



PUBLIC NOTICE

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AUCTION OF LICENSES IN THE 747-762 AND 777-792 MHz BANDS SCHEDULED FOR JUNE 19, 2002

FURTHER MODIFICATION OF PACKAGE BIDDING PROCEDURES AND OTHER PROCEDURES FOR AUCTION NO. 31

Report No. AUC-02-31-B (Auction No. 31)

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I. GENERAL INFORMATION

A. Introduction

By this public notice, the Wireless Telecommunications Bureau (“Bureau”) announces the procedures, minimum opening bids, and aggregate reserve price for the upcoming auction of licenses in the 747-762 and 777-792 MHz (“Upper 700 MHz”) bands scheduled for June 19, 2002 (“Auction No. 31”). In a series of prior public notices, the Bureau sought comment on and announced various Auction No. 31 procedures.¹ Most recently, in the *Auction No. 31 Further Modifications Comment Public Notice*, the Bureau sought comment on the potential establishment of an aggregate reserve price, inclusion of 24 additional licenses in Auction No. 31 and potential modifications to previously-announced procedures for Auction No. 31.² The Bureau received five comments and seven reply comments in response.³ In the present public notice, the Bureau sets forth a single set of procedures, minimum opening bids, and an aggregate reserve price consolidating prior Auction No. 31 procedures public notices, and resolves matters raised in the *Auction No. 31 Further Modifications Comment Public Notice*.

¹ See Auction of Licenses in the 747-762 and 777-792 MHz (“700 MHz”) Bands Scheduled for May 10, 2000; Comment Sought on Reserve Prices or Minimum Opening Bids and Other Auction Procedural Issues, DA 00-43, *Public Notice*, 15 FCC Rcd 670 (2000) (“*Auction No. 31 Comment Public Notice*”); Auction of Licenses in the 747-762 and 777-792 MHz Bands; Auction Notice and Filing Requirements for 12 Licenses in the 700 MHz Bands Auction Scheduled for May 10, 2000; Minimum Opening Bids and Other Auction Procedural Issues, DA 00-292, *Public Notice*, 15 FCC Rcd 2921 (2000) (“*Auction No. 31 Procedures Public Notice*”); Auction of Licenses in the 747-762 and 777-792 MHz Bands Scheduled for September 6, 2000; Comment Sought on Modifying the Simultaneous Multiple Round Auction Design to Allow Combinatorial (Package) Bidding, DA 00-1075, *Public Notice*, 15 FCC Rcd 8809 (2000) (“*Auction No. 31 Package Bidding Comment Public Notice*”); Auction of Licenses in the 747-762 and 777-792 MHz Bands Scheduled for September 6, 2000, Procedures Implementing Package Bidding for Auction No. 31; Bidder Seminar Scheduled for July 24, 2000, DA 00-1486, *Public Notice*, 15 FCC Rcd 11,526 (2000) (“*Auction No. 31 Package Bidding Procedures Public Notice*”); Auction of Licenses in the 747-762 and 777-792 MHz Bands Scheduled for March 6, 2001; Comment Sought on Modifying the Calculation for Determining Minimum Accepted Bids and Changing the Provisions Concerning “Last and Best” Bids, DA 00-2404, *Public Notice*, 15 FCC Rcd 21,424 (2000) (“*Auction No. 31 Package Bidding Modification Comment Public Notice*”); Auction of Licenses in the 747-762 and 777-792 MHz Bands Scheduled for March 6, 2001; Modifications to the Calculation for Determining Minimum Acceptable Bids and the Provisions Concerning “Last and Best Bids” and Other Procedural Issues; Bidder Seminar Scheduled for January 23, 2001, and Test of Package Bidding System Set for January 24, 25, and 26, 2001, DA 01-12, *Public Notice*, 16 FCC Rcd 217 (2001) (“*Auction No. 31 Package Bidding Procedures Modification Public Notice*”); Auction of License in the 747-762 and 777-792 MHz Bands Scheduled for June 19, 2002; Comment Sought on Adding to Auction Inventory and Further Modifying Package Bidding Procedures, DA 02-260, *Public Notice*, 17 FCC Rcd 2117 (2002) (“*Auction No. 31 Further Modifications Comment Public Notice*”).

² See, generally, *Auction No. 31 Further Modifications Comment Public Notice*.

³ The Bureau received comments from Ronald M. Harstad, Aleksandar Pekec, and Michael H. Rothkopf (collectively “Harstad”); the Major Cities Chiefs Association (“MCC”); Paxson Communications Corporation (“Paxson”); Spectrum Exchange Group, LLC and Allen & Company Incorporated (“Spectrum Exchange/Allen”); and United States Cellular Corporation (“US Cellular”). The Bureau received reply comments from Harstad; Entravision Communications Corporation (“Entravision”); Paxson; the Rural Telecommunications Group (“RTG”); Members and Supporters of the Spectrum Clearing Alliance (“SCA1”); a separate group of Members and Supporters of the Spectrum Clearing Alliance (“SCA2”) and Spectrum Exchange/Allen. As discussed further *infra*, the Bureau also sought comment regarding the potential inclusion of 24 additional licenses in Auction No. 31 from parties interested in the auction where those licenses otherwise would be sold, Auction No. 44. See, Section I(A)(2), “Licenses to Be Auctioned,” *infra*.

1. Background of Proceeding

Historically, the 746-806 MHz band has been used exclusively by television stations (Channels 60-69). In the Balanced Budget Act of 1997, Congress directed the Commission to reallocate this spectrum for public safety and commercial use by December 31, 1997,⁴ and to commence competitive bidding for commercial licenses on the reallocated spectrum after January 1, 2001.⁵ Incumbent analog television broadcasters, however, may continue operations until December 31, 2006, and, under certain circumstances, may be able to extend their operations beyond that date.⁶

In the *Upper 700 MHz First Report and Order*, the Commission adopted service rules for the commercial use of the Upper 700 MHz bands that enable the broadest possible use of this spectrum, consistent with sound spectrum management.⁷ In its service rules, the Commission divided the Upper 700 MHz bands into one 20-megahertz block (consisting of paired 10 megahertz blocks) and one 10-megahertz block (consisting of paired 5 megahertz blocks). The Commission will license the blocks in the Upper 700 MHz bands over six 700 MHz band Economic Area Groupings (“EAGs”). All operations in the Upper 700 MHz bands will be generally regulated under the framework of Part 27’s technical, licensing, and operating rules.

In subsequent proceedings, the Commission provided guidance on its review of applications for approval of voluntary agreements accelerating the transition of incumbent analog television licensees and opening these bands for new 700 MHz licensee use, and several potential mechanisms to advance the spectrum

⁴ See 47 U.S.C. § 337(a).

⁵ See 47 U.S.C. § 337(b)(2)(a)(1999)(subsequently repealed). In November 1999, Congress repealed this subsection in a consolidated appropriations statute. Consolidated Appropriations Act, 2000 Pub. L. No. 106-113, 113 Stat. 2502, Appendix E, § 213; see 145 Cong. Rec. H12493-94 (Nov. 17, 1999). The Consolidated Appropriations Act accelerated the schedule for auction of the commercial spectrum bands, and required that the proceeds from the auction of these bands be deposited in the U.S. Treasury by September 30, 2000. Subsequently, the Commission concluded that the accelerated statutory deadline conflicted with statutory requirements governing spectrum management and spectrum auctions. Cellular Telecommunications Industry Association *et al.*’s Request for Delay of the Auction of Licenses in the 747-762 and 777-792 MHz Bands Scheduled for September 6, 2000 (Auction No. 31), *Memorandum Opinion and Order*, 15 FCC Rcd 17,406 (2000). After reviewing these conflicting statutory mandates, the Commission concluded that it should schedule Auction No. 31 for a date after September 30, 2000. See *id.* Following a further postponement, the Bureau subsequently established the current June 19, 2002 auction date. See Auction of Licenses in the 747-762 and 777-792 MHz Bands (Auction No. 31) Scheduled for June 19, 2002, DA 01-2394, *Public Notice*, 16 FCC Rcd 18,510 (2001).

⁶ See 47 U.S.C. §§ 309(j)(14) and 337(e). See also *Advanced Television Systems and Their Impact Upon Existing Television Broadcast Service*, MM Docket No. 87-268, *Reconsideration of Fifth Report and Order*, 13 FCC Rcd 6860, 6887 (1998).

⁷ See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 99-168, Carriage of the Transmissions of Digital Broadcast Stations, CS Docket No. 98-120, Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television, MM Docket No. 00-39, *First Report and Order*, 15 FCC Rcd 476 (2000) (*Upper 700 MHz First Report and Order*).

clearing process.⁸ In connection with three-way spectrum clearing agreements (which would provide for TV incumbents on television Channels 59-69 to agree with new 700 MHz wireless licensees to relocate to lower band TV channels that, in turn, would be voluntarily cleared by the lower band TV incumbents), the Commission also provided guidance on interference issues that may arise from a proposal to relocate a broadcast operation to a channel below Channel 59, and adopted various procedural changes in order to streamline the process of reviewing regulatory requests needed to effectuate private band-clearing agreements.⁹

2. Licenses to Be Auctioned

As discussed fully below, twelve licenses in the Upper 700 MHz bands will be available in Auction No. 31. These licenses consist of one 20 megahertz license (consisting of paired 10 megahertz blocks) and one 10 megahertz license (consisting of paired 5 megahertz blocks) in each of six 700 MHz band EAGs. These licenses are listed in this public notice on Attachment A and are shown in the table below.

Upper 700 MHz Band Licenses

	Pacific	Central / Mountain	Great Lakes	Southeast	Mid- Atlantic	Northeast
10 MHz	WX-EAG706-C	WX-EAG705-C	WX-EAG704-C	WX-EAG703-C	WX-EAG702-C	WX-EAG701-C
20 MHz	WX-EAG706-D	WX-EAG705-D	WX-EAG704-D	WX-EAG703-D	WX-EAG702-D	WX-EAG701-D

Bidders may bid on individual licenses. In addition, bidders will be permitted to create and bid on up to twelve different packages of their own choosing during the course of the auction. Bidders will not be required to identify or create their packages before the start of the auction, but may create their packages as the auction progresses.¹⁰

In the *Further Modifications Comment Public Notice*, the Bureau sought comment regarding the potential inclusion in Auction No. 31 of 24 additional licenses from the 698-746 MHz band (the “Lower 700 MHz”

⁸ See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 99-168, Carriage of the Transmissions of Digital Broadcast Stations, CS Docket No. 98-120, Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television, MM Docket No. 00-39, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 20845 (2000) (*Upper 700 MHz MO&O and FNPRM*).

⁹ Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 99-168, Carriage of the Transmissions of Digital Broadcast Stations, CS Docket No. 98-120, Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television, MM Docket No. 00-39, *Third Report and Order*, 16 FCC Rcd 2703, 2712-17 ¶¶ 19-23 (2001) (*Upper 700 MHz Third Report and Order*).

¹⁰ Bidders are limited to bidding on, and hence creating packages from, those licenses which they selected on their FCC Form 175 and for which they have eligibility. See generally Section IV.A.2, Maximum Eligibility, and IV.A.3, Activity and Eligibility Rules. For more detail on packages, see Section IV.B.7, Packages.

band).¹¹ The licenses available for auction in the Lower 700 MHz band consist of 24 licenses to use spectrum in the 700 MHz band EAGs (four in each of the six EAGs) and 734 licenses to use spectrum in Metropolitan Statistical Areas/Rural Statistical Areas (“MSA/RSAs”).¹² The Bureau sought comment on any potential advantages or disadvantages of enabling bidders in Auction No. 31 to create and bid on packages containing 700 MHz band EAG licenses from both the Upper and Lower 700 MHz bands.¹³ As noted in the *Further Modifications Comment Public Notice*, the Bureau also sought comment on this issue in a public notice regarding the auction of licenses from the Lower 700 MHz band (“Auction No. 44”).¹⁴

Commenters were divided on whether to include the 24 Lower 700 MHz band EAG licenses in Auction No. 31. Commenters favoring the inclusion of the Lower 700 MHz band EAG licenses in Auction No. 31 tended to focus on separating the Lower 700 MHz band EAG licenses from the 734 Lower 700 MHz band MSA/RSA licenses rather than on combining the 24 Lower 700 MHz band EAG licenses with the 12 Upper 700 MHz band EAG licenses. Commenters opposing inclusion tended to focus on the possibility that continuing rule making proceedings in the Lower 700 MHz band might delay auction of those licenses and any other licenses grouped with them, including the Upper 700 MHz band licenses.

a. Comments Favoring Including the 24 Lower 700 MHz Band EAG Licenses in Auction No. 31

RTG and the Rural 700 MHz Group request that the Commission combine in a single auction the 24 EAG licenses in the Lower 700 MHz band with the 12 EAG licenses in the Upper 700 MHz band.¹⁵ According to the Rural 700 MHz Group, it would be administratively simple for bidders interested in the EAG licenses to participate in a single auction, rather than two simultaneous auctions.¹⁶ The Rural 700 MHz Group also contends that separating the EAG licenses from the MSA/RSA licenses might attract new small business entrants to Auction No. 44.¹⁷ RTG believes that grouping the MSA/RSA licenses with the

¹¹ *Further Modifications Comment Public Notice* at 1-2.

