auction. The bidding system would announce any such change in advance of the round in which it would take effect, giving bidders adequate notice to adjust their bidding strategies.

194. *Contingent bidding limit.* Because a bidder's eligibility for the next round is calculated based on the bidder's demands as applied by the auction system during bid processing, a bidder's eligibility may be reduced even if the bidder submitted bids with activity that exceeds the required activity for the round.³⁵¹ To help a bidder avoid potentially having its eligibility reduced as a result of submitted bids that could not be applied during bid processing, as proposed, we adopt procedures to allow

³⁴⁹ Blooston supports these limited information procedures. Blooston Comments at 3.

³⁵⁰ Under the ascending clock auction format, the FCC auction bidding system will not allow a bidder to reduce the quantity of blocks it demands in an individual product if the reduction would result in aggregate demand falling below (or further below) the available supply of blocks in the product. See Section IV.A.8.a (No Excess Supply Rule for Bids to Reduce Demand), below.

³⁵¹ This may occur, for example, if the bidder bids to reduce its demand in PEA X by two blocks (with 10 bidding units each) and bids to increase its demand by one block (with 20 bidding units) in PEA Y. If the bidder's demand can only be reduced by one block in PEA X (because there is only one block of excess demand), the increase in PEA Y cannot be applied, and absent other bidding activity the bidder's eligibility would be reduced. See Sections IV.A.8.a (No Excess Supply Rule for Bids to Reduce Demand) and d. (Processed Demand), below, for further details on bid processing.

a bidder to submit bids with associated bidding activity greater than its current bidding eligibility.³⁵² However, we emphasize that even under these additional procedures, the bidder's activity as applied by the auction system during bid processing will not exceed the bidder's current bidding eligibility.³⁵³ That is, if a bidder submits bids with associated bidding units exceeding 100% of its current bidding eligibility, its processed activity cannot exceed its eligibility.

195. Under these procedures, after Round 1 a bidder may submit bids with bidding units totaling up to a *contingent bidding limit* equal to the bidder's current bidding eligibility for the round times a percentage (the *contingent bidding percentage*) equal to or greater than 100%.³⁵⁴ We adopt an initial contingent bidding percentage of 120% to apply beginning in Round 2. This limit will be subject to change in subsequent rounds within a range of 100% to 140%. In any bidding round, the auction bidding system will advise the bidder of its current bidding eligibility, its required bidding activity, and its contingent bidding limit. The Auction 110 Clock Phase Technical Guide provides examples of use of the contingent bidding limit, and bidders are encouraged to review them.³⁵⁵

196. We are not persuaded by Verizon's arguments not to adopt the contingent bidding limit, or if adopted, to set the contingent bidding percentage at no greater than 110%. Verizon asserts, and T-Mobile agrees, that the procedures "promote insincere bidding and prolong the auction."³⁵⁶ Verizon also notes that in two previous auctions, the procedures were used only rarely.³⁵⁷ The commenters provide no evidence or explanation to support the assertions that a contingent bidding limit would lead to insincere bidding and prolong the auction. We recognize that the procedures have not been widely used in the past, but do not find that to be a sufficient reason not to adopt them here, as the procedures may prove useful in Auction 110, in particular for smaller entities whose lower total bidding eligibility may give them less flexibility to shift bidding across products.³⁵⁸

197. As with the activity requirement percentage, OEA will retain the discretion to change the contingent bidding percentage during the auction and will announce any such changes in advance of the round in which they would take effect.

198. *Missing bids.* Under the clock auction format, bidders are required to indicate their demands in every round, even if their demands at the new round's prices are unchanged from the previous round. Missing bids—bids that are not reconfirmed—are treated by the auction bidding system as

³⁵² For example, depending upon the bidder's overall bidding eligibility and the contingent bidding percentage, a bidder could submit an "additional" bid or bids that would be considered (in price point order with its other bids) and applied as available eligibility permits during the bid processing.

³⁵³ See Section IV.A.8.d (Processed Demand), below.

³⁵⁴ We have previously referred to the *contingent bidding limit* as the *activity upper limit*, and similarly, to the *contingent bidding percentage* as the *activity limit percentage*. *Auction 105 Procedures Public Notice*, 35 FCC Rcd at 2194-2195, paras. 182-184; *Auction 107 Procedures Public Notice*, 35 FCC Rcd at 8455-8456, paras. 172-176. We modify those terms to remind bidders that bids submitted using the contingent bidding limit will be applied only under certain circumstances. For Round 1, the contingent bidding limit would be 100% of the bidder's initial bidding eligibility.

³⁵⁵ See Auction 110 Clock Phase Technical Guide, Section 9.1, "Processed Activity, Next Round Eligibility, and the Contingent Bidding Limit."

³⁵⁶ See Verizon Comments at 9; T-Mobile, USA Inc. Reply (T-Mobile Reply) at 2, 8. Blooston, on the other hand, supports the procedures (Blooston Comments at 6).

³⁵⁷ Verizon Comments at 9.

³⁵⁸ See Auction 110 Clock Phase Technical Guide, Section 9.1, "Processed Activity, Next Round Eligibility, and Contingent Bidding Limit" for further explanation and examples of how the contingent bidding limit may be useful.

requests to reduce to a quantity of zero blocks for the product. If these requests are applied, or applied partially, then a bidder's bidding activity, and its bidding eligibility for the next round, may be reduced.³⁵⁹

199. For Auction 110, we will not provide for activity rule waivers to preserve a bidder's eligibility. We note that our procedures to permit a bidder to submit bids with bidding activity greater than its eligibility, within the precise limits set forth above, will address some of the circumstances under which a bidder risks losing bidding eligibility and otherwise could wish to use a bidding activity waiver, while minimizing any potential adverse impacts on bidder incentives to bid sincerely and on the price setting mechanism of the clock auction. This approach not to allow waivers is consistent with the ascending clock auction procedures used in other FCC clock auctions.³⁶⁰ The clock auction relies on precisely identifying the point at which demand decreases to equal supply to determine winning bidders and final prices. Allowing waivers would create uncertainty with respect to the exact level of bidder demand and would interfere with the basic clock price-setting and winner determination mechanism. Moreover, uncertainty about the level of demand would affect the way bidders' requests to reduce demand are processed by the bidding system, as addressed below.³⁶¹

7. Acceptable Bids

a. Minimum Opening Bids

200. As is typical for each auction, the Commission sought comment on the use of a minimum opening bid amount and/or reserve price, as mandated by section 309(j) of the Communications Act.³⁶² We will establish minimum opening bid amounts for Auction 110. The bidding system will not accept bids lower than the minimum opening bids for each product. Based on our experience in past auctions, setting minimum opening bid amounts judiciously is an effective tool for accelerating the competitive bidding process.³⁶³

201. For Auction 110, the Commission proposed to calculate minimum opening bid amounts based on bandwidth and license area population using a tiered approach under which the calculation would vary by market population. The Commission proposed minimum opening bid amounts for a block in a PEA based on \$0.06 per MHz-pop for PEAs 1–50 and \$0.02 per MHz-pop for all other PEAs, subject to a minimum of \$1000.³⁶⁴

202. Several commenters address the proposed minimum opening bid amounts. AT&T advocates a more gradual transition of the minimum opening bid calculation between large and small markets. T-Mobile supports AT&T's proposal.³⁶⁵ AT&T explains the rationale for its position in the context of the bidding units assigned to markets with similar population.³⁶⁶ We decline to adopt AT&T's

³⁵⁹ See Section IV.A.8.c (Partial Application of Bids), below, regarding partial application of bids.

³⁶⁰ See *Broadcast Incentive Auction Scheduled to Begin on March 29, 2016; Procedures for Competitive Bidding in Auction 1000, Including Initial Clearing Target Determination, Qualifying to Bid, and Bidding in Auctions 1001 (Reverse) and 1002 (Forward)*, AU Docket No. 14-252, WT Docket No. 12-269, GN Docket No. 12-268, MB Docket No. 15-146, Public Notice, 30 FCC Rcd 8975, 9077, para. 213 (2015); *Auctions 101 and 102 Procedures Public Notice*, 33 FCC Rcd at 7650, para. 245; *Auction 103 Procedures Public Notice*, 34 FCC Rcd at 5591, para. 195; *Auction 105 Procedures Public Notice*, 35 FCC Rcd at 2196, para. 188; *Auction 107 Procedures Public Notice*, 35 FCC Rcd at 8456-57, para. 178.

³⁶¹ See Sections V.A.8.a (No Excess Supply Rule for Bids to Reduce Demand) and d. (Processed Demand), below.

³⁶² *Auction 110 Comment Public Notice* at 21, para. 70; see also 47 U.S.C. § 309(j).

³⁶³ See, e.g., *Auction 97 Procedures Public Notice*, 29 FCC Rcd at 8440, para. 193.

³⁶⁴ See *Auction 110 Comment Public Notice* at 11-12, paras. 26-28.

³⁶⁵ T-Mobile Reply at 6.

³⁶⁶ AT&T Comments at 9–10.

proposal with respect to minimum opening bids. We separately address AT&T's concerns about the calculation of bidding units for similar-sized markets.³⁶⁷

203. RWA proposes that we change the minimum opening bid amounts for top 50 PEAs that contain at least one rural county, which RWA claims would allow small carriers to remain competitive in the auction. We note that minimum opening bid amounts in Commission auctions are not meant to predict the value of the spectrum,³⁶⁸ and we are not convinced that lowering the minimum opening bids for some of the top PEAs as suggested by RWA would affect the outcome of the auction. We decline to adopt RWA's proposal.³⁶⁹

204. Verizon argues that the minimum opening bids should be based on the same MHz-pop calculation used in Auction 107.³⁷⁰ US Cellular and T-Mobile support Verizon's position.³⁷¹

205. Given the totality of the comments regarding the proposed minimum opening bid amounts and how they might affect potential new entrants and small carriers, we adopt revised, lower minimum opening bid amounts for Auction 110 as proposed by Verizon and supported by US Cellular and T-Mobile. Specifically, we adopt minimum opening bid amounts for a block in a PEA based on \$0.03 per MHz-pop for PEAs 1–50, \$0.006 per MHz-pop for PEAs 51–100, and \$0.003 per MHz-pop for all other PEAs, subject to a minimum of \$1000.³⁷² These minimum opening bid amounts are set forth in the "Attachment A" file on the Auction 110 website at www.fcc.gov/auction/110.

b. Clock Price Increments

206. We adopt the proposed procedures regarding clock price increments for Auction 110. Accordingly, after bidding in the first round and before each subsequent round, the bidding system will announce the start-of-round price³⁷³ and the clock price for the upcoming round—that is, the lowest price and the highest price at which bidders can specify the number of blocks they demand during the round. As long as aggregate demand for blocks in the product exceeds the supply of blocks, the start-of-round price will be equal to the clock price from the prior round. If demand equaled supply at a price in a previous round, then the start-of-round price for the next round will be equal to the price at which demand equaled supply. If demand was less than supply in the previous round, then the start-of-round price for the next round will not increase.