¹² Metropolitan Statistical Areas (MSAs) and Rural Service Areas (RSAs) are collectively known as Cellular Market Areas (CMAs).

¹³ *Auction No. 31 Further Modifications Public Notice* at 2.

¹⁴ *Further Modifications Comment Public Notice* at 2 and nn. 5 and 6; see Auction of Licenses in the 698-746 MHz Band Scheduled for June 19, 2002; Comment Sought on Reserve Prices or Minimum Opening Bids and other Auction Procedural Issues, DA 02-200, *Public Notice*, 17 FCC Rcd 1617 (2002) (“*Auction No. 44 Comment Public Notice*”). The Bureau received eight comments and thirteen reply comments in response to the *Auction No. 44 Comment Public Notice*. The Bureau received comments from the following parties: McBride Spectrum Partners, LLC (“McBride”); Paxson; the Rural 700 MHz Group (“Rural Group”); the Rural Telecommunications Group (“RTG”); Scott D. Reiter and Vincent D. McBride (collectively “Reiter”); Spectrum Exchange/Allen; Telecom Consulting Associates (“TCA”); and US Cellular. The Bureau received reply comments from the following parties: Council Tree Communications, LLC (“Council Tree”); Leap Wireless International, Inc. (“Leap”); McBride; the National Telephone Cooperative Association (“NTCA”); Norwell Television, LLC (“Norwell”); Paxson; Rural Group; RTG; Members and Supporters of the Spectrum Clearing Alliance (“SCA Supporters”); Spectrum Exchange/Allen; TCA; and US Cellular.

¹⁵ Comments of Rural 700 MHz Group at 2; Comments of RTG at 2-3.

¹⁶ Comments of Rural 700 MHz Group at 2.

¹⁷ *Id.* at 2-3.

EAG licenses in the Lower 700 MHz band may discourage many smaller carriers from participating in Auction No. 44.¹⁸ RTG also asserts that grouping the Lower 700 MHz EAG-licenses with the Upper 700 MHz EAG-licenses will avoid confusion and improve the efficiency of both Auction Nos. 31 and 44.¹⁹ TCA also supports limiting Auction No. 44 to MSA/RSA licenses, believing that it will limit the amount of overall bidding eligibility and increase the number of licenses in the control of many different entities, including rural telephone companies.²⁰ TCA supports auctioning the MSA/RSA licenses separately from the EAG licenses in the Lower 700 MHz band, to further the opportunities for small and rural carriers.²¹ McBride also does not want the larger EAG licenses to be grouped with MSA/RSA licenses that are likely to be of interest to smaller carriers.²² Finally, NTCA agrees with RTG, the Rural 700 MHz Group and TCA that auctioning the MSA/RSA licenses separately may increase rural carrier and other small business participation.²³

Leap believes that grouping the EAG licenses in the Upper and the Lower 700 MHz bands in the same auction is the most efficient way to conduct the auction, because bidders will perceive EAG licenses in the two bands as relatively substitutable and will implicitly place values on these licenses with reference to the price and availability of all others.²⁴ Leap also contends that combining Auction Nos. 31 and 44 would produce an unmanageable situation in a package bidding environment and thus, recommends that the MSA/RSA licenses be auctioned separately, without package bidding features.²⁵

b. Comments Opposing Including the 24 Lower 700 MHz Band EAG Licenses in Auction No. 31

In its comments, Paxson opposes grouping the 24 EAG licenses in Auction No. 44 with the 12 EAG licenses in Auction No. 31.²⁶ Paxson asserts that there is no chance of clearing the Lower 700 MHz band for many years to come, and thus, it recommends that the EAG licenses in Auction No. 31 be kept separate from the EAG licenses in Auction No. 44 to assure that a delay in conducting Auction No. 44

¹⁸ Comments of RTG at 2-3.

¹⁹ *Id.* at 2-3.

²⁰ Auction No 44 Comments of TCA at 2.

²¹ Auction No. 44 Reply Comments of TCA at 2-3.

²² Auction No. 44 Reply Comments of McBride at 1-2. *But see* Auction No. 44 Reply Comments of McBride at 3, in which McBride supports consolidation of licenses into a single auction.

²³ Auction No. 44 Reply Comments of the NTCA at 1-2.

²⁴ Auction No. 44 Reply Comments of Leap at 1-2.

²⁵ *Id.* at 2-5. Leap also requests that the Commission create more MSA/RSA licenses from the Lower 700 MHz spectrum. *Id.* The Commission decided on a band plan for the Lower 700 MHz band in the *Lower 700 MHz Report & Order*. See Reallocation and Service Rules for the 698-746 Spectrum MHz Band (Television Channels 52-59), GN Docket 01-74, *Report and Order*, 17 FCC Rcd 1022 (“*Lower 700 MHz Report & Order*”) at ¶¶ 7-36. Because this issue has been addressed by the Commission and was not an issue on which the Bureau sought comment, we will not address it in this public notice.

²⁶ Comments of Paxson at 7-11; *see also* Auction No. 44 Reply Comments of Paxson at 3-5.

does not result in a delay in the start of Auction No. 31.²⁷ Paxson also argues there are no real administrative efficiencies to be achieved by linking Auction Nos. 31 and 44, because all of the prospective bidders have been planning their software and tracking tools based on current auction inventory.²⁸ Spectrum Exchange/Allen agrees that all 758 Lower 700 MHz band licenses should be sold together, adding that the Bureau should use package bidding provisions similar to those employed for Auction No. 31.²⁹ The Spectrum Clearing Alliance also supports Paxson's position that the Bureau should not risk delaying the Upper 700 MHz auction by linking it with the Lower 700 MHz auction in any regard.³⁰ Finally, Entravision agrees with Paxson that the Bureau's proposal to group the EAG licenses from both the Upper 700 MHz and Lower 700 MHz auctions would delay the Upper 700 MHz auction because postponement of the Lower 700 MHz auction is likely due to the heavily encumbered status of the Lower 700 MHz spectrum.³¹

c. Comments Advocating Including All Lower and Upper 700 MHz Band Licenses in a Single Auction

One commenter, US Cellular, recommends that the Bureau include in a single auction all 12 licenses in the Upper 700 MHz band and 758 licenses in the Lower 700 MHz band.³² According to US Cellular, a consolidation of the auction of the 700 MHz spectrum will help avoid the "effects of the head-start advantage" of licensing EAGs before licensing MSAs/RSAs in the 700 MHz band.³³

d. Discussion

After careful review of the comments, the Bureau concludes that it will not include the 24 Lower 700 MHz EAG licenses in Auction No. 31 with the Upper 700 MHz EAG licenses. The Bureau is not persuaded that grouping the MSA/RSA licenses in an auction with the Lower 700 MHz EAG licenses will create a disadvantage to small businesses and rural telephone companies. We do not agree with those commenters that believe that separating the 734 MSAs/RSAs from the 24 EAGs would provide greater opportunities for small businesses and rural telephone companies.³⁴ Larger entities that do not qualify for bidding credits would continue to be eligible to participate in an auction of the 734 MSA/RSA licenses. In the *Lower 700 MHz Report and Order*, the Commission adopted MSAs/RSAs as the licensing area for a portion of the Lower 700 MHz band to promote opportunities for a wide variety of applicants, including

²⁷ *Id.* at 8-9.

²⁸ Auction No. 44 Reply Comments of Paxson at 3-5

²⁹ Auction No.44 Comments of Spectrum Exchange/Allen at 5-7; see also Reply Comments of Spectrum Exchange/Allen at 1-2.

³⁰ Reply Comments of Spectrum Clearing Alliance at 1-2.

³¹ Reply Comments of Entravision at 1-2.

³² Comments of US Cellular at 2.

³³ *Id.*

³⁴ Auction No.44 Comments of TCA at 2; *see also* Comments of RTG at 2-3, and Auction No. 44 Reply Comments of the NTCA at 1-2.

small and rural wireless providers, to obtain spectrum.³⁵ However, the Commission did not decide to restrict eligibility for these licenses to small and rural service providers.³⁶ Because the Commission adopted licensing rules for the Lower 700 MHz band that provide for open eligibility, the Bureau declines to consider license groupings for the purpose of discouraging participation in the auction by any particular class of bidders. We disagree with those commenters who suggest that grouping the MSA/RSA licenses with the EAG licenses in the Lower 700 MHz band may discourage many smaller carriers from participating in Auction No. 44. The Commission has sought to provide small businesses with an opportunity to successfully compete against larger, well-financed bidders by defining three tiers of small-businesses that are eligible for bidding credits. As the Commission noted in the *Lower 700 MHz Report & Order*, the use of a third small entity definition may result in the dissemination of licenses among an even wider range of small business entities, consistent with its obligations under Section 309(j)(3)(B) of the Act.³⁷

B. Rules and Disclaimers

1. Relevant Authority

Prospective bidders must familiarize themselves thoroughly with the Commission's rules relating to the Upper 700 MHz bands contained in Title 47, Part 27 of the Code of Federal Regulations, and those relating to application and auction procedures, contained in Title 47, Part 1 of the Code of Federal Regulations.

Prospective bidders also must be thoroughly familiar with the procedures, terms and conditions (collectively, "Terms") contained in the Commission's rulemakings regarding the Upper 700 MHz bands, including the *Reallocation and Reconsideration*,³⁸ *Upper 700 MHz First Report and Order*; the *Upper 700 MHz Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*; the *Upper 700 MHz Third Report and Order*; and the *Upper 700 MHz Third Report and Order Reconsideration*,³⁹ as well as the Commission's rulemakings regarding competitive bidding, such as the *Part 1 Fifth Report and Order*.⁴⁰

³⁵ Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), GN Docket No. 01-74, *Report and Order*, FCC 01-364, (rel. January 18, 2002) ("*Lower 700 MHz Report and Order*"), at ¶ 173.

³⁶ *Id.* at ¶ 95.

³⁷ *Lower 700 MHz Report & Order*, at ¶ 174.

³⁸ Reallocation of Television Channels 60-69, the 746-806 MHz Band, ET Docket No. 97-157, *Report and Order*, 12 FCC Rcd 22,953 (1998), *recon.*, 13 FCC Rcd 21,578 (1998) ("*Reallocation and Reconsideration*")

³⁹ Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, WT Docket No. 99-168, Carriage of the Transmissions of Digital Broadcast Stations, CS Docket No. 98-120, Review of the Commission's Rules and Policies Affecting the Conversion to Digital Television, MM Docket No. 00-39, *Order on Reconsideration of Third Report and Order*, 16 FCC Rcd 21,633 (2001) ("*Upper 700 MHz Third Report and Order Reconsideration*").

⁴⁰ Amendment of Part 1 of the Commission's Rules—Competitive Bidding Procedures, WT Docket No. 97-82, *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) (modified by Erratum, DA 00-2475 (rel. Nov. 3, 2000)) ("*Part 1 Fifth Report and Order*"). Subsequently, the Commission amended Section 1.2105 of the Competitive Bidding Rules. In the Matter of Amendment of Part 1 of the Commission's Rules--Competitive Bidding

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 our public notices at any time, and will issue public notices to convey any new or supplemental information to bidders. It is the responsibility of all prospective bidders to remain current with all Commission rules and with all public notices pertaining to this auction. Copies of most Commission documents, including public notices, can be retrieved from the FCC Auctions Internet site at <http://wireless.fcc.gov/auctions>. Additionally, documents are available for public inspection and copying during regular business hours at the FCC Reference Information Center, Portals II, 445 12th Street, SW, Room CY-A257, Washington, DC, 20554 or may be purchased from the Commission's duplicating contractor, Qualex International, Portals II, 445 12th Street, SW, Room CY-B402, Washington, DC 20554, telephone 202-863-2893, facsimile 202-863-2898, or via e-mail qualexint@aol.com. When ordering documents from Qualex, please provide the appropriate FCC number (for example, FCC 00-5 for the *700 MHz First Report & Order*).