207. We will set the clock price for blocks in a specific product for a round by adding a percentage increment to the start-of-round price.³⁷⁴ We will set the initial increment percentage at 10%, and may adjust the increment within a range of 5% to 20% inclusive, as rounds continue. The total dollar amount of the increment (the difference between the clock price and the start-of-round price) will be capped at a certain amount. We will set this cap on the increment initially at \$50 million and may adjust

³⁶⁷ See paras. 153–154, above.

³⁶⁸ See, e.g., *Auction 103 Procedures Public Notice*, 34 FCC Rcd at 5591, para. 197 (rejecting a proposal to lower minimum opening bids for blocks in the 47 GHz band offered in Auction 103 relative to blocks in the upper 37 GHz and 39 GHz bands also available in that auction).

³⁶⁹ RWA Comments at 6–8.

³⁷⁰ Verizon Comments at 6–7.

³⁷¹ US Cellular Reply at 3–5; T-Mobile Reply at 6–7.

³⁷² See note 328 (concerning rounding), above.

³⁷³ The start-of-round price is also referred to as the posted price of the previous round.

³⁷⁴ For example, if the start-of-round price for a block of a given product is \$10,000, and the percentage increment is 20%, then the clock price for the round will be \$12,000. The result of the clock price calculation will be rounded as follows: results above \$10,000 will be rounded up to the nearest \$1,000, and results below \$10,000 will be rounded up to the nearest \$100.

the cap as rounds continue. The proposed 5% to 20% increment range and cap will allow us to set a percentage that manages the auction pace and takes into account bidders' needs to evaluate their bidding strategies while moving the auction along quickly.

208. No commenters addressed the proposed procedures for determining clock price increments, although Verizon urged that the cap on the increment be set at an amount lower than \$50 million. Verizon argues that “[s]maller bidders, rural bidders, and new entrants that examine the 3.7 GHz Service price escalations in Auction 107 may be reassured by a lower increment cap that would allow for more price discovery.”³⁷⁵ We decline to reduce the increment cap at this time, but will keep the comment in mind, noting that we may make adjustments to the increment percentage and the cap as the auction progresses.

c. Intra-Round Bids

209. As proposed, we will permit a bidder to make intra-round bids by indicating a point between the start-of-round price and the clock price at which its demand for blocks changes. In placing an intra-round bid, a bidder will indicate a specific price and a (different) quantity of blocks it demands if, after bids for the round are processed, the price for blocks should increase beyond that intra-round amount.

210. An intra-round bid gives the bidder the flexibility to indicate that it wants to change its demand at a price lower than the clock price. However, intra-round bids will be optional; a bidder may choose to express its demands only at the clock prices. Permitting intra-round bids allows the auction system to use relatively large increments, thereby speeding the auction, without running the risk that a jump in the clock price will overshoot the market clearing price—the point at which demand for blocks equals the available supply.

8. Bids to Change Demand, Bid Types, and Bid Processing

211. Under the ascending clock auction format the Commission proposed for Auction 110, and which we adopt, a bidder will indicate in each round the number of blocks in each product that it demands at a given price, subject to the in-band limit of four discussed above.

212. A bidder that is willing to maintain the same demand for a product (relative to its demands from the previous round as processed by the bidding system) at the new clock price would bid for that quantity at the clock price, indicating that it is willing to pay up to that price, if need be, for the specified quantity. Bids to maintain demand will always be applied by the auction bidding system. A bidder that wishes to change the quantity it demands would bid at the clock price or at an intra-round price, depending upon the point at which its demands change.

213. For example, if a bidder has processed demand for two blocks entering a round in which the start-of-round price is \$2,000 and the clock price is \$2,500, but it is only willing to buy one block if the price should increase above \$2,100, the bidder can submit an intra-round bid indicating a bid quantity of one at a price of \$2,100. Or, if the bidder is not willing to pay more than the start-of-round price of \$2,000 for any blocks, it can submit an intra-round bid requesting a quantity of zero at the start-of-round price of \$2,000.

214. To facilitate bidding for multiple blocks in a PEA, bidders will be permitted to make two types of bids: simple bids and switch bids. A “simple” bid indicates a desired quantity of blocks in a product at a price (either the clock price or an intra-round price). A “switch” bid allows the bidder to request to move its demand for a quantity of blocks from Cat1 to Cat2, or vice versa, within the same

³⁷⁵ Verizon Comments at 7.

PEA at a price for the “from” category (either the clock price or an intra-round price).³⁷⁶ “Switch” bids are allowed only in PEAs with two categories.

215. We will not incorporate any form of package bidding procedures into the clock phase of Auction 110. Package bidding would add complexity to the bidding process, and we do not see significant benefit from such procedures, given the clock auction and assignment phase format we adopt.³⁷⁷ A bidder may bid on multiple blocks in a PEA (up to the limit of four) and in multiple PEAs. As set forth below, the assignment phase will assign contiguous blocks to winners of multiple blocks in a category in a PEA and give bidders an opportunity to express their preferences for specific frequency blocks, thereby facilitating aggregations of licenses.³⁷⁸

216. We adopt bid processing procedures that the auction bidding system will use, after each bidding round, to process bids to change demand to determine the *processed demand* of each bidder for each product and a *posted price* for each product that will serve as the start-of-round price for the next round.

a. No Excess Supply Rule for Bids to Reduce Demand

217. Under the ascending clock auction format, the FCC auction bidding system will not allow a bidder to reduce the quantity of blocks it demands in a product if the reduction would result in aggregate demand falling below (or further below) the available supply of blocks in the product. Therefore, if a bidder submits a simple bid to reduce the number of blocks for which it has processed demand as of the previous round, the bidding system will treat the bid as a request to reduce demand that will be applied only if the “no excess supply” rule would be satisfied. Similarly, if a bidder submits a switch bid to move its demand for a quantity of blocks from Cat1 to Cat2 within the same PEA, the FCC auction bidding system will treat the bid as a request that will be applied only if the “no excess supply” rule would be satisfied for Cat1 in the PEA.

218. We decline to adopt the suggestion of AT&T that we relax the “no excess supply” rule in the case where a bidder wishes to reduce its demand from two blocks to zero, and only one block of that requested reduction can be applied due to insufficient excess demand.³⁷⁹ AT&T argues that steps such as this are needed to ensure that “no bidder finds itself the “winner” of just 10 MHz of spectrum (a highly inefficient result) with no way of exiting the auction in a particular PEA.”³⁸⁰ In the first place, we disagree with AT&T’s premise that a license for a single block of spectrum in the 3.45 band cannot be used efficiently. The Commission adopted 10 megahertz blocks for Auction 110 in response to numerous commenters supporting that approach, suggesting that for many potential bidders there is a feasible business case for 10 megahertz blocks.³⁸¹ In addition, the Commission noted that “for frequencies below

³⁷⁶ See the Auction 110 Clock Phase Technical Guide for more details on switch bids and other proposed auction procedures.

³⁷⁷ US Cellular supports this approach. See US Cellular Reply at 2.

³⁷⁸ Also as set forth below, if there are one or more bidders that win blocks in both categories, the assignment phase bidding system will assign blocks that are contiguous across the categories to one such bidder. See Section IV.B.2 (Acceptable Bids and Bid Processing), below.

³⁷⁹ See AT&T Comments at 2, 4.

³⁸⁰ AT&T Comments at 2. AT&T further states that allowing bidders to win a single block “has the potential to complicate the assignment phase and create non-contiguous assignments for other winning bidders.” AT&T Comments at 4. We disagree with that assessment; especially given the modification we make to proposed assignment phase procedures with respect to assigning contiguous blocks across categories. See Section IV.B.2 (Acceptable Bids and Bid Processing).