2. Prohibition of Collusion

To ensure the competitiveness of the auction process, the Commission's rules prohibit applicants for the same geographic license area from communicating with each other during the auction about bids, bidding strategies, or settlements.⁴¹ This prohibition begins at the short-form application filing deadline and ends at the down payment deadline after the auction. Bidders competing for licenses in the same geographic license areas are encouraged not to use the same individual as an authorized bidder. A violation of the anti-collusion rule could occur if an individual acts as the authorized bidder for two or more competing applicants, and conveys information concerning the substance of bids or bidding strategies between the bidders he or she is authorized to represent in the auction. A violation could similarly occur if the authorized bidders are different individuals employed by the same organization (e.g., law firm or consulting firm). In such a case, at a minimum, applicants should certify on their applications that precautionary steps have been taken to prevent communication between authorized bidders and that applicants and their bidding agents will comply with the anti-collusion rule.⁴²

However, the Bureau cautions that merely filing a certifying statement as part of an application will not outweigh specific evidence that collusive behavior has occurred, nor will it preclude the initiation of an investigation when warranted.⁴³ In Auction No. 31, for example, the rule would apply to any applicants bidding for the same 700 MHz Band EAG. Therefore, applicants that apply to bid for "all markets" are precluded from communicating with all other applicants until after the down payment deadline. However, applicants may enter into bidding agreements *before* filing their FCC Form 175, as long as they

Procedures, *Seventh Report and Order*, 16 FCC Rcd 17546, 17555, ¶ 17 (2001) ("*Part 1 Seventh Report and Order*"). See *infra* note 47. On February 8, 2002, the Commission further amended Section 1.2110 of the Competitive Bidding Rules. Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures, *Eighth Report and Order*, FCC 02-34 (rel. February 13, 2002). These most recent amendments take effect 30 days after publication in the Federal Register.

⁴¹ See *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15297-98, ¶¶ 7-8; see also 47 C.F.R. § 1.2105.

⁴² See *In re 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, 11977 ¶ 11 (1998) ("*Nevada Wireless*").

⁴³ See *id.*, at 11978.

disclose the existence of the agreement(s) in their Form 175.⁴⁴ If parties agree in principle on all material terms prior to the short-form filing deadline, those parties must be identified on the short-form application pursuant to Section 1.2105(c), even if the agreement has not been reduced to writing. If the parties have not agreed in principle by the filing deadline, an applicant would not include the names of those parties on its application, and may not continue negotiations with other applicants for licenses covering the same geographic areas.⁴⁵ By signing their FCC Form 175 short-form applications, applicants are certifying their compliance with Section 1.2105(c).

In addition, Section 1.65 of the Commission's rules requires an applicant to *maintain* the accuracy and completeness of information furnished in its pending application and to notify the Commission within 30 days of any substantial change that may be of decisional significance to that application.⁴⁶ Thus, Sections 1.65 and 1.2105 require an auction applicant to notify the Commission of any violation of the anti-collusion rules upon learning of such violation. Bidders therefore are required to make such notification to the Commission immediately upon discovery.⁴⁷

A summary listing of documents from the Commission and the Bureau addressing the application of the anti-collusion rules may be found in Attachment I.

3. Interference Protection of Television Services

Licensees operating on the spectrum associated with Channels 60, 61, 62, 65, 66, and 67 must comply with the co-channel and adjacent channel provisions of Section 27.60 of our Rules.⁴⁸ For example, a licensee operating on any portion of the 10 megahertz block (i.e., between 752 MHz and 762 MHz) that coincides with Channel 61 will have to provide co-channel protection to television stations operating on Channel 61 and adjacent channel protection to television stations operating on Channels 60 and 62 (including digital television ("DTV") stations); and any licensee operating on any portion of the 10 megahertz block that coincides with Channel 62 will have to provide co-channel protection to television stations operating on Channel 62 and adjacent channel protection to television stations operating on Channels 61 and 63. Licensees operating on spectrum between 747 MHz and 752 MHz (Channel 60), in addition to providing co-channel protection to Channel 60 television stations, will have to provide adjacent channel protection to television stations operating on both Channel 61 and 59.⁴⁹ New Upper 700 MHz licensees will also have to comply with any additional technical requirements or interference protection

⁴⁴ See 47 C.F.R. § 1.2105(c).

⁴⁵ See Wireless Telecommunications Bureau Clarifies Spectrum Auction Anti-Collusion Rules, *Public Notice*, 11 FCC Rcd 9645 (1995).

⁴⁶ See 47 C.F.R. § 1.65.

⁴⁷ The Commission amended Section 1.2105 to require auction applicants to report prohibited communications in writing to the Commission immediately, but in no case later than five business days after the communication occurs. *Part 1 Seventh Report and Order*, 16 FCC Rcd at 17555, ¶ 17.

⁴⁸ 47 C.F.R. § 27.60.

⁴⁹ In addition, licensees operating fixed stations in the 747-762 MHz band must comply with the relevant provisions for "base stations" in Sections 27.60 and 90.309 of our Rules; and licensees operating fixed stations in the 777-792 MHz band must comply with the relevant provisions for "control stations" in Sections 27.60 and 90.309 of our Rules. See 47 C.F.R. §§ 27.60, 90.309.

requirements that may be adopted in the future as a result of pending and future rulemaking proceedings.⁵⁰ These interference obligations will remain in force until the end of the DTV transition period, at which time analog TV and DTV broadcasters will be required to vacate both the Upper and Lower 700 MHz bands.

a. Negotiations with Incumbent Broadcast Licensees

The Commission has established a policy of facilitating voluntary clearing of the 700 MHz bands to allow for the introduction of new wireless services and to promote the transition of incumbent analog television licensees to DTV service. The Commission established its policies on voluntary clearing for the Upper 700 MHz Band in a series of orders. The Commission initially stated that it would “consider specific regulatory requests needed to implement voluntary agreements” between incumbent broadcasters and new licensees to clear the Upper 700 MHz Band early, if consistent with public interest.⁵¹ Subsequently, the Commission established a rebuttable presumption favoring the grant of requests that would both result in certain specific benefits and avoid specific detriments.⁵² These policies were later extended to “three-way” band clearing arrangements, in which non-Channel 59-69 broadcasters were also potential parties.⁵³ Subsequently, the Commission provided certain additional flexibility to facilitate voluntary agreements for early clearing and granted a request for relief from two specific DTV-related requirements.⁵⁴ In considering such requests, the Commission will consider whether grant of the request would result in public interest benefits, such as making new or expanded public safety or other wireless services available to consumers or deploying wireless service to rural or other underserved communities.⁵⁵ The Commission intends to weigh these benefits against any likely public interest costs, such as the loss of any of the four stations in the designated market area with the largest audience share, the loss of the sole service licensed to the local community, the loss of a community’s sole service on a channel reserved for noncommercial educational broadcast service, or a negative effect on the pace of the DTV transition in the market.⁵⁶ For example, the Commission would consider the availability of the licensee’s former

⁵⁰ A Due Diligence Announcement that includes a listing of some of the pending matters that may relate to the 746- 806 MHz band will be released shortly. The Bureau does not represent that this list will include all pending matters that may relate to the 746-806 MHz band.

⁵¹ See *Upper 700 MHz First Report and Order*, 15 FCC Rcd at 534 ¶ 145.

⁵² See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 99-168, *Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 20845, 20870-71 ¶ 61 (2000) (“*Upper 700 MHz MO&O and FNPRM*”).

⁵³ See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 99-168, Carriage of the Transmissions of Digital Broadcast Stations, CS Docket No. 98-120, Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television, MM Docket No. 00-39, *Third Report and Order*, 16 FCC Rcd 2703, 2718 at ¶ 36 (2001) (“*Upper 700 MHz Third Report and Order*”).

⁵⁴ See Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission’s Rules, WT Docket No. 99-168, Carriage of the Transmissions of Digital Broadcast Stations, CS Docket No. 98-120, Review of the Commission’s Rules and Policies Affecting the Conversion to Digital Television, MM Docket No. 00-39, *Order on Reconsideration of the Third Report and Order*, 16 FCC Rcd 21,633 (2001).

⁵⁵ See *Upper 700 MHz MO&O and FNPRM*, 15 FCC Rcd at 20870 ¶ 61.

⁵⁶ *Id.*

analog programming within the service area, through simulcast of the programming on the licensee's DTV channel or distribution of the programming on cable or DBS, or the availability of similar broadcast services within the service area (e.g., whether the lost service is the only network service, the only source for local service, or the only source for otherwise unique broadcast service).

b. Canadian and Mexican Border Regions

There are currently separate agreements with Canada and Mexico covering TV broadcast use of the UHF 470-806 MHz band. Such agreements do not reflect the additional use or services adopted in the *700 MHz First Report & Order* for 746-764 and 776-794 MHz bands.⁵⁷ While the Commission staff has been involved in discussions with both countries regarding coordination of interference criteria for the use of these bands in the border areas for the additional services, agreements have yet to be reached.⁵⁸ Therefore, until such agreements have been finalized, the Commission found it necessary to adopt certain interim requirements for licenses in these bands along the Canada and Mexico borders.⁵⁹ Accordingly, licenses issued for these bands within 120 km of the borders were made subject to whatever future agreements the United States developed with those two countries. Because the existing agreements for the protection of TV stations in those countries are still in effect and must be recognized until they are replaced or modified to reflect the new uses, the Commission decided that licenses in the border areas will be granted on the condition that harmful interference may not be caused to, but must accept interference from, UHF TV transmitters in Canada and Mexico.⁶⁰ Furthermore, the Commission pointed out that modifications may be necessary to comply with whatever provisions are ultimately specified in future agreements with Canada and Mexico regarding the use of these bands.⁶¹

⁵⁷ See *Upper 700 MHz First Report and Order*, 15 FCC Rcd at 534-5.

⁵⁸ *Id.* Furthermore, both Canada and Mexico have been notified that the Commission has changed the allocation of these bands, and the Commission has discussed with them the possibility of mutually compatible spectrum use in all three countries.

⁵⁹ See *700 MHz First Report & Order*, 15 FCC Rcd at 480-1 n. 17. There, the Commission stated that: "many agreements have used the geographic distance of 120 km from the border as the coordination or affected area. We will apply this criterion until agreements are reached."

⁶⁰ A Letter of Understanding ("LOU") with Canada recognized U.S. plans to use this band for other than broadcasting services, and notes that Canada is independently considering a reduction of the spectrum in this band allocated to television. This LOU also specifically provides for non-broadcast allocations and services in the 746-806 MHz bands (Channels 60-69) by establishing criteria to protect DTV stations and analog TV stations established in accordance with the existing TV Agreement (Nov. 3, 1993 – Jan. 5, 1994). The FCC and Mexico's Secretariat of Communications and Transportation have signed a Memorandum of Understanding ("MOU") that establishes procedures for implementing digital television (DTV) service along the United States/Mexico border and approves all five DTV stations in the U.S./Mexico border area slated to begin service in November 1998 and May 1999. The MOU, which covers DTV operations in the area extending 275 kilometers on either side of the U.S./Mexico common border, contains the following provisions: a list of mutually acceptable second channel DTV allotments for each country; procedures to be used for notifying each administration of plans to implement DTV service relative to an allotment; and the methods to be used by each administration in evaluating the acceptability of proposed DTV facilities.

⁶¹ See *700 MHz First Report & Order*, 15 FCC Rcd at 534 ¶ 146. Agreements affecting the use of this band between the United States, Canada and Mexico may be referenced on the Internet at <http://www.fcc.gov/ib/pnd/agree/>.

4. Due Diligence

Potential bidders are reminded that there are a number of incumbent broadcast television licensees already licensed and operating in the 746-764 and 776-794 MHz bands (television Channels 60-62 and 65-67) that will be subject to the upcoming auction. As discussed above in greater detail, the Commission made clear that geographic area licensees operating on the spectrum associated with Channels 60, 61, 62, 65, 66, and 67 must comply with the co-channel and adjacent channel provision of Section 27.60 of the Commission's rules.⁶² In addition, geographic area licensees operating fixed stations in the 746-764 MHz band must comply with the relevant provisions for "base stations" in Sections 27.60 and 90.309 of the Commission's rules; and licensees operating fixed stations in the 776-794 MHz band must comply with the relevant provisions for "control stations" in those sections of the rules.⁶³

These limitations may restrict the ability of such geographic licensees to use certain portions of the electromagnetic spectrum or provide service to certain regions in their geographic license areas. To aid potential bidders, the Bureau will shortly issue a Due Diligence Announcement listing incumbent licensees operating in these bands. The Commission makes no representations or guarantees that the matters listed in this Due Diligence Announcement are the only pending matters that could affect spectrum availability in these services.

Potential bidders 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 licenses available in Auction No. 31.

Potential bidders also should be aware that certain applications (including those for modification), petitions for rulemaking, requests for special temporary authority ("STA"), waiver requests, petitions to deny, petitions for reconsideration, and applications for review may be pending before the Commission and relate to particular applicants or incumbent licensees. In addition, certain decisions reached in this proceeding may be subject to judicial appeal and may be the subject of additional reconsideration or appeal. We note that resolution of these matters could have an impact on the availability of spectrum in Auction No. 31. In addition, although the Commission will continue to act on pending applications, requests and petitions, some of these matters may not be resolved by the time of the auction. To aid potential bidders, the Bureau will issue shortly a Due Diligence Announcement listing matters pending before the Commission that relate to licenses or applications in these services. The Commission makes no representations or guarantees that the listed matters are the only pending matters that could affect spectrum availability in these services.

In addition, potential bidders may research the licensing database for the Mass Media Bureau on the Internet in order to determine which frequencies are already licensed to incumbent licensees. 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. 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 the database. **Potential bidders are strongly encouraged to physically inspect any sites located in, or near, the EAG for which they plan to bid.**

⁶² See *id.* at ¶ 141. See also 47 C.F.R. § 27.60; See also Section I.B.3 of this Public Notice.

⁶³ See 47 C.F.R. §§ 27.60, 90.309.

Licensing records for the Mass Media Bureau are contained in the Mass Media Bureau's Consolidated Data Base System (CDBS) and may be researched on the Internet at <http://www.fcc.gov/mmb>. Potential bidders may query the database online and download a copy of their search results if desired. Detailed instructions on using Search for Station Information, Search for Ownership Report Information and Search for Application Information and downloading query results are available online by selecting the CDBS Public Access (main) button at the bottom of the Electronic Filing and Public Access list section. The database searches return either station or application data. The application search provides an application link that displays the complete electronically filed application in application format. An AL/TC search under the application search link permits searching for Assignment of License/Transfer of Control groups using the AL/TC group lead application. For further details, click on the [Help](#) file.

Potential bidders should direct questions regarding the search capabilities of CDBS to the Mass Media Bureau help line at (202) 418-2662, or via e-mail at mmbinfo@fcc.gov.

5. Bidder Alerts

All applicants must certify on their FCC Form 175 applications under penalty of perjury that they are legally, technically, financially and otherwise qualified to hold a license, and not in default on any payment for Commission licenses (including down payments) or delinquent on any non-tax debt owed to any Federal agency.⁶⁴ Prospective bidders are reminded that submission of a false certification to the Commission is a serious matter that may result in severe penalties, including monetary forfeitures, license revocations, exclusion from participation in future auctions, and/or criminal prosecution.

The FCC makes no representations or warranties about the use of this spectrum for particular services. Applicants should be aware that an FCC auction represents an opportunity to become an FCC licensee in this service, subject to certain conditions and regulations. An FCC auction does not constitute an endorsement by the FCC of any particular services, technologies or products, nor does an FCC license constitute a guarantee of business success. Applicants and interested parties should perform their own due diligence before proceeding, as they would with any new business venture.

As is the case with many business investment opportunities, some unscrupulous entrepreneurs may attempt to use Auction No. 31 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 ("IRS"), Federal Trade Commission ("FTC"), Securities and Exchange Commission ("SEC"), FCC, or other government agency has approved the investment; (b) the

⁶⁴ See 47 C.F.R. § 1.2105.

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.

Information about deceptive telemarketing investment schemes is available from the FTC at (202) 326-2222 and from the SEC at (202) 942-7040. Complaints about specific deceptive telemarketing investment schemes should be directed to the FTC, the SEC, or the National Fraud Information Center at (800) 876-7060. Consumers who have concerns about specific proposals regarding Auction No. 31 may also call the FCC Consumer Center at (888) CALL-FCC ((888) 225-5322).

6. National Environmental Policy Act (“NEPA”) Requirements

Licenses must comply with the Commission’s rules regarding the National Environmental Policy Act (NEPA).⁶⁵ The construction of a wireless antenna facility is a federal action and the licensee must comply with the Commission’s NEPA rules for each such facility.⁶⁶ The Commission’s NEPA rules require, among other things, that the licensee consult with expert agencies having NEPA responsibilities, including the U.S. Fish and Wildlife Service, the State Historic Preservation Office, the Army Corp of Engineers and the Federal Emergency Management Agency (through the local authority with jurisdiction over floodplains). The licensee must prepare environmental assessments for facilities that may have a significant impact in or on wilderness areas, wildlife preserves, threatened or endangered species or designated critical habitats, historical or archaeological sites, Indian religious sites, floodplains, and surface features. The licensee must also prepare environmental assessments for facilities that include high intensity white lights in residential neighborhoods or excessive radio frequency emission.

C. Auction Specifics

1. Auction Date

The auction will begin on Wednesday, June 19, 2002.⁶⁷ The initial schedule for bidding will be announced by public notice at least one week before the start of the auction. Unless otherwise announced, bidding on all licenses and packages will be conducted on each business day until bidding has stopped on all licenses and packages.

2. Auction Title

Auction No. 31 – Upper 700 MHz Band

⁶⁵ See 47 C.F.R. Ch. 1, Subpart I.

⁶⁶ See 47 C.F.R. §§ 1.1305-1.1319.

⁶⁷ Although the Bureau did not seek comment on the issue, several commenters stated their opposition to any delay of Auction No. 31. See, e.g., Comments of Paxson, *passim*. US Cellular favored postponement of Auction No. 31 to permit development of band clearing agreements. See Comments of US Cellular at 3-4. In its Auction No. 44 filing, Leap Wireless suggests that Auction No. 31 not be held until the status of Auction No. 35 is resolved. See Reply Comments of Leap at 6. As noted above, Auction No. 31 is scheduled to begin concurrently with Auction No. 44 on June 19, 2002, as previously announced.

3. Bidding Methodology

The bidding methodology for Auction No. 31 will be simultaneous multiple round with package bidding (SMR-PB).⁶⁸ The Commission will conduct this auction over the Internet. Telephonic bidding will also be available. As a contingency, the FCC Wide Area Network, which requires access to a 900 number telephone service, will be available as well for a fee of \$2.30 per minute. Qualified bidders are permitted to bid telephonically or electronically.

4. Pre-Auction Dates and Deadlines

Auction Seminar	April 30, 2002
Short-Form Application (FCC FORM 175)	May 8, 2002; 6:00 p.m. ET
Upfront Payments (via wire transfer)	May 28, 2002; 6:00 p.m. ET
Mock Auction	June 13-14, 2002
Auction Begins.....	June 19, 2002

5. Requirements For Participation

Those wishing to participate in the auction must:

- Submit a short-form application (FCC Form 175) electronically by 6:00 p.m. ET, May 8, 2002.
- Submit a sufficient upfront payment and an FCC Remittance Advice Form (FCC Form 159) by 6:00 p.m. ET, May 28, 2002.
- Comply with all provisions outlined in this public notice.
- Comply with all rules set forth in the Commission's order in WT Docket No. 99-168, Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules.

6. General Contact Information

GENERAL AUCTION INFORMATION

General Auction Questions
Seminar Registration

FCC Auctions Hotline
(888) 225-5322, Press Option #2
or direct (717) 338-2888
Hours of service: 8 a.m. – 5:30 p.m. ET

AUCTION LEGAL INFORMATION

Auction Rules, Policies, Regulations

Auctions and Industry Analysis Division
Legal Branch (202) 418-0660

LICENSING INFORMATION

Rules, Policies, Regulations
Licensing Issues
Due Diligence
Incumbency Issues

Commercial Wireless Division
(202) 418-0620

⁶⁸ See below Section IV.A.1, Simultaneous Multiple Round with Package Bidding.

TECHNICAL SUPPORT

Electronic Filing
Automated Auction System

FCC Auctions Technical Support Hotline

(202) 414-1250 (Voice),

(202) 414-1255 (TTY)

Hours of service: Monday through Friday 7 a.m. to 10:00 p.m. ET, Saturday, 8:00 a.m. to 7:00 p.m., Sunday, 12:00 noon to 6:00 p.m.

PAYMENT INFORMATION

Wire Transfers
Refunds

FCC Auctions Accounting Branch

(202) 418-1995

(202) 418-2843 (Fax)

TELEPHONIC BIDDING

Will be furnished only to qualified bidders

FCC COPY CONTRACTOR

Additional Copies of
Commission Documents

Qualex International

Portals II, 445 12th Street, SW, Room CY-B402

Washington, DC 20554

(202) 863-2893

(202) 863-2898 (Fax)

qualexint@aol.com (E-mail)

PRESS INFORMATION

Meribeth McCarrick (202) 418-0654

FCC FORMS

(800) 418-3676 (outside Washington, DC)

(202) 418-3676 (in the Washington Area)

<http://www.fcc.gov/formpage.html>

FCC INTERNET SITES

<http://www.fcc.gov>

<http://wireless.fcc.gov/auctions>

<http://wireless.fcc.gov/uls>

II. SHORT-FORM (FCC FORM 175) APPLICATION REQUIREMENTS

Guidelines for completion of the short-form (FCC Form 175) are set forth in Attachment E to this public notice. The short-form application seeks the applicant's name and address, legal classification, status, small or very small business bidding credit eligibility, identification of the license(s) sought, the authorized bidders and contact persons. All applicants must certify on their FCC Form 175 applications under penalty of perjury that they are legally, technically, financially and otherwise qualified to hold a license and, as discussed below in Section II.D (Provisions Regarding Defaulters and Former Defaulters), that they are not in default on any payment for Commission licenses (including down payments) or delinquent on any non-tax debt owed to any Federal agency.

A. Ownership Disclosure Requirements (FCC Form 175 Exhibit A)

All applicants must comply with the uniform Part 1 ownership disclosure standards and provide

information required by Sections 1.2105 and 1.2112 of the Commission’s rules. Specifically, in completing FCC Form 175, applicants will be required to file an “Exhibit A” providing a full and complete statement of the ownership of the bidding entity. The ownership disclosure standards for the short-form are set forth in Section 1.2112 of the Commission’s rules.⁶⁹

B. Consortia And Joint Bidding Arrangements (FCC Form 175 Exhibit B)

Applicants will be required to identify on their short-form applications any parties with whom they have entered into any consortium arrangements, joint ventures, partnerships or other agreements or understandings which relate in any way to the licenses being auctioned, including any agreements relating to post-auction market structure.⁷⁰ Applicants will also be required to certify on their short-form applications that they have not entered into any explicit or implicit agreements, arrangements or understandings of any kind with any parties, other than those identified, regarding the amount of their bids, bidding strategies, or the particular licenses on which they will or will not bid.⁷¹ As discussed above, if an applicant has had discussions, but has not reached a joint bidding agreement by the short-form deadline, it would not include the names of parties to the discussions on its applications and may not continue discussions with applicants for the same geographic license area(s) after the deadline.⁷² Where applicants have entered into consortia or joint bidding arrangements, applicants must submit an “Exhibit B” to the FCC Form 175.