³⁸¹ See *3.45 GHz Second Report and Order* at 24, para. 59, n. 161, citing CCA Comments, WT 19-348, at 5 (rec. Nov. 20, 2020); Dynamic Spectrum Alliance Comments, WT 19-348, at 5-6 (rec. Nov. 20, 2020); Federated Wireless Comments, WT 19-348, at 19 (rec. Nov. 20, 2020); Open Technology Institute at New America and Public

6 GHz, 3GPP has specified 10 megahertz among the 13 channel bandwidths suitable for 5G deployments.”³⁸² Moreover, relaxing a basic principle of the clock auction such as the “no excess supply” rule could require additional complex procedures and create unforeseen abusive strategic opportunities that result in an overall less effective auction. For example, relaxing the rule would likely result in unsold blocks, which AT&T recognizes and proposes could be addressed with a complicated modification to assignment phase procedures.³⁸³ In sum, we agree with Verizon that “Such fundamental alterations of a tried-and-true format” are not advisable.³⁸⁴ T-Mobile also opposes relaxing the “no excess supply” rule.³⁸⁵

b. Eligibility Rule and Aggregation Limit for Bids to Increase Demand

219. The bidding system will not allow a bidder to increase the quantity of blocks it demands in a product if the total number of bidding units associated with the bidder’s demand exceeds the bidder’s bidding eligibility for the round. Therefore, if a bidder submits a simple bid to increase the number of blocks for which it has processed demand as of the previous round, the bidding system will treat the bid as a request to increase demand that will be applied only if it would not cause the bidder’s activity to exceed its eligibility.³⁸⁶

220. In addition, in light of the in-band aggregation limit of 40 megahertz in a PEA established by the *3.45 GHz Second Report and Order*, the bidding system will not permit a bidder to increase the number of blocks it demands in a PEA if its total demand in the PEA would exceed four blocks.³⁸⁷

c. Partial Application of Bids

221. Under the bid processing procedures we adopt, as in all previous FCC spectrum auctions using the clock auction format, a bid (simple bid or switch bid) that involves a reduction from the bidder’s previous demands can be applied partially—that is, reduced by fewer blocks than requested in the bid—if excess demand is insufficient to support the entire reduction. Accordingly, the bidding system will apply a bidder’s request to reduce demand as much as possible consistent with the no excess supply rule. A switch bid may be applied partially, but the increase in demand in the “to” category will always match in quantity the reduction in the “from” category. A simple bid to increase a bidder’s demand may be applied

(Continued from previous page)

Knowledge Comments, WT 19-348, at 2 (rec. Nov. 20, 2020); Southern Communications Services, Inc. d/b/a Southern Linc (Southern Linc), WT 19-348, at 4 (rec. Nov. 20, 2020); T-Mobile Comments, WT 19-348, at 3, 21 (rec. Nov. 20, 2020); Wireless Internet Service Providers Association Comments, WT 19-348, at 3, 10. The period following public release of the draft of this item saw extensive support for 10 megahertz blocks. *See* Letter from Steve Sharkey, Vice President, Government Affairs, Technology and Engineering Policy, T-Mobile to Marlene H. Dortch, Secretary, FCC WT Docket No. 19-348, AU Docket No. 21-62, at 2-3 (filed Mar. 5, 2021); Letter from David D Rines, Counsel to Southern Linc to Marlene H. Dortch, Secretary, FCC WT Docket No. 19-348 at 2 (filed Mar. 8, 2021); Letter from Grant B Spellmeyer, Vice President, Federal Affairs & Public Policy, US Cellular to Marlene H. Dortch, Secretary, FCC WT Docket No. 19-348 at 1 (filed Mar. 8, 2021); Letter from Alexi Maltas, SVP & General Counsel, CCA to Marlene H. Dortch, Secretary, FCC, WT Docket No. 19-348 at 2 (filed Mar. 5, 2021); Letter from Carri Bennet, General Counsel, RWA to Marlene H. Dortch, Secretary, FCC, WT Docket No. 19-348 at 2 (filed Mar. 10, 2021).

³⁸² *3.45 GHz Second Report at Order* at 24-25, para. 59.

³⁸³ AT&T Comments at 5 (“... during the assignment phase, bidders could bid on an assignment that would include the excess supply block. To recuperate at least the reserve price for this block, the Commission could require that bidders in the assignment phase express a price margin greater than or equal to a minimum amount for assignments including the extra block.”).

³⁸⁴ Verizon Reply at 5.

³⁸⁵ T-Mobile Reply at 2.

³⁸⁶ The eligibility rule for bids to increase demand does not apply to switch bids because the bidder’s processed activity does not change when a switch bid is applied.

³⁸⁷ *See also* Section IV.A.2 (Generic License Blocks in Two Bidding Categories), above.

partially if the total number of bidding units associated with the bidder's demand exceeds the bidder's bidding eligibility for the round, or if fully applying the bid would violate the aggregation limit. Therefore, the bidding system will accommodate a bidder's request to increase demand as much as possible consistent with the aggregation limit and as long as the bidder's activity does not exceed its eligibility.

222. AT&T suggests that we also include procedures for an "all-or-nothing" bid (and an "all-or-nothing" switch bid) that cannot be applied partially so that a bidder can ensure that it is not left with a single block of demand if it wishes to win either two or zero blocks.³⁸⁸ We do not adopt the suggestion, as we believe that the auction procedures we adopt will provide bidders with adequate ways to ensure an efficient outcome, and further, that if adopted, all-or-nothing bids would be used only very infrequently, as they were in Auction 1002.³⁸⁹

d. Processed Demand

223. As proposed, we adopt procedures to determine the order in which the bidding system will process bids after a round ends. Bids to maintain demand are considered first and always applied. The bidding system will then process bids to change demand in order of price point, where the price point represents the percentage of the bidding interval for the round.³⁹⁰ The bidding system will first consider intra-round bids in ascending order of price point and then bids at the clock price. The system will consider bids at the lowest price point across all PEAs, then look at bids at the next price point in all areas, and so on.³⁹¹ As it considers each submitted bid during bid processing, the bidding system will determine the extent to which there is excess demand in each PEA at that point in the processing in order to determine whether a bidder's request to reduce demand can be applied. Likewise, the auction bidding system will evaluate the activity associated with the bidder's most recently determined demands at that point in the processing to determine whether a request to increase demand can be applied.

224. Because in any given round some bidders may request to increase demands for licenses while others may request reductions, the price point at which a bid is considered by the bidding system can affect whether it is applied. Bids not applied because of insufficient aggregate demand or insufficient eligibility will be held in a queue and considered, again in order, if there should be excess demand or sufficient eligibility later in the processing after other bids are processed.

225. Therefore, once a round closes, the bidding system will process bids to change demand by first considering the bid submitted at the lowest price point and determining the maximum extent to which that bid can be applied given bidders' demands as determined at that point in the bid processing. If the bid can be applied (either in full or partially), the number of blocks the bidder holds at that point in the processing will be adjusted, and aggregate demand will be recalculated accordingly. If the bid cannot be applied in full, the unfulfilled bid, or portion thereof, will be held in a queue to be considered later during bid processing for that round. The bidding system will then consider the bid submitted at the next highest price point, applying it in full, in part, or not at all, given the most recently determined demands of bidders. Any unfulfilled requests will again be held in the queue, and aggregate demand will again be recalculated. Every time a bid or part of a bid is applied, the unfulfilled bids held in the queue will be reconsidered, in the order of the original price points of the bids (and by pseudo-random number, in the

³⁸⁸ AT&T Comments at 4-5; *see also* T-Mobile Comments at 7-8.

³⁸⁹ In Stage 4 of Auction 1002, the forward auction of the Broadcast Incentive Auction, fewer than one-tenth of 1% of bids were all-or-nothing bids. FCC Public Reporting System, *Incentive Auction: Forward Bids*, <https://auctiondata.fcc.gov/public/projects/1000/reports/forward-bids> (last visited June 4, 2021).

³⁹⁰ For example, if the start-of-round price is \$5,000 and the clock price is \$6,000, a price of \$5,100 will correspond to the 10% price point, since it is 10% of the bidding interval between \$5,000 and \$6,000.

³⁹¹ If there are multiple bids at a single price point, the system will process those bids in order of a bid-specific pseudo-random number.

case of tied price points). The auction bidding system will not carry over unfulfilled bid requests to the next round, however. The bidding system will advise bidders of the status of their bids when round results are released.

e. Price Determination

226. We further adopt bid processing procedures that will determine, based on aggregate demand, the posted price for each product for the round, which will serve as the start-of-round price for the next round. The uniform price for all of the blocks in a product will increase from round to round as long as there is excess demand for blocks in the product but will not increase if aggregate demand does not exceed the available supply of blocks.

227. Under these procedures, if at the end of a round the aggregate demand for blocks in the product exceeds the supply of blocks, the posted price will equal the clock price for the round. If a reduction in demand was applied during the round and caused demand in the product to equal supply, the posted price will be the price at which the reduction was applied. If aggregate demand is less than or equal to supply and no bid to reduce demand was applied for the product, then the posted price will equal the start-of-round price for the round. The range of acceptable bid amounts for the next round will be set by adding the percentage increment to the posted price.

228. When a bid to reduce demand can be applied only partially, the uniform price for the product will stop increasing at that point, since the partial application of the bid will result in demand falling to equal supply. Hence, a bidder that makes a bid to reduce demand that cannot be fully applied will not face a price for the remaining demand that is higher than its bid price.

229. After the bids of the round have been processed, if the stopping rule has not been met, the FCC auction bidding system will announce clock prices to indicate a range of acceptable bids for the next round. Each bidder will be informed of its processed demand and the extent of excess demand for blocks in each product.

9. Winning Bids in the Clock Phase

230. Under the clock auction format for Auction 110, if the reserve price to meet the CSEA requirement is met in the clock phase, bidders with processed demand for a product at the time the stopping rule is met will become the winning bidders of licenses corresponding to that number of blocks and will be assigned specific frequencies in the assignment phase. The final clock phase price for a generic block in a product will be the posted price for the final round.³⁹²

B. Assignment Phase

231. Following the conclusion of the clock phase, if the reserve price to satisfy the CSEA requirement has been met, the assignment phase will follow. As proposed, in the assignment phase, in a series of bidding rounds, each clock phase winning bidder will have the opportunity to indicate its preferences for specific frequency licenses corresponding to the generic blocks it won in each category in the clock phase. As proposed, a bidder will be assigned contiguous frequencies for blocks it wins within each category and PEA regardless of whether it chooses to bid in the assignment phase. As set forth below, we adopt an additional assignment procedure to address commenter concerns that the procedures, as proposed, did not take contiguity across categories into account.

1. Sequencing and Grouping of PEAs

232. As proposed, we will sequence assignment rounds to make it easier for bidders to incorporate frequency assignments from previously assigned areas into their bid preferences for other areas, recognizing that bidders winning multiple blocks of licenses generally will prefer contiguous

³⁹² This and other Auction 110 bid processing details are addressed in the Auction 110 Clock Phase Technical Guide.

blocks across adjacent PEAs. To that end, we will conduct rounds for the largest markets first to enable bidders to establish a “footprint” from which to work.