A party holding a non-controlling, attributable interest in one applicant will be permitted to acquire an ownership interest in, form a consortium with, or enter into a joint bidding arrangement with other applicants for licenses in the same geographic license area provided that (i) the attributable interest holder certifies that it has not and will not communicate with any party concerning the bids or bidding strategies of more than one of the applicants in which it holds an attributable interest, or with which it has formed a consortium or entered into a joint bidding arrangement; and (ii) the arrangements do not result in a change in control of any of the applicants.⁷³ While the anti-collusion rules do not prohibit non-auction related business negotiations among auction applicants, bidders are reminded that certain discussions or exchanges could touch upon impermissible subject matters because they may convey pricing information and bidding strategies.

C. Eligibility

1. Bidding Credit Eligibility (FCC Form 175 Exhibit C)

Bidding credits are available to small and very small businesses, or consortia, thereof, as defined in 47 C.F.R. § 27.502. A bidding credit represents the amount by which a bidder’s winning bids are

⁶⁹ 47 C.F.R. § 1.2105 requires the disclosure on the short-form of the applicant’s ownership information as set forth in 47 C.F.R. § 1.2112. Note that both of these sections were revised in the *Part 1 Fifth Report and Order*.

⁷⁰ See 47 C.F.R. §§ 1.2105(a)(2)(viii), (c)(1).

⁷¹ See 47 C.F.R. § 1.2105(a)(2)(ix).

⁷² See Section I.B.2 “Prohibition of Collusion,” above.

⁷³ See 47 C.F.R. § 1.2105(c)(4)(i), (ii).

discounted.⁷⁴ The size of a 700 MHz band bidding credit depends on the average of the aggregated annual gross revenues for each of the preceding three years of the bidder, its affiliates, its controlling interests, and the affiliates of its controlling interests:

- A bidder with attributed average annual gross revenues of not more than \$40 million for the preceding three years receives a 15 percent discount on its winning bids for 700 MHz band licenses (“small business”);⁷⁵
- A bidder with attributed average annual gross revenues of not more than \$15 million for the preceding three years receives a 25 percent discount on its winning bids for 700 MHz band licenses (“very small business”).⁷⁶

Bidding credits are not cumulative; qualifying applicants receive either the 15 percent or the 25 percent bidding credit, but not both.

2. Tribal Land Bidding Credit

To encourage the growth of wireless services in federally recognized tribal lands the Commission has implemented a tribal land bidding credit. *See* Section V.D. of this Public Notice.

3. Applicability of Part 1 Attribution Rules

Controlling interest standard. On August 14, 2000, the Commission released the *Part 1 Fifth Report and Order*, in which the Commission, *inter alia*, adopted a “controlling interest” standard for attributing to auction applicants the gross revenues of their investors and affiliates in determining small business eligibility for future auctions.⁷⁷ The Commission observed that the rule modifications adopted in the various Part 1 orders would result in discrepancies and/or redundancies between certain of the new Part 1 rules and existing service-specific rules, and the Commission delegated to the Bureau the authority to make conforming edits to the Code of Federal Regulations (CFR) consistent with the rules adopted in the Part 1 proceeding.⁷⁸ Part 1 rules that superseded inconsistent service-specific rules will control in Auction No. 31.⁷⁹ *Accordingly, the “controlling interest” standard as set forth in the Part 1 rules will be in effect for Auction No. 31, even if conforming edits to the CFR are not made prior to the auction.*

⁷⁴ *See* 47 C.F.R. §§ 1.2110(f), 27.502.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ The eligibility for small business preferences will be determined based on the attribution rules in effect at the short-form application deadline. *See Part 1 Fifth Report and Order*, 15 FCC Rcd at 15327, ¶ 67. *See also* note 12, above.

⁷⁸ *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15330, ¶ 78.

⁷⁹ *See* Amendment of Part 1 of the Commission’s Rules-Competitive Bidding Procedures, Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, 4660-4685 MHz, WT Docket No. 97-82, ET Docket No. 94-32, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374, 382, ¶ 5 (1997) (“*Part 1 Third Report and Order*”); *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15330, ¶ 78.

Control. The term “control” includes both *de facto* and *de jure* control of the applicant. Typically, *ownership of at least 50.1 percent of an entity’s voting stock evidences de jure control. De facto control is determined on a case-by-case basis.*⁸⁰ The following are some common indicia of *de facto* control:

- the entity constitutes or appoints more than 50 percent 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; or
- the entity plays an integral role in management decisions.

Attribution for small and very small business eligibility. In determining which entities qualify as small or very small businesses, the Commission will consider the gross revenues of the applicant, its affiliates, its controlling interests, and the affiliates of its controlling interests. The Commission does not impose specific equity requirements on controlling interest holders. Once the principals or entities with a controlling interest are determined, only the revenues of those principals or entities, the affiliates of those principals or entities, the applicant and its affiliates, will be counted in determining small business eligibility.

A consortium of small or very small businesses is a “conglomerate organization formed as a joint venture between or among mutually independent business firms,” each of which *individually* must satisfy the definition of small or very small business in Sections 1.2110(f), 27.502. Thus, each consortium member must disclose its gross revenues along with those of its affiliates, its controlling interests, and the affiliates of its controlling interests. We note that although the gross revenues of the consortium members will not be aggregated for purposes of determining eligibility for small or very small business credits, this information must be provided to ensure that each individual consortium member qualifies for any bidding credit awarded to the consortium.

4. Supporting Documentation

Applicants should note that they will be required to file supporting documentation to their FCC Form 175 short-form applications to establish that they satisfy the eligibility requirements to qualify as small or very small businesses (or consortia of small or very small businesses) for this auction.⁸¹

Applicants should further note that submission of an FCC Form 175 application constitutes a representation by the certifying official that he or she is an authorized representative of the applicant, has

⁸⁰ For further guidance on the issue of *de facto* control, see the Commission’s affiliation rule at 47 C.F.R. § 1.2110(b)(5); *see also* Ellis Thompson Corp., *Summary Decision of Administrative Law Judge Joseph Chachkin*, 10 FCC Rcd. 12554, 12555-56 (1994), in which the Commission identified the following factors used to determine control of a business: (1) use of facilities and equipment; (2) control of day-to-day operations; (3) control of policy decisions; (4) personnel responsibilities; (5) control of financial obligations; and (6) receipt of monies and profits; Intermountain Microwave, 12 FCC 2d. 559 (1963), and Application of Baker Creek Communications, L.P., for Authority to Construct and Operate Local Multipoint Distribution Services in Multiple Basic Trading Areas, *Memorandum Opinion and Order*, 13 FCC Rcd. 18709 (1998).

⁸¹ *See* 47 C.F.R. § 1.2105.

read the form's instructions and certifications, and that the contents of the application and its attachments are true and correct. Submission of 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.

Small or very small business eligibility (Exhibit C). Entities applying to bid as small or very small businesses (or consortia of small or very small businesses) will be required to disclose on Exhibit C to their FCC Form 175 short-form applications, *separately and in the aggregate*, the gross revenues for the preceding three years of each of the following: (1) the applicant, (2) its affiliates, (3) its controlling interests, and (4) the affiliates of its controlling interests. **Certification that the average annual gross revenues for the preceding three years do not exceed the applicable limit is not sufficient. A statement of the total gross revenues for the preceding three years is also insufficient. The applicant must provide separately for itself, its affiliates, its controlling interests, and the affiliates of its controlling interests, a schedule of gross revenues for each of the preceding three years, as well as a statement of total average gross revenues for the three-year period.** If the applicant is applying as a consortium of small or very small businesses, this information must be provided for each consortium member.

D. Provisions Regarding Defaulters and Former Defaulters (FCC Form 175 Exhibit D)

Each applicant must certify on its FCC Form 175 application that it is not in default on any Commission licenses and that it is not delinquent on any non-tax debt owed to any Federal agency.⁸² In addition, each applicant must attach to its FCC Form 175 application a statement made under penalty of perjury indicating whether or not the applicant, its affiliates, its controlling interests, or the affiliates of its controlling interest have ever been in default on any Commission licenses or have ever been delinquent on any non-tax debt owed to any Federal agency. The applicant must provide such information for itself, its affiliates, its controlling interests, and the affiliates of its controlling interests, as defined by Section 1.2110 of the Commission's rules (as amended in the *Part 1 Fifth Report and Order*).⁸³ **Applicants must include this statement as Exhibit D of the FCC Form 175.** Prospective bidders are reminded that the statement must be made under penalty of perjury and, further, submission of a false certification to the Commission is a serious matter that may result in severe penalties, including monetary forfeitures, license revocations, exclusion from participation in future auctions, and/or criminal prosecution.

“Former defaulters” — *i.e.*, applicants, including their attributable interest holders, that in the past have defaulted on any Commission licenses or been delinquent on any non-tax debt owed to any Federal agency, but that have since remedied all such defaults and cured all of their outstanding non-tax delinquencies — are eligible to bid in Auction No. 31, provided that they are otherwise qualified. However, as discussed *infra* in Section III.D.3, former defaulters are required to pay upfront payments that are fifty percent more than the normal upfront payment amounts.⁸⁴

E. Installment Payments

Installment payment plans will not be available in Auction No. 31.

⁸² 47 C.F.R. § 1.2105(a)(2)(x).

⁸³ 47 C.F.R. § 1.2105(a)(2)(xi); *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15316-17, ¶¶ 40-42.

⁸⁴ 47 C.F.R. § 1.2106(a).

F. Other Information (FCC Form 175 Exhibits E and F)

Applicants owned by minorities or women, as defined in 47 C.F.R. § 1.2110(c)(2), may attach an exhibit (Exhibit E) regarding this status. This applicant status information is collected for statistical purposes only and assists the Commission in monitoring the participation of “designated entities” in its auctions. Applicants wishing to submit additional information may do so on Exhibit F (Miscellaneous Information) to the FCC Form 175.

G. Minor Modifications to Short-Form Applications (FCC Form 175)

After the short-form filing deadline (May 8, 2002), applicants may make only minor changes to their FCC Form 175 applications. Applicants will not be permitted to make major modifications to their applications (*e.g.*, change their license selections or proposed service areas, change the certifying official or change control of the applicant or change bidding credits). *See* 47 C.F.R. § 1.2105. Permissible minor changes include, for example, deletion and addition of authorized bidders (to a maximum of three) and revision of exhibits. Applicants should make these modifications to their FCC Form 175 electronically and submit a letter, briefly summarizing the changes, by electronic mail to the attention of Margaret Wiener, Chief, Auctions and Industry Analysis Division, at the following address: auction31@fcc.gov. The electronic mail summarizing the changes must include a subject or caption referring to Auction No. 31. The Bureau requests that parties format any attachments to electronic mail as Adobe® Acrobat® (pdf) or Microsoft® Word documents.

A separate copy of the letter should be faxed to the attention of Kathryn Garland at (717) 338-2850. Questions about other changes should be directed to Howard Davenport of the Auctions and Industry Analysis Division at (202) 418-0660.

H. Maintaining Current Information in Short-Form Applications (FCC Form 175)

Applicants have an obligation under 47 C.F.R. §1.65, to maintain the completeness and accuracy of information in their short-form applications. Amendments reporting substantial changes of possible decisional significance in information contained in FCC Form 175 applications, as defined by 47 C.F.R. § 1.2105(b)(2), will not be accepted and may in some instances result in the dismissal of the FCC Form 175 application.

III. PRE-AUCTION PROCEDURES

A. Auction Seminar

On Tuesday, April 30, 2002, the FCC will sponsor a free seminar for Auction No. 31 at the Federal Communications Commission, located at 445 12th Street, SW, Washington, DC. The seminar will provide attendees with information about pre-auction procedures, conduct of the auction, the FCC Automated Auction System, and the 700 MHz band service and auction rules. The seminar will also provide an opportunity for prospective bidders to ask questions of FCC staff.

To register, complete the registration form attached hereto as Attachment C and submit it by Friday, April, 26, 2002. Registrations are accepted on a first-come, first-served basis.

B. Short-Form Application (FCC Form 175) — Due May 8, 2002

In order to be eligible to bid in this auction, applicants must first submit an FCC Form 175 application. This application must be submitted electronically and received at the Commission no later than 6:00 p.m. ET on May 8, 2002. Late applications will not be accepted.