233. Specifically, we will conduct a separate assignment round for each of the top 20 PEAs and to conduct these assignment rounds sequentially, beginning with the largest PEA.³⁹³ We will not conduct separate assignment rounds for the top 50 PEAs, as Verizon requests, arguing that more individual rounds will give “bidders a better opportunity to “establish a ‘footprint’ from which to work.”³⁹⁴ Absent similar feedback from other participants in Auctions 103 and 107, in which we also conducted individual assignment rounds for the top 20 markets, we are not persuaded that any additional advantage that a bidder might have in refining its frequency footprint over additional individual assignment rounds outweighs the cost to all bidders of time spent on conducting those rounds. Verizon also requests adequate time between assignment rounds to evaluate results, and we will keep that request in mind when determining the schedule for the assignment phase.³⁹⁵

234. Once the top 20 PEAs have been assigned, we will conduct, for each Regional Economic Area Grouping (REAG),³⁹⁶ a series of assignment rounds for the remaining PEAs within that region.

235. Further, the bidding system will group into a single market for assignment any non-top 20 PEAs within a REAG in which the same winning bidders will be assigned the same number of blocks in each category, and all are subject to the small markets bidding cap or all are not subject to the cap. Grouping in this way may also help maximize contiguity across PEAs.

236. AT&T proposes, and T-Mobile supports, an additional criterion for determining groupings in the assignment phase, namely that PEAs only be grouped if the restrictions in a category in one PEA are the same as the restrictions for that category in the other PEAs in the group.³⁹⁷ AT&T argues that under the proposed grouping approach a bidder may need “to bid for a single assignment across PEAs with different restrictions.”³⁹⁸ They do not, however, explain why a bidder may want a different frequency assignment given that the difference in restrictions across PEAs would be the same regardless of the frequency assignment, since all blocks within a category in each PEA are the same in terms of coordination requirements and restrictions. Furthermore, we are not persuaded that this change, if adopted, would have a significant impact on PEA groupings. The criteria we adopt are already reasonably strict—in order to be grouped together, PEAs must be the same in terms of categories, status with respect to the small market cap, and have the same winners of the same number of blocks in each category. Moreover, the large majority of PEAs will have no restrictions, further reducing the chances that our grouping procedures will group together PEAs with disparate restrictions. Therefore, we adopt the grouping criteria as proposed.

237. We will sequence the assignment rounds within a REAG in descending order of population for a PEA group or individual PEA. The bidding for the different REAGs will be conducted in parallel in order to reduce the total amount of time required to complete the assignment phase.

³⁹³ In Auction 1002, we conducted sequential rounds for the top 40 PEAs and for Auction 102, we did the same. We altered the proposal for Auctions 103 and 107, in order to further speed up the assignment phase, by including PEAs 21-40 in the simultaneous REAG assignment rounds. Our experience suggests that this change did not adversely affect bidders in Auctions 103 and 107.

³⁹⁴ Verizon Comments at 2, 8.

³⁹⁵ Verizon Comments at 8.

³⁹⁶ The six REAGs are: Northeast, Southeast, Great Lakes, Mississippi Valley, Central, and West.

³⁹⁷ AT&T Comments at 7-8, T-Mobile Reply Comments at 10.

³⁹⁸ AT&T Comments at 8.

2. Acceptable Bids and Bid Processing

238. Under the bidding procedures we adopt, in each assignment round a bidder will be asked to assign a price to one or more possible frequency assignments for which it wishes to express a preference, consistent with its winnings for generic blocks in the clock phase. The price will represent a maximum payment that the bidder is willing to pay, in addition to the price established in the clock phase for the generic blocks, for the frequency-specific license or licenses in its bid. In PEAs where there are two categories and a bidder won generic blocks in both categories, a bidder will submit its preferences for blocks won in Cat1 and Cat2 separately, rather than submitting bids for preferences that include blocks in both categories. That is, if a bidder won one block in Cat1 and two blocks in Cat2, it will not be able to submit a single bid amount for an assignment that includes both categories. Instead, it will submit its bid or bids for assignments in Cat1 separately from its bid or bids for assignments in Cat2.

239. In response to numerous comments requesting that we implement procedures that would prioritize contiguous assignments across categories, we modify our procedures to ensure that, in PEAs with both Cat1 and Cat2 blocks, if one or more bidders win blocks in both categories in the clock phase, one of those bidders will be assigned licenses that are contiguous across the categories.³⁹⁹ Specifically, in each assignment round, prior to implementing the proposed optimization procedures separately for each category in the PEA or PEA group, the bidding system will first determine if there are one or more bidders with winnings in both categories. If there are, the bidding system will assign blocks that are contiguous across the categories to one such bidder. To do so, the bidding system will consider the sum of each such bidder's bid for its Cat1 option that includes the highest-frequency block D and its bid for the Cat2 option that includes the lowest-frequency block E.⁴⁰⁰ The bidder with the highest bid total will be assigned licenses that are contiguous across the categories (i.e., that include blocks D and E and any other blocks contiguous to D and/or E that the bidder won. The bidder's assignment payment will be the price of the bidder with the second-highest total bid for options that include blocks that are contiguous across categories.

240. Two commenters suggest or support a suggestion to assign contiguous blocks across categories automatically if there is a single bidder with clock phase winnings in both Cat1 and Cat2.⁴⁰¹ One commenter expands on the proposal by suggesting that if there is more than one winner of blocks in both categories, the bidding system should assign contiguous licenses across the two categories to one of the winners based on a pseudo-random number.⁴⁰² We prefer the more general approach we adopt, which in the case of a single bidder with winnings in both categories, has the same result as the automatic assignment proposal: the single bidder is assigned blocks that straddle the categories and because there is no second-highest bid total (or equivalently, the second-highest bid total is \$0), the bidder has an assignment payment of \$0. In the event of multiple bidders with winnings in both categories, basing the assignment determination on bid amounts with a second-price payment rule is consistent with the basic principles of the assignment phase, while the pseudo-random number proposal is not.

241. We also decline to adopt suggestions that bidders be permitted to bid for assignments across categories (i.e., be presented with a single bid option for a contiguous assignment),⁴⁰³ an approach that would be considerably more complex to implement in the bidding system, but which would not have

³⁹⁹ See, for example, AT&T Comments at 1, 6-7; CTIA Comments at 2, 7-9; CTIA Reply Comments at 6; T-Mobile Comments at 5; T-Mobile Reply Comments at 10; Verizon Reply Comments at 4, and USCC Reply Comments at 2, 5-7.

⁴⁰⁰ Blocks H and I will be the relevant adjacent blocks between categories in the event that Lockheed is granted relief substantially similar to that sought in its waiver request.

⁴⁰¹ See AT&T Comments at 6; US Cellular Reply at 6.

⁴⁰² See US Cellular Reply at 7.

⁴⁰³ See AT&T Comments at 7; CTIA Reply at 6; T-Mobile Reply at 10.

a fundamentally different effect than the procedures we adopt to address commenter concerns about contiguity across categories.

242. Once the bidding system has determined whether there is at least one bidder with cross-category winnings and if so, has assigned licenses to one of those bidders, the system will, as proposed, use an optimization approach to determine the winning frequency assignment for the remaining blocks in each category in each PEA or PEA group. The auction system will select the assignment that maximizes the sum of bid amounts among all assignments that satisfy the contiguity requirements within categories.⁴⁰⁴

243. The additional price a bidder will pay for a specific frequency assignment (above the clock phase price) in a given category will be calculated consistent with a generalized “second price” approach—that is, the winner will pay a price that would be just sufficient to result in the bidder receiving that same winning frequency assignment while ensuring that no group of bidders is willing to pay more for an alternative assignment where each bidder is assigned contiguous spectrum within that category.⁴⁰⁵ This price will be less than or equal to the price the bidder indicated it was willing to pay for the assignment. We will determine prices in this way because it facilitates bidding strategy for the bidders, encouraging them to bid their full value for the assignment, knowing that if the assignment is selected, they will pay no more than would be necessary to ensure that the outcome is competitive.⁴⁰⁶

3. Information Available to Bidders During the Assignment Phase

244. After the clock phase concludes but before bidding begins in the assignment phase, the bidding system will provide to each assignment phase bidder a menu of bidding options consisting of possible configurations of frequency-specific licenses on which it can bid.⁴⁰⁷ These bidding options will be consistent with the bidder’s clock-phase winnings but will not take into account the winnings of other bidders. The bidding system will also announce the order in which assignment rounds will take place and indicate which PEAs will be grouped together for bidding. The bidding system will provide clock phase winning bidders with this information as soon as possible and will announce a schedule of assignment phase rounds that will commence no sooner than five business days later.

245. After each assignment round, the bidding system will inform each bidder of its own assignment and assignment payment for each assignment category for each PEA or PEA group assigned in the round. The bidding system will also provide each bidder with its current total payment, which is calculated as the sum of the bidder’s total clock payment across all PEAs and the bidder’s assignment payments for the PEAs for which an assignment round has already completed. During the assignment rounds this information will provide the bidder a running estimate of the dollar amount it will owe at the end of the auction. A bidder that is claiming a bidding credit will also be informed about its current bidding credit discount and whether the discount has been capped.

C. Final Auction Payment Calculations⁴⁰⁸

246. When all assignment rounds have been completed, a bidder’s final auction payment takes into account the sum of final clock phase prices across all licenses that it won, the sum of all of the bidder’s assignment payments, and any claimed bidding credits.⁴⁰⁹ Specifically, if a bidder is not

⁴⁰⁴ Furthermore, if multiple blocks in a category in a PEA remain unsold, the unsold licenses will be contiguous.

⁴⁰⁵ The Auction 110 Assignment Phase Technical Guide provides mathematical details.

⁴⁰⁶ We will determine prices using the Vickrey-nearest approach, which is described in the Auction 110 Assignment Phase Technical Guide.

⁴⁰⁷ See Section IV.B.2 (Acceptable Bids and Bid Processing), above.

⁴⁰⁸ We remind potential bidders that the Commission provided separately for new licensees to fund relocation of secondary non-Federal users separate and apart from auction proceeds. *3.45 GHz Second Report and Order* at 55-59, paras. 154-65.

claiming a bidding credit, its final payment is determined by summing the final clock phase prices across all licenses that it won and its assignment payments across all PEAs or PEA groups.

247. If a bidder claims a bidding credit, a bidding credit discount is calculated by applying the bidder's bidding credit percentage to the sum of the bidder's clock payments and assignment payments, capping the bidding credit discount if it exceeds the applicable caps for small businesses, rural service providers, and small markets. The resulting bidding credit discount is subtracted from the sum of the bidder's clock payments and assignment payments to determine the final payment for a bidder with a bidding credit.

D. Calculating Individual “Per-License” Prices

248. While final auction payments for winning bidders will be calculated with bidding credit caps and assignment payments applied on an aggregate basis, rather than to individual licenses, the bidding system will also calculate a “per-license” price for each license.⁴¹⁰ Such individual prices may be needed if a licensee later incurs license-specific obligations, such as unjust enrichment payments.

249. After the assignment phase, the auction bidding system will determine a net and gross post-auction price for each license that a bidder won by apportioning assignment payments and bidding credit discounts (only applicable for the net price) across all the bidder's licenses. To calculate the gross per-license price, the auction bidding system will apportion the assignment payment to licenses in proportion to the final clock phase price of the blocks that the bidder is assigned in that assignment category and PEA (or PEA group).⁴¹¹ To calculate the net price, the auction bidding system will first apportion any applicable bidding credit discounts to each PEA or PEA group in proportion to the gross payment for that market. Then, for each PEA or PEA group, the auction bidding system will apportion the assignment payment and the discount to licenses in proportion to the final clock phase price of the blocks that the bidder is assigned in that assignment category for that PEA (or PEA group).

E. Auction Results

250. The bidding system will determine winning bidders as described in Section IV.A.9 (Winning Bids in the Clock Phase), above. After release of the public notice announcing auction results, the public will be able to view and download bidding and results data through the FCC Public Reporting System (PRS).

F. Auction Announcements

251. Commission staff will use auction announcements to report necessary information, such as schedule changes, to bidders. All auction announcements will be available by clicking a link in the bidding system.

(Continued from previous page) _____

⁴⁰⁹ See the Auction 110 Assignment Phase Technical Guide for mathematical details.

⁴¹⁰ See the Auction 110 Assignment Phase Technical Guide for details on how these prices are calculated.

⁴¹¹ Mathematical details of these procedures, including how the system apportions the assignment payment for an assignment that is contiguous across the two categories, are given in the Auction 110 Assignment Phase Technical Guide.

V. POST-AUCTION PROCEDURES

252. The public notice announcing the close of the bidding and auction results will be released shortly after bidding has ended in Auction 110. This public notice will also establish the deadlines for submitting down payments, final payments, and the long-form applications (FCC Form 601) for the auction.

A. Down Payments

253. The Commission's rules provide that, unless otherwise specified by public notice, within ten business days after the release of the auction closing public notice for Auction 110, each winning bidder must submit sufficient funds (in addition to its upfront payment) to bring its total amount of money on deposit with the Commission to 20% of the net amount of its winning bids (less any bidding credits, if applicable).⁴¹² Because we cannot yet know when bidding in Auction 110 will end, and thus whether post-auction payments will be due in late 2021 or early 2022, T-Mobile and CTIA request that we announce before bidding begins that down payments will be due in early 2022.⁴¹³ They argue that this will better enable potential bidders to make the necessary financial arrangements to ensure their ability to participate in Auction 110.⁴¹⁴ We have previously recognized that uncertainties regarding the year in which down payments will be due could affect potential applicants from a capital planning perspective, and that this could in turn affect auction participation.⁴¹⁵ Acknowledging that such uncertainties may be presented under the current schedule for Auction 110, we exercise our discretion under the Commission's rules to set the down payment deadline for Auction 110 to be the later of January 7, 2022, or ten business days after release of the auction closing public notice.⁴¹⁶

B. Final Payments

254. Each winning bidder will be required to submit the balance of the net amount for each of its winning bids within 10 business days after the deadline for submitting down payments.⁴¹⁷

C. Long-Form Application (FCC Form 601)

255. The Commission's rules provide that, within 10 business days after release of the auction closing public notice, winning bidders must electronically submit a properly completed post-auction application (FCC Form 601), including the necessary filing fee of \$3,175,⁴¹⁸ for the license(s) they won through the auction.⁴¹⁹

⁴¹² See 47 CFR § 1.2107(b).

⁴¹³ See T-Mobile Comments at 6-8; CTIA Comments at 6-7.

⁴¹⁴ T-Mobile Comments at 6; CTIA Comments at 6-7; T-Mobile Reply at 11; CTIA Reply at 5.

⁴¹⁵ *Auction 97 Procedures Public Notice*, 29 FCC Rcd at 8448, para. 228.

⁴¹⁶ See 47 CFR § 1.2107(a).

⁴¹⁷ *Id.* § 1.2109(a); see *CSEA/Part I Report and Order*, 21 FCC Rcd at 907-09, paras. 43-46.

⁴¹⁸ A winning bidder is required to submit an application filing fee with each long-form application. 47 CFR § 1.1102. The Commission recently adopted a new long-form application filing fee that includes an amount to recover costs for processing the short form. *Amendment of the Schedule of Application Fees Set Forth in Sections 1.1102 through 1.1109 of the Commission's Rules*, MD Docket No. 20-270, Report and Order, 35 FCC Rcd 15089, 15104-15106, paras. 45-51 (2020) (adopting a filing fee for geographic-based wireless license long-form applications). Amended section 1.1102, which specifies filing fees for wireless long-form applications, is not yet in effect. No long-form application filing fee will be required if amended section 1.1102 is not in effect by the long-form deadline.

⁴¹⁹ 47 CFR § 1.2107(c).

256. A winning bidder claiming eligibility for a small business bidding credit or a rural service provider bidding credit must demonstrate its eligibility for the bidding credit sought in its FCC Form 601 post-auction application.⁴²⁰ Further instructions on these and other filing requirements will be provided to winning bidders in the auction closing public notice for Auction 110.

257. Winning bidders organized as bidding consortia must comply with the FCC Form 601 post-auction application procedures set forth in section 1.2107(g) of the Commission's rules.⁴²¹ Specifically, license(s) won by a consortium must be applied for as follows: (a) an individual member of the consortium or a new legal entity comprising two or more individual consortium members must file for licenses covered by the winning bids; (b) each member or group of members of a winning consortium seeking separate licenses will be required to file a separate FCC Form 601 for its/their respective license(s) in their legal business name; (c) in the case of a license to be partitioned or disaggregated, the member or group filing the applicable FCC Form 601 shall include the parties' partitioning or disaggregation agreement with the FCC Form 601; and (d) if a DE credit is sought (either small business or rural service provider), the applicant must meet the applicable eligibility requirements in the Commission's rules for the credit.⁴²²

D. Ownership Disclosure Information Report (FCC Form 602)

258. Within 10 business days after release of the auction closing public notice for Auction 110, each winning bidder must also comply with the ownership reporting requirements in sections 1.913, 1.919, and 1.2112 of the Commission's rules by submitting an ownership disclosure information report for wireless telecommunications services (FCC Form 602) with its FCC Form 601 post-auction application.⁴²³

259. If a winning bidder already has a complete and accurate FCC Form 602 on file in the FCC's Universal Licensing System (ULS), then it is not necessary to file a new report, but the winning bidder must certify in its FCC Form 601 application that the information on file with the Commission is complete and accurate. If the winning bidder does not have an FCC Form 602 on file, or if the form on file is not complete and accurate, then the winning bidder must submit a new one.

260. When a winning bidder submits an FCC Form 175, ULS automatically creates an ownership record. **This record is not an FCC Form 602, but it may be used to pre-fill the FCC Form 602 with the ownership information submitted on the winning bidder's FCC Form 175 application.** A winning bidder must review the pre-filled information and confirm that it is complete and accurate as of the filing date of the FCC Form 601 post-auction application before certifying and submitting the FCC Form 602. Further instructions will be provided to winning bidders in the auction closing public notice.

E. Tribal Lands Bidding Credit

261. A winning bidder that intends to use its license(s) to deploy facilities and provide services to federally recognized tribal lands that have a wireline penetration rate equal to or below 85% is eligible to receive a tribal lands bidding credit as set forth in sections 1.2107(e) and 1.2110(f)(3) of the Commission's rules.⁴²⁴ A tribal lands bidding credit is in addition to, and separate from, any other bidding credit for which a winning bidder may qualify.

⁴²⁰ *Id.* § 1.2112(b).

⁴²¹ *Id.* § 1.2107(g); *see also* CSEA/Part 1 Report and Order, 21 FCC Rcd at 911-12, paras. 51-52; *Updating Part 1 Report and Order*, 30 FCC Rcd at 7535, para. 101.

⁴²² 47 CFR § 1.2107(g); *see also* *id.* § 1.2110(b)(4)(i), (c)(6); *Updating Part 1 Report and Order*, 30 FCC Rcd at 7535-36, 7574, 7583-86, paras. 101-03, 190, 214-26.

⁴²³ 47 CFR §§ 1.913, 1.919, 1.2107(f), 1.2112.

⁴²⁴ *Id.* §§ 1.2107(e), 1.2110(f)(3).

262. Unlike other bidding credits that are requested prior to the auction, a winning bidder applies for the tribal lands bidding credit after the auction when it files its FCC Form 601 post-auction application. When initially filing the post-auction application, the winning bidder will be required to inform the Commission whether it intends to seek a tribal lands bidding credit, for each license won in the auction, by checking the designated box(es). After stating its intent to seek a tribal lands bidding credit, the winning bidder will have 180 days from the close of the post-auction application filing window to amend its application to select the specific tribal lands to be served and provide the required tribal government certifications. Licensees receiving a tribal lands bidding credit are subject to performance criteria as set forth in section 1.2110(f)(3)(vii).⁴²⁵ For additional information on the tribal lands bidding credit, including how the amount of the credit is calculated, applicants should review the Commission's rulemaking proceeding regarding tribal lands bidding credits and related public notices.⁴²⁶

F. Default and Disqualification

263. Any winning bidder that defaults or is disqualified after the close of an auction (i.e., fails to remit the required down payment by the specified deadline, fails to submit a timely long-form application, fails to make a full and timely final payment, or is otherwise disqualified) is liable for default payments as described in section 1.2104(g)(2).⁴²⁷ A default payment consists of a deficiency payment, equal to the difference between the amount of the bidder's winning bid and the amount of the winning bid the next time a license covering the same spectrum is won in an auction, plus an additional payment equal to a percentage of the defaulter's bid or of the subsequent winning bid, whichever is less.