There is no application fee required when filing an FCC Form 175. However, to be eligible to bid, an applicant must submit an upfront payment. *See Part III.D, below.*

1. Electronic Filing

Applicants must file their FCC Form 175 applications electronically.⁸⁵ Applications may generally be filed at any time beginning at noon ET on April 30, 2002, until 6:00 p.m. ET on May 8, 2002. Applicants are strongly encouraged to file early and are responsible for allowing adequate time for filing their applications. Applicants may update or amend their electronic applications multiple times until the filing deadline on May 8, 2002.

Applicants must press the “SUBMIT Application” button on the “Submission” page of the electronic form to successfully submit their FCC Form 175s. Any form that is not submitted will not be reviewed by the FCC. Information about accessing the FCC Form 175 is included in Attachment D. Technical support is available at (202) 414-1250 (voice) or (202) 414-1255 (text telephone (TTY)); the hours of service Monday through Friday, from 7:00 AM to 10:00 PM ET, Saturday, 8:00 AM to 7:00 PM ET, and Sunday, 12:00 noon to 6:00 PM ET. In order to provide better service to the public, *all calls to the hotline are recorded.*

Applicants can also contact Technical Support via e-mail at betacomm@fcc.gov.

2. Completion of the FCC Form 175

Applicants should carefully review 47 C.F.R. § 1.2105, and must complete all items on the FCC Form 175. Instructions for completing the FCC Form 175 are in Attachment E of this public notice. Applicants are encouraged to begin preparing the required attachments for FCC Form 175 prior to submitting the form. Attachments D and E to this public notice provide information on the required attachments and appropriate formats.

3. Electronic Review of FCC Form 175

The FCC Form 175 electronic review system may be used to locate and print applicants’ FCC Form 175 information. Applicants may also view other applicants’ completed FCC Form 175s after the filing deadline has passed and the FCC has issued a public notice explaining the status of the applications. For this reason, it is important that applicants do not include their Taxpayer Identification Numbers (TINs) on any exhibits to their FCC Form 175 applications. There is no fee for accessing this system. *See Attachment D for details on accessing the review system.*

C. Application Processing and Minor Corrections

After the deadline for filing the FCC Form 175 applications has passed, the FCC will process all timely

⁸⁵ *See* 47 C.F.R. § 1.2105(a).

submitted applications to determine which are acceptable for filing, and subsequently will issue a public notice identifying: (1) those applications accepted for filing; (2) those applications rejected; and (3) those applications which have minor defects that may be corrected, and the deadline for filing such corrected applications.

As described more fully in the Commission's rules, after the May 8, 2002, short-form filing deadline, applicants may make only minor corrections to their FCC Form 175 applications. Applicants will not be permitted to make major modifications to their applications (*e.g.*, change their license selections, change the certifying official, change control of the applicant, or change bidding credit eligibility).⁸⁶

D. Upfront Payments — Due May 28, 2002

In order to be eligible to bid in the auction, applicants must submit an upfront payment accompanied by an FCC Remittance Advice Form (FCC Form 159). After completing the FCC Form 175, filers will have access to an electronic version of the FCC Form 159 that can be printed and faxed to Mellon Bank in Pittsburgh, PA. All upfront payments must be received at Mellon Bank by 6:00 p.m. ET on May 28, 2002.

Please note that:

- All payments must be made in U.S. dollars.
- All payments must be made by wire transfer.
- Upfront payments for Auction No. 31 go to a lockbox number different from the lockboxes used in previous FCC auctions, and different from the lockbox number to be used for post-auction payments.
- Failure to deliver the upfront payment by the May 28, 2002, deadline will result in dismissal of the application and disqualification from participation in the auction.

1. Making Auction Payments by Wire Transfer

Wire transfer payments must be received by 6:00 p.m. ET on May 28, 2002. To avoid untimely payments, applicants should discuss arrangements (including bank closing schedules) with their banker several days before they plan to make the wire transfer, and allow sufficient time for the transfer to be initiated and completed before the deadline. Applicants will need the following information:

ABA Routing Number: 043000261
Receiving Bank: Mellon Pittsburgh
BENEFICIARY: FCC/Account # 910-0171
OBI Field: (Skip one space between each information item)
"AUCTIONPAY"
FCC REGISTRATION NUMBER (FRN): (same as FCC Form 159, block 11 and/or 21)
PAYMENT TYPE CODE (same as FCC Form 159, block 24A: A31U)
FCC CODE 1 (same as FCC Form 159, block 28A: "31")

⁸⁶ See 47 C.F.R. § 1.2105; see also *Two Way Radio of Carolina, Inc., Memorandum, Opinion and Order*, 14 FCC Rcd. 12035 (1999).

PAYER NAME (same as FCC Form 159, block 2)
LOCKBOX NO. # 358430

NOTE: The BNF and Lockbox number are specific to the upfront payments for this auction; do not use BNF or Lockbox numbers from previous auctions.

Applicants must fax a completed FCC Form 159 (Revised 2/00) to Mellon Bank at (412) 209-6045 **at least one hour before** placing the order for the wire transfer (but on the same business day). On the cover sheet of the fax, write “Wire Transfer — Auction Payment for Auction Event No. 31.” **Bidders should confirm receipt of their upfront payment at Mellon Bank by contacting their sending financial institution.**

2. FCC Form 159

A completed FCC Remittance Advice Form (FCC Form 159, Revised 2/00) must be faxed to Mellon Bank in order to accompany each upfront payment. Proper completion of FCC Form 159 (Revised 2/00) is critical to ensuring correct credit of upfront payments. Detailed instructions for completion of FCC Form 159 are included in Attachment F to this public notice. An electronic version of the FCC Form 159 is available after filing the FCC Form 175. The FCC Form 159 can be completed electronically, but must be filed with Mellon Bank via facsimile.

3. Amount of Upfront Payment

In the *Part 1 Order, Memorandum Opinion and Order, and Notice of Proposed Rule Making*, the Commission delegated to the Bureau the authority and discretion to determine appropriate upfront payment(s) for each auction.⁸⁷ In addition, in the *Part 1 Fifth Report and Order*, the Commission ordered that “former defaulters,” *i.e.*, applicants that have ever been in default on any Commission license or have ever been delinquent on any non-tax debt owed to any Federal agency, be required to pay upfront payments fifty percent greater than non-“former defaulters.”⁸⁸ For purposes of this calculation, the “applicant” includes the applicant itself, its affiliates, its controlling interests, and the affiliates of its controlling interests, as defined by Section 1.2110 of the Commission’s rules (as amended in the *Part 1 Fifth Report and Order*).⁸⁹

The amount of the upfront payment will determine the number of bidding units on which a bidder can bid, where each license is associated with a fixed number of bidding units. A bidder’s maximum eligibility will be established by translating its upfront payment to bidding units (one dollar equals one bidding unit). In order to bid on a license, otherwise qualified bidders who applied for that license on Form 175 must have an eligibility level that meets or exceeds the number of bidding units assigned to that license. At a minimum, therefore, an applicant’s total upfront payment must be enough to establish eligibility to bid on at least one of the licenses applied for on Form 175, or else the applicant will not be eligible to participate in the auction. An applicant does not have to make an upfront payment to cover all licenses

⁸⁷ Amendment of Part 1 of the Commission’s rules — Competitive Bidding Proceeding, WT Docket No. 97-82, *Order, Memorandum Opinion and Order and Notice of Proposed Rule Making*, 12 FCC Rcd. 5686, 5697-5698, ¶ 16 (1997) (“*Part 1 Order*”).

⁸⁸ *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15316-17, ¶¶ 40-42; 47 C.F.R. § 1.2106(a); *see* 47 C.F.R. §§ 1.2105(a)(2)(xi)

⁸⁹ 47 C.F.R. § 1.2105(a)(2)(xi); *Part 1 Fifth Report and Order*, 15 FCC Rcd at 15316-17, ¶¶ 40-42.

for which the applicant has applied on Form 175. An applicant may, on its FCC Form 175, apply for every applicable license being offered, but its actual bidding in any round will be limited by (1) its *initial eligibility*, the bidding units reflected in its upfront payment; and (2) its *current eligibility*, the bidding units reflected in its upfront payment less the number of bidding units by which its eligibility has been reduced. As an upper bound on the upfront payment, an applicant could add together the upfront payments for all licenses on which it seeks to bid (either individually or in a package) in any given round. **Bidders should check their calculations carefully, as there is no provision for increasing a bidder's maximum eligibility after the upfront payment deadline.**

The specific upfront payments and bidding units for each license are set forth in Attachment A of this Public Notice.

Former defaulters should calculate their upfront payment for all licenses by multiplying the number of bidding units they wish to purchase by 1.5. In order to calculate the number of bidding units to assign to former defaulters, the Commission will divide the upfront payment received by 1.5 and round the result up to the nearest bidding unit.

Example: Upper 700 MHz Bands Upfront Payments and Bidding Flexibility

License or Package	Bidding Units	Upfront Payment
Package A (WX-EAG701-C and WX-EAG701-D)	42,000,000	\$42,000,000
WX-EAG702-C	14,000,000	\$14,000,000

If a bidder wishes to bid on both Package A and license WX-EAG702-C in a round, it must have selected WX-EAG701-C, WX-EAG701-D, and WX-EAG702-C on its FCC Form 175 and purchased at least 56,000,000 bidding units (14,000,000 + 28,000,000 + 14,000,000). If a bidder only wishes to bid on either Package A or license WX-EAG702-C, but not both, purchasing 42,000,000 bidding units would meet the requirement for either Package A or license WX-EAG702-C. The bidder would be able to bid on either Package A or license WX-EAG702-C, but not both at the same time. If the bidder purchased only 14,000,000 bidding units, it would have enough eligibility for license WX-EAG702-C or license WX-EAG701-C but not for Package A or license WX-EAG701-D.

4. Applicant's Wire Transfer Information for Purposes of Refunds of Upfront Payments

The Commission will use wire transfers for all Auction No. 31 refunds. To ensure that refunds of upfront payments are processed in an expeditious manner, the Commission is requesting that all pertinent information as listed below be supplied to the FCC. Applicants can provide the information electronically during the initial short-form filing window after the form has been submitted. Wire Transfer Instructions can also be manually faxed to the FCC, Financial Operations Center, Auctions Accounting Group, ATTN: Tim Dates or Gail Glasser, at (202) 418-2843 by May 28, 2002. All refunds will be returned to the payer of record as identified on the FCC Form 159 unless the payer submits written authorization instructing otherwise. For additional information, please call (202) 418-1995.

Name of Bank
 ABA Number

Contact and Phone Number
Account Number to Credit
Name of Account Holder
FCC Registration Number (FRN)
Taxpayer Identification Number (see below)
Correspondent Bank (if applicable)
ABA Number
Account Number

(Applicants should also note that implementation of the Debt Collection Improvement Act of 1996 requires the FCC to obtain a Taxpayer Identification Number (TIN) before it can disburse refunds.) Eligibility for refunds is discussed in Section V.F., *below*.

E. Auction Registration

Approximately ten days before the auction, the FCC will issue a public notice announcing all qualified bidders for the auction. Qualified bidders are those applicants whose FCC Form 175 applications have been accepted for filing and have timely submitted upfront payments sufficient to make them eligible to bid on at least one of the licenses for which they applied.

All qualified bidders are automatically registered for the auction. Registration materials will be distributed prior to the auction by two separate overnight mailings, one containing the confidential bidder identification number (BIN) required to place bids and the other containing the SecurID cards. These mailings will be sent only to the contact person at the contact address listed in the FCC Form 175.

Applicants that do not receive both registration mailings will not be able to submit bids. Therefore, any qualified applicant that has not received both mailings by noon on Wednesday, June 12, 2002, should contact the Auctions Hotline at (717) 338-2888. Receipt of both registration mailings is critical to participating in the auction and each applicant is responsible for ensuring it has received all of the registration material.

Qualified bidders should note that lost bidder identification numbers or SecurID cards can be replaced only by appearing in person at the FCC Auction Headquarters located at 445 12th St., SW, Washington, DC 20554. Only an authorized representative or certifying official, as designated on an applicant's FCC Form 175, may appear in person with two forms of identification (one of which must be a photo identification) in order to receive replacements. Qualified bidders requiring replacements must call technical support prior to arriving at the FCC.