264. The percentage of the applicable bid to be assessed as an additional payment for defaults in a particular auction is established in advance of the auction. We adopt the Commission's proposal to set the additional default payment for Auction 110 at 15% of the applicable bid for winning bids.⁴²⁸ The bidding system will calculate individual per-license prices that are separate from final auction payments, which are calculated on an aggregate basis.⁴²⁹

265. Finally, in the event of a default, the Commission has the discretion to re-auction the license or offer it to the next highest bidder (in descending order) at its final bid amount.⁴³⁰ In addition, if a default or disqualification involves gross misconduct, misrepresentation, or bad faith by an applicant, then the Commission may declare the applicant and its principals ineligible to bid in future auctions and

⁴²⁵ See *id.* § 1.2110(f)(3)(ii)-(vii).

⁴²⁶ See generally *Extending Wireless Telecommunications Services to Tribal Lands*, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 11794 (2000); Second Report and Order and Second Further Notice of Proposed Rulemaking, 18 FCC Rcd 4775, 4778-79, para. 10 (2003); Third Report and Order, 19 FCC Rcd 17652 (2004); see also Wireless Telecommunications Bureau Announces Enhancements to the Universal Licensing System to Help Winning Bidders of FCC Auctions File for Tribal Land Bidding Credits, Public Notice, 16 FCC Rcd 5355 (2001); Wireless Telecommunications Bureau Releases Additional Information Regarding the Procedures for Obtaining a Tribal Lands Bidding Credit and List of Tribal Lands, Public Notice, 15 FCC Rcd 24838 (2000); Wireless Telecommunications Bureau Announces Availability of Bidding Credits for Providing Wireless Services to Qualifying Tribal Lands: Tribal Lands Bidding Credits to Be Available Beginning in Auction No. 36 (800 MHz Specialized Mobile Radio (SMR) Lower 80 Channels) and in Future Auctions, Public Notice, 15 FCC Rcd 18351 (2000). Relevant documents can be viewed on the Commission's website by going to www.fcc.gov/auctions and clicking on the Tribal Lands Credits link.

⁴²⁷ *Id.* § 1.2104(g)(2).

⁴²⁸ See *Auction 110 Comment Public Notice* at 14, para. 38. No commenter opposed the proposal, which was supported by RWA. RWA Comments at 6.

⁴²⁹ See Section IV.D (Calculating Individual "Per-License" Prices), above. These prices determine the defaulted bid amount on individual licenses.

⁴³⁰ 47 CFR § 1.2109(b)-(c).

may take any other action that it deems necessary, including institution of proceedings to revoke any existing authorizations held by the applicant.⁴³¹

G. Refund of Remaining Upfront Payment Balance

266. All refunds of upfront payment balances will be returned to the payer of record as identified on the FCC Form 159 unless the payer submits written authorization instructing otherwise. Bidders are encouraged to use the **Refund Information** icon found on the *Auction Application Manager* page or the **Refund Form** link available on the *Auction Application Submit Confirmation* page in the FCC Auction Application System to access the form. After the required information is completed on the blank form, the form should be printed, signed, and submitted to the Commission by mail, fax, or email as instructed below.

267. If you have elected not to access the Refund Form through the *Auction Application Manager* page, the Commission is requesting that all information listed below be supplied in writing.

Name, address, contact and phone number of Bank
 ABA Number (capable to accept ACH payments)
 Account Number to Credit
 Name of Account Holder
 FCC Registration Number (FRN)

The refund request must be submitted by fax to the Revenue & Receivables Operations Group/Auctions at (202) 418-2843, by email to RROGWireFaxes@fcc.gov.

NOTE: Refund processing generally takes up to two weeks to complete. Bidders with questions about refunds should contact Scott Radcliffe at (202) 418-7518 or Theresa Meeks at (202) 418-2945.

VI. PROCEDURAL MATTERS

268. *Supplemental Final Regulatory Flexibility Analysis.* As required by the Regulatory Flexibility Act of 1980, as amended (RFA),⁴³² a Supplemental Initial Regulatory Flexibility Analysis (Supplemental IRFA) was incorporated in the *Auction 110 Comment Public Notice* released in March 2021. The Commission sought public comment on the proposals in the *Auction 110 Comment Public Notice*, including comments on the Supplemental IRFA. The Rural Wireless Association, Inc. (RWA) filed comments specifically addressing the Supplemental IRFA, among other things,⁴³³ and we address these comments in the discussion below. This Public Notice establishes the procedures to be used for Auction 110 and supplements the Initial and Final Regulatory Flexibility Analyses completed by the Commission in the *3.1–3.55 GHz R&O and FNPRM, 3.45 GHz Second Report and Order*, and other Commission orders pursuant to which Auction 110 will be conducted.⁴³⁴ This present Supplemental Final Regulatory Flexibility Analysis (Supplemental FRFA) conforms to the RFA.⁴³⁵

269. *Need for, and Objectives of, the Rules.* This Public Notice implements auction procedures for those entities that seek to bid to acquire licenses in Auction 110. Auction 110 will be the Commission's third auction of mid-band spectrum in furtherance of the deployment of fifth-generation (5G) wireless, the Internet of things (IoT), and other advanced spectrum-based services. The Public

⁴³¹ *Id.* § 1.2109(d).

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

⁴³³ See RWA Comment.

⁴³⁴ See *3.1-3.55 GHz R&O and FNPRM*, 35 FCC Rcd at 11126, Appx. B, paras. 1-27; *3.45 GHz Second Report and Order*, at 89-101, paras. 1-30, Appx. B.

⁴³⁵ See 5 U.S.C. § 604.

Notice adopts procedural rules and terms and conditions governing Auction 110, and the post-auction application and payment processes, as well as sets the minimum opening bid amounts for flexible-use licenses in the 3.45–3.55 GHz band (3.45 GHz Service) that will be offered in Auction 110.

270. To promote the efficient and fair administration of the competitive bidding process for all Auction 110 participants, we adopt the following procedures proposed in the *Auction 110 Comment Public Notice*:

- establishment of bidding credit caps for eligible small businesses, very small businesses, and rural service providers in Auction 110;
- designation of AT&T, T-Mobile, and Verizon Wireless as nationwide providers for purposes of the prohibition of certain communications;
- use of anonymous bidding/limited information procedures which will not make public until after bidding has closed: (1) the PEAs that an applicant selects for bidding in its short-form application (FCC Form 175), (2) the amount of any upfront payment made by or on behalf of an applicant for Auction 110, (3) an applicant's bidding eligibility, and (4) any other bidding-related information that might reveal the identity of the bidder placing a bid;
- establishment of an additional default payment of 15% under section 1.2104(g)(2) of the rules in the event that a winning bidder defaults or is disqualified after the auction;
- a specific upfront payment amount for products available in Auction 110;
- establishment of a bidder's initial bidding eligibility in bidding units based on that bidder's upfront payment through assignment of a specific number of bidding units for each generic block;
- establishment of a single aggregate reserve price for the auction to ensure that total cash proceeds from the auction equal at least \$14,775,354,330;
- use of a simultaneous stopping rule for Auction 110, under which all blocks in both categories in all PEAs would remain available for bidding until the bidding stops in every PEA;
- use of a clock auction format for Auction 110 under which each qualified bidder will indicate in successive clock bidding rounds its demands for categories of generic blocks in specific geographic areas. Categories are determined based on the framework set forth in the *3.45 GHz Second Report and Order*, in which the lower frequency blocks are affected differently than the upper frequency blocks in certain PEAs in the band;
- permission for bidders to make two types of bids: simple bids and switch bids. A "simple" bid indicates a desired quantity of blocks in a product at a price (either the clock price or an intra-round price). A "switch" bid allows the bidder to request to move its demand for a quantity of blocks from Cat1 to Cat2, or vice versa, within the same PEA at a price for the "from" category (either the clock price or an intra-round price);
- use of an activity rule that would require bidders to be active on between 90% and 100% of their bidding eligibility in all regular clock rounds;
- use of an activity rule that does not include a waiver of the rule to preserve a bidder's eligibility;
- a specific minimum opening bid amount for products available in Auction 110;
- establishment of acceptable bid amounts, including clock price increments and intra-round bids, along with a proposed methodology for calculating such amounts;
- establishment of a methodology for processing bids and requests to reduce and increase demand subject to the no excess supply rule for bids to reduce demand and the eligibility rule for bids to increase demand; and

- establishment of an assignment phase that will determine which frequency-specific licenses will be won by the winning bidders of generic blocks during the clock phase.

271. The procedures for the conduct of Auction 110 constitute the more specific implementation of the competitive bidding rules contemplated by Parts 1 and 27 of the Commission's rules and the underlying rulemaking orders, including the *3.45 GHz Second Report and Order*, and relevant competitive bidding orders, and are fully consistent therewith.⁴³⁶

272. *Summary of Significant Issues Raised by Public Comments in Response to the Supplemental IRFA.* RWA filed comments that address issues discussed in the Supplemental IRFA. RWA argues that the Commission's analysis in the *Auction 110 Comment Public Notice's* Supplemental IRFA underestimates the costs that small and rural entities incur when participating in an FCC auction.⁴³⁷ RWA states that, contrary to the Commission's expectations,⁴³⁸ small and rural providers "regularly consult attorneys, engineers, and consultants to participate in Commission auctions," incurring costs of up to \$100,000 on average per auction.⁴³⁹ However, RWA provides no support for this cost figure. Nor does RWA clarify what portion of this figure represents costs associated with applying to participate in the auction and/or whether the figure may be an aggregate amount for all of its trade association members. RWA also claims that the educational materials provided by the Commission are insufficient, as some materials are not provided until after the short-form application deadline.⁴⁴⁰ We further address RWA's comments below. Additionally, while not filed in response to the IRFA, we also address comments filed by several parties requesting that the Commission increase the caps on bidding credits for small businesses and rural service providers.

273. *Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration.* 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 SBA and to provide a detailed statement of any changes made to the proposed procedures as a result of those comments.⁴⁴¹ The Chief Counsel did not file any comments in response to the procedures that were proposed in the *Auction 110 Comment Public Notice*.

274. *Description and Estimate of the Number of Small Entities to Which the Rules Will Apply.* 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 and policies adopted herein.⁴⁴² The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."⁴⁴³ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.⁴⁴⁴ A "small business concern" is one

⁴³⁶ See generally *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2360-75, paras. 68-159.

⁴³⁷ See RWA Comments at 8-9.

⁴³⁸ See *Auction 110 Comment Public Notice* at 29, para. 111.

⁴³⁹ RWA Comments at 8-9.

⁴⁴⁰ *Id.* at 9.

⁴⁴¹ 5 U.S.C. § 604(a)(3).

⁴⁴² *Id.*

⁴⁴³ *Id.* § 601(6).

⁴⁴⁴ *Id.* § 601(3) (incorporating by reference the definition of "small business concern" in the Small Business Act, 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."

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.⁴⁴⁵

275. As noted above, Regulatory Flexibility Analyses were incorporated into the *3.1–3.55 GHz R&O and FNPRM* and the *3.45 GHz Second Report and Order*.⁴⁴⁶ These orders provide the underlying authority for the procedures proposed in the *Auction 110 Comment Public Notice* and are adopted herein for Auction 110. In those regulatory flexibility analyses, the Commission described in detail the small entities that might be significantly affected. In this Public Notice, in the Supplemental FRFA, we hereby incorporate by reference the descriptions and estimates of the number of small entities from the previous Regulatory Flexibility Analyses in the *3.1–3.55 GHz R&O and FNPRM* and the *3.45 GHz Second Report and Order*.⁴⁴⁷

276. *Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities.* The Commission designed the auction application process to minimize reporting and compliance requirements for small businesses and other applicants. In the first part of the Commission's two-phased auction application process, parties desiring to participate in an auction file streamlined, short-form applications in which they certify under penalty of perjury as to their qualifications.⁴⁴⁸ Eligibility to participate in bidding is based on an applicant's short-form application and certifications, as well as its upfront payment. In the second phase of the process, winning bidders file a more comprehensive long-form application. Thus, an applicant that fails to become a winning bidder does not need to file a long-form application or provide the additional showings and more detailed demonstrations required of a winning bidder.

277. We do not expect that the processes and procedures adopted in this Public Notice will require small entities to hire attorneys, engineers, consultants, or other professionals to participate in Auction 110 and comply with the procedures we adopt because of the information, resources, and guidance we make available to potential and actual participants. We cannot quantify the cost of compliance with the procedures, however, we do not believe that the cost of compliance will unduly burden small entities that choose to participate in the auction. We note that the processes and procedures are consistent with existing Commission policies and procedures used in prior auctions. Thus, some small entities may already be familiar with such procedures and have the processes and procedures in place to facilitate compliance resulting in minimal incremental costs to comply. For those small entities that may be new to the Commission's auction process, the various resources that will be made available, including, but not limited to, the mock auction, remote electronic bidding, and access to hotlines for both technical and auction assistance, should help facilitate participation without the need to hire professionals. For example, we intend to release an online tutorial that will help applicants understand the procedures for filing the auction short-form applications (FCC Form 175). We also intend to offer other educational opportunities for applicants in Auction 110 to familiarize themselves with the FCC Auction Application System and the bidding system. By providing these resources as well as the resources discussed below, we expect small entities that use the available resources to experience lower participation and compliance costs.

278. As noted above, RWA argues that the Commission underestimates the costs of participating in an auction for small and rural providers.⁴⁴⁹ In particular, RWA points to the need for small entities to hire attorneys, engineers, and other consultants, at a cost of \$100,000 on average per

⁴⁴⁵ 15 U.S.C. § 632.

⁴⁴⁶ See *3.1–3.55 GHz R&O and FNPRM*, Appx. E, 35 FCC Rcd at 11154-58, paras. 6-15; *3.45 GHz Second Report and Order* at 90-95, paras. 9-18, Appx. B.

⁴⁴⁷ *Id.*

⁴⁴⁸ See *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2376-77, paras. 163-66.

⁴⁴⁹ RWA Comments at 8-9.

auction.⁴⁵⁰ RWA does not, however, provide evidence that suggests that outside consultants are needed to comply with the auction procedures adopted here. Instead, RWA claims that small entity bidders “cannot make complex decisions on the future impacts of auction bidding, participation, and winning bidder compliance requirements without outside counsel.”⁴⁵¹ In doing so, RWA appears to conflate compliance with auction procedures with the development of bidding strategies and compliance with the relevant service rules. As discussed below, the Commission makes every effort to educate auction participants at every stage of the auction process in order to reduce the need for outside consultants.

279. Moreover, neither the short-form application nor the bidding system for Auction 110 requires applicant to provide detailed technical or financial information that would require the advice of outside experts, nor do they require technical or legal expertise to access or use. That some entities may elect to hire outside consultants as a matter of convenience and/or to develop bidding strategies is not relevant to the question of whether they are necessary for small entities to comply with auction procedures.

280. *Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered.* The RFA requires an agency to describe any significant, specifically small business, 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 such small entities.”⁴⁵²

281. The Commission has taken steps to minimize any economic impact of our auction procedures on small entities through, among other things, the many free resources we provide to potential auction participants. As mentioned above, consistent with the past practices in prior auctions, small entities that are potential participants will have access to detailed educational information and Commission personnel to help guide their participation in Auction 110, which should alleviate any need to hire professionals. For example, small entities and other would-be participants will be provided with various materials on the pre-bidding process in advance of the short-form application filing window, which includes step-by-step instructions on how to complete FCC Form 175. In addition, small entities will have access to the web-based, interactive online tutorials produced by Commission staff to familiarize themselves with auction procedures, filing requirements, bidding procedures, and other matters related to an auction.

282. The Commission has also taken steps to ensure that the application system is simple to use and that FCC Form 175 itself is easy to complete. For example, the application will pre-fill ownership information that an applicant has previously provided in FCC Form 175 for prior auctions or in an FCC Form 602.

283. After the initial application stage, auction participants whose applications have been deemed incomplete have the opportunity to correct their errors. An applicant whose application is deemed incomplete will receive a letter from the Commission identifying the specific errors in their application and providing contact information for a specific FCC staff member who has been assigned to provide additional information about the nature of the errors and the information needed to correct them. Additionally, after the application process is complete and the Commission has identified the applicants who will be qualified to bid in Auction 110, all qualified bidders for Auction 110 will automatically be

⁴⁵⁰ *Id.*

⁴⁵¹ *Id.* at 9.

⁴⁵² 5 U.S.C. § 604(a)(6).

registered for the auction, and registration materials will be distributed prior to the auction by overnight delivery. Applicants are not required to take any further steps until bidding commences.

284. Prior to the start of bidding, eligible bidders will be given an opportunity to become familiar with auction procedures and the bidding system by participating in a mock auction. Eligible bidders will have access to a user guide for the bidding system, bidding file formats, and an online bidding procedures tutorial in advance of the mock auction. Further, we will conduct Auction 110 electronically over the Internet using a web-based auction system that eliminates the need for small entities and other bidders to be physically present in a specific location. These mechanisms are made available to facilitate participation in Auction 110 by all eligible bidders and may result in significant cost savings for small entities that use them. Moreover, the adoption of bidding procedures in advance of the auction, consistent with statutory directive, is designed to ensure that the auction will be administered predictably and fairly for all participants, including small businesses.

285. Small entities and other auction participants may seek clarification of, or guidance on, complying with competitive bidding rules and procedures, reporting requirements, and using the bidding system at any stage of the auction process. Additionally, an FCC Auctions Hotline will provide small entities one-on-one access to Commission staff for information about the auction process and procedures. Further, the FCC Auctions Technical Support Hotline is another resource that provides technical assistance to applicants, including small entities, on issues such as access to or navigation within the electronic FCC Form 175 and use of the bidding system.⁴⁵³

286. The Commission also makes various databases and other sources of information, including the Auctions program websites and copies of Commission decisions, available to the public without charge, providing a low-cost mechanism for small entities to conduct research prior to and throughout the auction. Prior to the start of bidding, and at the close of Auction 110, we will post public notices on the Auctions website that articulate the procedures and deadlines for the auction. The Commission makes this information easily accessible and without charge to benefit all Auction 110 applicants, including small entities, thereby lowering their administrative costs to comply with the Commission's competitive bidding rules.

287. In response to RWA's comments, we do not believe it necessary to "significantly increase [our] auction outreach and education efforts, and release all auction materials well before the short-form filing deadline to better enable prospective applicants to make informed decisions," as RWA requests.⁴⁵⁴ While RWA does not give any examples of "informed decisions" that an applicant must make prior to the short-form application deadline, we infer from their comments that RWA believes that compliance with auction procedures require an applicant to have a bidding strategy and/or a business plan in place well in advance of the auction's short-form deadline.⁴⁵⁵ That is not the case. While the new certification requirement adopted in a separate Public Notice for this auction does require an applicant to be familiar with the auction procedures and the service rules for the 3.45–3.55 GHz band,⁴⁵⁶ all of the materials necessary to comply with that procedure (namely, the *3.45 GHz Second Report and Order*, the *Joint Coordination Public Notice*, and this Public Notice) are publicly available and easily accessible without charge available to the public on the Auction 110 web page. We therefore do not believe that any significant outreach or additional educational materials are necessary for applicants to comply with the auction procedures. Similarly, we do not believe RWA's request to extend the short-form application

⁴⁵³ RWA contends that the legal advice provided by FCC staff is inadequate because it cannot be relied upon, and therefore small entities must rely on outside assistance. RWA Comments at 9. Reliance on outside counsel, however, does not protect an auction participant from the consequences of any errors.