F. Electronic Bidding

The Commission will conduct this auction over the Internet. Telephonic bidding will also be available. As a contingency, the FCC Wide Area Network, which requires access to a 900 number telephone service, will be available as well. Qualified bidders are permitted to bid telephonically or electronically, *i.e.*, over the Internet or the FCC's Wide Area Network at \$2.30 per minute. In either case, **each authorized bidder** must have its own Remote Security Access SecurID card, which the FCC will provide at no charge. Any applicant with only one authorized bidder will be issued two SecurID cards, while applicants with two or three authorized bidders will be issued three cards. For security purposes, the SecurID cards and the FCC Automated Auction System User Manual are only mailed to the contact person at the contact address listed on the FCC Form 175. Please note that each SecurID card is tailored to a specific auction, therefore, SecurID cards issued for other auctions or obtained from a source other

than the FCC will not work for Auction No. 31. The telephonic bidding phone number will be supplied in the first overnight mailing, which also includes the confidential bidder identification number. Each applicant should indicate its bidding preference—electronic or telephonic—on the FCC Form 175.

Please note that the SecurID cards can be recycled, and we encourage bidders to return the cards to the FCC. We will provide pre-addressed envelopes that bidders may use to return the cards once the auction is over.

G. Mock Auction

All qualified bidders will be eligible to participate in a mock auction on Thursday, June 13, 2002, and Friday, June 14, 2002. The mock auction will enable applicants to become familiar with the FCC Automated Auction System prior to the auction. Participation by all bidders is strongly recommended. Details will be announced by public notice.

IV. AUCTION EVENT

The first round of bidding for Auction No. 31 will begin on Wednesday, June 19, 2002. The initial bidding schedule will be announced in a public notice listing the qualified bidders, which is released approximately 10 days before the start of the auction.

A. Auction Structure

1. Simultaneous Multiple Round Auction with Package Bidding

We will auction the twelve Upper 700 MHz band licenses in a single, simultaneous multiple-round auction with package bidding.⁹⁰ Unless otherwise announced, bids will be accepted on all licenses and packages in each round of the auction.⁹¹ This approach, we believe, will allow bidders in this auction to take advantage of any synergies that exist among licenses and will lead to the most efficient outcome consistent with our objectives under Section 309(j) of the Communications Act of 1934.⁹²

The simultaneous multiple round auction with package bidding auction format (SMR-PB) differs in several important ways from our traditional simultaneous multiple round auction (SMR).⁹³ Briefly and generally, the most important structural changes follow. Bids are allowed on groups of licenses as well as on individual licenses. All bids in the auction, not just those from the current round, are considered when determining the provisionally winning set of bids in each round. However, the bids of a bidder in one round are considered mutually exclusive of its bids from any other round – that is, all bids from a single bidder in the provisionally winning set must be from the same round. A major implication of these changes is that bids which are not part of the provisionally winning set in a given round can become part of the provisionally winning set in later rounds.

⁹⁰ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC rcd at 11534-11536.

⁹¹ Bidders are, however, limited by (1) the license selection made on their FCC Form 175, (2) activity and eligibility rules, and (3) the 12 packages per bidder constraint.

⁹² 47 U.S.C. § 309(j).

⁹³ Except where otherwise noted, “simultaneous multiple round” generally refers to simultaneous multiple round auction format **without** package bidding, and “package bidding” generally refers to simultaneous multiple round auction format **with** package bidding.

As a consequence of these basic structural changes, the SMR-PB rules on activity and eligibility, minimum acceptable bids, bid withdrawals, and many other auctions specifics are very different from the rules under the traditional SMR format. In addition to the complete descriptions in this Public Notice, Attachments G and H summarize the SMR-PB requirements.

2. Maximum Eligibility

The amount of the upfront payment submitted by a bidder will determine the initial maximum eligibility (as measured in bidding units) for each bidder.⁹⁴ Note again that each license is assigned a specific number of bidding units equal to the upfront payment listed in Attachment A on a bidding unit per dollar basis. The bidding units associated with a package are defined as the sum of the bidding units associated with the individual licenses comprising the package.⁹⁵ The total upfront payment defines the maximum number of bidding units on which the applicant will be permitted to be active during any given round. As there is no provision for increasing a bidder’s maximum eligibility during the course of an auction, prospective bidders are cautioned to calculate their upfront payments carefully. The total upfront payment does not affect the dollar amount a bidder may bid on licenses.

3. Activity and Eligibility Rules

In order to ensure that the auction closes within a reasonable period of time, an activity rule is in place that requires bidder participation throughout the auction. The activity rule requires each bidder to have active bids in each round that account for a specified fraction of the bidder’s current eligibility, as measured in bidding units. Failure to adhere to the rule results in the use of an activity rule waiver or the reduction of current eligibility (*see* Section IV.A.4, “Activity Rule Waivers and Reducing Eligibility”).

In earlier SMR auctions, a bidder’s activity in a round was determined by summing the bidding units associated with licenses on which the bidder was active. A bidder was considered active on a license in the current round if it was either the high bidder at the end of the previous bidding round (and did not withdraw the high bid in the current round), or if it submitted an acceptable bid in the current round (and did not subsequently remove the bid). In a package-bidding auction, calculating activity levels in a round is not as straightforward because a bidder can submit bids on different packages that contain one or more of the same licenses.

Bidding activity is one measure that is used to determine a bidder’s activity in a round for a package-bidding auction. We define a bidder’s bidding activity in a round to be the maximum number of bidding units the bidder can win considering new bids placed and provisionally winning bids renewed in that round. Thus, when a bidder submits bids in a round the system will determine the set of bids, among the bidder’s new bids and renewed provisionally winning bids, that contains the most bidding units and has no overlap among the licenses. To illustrate this, suppose a bidder submits the following bids in round t :

Bids Placed in Round t

License/Package	Bidding Units
-----------------	---------------

⁹⁴ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11536.

⁹⁵ *Id.*

Package A: WX-EAG701-C (14,000,000 bu) WX-EAG702-C (14,000,000 bu) WX-EAG703-C (14,000,000 bu) WX-EAG704-C (14,000,000 bu)	56,000,000 bu
Package B: WX-EAG701-C (14,000,000 bu) WX-EAG701-D (28,000,000 bu)	42,000,000 bu

This set of bids contains five distinct licenses. The sum of the bidding units associated with these five licenses is 84,000,000. However, since both packages contain license WX-EAG701-C, this bidder can not win both packages at the same time. The maximum number of bidding units that the bidder can win would be the 56,000,000 associated with Package A, so the bidder's bidding activity is 56,000,000 bidding units.

A bidder is also considered to be active if the bidder has provisionally winning bids from the previous round. Auction rules state that a bidder's bids made in different rounds will be considered mutually exclusive, so the bidding units associated with provisionally winning bids must be viewed independently from the bidding units associated with current round bids. We define a bidder's *eligibility activity* in a round to be the greater of (i) its bidding activity in the round and (ii) the bidding units associated with the bidder's provisionally winning bids from the prior round. To illustrate how eligibility activity will be calculated in a round we continue with our example. Suppose this bidder has the following provisionally winning bids from round $t-1$:

Provisionally Winning Bids from Round $t-1$

License/Package	Bidding Units
License: WX-EAG701-C (14,000,000 bu)	14,000,000 bu
License: WX-EAG701-D (28,000,000 bu)	28,000,000 bu

The number of bidding units associated with this bidder's provisionally winning bids is 42,000,000. Recall that the bidder's bidding activity for the round is 56,000,000 bidding units. The eligibility activity for this bidder in round t is therefore 56,000,000, the greater of its bidding activity (56,000,000 bidding units) and the bidding units associated with its bids in the provisionally winning set (42,000,000 bidding units).

We have established an eligibility activity requirement of one-half.⁹⁶ Accordingly, in each round of the auction, a bidder desiring to maintain its current eligibility and not use an activity rule waiver is required to have eligibility activity equal to at least half of its current eligibility. A bidder that fails to meet this eligibility activity requirement in a given round and also has no remaining activity rule waivers will have its current eligibility reduced for the next round to a level consistent with the eligibility activity requirement. The bidder's new current eligibility will be its eligibility activity in the current round multiplied by the reciprocal of the eligibility activity requirement ($1/\text{eligibility activity requirement}$) — in this case, two ($1/(1/2)$). Thus, a bidder's eligibility in the current round will be the lesser of: (i) its eligibility in the previous round or (ii) the product of its eligibility activity in the previous round and the reciprocal of the eligibility activity requirement.

⁹⁶ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11537.

The Bureau has reserved the right, however, to increase to two-thirds the proportion of current eligibility on which bidders must be active to retain their current eligibility.⁹⁷ The two-thirds limit will ensure that bidders retain the flexibility to switch from bidding on a 20 MHz license or package to a 30 MHz package with the equivalent population. Any such change will be announced to bidders prior to the beginning of the round in which the change takes effect. In the event that the Bureau exercises its ability to change the eligibility activity requirement to two-thirds, the new current eligibility for a bidder not meeting the requirement and having no remaining activity rule waivers will be its eligibility activity in the current round multiplied by 3/2 (the reciprocal of the eligibility activity requirement).

In the example above, the bidder has eligibility activity in the current round of 56,000,000 bidding units. If this bidder's current eligibility is 168,000,000 bidding units and the eligibility activity requirement is one-half, the bidder's required activity level is 84,000,000 bidding units ($168,000,000 * \frac{1}{2} = 84,000,000$). Since the bidder's eligibility activity is less than the required activity level, and if the bidder has no remaining activity rule waivers, its current eligibility will be reduced so that the bidder will be in compliance with the activity requirement. Therefore, the bidder's current eligibility for the next round will be 112,000,000 bidding units ($56,000,000 * (1/\frac{1}{2}) = 112,000,000$).

Because a bidder's bids from all prior rounds are considered in determining provisionally winning bids, it is possible for a bidder to become a provisional winner for a license or package even though it does not have sufficient eligibility to place a new bid on that license or package. In such a case, the bidder will be awarded the license or package at the end of the auction if it has made the winning bid, but it will not be permitted to place any new bids on the license or package during the auction.

4. Activity Rule Waivers and Reducing Eligibility

Each bidder in the auction will be provided five activity rule waivers that may be used in any round during the course of the auction.⁹⁸ Use of an activity rule waiver preserves the bidder's current bidding eligibility despite the bidder's eligibility activity in the current round being below the required minimum level. An activity rule waiver applies to an entire round of bidding and not to a particular license.⁹⁹ We are satisfied that our practice of providing five waivers over the course of the auction provides a sufficient number of waivers and flexibility to the bidders, while safeguarding the integrity of the auction.

In contrast to our traditional SMR auction format, bidders will not have the ability to apply waivers proactively.¹⁰⁰ In our SMR auction format, proactive waivers are a means by which bidders can keep the auction open without bidding. For Auction No. 31, we have adopted a two-round simultaneous stopping rule. Thus, after one round with no new bids, the auction will not close. For more information, see Section IV.A.6. "Stopping Rules," *infra*.

The FCC Automated Auction System assumes that bidders with insufficient eligibility activity would prefer to use an activity rule waiver (if available) rather than lose bidding eligibility. Therefore, the system will automatically apply a waiver at the end of any round where a bidder's eligibility activity level

⁹⁷ *Id.*

⁹⁸ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11539.

⁹⁹ *Auction No. 31 Package Bidding Comment Public Notice*, 15 FCC Rcd at 8816.

¹⁰⁰ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11539.

is below the minimum required unless: (1) there are no activity rule waivers available; or (2) the bidder overrides the automatic application of a waiver by reducing eligibility, thereby meeting the minimum requirements.

A bidder with insufficient eligibility activity that wants to reduce its bidding eligibility rather than use an activity rule waiver must affirmatively override the automatic waiver mechanism during the round by using the reduce eligibility function in the Automated Auction System. In this case, the bidder's eligibility is permanently reduced to bring the bidder into compliance with the activity rules as described in the previous section. Once eligibility has been reduced, a bidder will not be permitted to regain its lost bidding eligibility

5. Auction Stages and Stage Transitions

Our SMR auctions generally are conducted in two or three stages, in which the activity requirement is increased between stages. In this SMR-PB auction, we have adopted a single stage with a one-half activity requirement, although we retain the discretion during the auction to increase to two-thirds the proportion of bidding units on which bidders must be active to retain their current eligibility.¹⁰¹ Any such change will be announced to bidders prior to the beginning of the round in which the change takes effect.¹⁰²

6. Auction Stopping Rules

For Auction No. 31, we have adopted a two-round simultaneous stopping rule.¹⁰³ A two-round simultaneous stopping rule means that all licenses remain open until two consecutive rounds have occurred in which no new bids are accepted. After a round with no new bids, bidders will receive a message warning that if no new bids are placed in the next round the auction will close. After the second consecutive round with no new bids, bidding closes simultaneously on all licenses and packages. Thus, unless circumstances dictate otherwise, bidding will remain open on all licenses until bidding stops on every license and package.