⁴⁵⁴ RWA Comments at 5.

⁴⁵⁵ *Id.* at 9.

⁴⁵⁶ See *Auction 110 Certification Requirement Public Notice*.

deadline is warranted. As mentioned earlier, the short-form application for Auction 110 does not require detailed technical or financial information for which expert advice is necessary and the bidding system does not require technical or legal expertise to access or use.

288. Another step taken to minimize the economic impact for small entities participating in Auction 110 is the Commission's adoption of bidding credits for small businesses and rural service providers. In accordance with the service rules applicable to the 3.45 GHz Service licenses to be offered in Auction 110, bidding credit discounts will be available to eligible small businesses and small business consortia on the following basis: (1) a bidder with attributed average annual gross revenues that do not exceed \$55 million for the preceding five years is eligible to receive a 15% discount on its overall payment or (2) a bidder with attributed average annual gross revenues that do not exceed \$20 million for the preceding five years is eligible to receive a 25% discount on its overall payment. Eligible applicants can receive only one of the available small business bidding credits—not both.

289. An eligible rural service provider may request a 15% discount on its overall payment using a rural service provider bidding credit. To be eligible for a rural service provider bidding credit, an applicant must: (1) be a service provider that is in the business of providing commercial communications services and, together with its controlling interests, affiliates, and the affiliates of its controlling interests, has fewer than 250,000 combined wireless, wireline, broadband, and cable subscribers; and (2) serve predominantly rural areas. Rural areas are defined as counties with a population density of 100 or fewer persons per square mile. Eligible applicants can request either a small business bidding credit or a rural service provider bidding credit, but not both.

290. The total amount of bidding credit discounts that may be awarded to an eligible small business is capped at \$25 million and there is a \$10 million cap on the total amount of bidding credit discounts that may be awarded to an eligible rural service provider. In addition, to create parity among eligible small businesses and rural service providers competing against each other in smaller markets, we adopt a \$10 million cap on the overall amount of bidding credits that any winning designated entity may apply to winning licenses in PEAs with a population of 500,000 or less. Based on the technical characteristics of the 3.45–3.55 GHz band and our analysis of past auction data, we anticipate that our caps will allow the majority of small businesses to take full advantage of the bidding credit program, thereby lowering the relative costs of participation for small businesses.

291. RWA supports the small business and rural provider credits and “the principle of a two-tiered approach to minimum opening bids imposing higher minimum opening bids on licenses in larger urban market than licenses in less populated areas” that we adopt in this Public Notice.⁴⁵⁷ However, RWA opposes the adoption of the proposed specific minimum opening bids when there is at least one rural county included in the top fifty markets and the use of PEAs as license areas for Auction 110.⁴⁵⁸ RWA asserts that with respect to minimum opening bids, “the Commission fails to recognize that the top 50 PEAs contain rural counties in addition to urban counties” and our approach “will impede the ability of small rural carriers to compete for licenses, and rural areas to receive broadband service from auctioned licenses” and “in some cases small businesses and rural carriers will be impeded from bidding on licenses in their home markets when their rural counties are included in those top 50 PEAs.”⁴⁵⁹ In the alternative, RWA proposes lowered opening bids for those PEAs that include at least one rural county and that counties or CMAs be used for bidding in Auction 110 to permit small carriers seeking licenses in the top 50 PEAs to remain competitive in Auction 110.⁴⁶⁰ We do not believe RWA's specific proposal is necessary because minimum opening bid amounts in Commission auctions are not meant to predict the

⁴⁵⁷ RWA Comments at 6.

⁴⁵⁸ *Id.*

⁴⁵⁹ RWA Comments at 6-7.

⁴⁶⁰ RWA Comments at 6-8.

value of the spectrum,⁴⁶¹ and we are not convinced that lowering the minimum opening bids for some of the top PEAs as suggested by RWA would affect the outcome of the auction. We do recognize, RWA's general concern, however, and adopt lower minimum opening bid amounts for all licenses "[g]iven the totality of the comments regarding the proposed minimum opening bid amounts and how they might affect potential new entrants and small carriers."⁴⁶²

292. We also decline to adopt the requests by Moise Advisory (Moise),⁴⁶³ Whitewater,⁴⁶⁴ and CCA⁴⁶⁵ to increase the small business bidding credit caps to \$200 million, \$150 million, and \$40 million, respectively, as well as CCA's request to raise the rural service provider bidding credit cap to \$25 million. Whitewater and Moise assert that such increases are necessary in order to provide a meaningful opportunity for small businesses to participate in Auction 110.⁴⁶⁶ CCA asserts that if the caps are increased, small and rural bidders will be more aggressive in the Auction.⁴⁶⁷ We are not persuaded by these arguments that the small business and rural service provider caps should be raised because the commenters have not provided specific data-driven arguments to support their claim that higher bidding credit caps are necessary to ensure that *bona fide* small businesses have a meaningful opportunity to participate in the auction and only a very small percentage of designated entities in recent spectrum auctions have exceeded the \$25 million small business bidding credit cap and none have exceeded the rural service provider bidding credit cap.

293. These procedures for the conduct of Auction 110 constitute the more specific implementation of the competitive bidding rules contemplated by Parts 1 and 27 of the Commission's rules and the underlying rulemaking orders, including the *3.45 GHz Second Report and Order* and relevant competitive bidding orders, and are fully consistent therewith.⁴⁶⁸

294. *Report to Congress.* The Commission will send a copy of the *Auction 110 Procedures Public Notice*, including the Supplemental FRFA, in a report to Congress pursuant to the Congressional Review Act.⁴⁶⁹ In addition, the Commission will send a copy of the *Auction 110 Procedures Public Notice*, including the Supplemental FRFA, to the Chief Counsel for Advocacy of the SBA. A copy of the *Auction 110 Procedures Public Notice*, and Supplemental FRFA (or summaries thereof), will also be published in the Federal Register.⁴⁷⁰

295. *Contact Information.* For further information concerning this proceeding, contact the offices listed below:

⁴⁶¹ See, e.g., *Auction 103 Procedures Public Notice*, 34 FCC Rcd at 5591, para. 197 (rejecting a proposal to lower minimum opening bids for blocks in the 47 GHz band offered in Auction 103 relative to blocks in the upper 37 GHz and 39 GHz bands also available in that auction).

⁴⁶² See above, para 205.

⁴⁶³ See generally Moise Comments.

⁴⁶⁴ See generally Whitewater Reply.

⁴⁶⁵ See CCA Comments at 4-6.

⁴⁶⁶ Whitewater Comments at 8; Moise Comments at 5.

⁴⁶⁷ CCA Comments at 5-6.

⁴⁶⁸ See generally *Competitive Bidding Second Report and Order*, 9 FCC Rcd at 2360-75, paras. 68-159.

⁴⁶⁹ See 5 U.S.C. § 801(a)(1)(A).

⁴⁷⁰ See *id.* § 604(b).

General Auction 110 Information

General Auction Questions
Auction Process and Procedures

FCC Auctions Hotline

(888) 225-5322, option two; or
(717) 338-2868
Hours of service: 8:00 a.m. – 5:30 p.m. ET,
Monday through Friday

Auction 110 Legal Information

Auction Rules, Policies, Regulations, including
Reports of Section 1.2105(c) Violations and
Application Major Modifications

Auctions Division, OEA

(202) 418-0660
Mary Lovejoy (Attorney)
Andrew McArdell (Attorney)

3.45 GHz Service Information

Service Rules, Policies, Regulations
Licensing Issues, Engineering Issues
Due Diligence, Incumbency Issues

Mobility Division, WTB

(202) 418-1327
Joyce Jones (Attorney)

Engineering Issues

Office of Engineering and Technology

Ira Keltz at (202) 418-0616

Technical Support

Electronic Filing
FCC Auction System (Hardware/Software
Issues)

FCC Auctions Technical Support Hotline

(877) 480-3201, option nine; or (202) 414-1250
(202) 414-1255 (TTY)
Hours of service: 8:00 a.m. – 6:00 p.m. ET,
Monday through Friday

Payment Information

Wire Transfers
Refunds

**FCC Revenue & Receivables Operations
Group/Auctions**

Scott Radcliffe at (202) 418-7518,
or Theresa Meeks at (202) 418-2945, or
(fax) (202) 418-2980, or email to
RROGWireFaxes@fcc.gov

Auction Bidder Line

Will be furnished only to qualified bidders

Press Information

Cecilia Sulhoff at (202) 418-0587

FCC Forms

(800) 418-3676 (outside Washington, DC)
(202) 418-3676 (in the Washington area)
www.fcc.gov/forms

Accessible Formats

Braille, large print, electronic files, or
audio format for people with disabilities

Consumer and Governmental Affairs Bureau

(202) 418-0530 or (202) 418-0432 (TTY)
fcc504@fcc.gov

Small Businesses

Additional information for small and
disadvantaged businesses

**Office of Communications Business
Opportunities**

(202) 418-0990
www.fcc.gov/ocbo

FCC Internet Sites

www.fcc.gov
www.fcc.gov/auction/110

- FCC -

APPENDIX**Commenter Short Names**

Short Name	Name of Filer
AT&T	AT&T Services, Inc.
Blooston	Blooston Rural Carriers
CCA	Competitive Carriers Association
CTIA	CTIA—The Wireless Association
Lockheed	Lockheed Martin Corporation
Moise	Moise Advisory
RWA	Rural Wireless Association, Inc.
T-Mobile	T-Mobile USA, Inc.
US Cellular	United States Cellular Corporation
Verizon	Verizon
Whitewater	Whitewater Wireless, L.P. and N Squared Wireless, LLC