For purposes of the stopping rule, renewed bids are not considered new bids; in other words, a round in which the only bids that are placed are renewed bids is considered a round with no new bids for purposes of the stopping rule.¹⁰⁴

The computer software used to determine the provisionally winning set of bids is run at the end of every round of the auction but the last round (*i.e.*, the second consecutive round with no new bids). Because ties are broken randomly, this means that if there were ties for the provisionally winning set in the previous round, running the software at the conclusion of the next round may well result in a different provisionally winning set, even if there was no bidding activity in the round. Consequently, a

¹⁰¹ If we implement this change in the activity requirement, bidders whose eligibility activity is below the requirement and which have no remaining activity waivers available will have their current eligibility reduced to put them into compliance with the two-thirds activity requirement. Consequently, we will reduce the bidder's eligibility for the next round to three-halves its eligibility activity in the current round.

¹⁰² *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11540-11541.

¹⁰³ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11541.

¹⁰⁴ *Id.*

provisionally winning bid on a license or package may not be a provisionally winning bid one round later, even if there are no bids in the intervening round. Bidders have the option of using the last and best bidding procedure in order to avoid being in a tied set (*see* Section IV.B.5, “Last and Best Bids”).

As in previous auctions, the Bureau has retained the discretion to keep an auction open even if no new bids are submitted. The activity rule would apply as usual, and a bidder with insufficient eligibility activity will either lose bidding eligibility or use a remaining activity rule waiver. The Bureau has reserved the right to declare that the auction will end after a specified number of additional rounds (“special stopping rule”). The Bureau would exercise this option only in certain circumstances, such as, for example, where the auction is proceeding very slowly, there is minimal overall bidding activity, or it appears likely that the auction will not close within a reasonable period of time. Before exercising this option, the Bureau is likely to attempt to increase the pace of the auction, for example, by increasing the number of bidding rounds per day, and/or by increasing the amount of the minimum acceptable bids for the limited number of licenses where there is still a high level of bidding activity. Any such change will be announced to bidders before it takes effect.¹⁰⁵

7. Auction Delay, Suspension, or Cancellation

By public notice or by announcement during the auction, the Bureau may delay, suspend, or cancel the auction in the event of natural disaster, technical obstacle, evidence of an auction security breach, unlawful bidding activity, administrative or weather necessity, or for any other reason that affects the fair and competitive conduct of competitive bidding. In such cases, the Bureau, in its sole discretion, may elect to resume the auction starting from the beginning of the current round, resume the auction starting from some previous round, or cancel the auction in its entirety. Network interruption may cause the Bureau to delay or suspend the auction. We emphasize that exercise of this authority is solely within the discretion of the Bureau, and its use is not intended to be a substitute for situations in which bidders may wish to apply their activity rule waivers.

B. Bidding Procedures

1. Round Structure

The Commission will use an automated auction system to conduct the simultaneous multiple round with package bidding auction format. The initial bidding schedule will be announced in the public notice listing the qualified bidders, which is released approximately 10 days before the start of the auction. The round structure for each bidding round contains a single bidding round followed by the release of the round results. Multiple bidding rounds may be conducted in a given day.

The Bureau will release an additional public notice by April 30, 2002, explaining the round results process and providing sufficient information on our solving and tie-breaking procedures such that participants and interested observers will be able to replicate the FCC’s official round results.

The Bureau has discretion to change 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. The Bureau may increase or decrease the amount of time for the bidding rounds and review periods, or the number of rounds per day, depending upon the bidding activity level and other factors.

¹⁰⁵ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11541-11542.

2. Reserve Price and Minimum Opening Bid

Congress mandated that the Commission's objectives when designing competitive bidding methodologies include "recovery for the public of a portion of the value of the public spectrum resource."¹⁰⁶ Section 309(j) of the Communications Act, as amended, calls upon the Commission to prescribe methods by which a reasonable reserve price will be required and/or a minimum opening bid established for licenses subject to auction, unless the Commission determines that a reserve price or minimum opening bid is not in the public interest.¹⁰⁷ Consistent with this mandate, the Commission directed the Bureau to seek comment on the use of a minimum opening bid and/or reserve price prior to the start of each auction.¹⁰⁸ Among other factors, the Bureau must consider the amount of spectrum being auctioned, levels of incumbency, the availability of technology to provide service, the size of the geographic service areas, the extent of interference with other spectrum bands, and any other relevant factors that could have an impact on the spectrum being auctioned.¹⁰⁹ The Commission concluded that the Bureau should have the discretion to employ either or both of these mechanisms for future auctions.¹¹⁰

The Bureau has adopted minimum opening bids for each license in Auction No. 31, and the Bureau further established that the minimum opening bids for packages will be the sum of the minimum opening bids for the licenses comprising the package.¹¹¹

In the *Auction No. 31 Further Modifications Comment Public Notice*, the Bureau sought comment on increasing the minimum opening bids or establishing an aggregate reserve price that exceeds the sum of the minimum opening bids.¹¹² The Bureau did so in light of the unique statutory process governing the clearance of incumbent broadcasters from the spectrum in Auction No. 31 and the incentives created by the Commission to accelerate that process.¹¹³

Given the complexities resulting from the presence of incumbents and the clearance process, the Bureau specifically sought comment on an aggregate reserve in Auction No. 31 equal to \$2.6 billion in gross bids.¹¹⁴ As the Bureau noted in the *Auction No. 31 Further Modifications Comment Public Notice*, Congress previously estimated that the Upper 700 MHz band licenses, which consist of the previously auctioned 700 MHz guard bands licenses and the licenses in Auction No. 31, will generate \$2.6 billion in

¹⁰⁶ 47 U.S.C. § 309(j)(3)(C). In contrast, the Commission's consideration of potential recovery of revenues is statutorily limited in other contexts. See 47 U.S.C. § 309(j)(7)(A).

¹⁰⁷ See 47 U.S.C. § 309(j)(4)(F).

¹⁰⁸ See *Part 1 Third Report and Order*, 13 FCC Rcd 375, 455-456 ¶ 141 (1997).

¹⁰⁹ *Id.*

¹¹⁰ *Id.*

¹¹¹ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11543.

¹¹² *Auction No. 31 Further Modifications Comment Public Notice* at 5-7.

¹¹³ See *Auction No. 31 Further Modifications Comment Public Notice* at 6 (citing the *Third Report and Order Reconsideration*, 16 FCC Rcd 21,633 (2001)).

¹¹⁴ *Auction No. 31 Further Modifications Comment Public Notice* at 6.

net revenue.¹¹⁵ The prior 700 MHz guard bands auctions generated nearly \$541 million in net revenue.¹¹⁶ To assure that net revenues in Auction No. 31 together with prior net revenues will be commensurate with Congress's expectations, the Bureau suggested establishing an aggregate reserve price for Auction No. 31 of \$2.6 billion in gross bids. The Bureau notes that there are unavoidable uncertainties in estimating the gross bids required to assure particular net revenues.

Only three comments or reply comments address the reserve price question. In a footnote, Paxson simply states that it has "no objection" to the proposal concerning establishing an aggregate reserve price.¹¹⁷ Spectrum Exchange/Allen addresses the aggregate reserve price at greater length in its comment. Spectrum Exchange/Allen advocates establishing an aggregate reserve of \$720 million, equal to the sum of the previously established minimum opening bids, and reducing the minimum opening bids on individual licenses.¹¹⁸ It opposes any aggregate reserve price greater than \$720 million. More generally, Spectrum Exchange/Allen asserts that establishing reserves based on expected auction revenues conflicts with the Commission's statutory mandate of ensuring efficient and intensive use of the spectrum.¹¹⁹ In addition, Spectrum Exchange/Allen argues that any aggregate reserve price should be made public prior to the auction.¹²⁰ Finally, Harstad addresses the issue of an aggregate reserve price in a reply comment. Harstad argues for the use of both aggregate and individual license reserve prices, ideally set at or marginally below market values.¹²¹ In the absence of other valuation data, Harstad endorses the Commission's use of Congressional auction revenue projections to establish an aggregate reserve price. No other parties submitted any comments or replies addressing the possibility of establishing an aggregate reserve price for Auction No. 31.

The Bureau adopts the suggested public aggregate reserve price equal to \$2.6 billion in gross bids. The unique complexities of the spectrum clearance process make establishing an aggregate reserve price for Auction No. 31 appropriate.

The comments of Spectrum Exchange/Allen regarding the level of the aggregate reserve price overlook the fact that Congress statutorily mandated that the Commission seek "recovery for the public of a portion of the value of the public spectrum resource . . . and avoidance of unjust enrichment."¹²² Establishing a reserve price based on expected revenues can serve this statutory objective without interfering with the

¹¹⁵ *Auction No. 31 Further Modifications Comment Public Notice* at 8.

¹¹⁶ *See Auction No. 31 Further Modifications Comment Public Notice* at 8 and n.22. The 700 MHz guard bands account for one-sixth of the Upper 700 MHz spectrum to be auctioned. Thus, assuming roughly comparable values for the spectrum in the 700 MHz guard bands and in Auction No. 31, net revenues in Auction No. 31 might reach six times the net revenue from the 700 MHz guard bands auctions, or approximately \$3.2 billion. Consequently, the aggregate reserve price of \$2.6 billion in gross bids should be at the lower end of any range of likely values for the spectrum in Auction No. 31.

¹¹⁷ Paxson Comment at 8, n.20.

¹¹⁸ Spectrum Exchange/Allen Comment at 2-5.

¹¹⁹ Spectrum Exchange/Allen Comment at 5.

¹²⁰ Spectrum Exchange/Allen Comment at 5.

¹²¹ Harstad Reply at 1-2.

¹²² 47 U.S.C. § 309(j)(3)(C).

Commission's other statutory objective of ensuring efficient and intensive use of the spectrum.¹²³ Furthermore, Spectrum Exchange/Allen's proposal to establish a reserve price at levels comparable to minimum opening bids in prior auctions does not serve the statutory purpose of seeking adequate recovery. Minimum opening bids serve merely as starting points for the auction and so appropriately may be very low relative to expected values. In contrast, reserve prices employed to protect recovery should be set near the level of anticipated recovery or they will not accomplish their purpose.

Spectrum Exchange/Allen bases its argument for a substantially lower aggregate reserve on "adverse developments in capital markets that have likely constrained the financial wherewithal of potential bidders."¹²⁴ In reply, Harstad notes that "[s]tock prices fluctuate for many reasons. Some of these reasons have nothing to do with the long-term value of the licenses," and further asserts that "to the extent that the data on the fall of the stock prices of wireless companies represent temporary business conditions or result in temporary difficulties for wireless companies in obtaining financing, they are an argument FOR aggressive reserve prices, not against them."¹²⁵

The Bureau concludes that there is no basis for departing from the use of the Congressional estimate set forth in the *Auction No. 31 Further Modifications Comment Public Notice*. Spectrum Exchange/Allen offers no evidence, and the Bureau is aware of none, that either Congress or the Administration has departed substantially from the prior Congressional estimate based on recent market developments. Finally, Spectrum Exchange/Allen does not dispute the Congressional estimate with its own valuations but simply argues in favor of a downward departure from a figure based on the prior Congressional estimate.¹²⁶

In addition to the aggregate reserve price of \$2.6 billion, we will maintain the previously-established minimum opening bids on licenses and packages. No license or package will be sold if it has not received a bid at the minimum opening bid amount. Furthermore, at the end of Auction No. 31, if the total gross revenue of the provisionally winning set does not equal or exceed \$2.6 billion, there will be no winning bids and no licenses will be sold.

However, the aggregate reserve will be considered satisfied and licenses will be awarded to the winning bidders if total gross revenue exceeds \$2.6 billion, even if some individual licenses remain unsold. The FCC will retain any unsold licenses. For the purposes of calculating the total gross revenue of the winning set, any FCC-held licenses will be treated as having received a bid at a small amount below the minimum opening bid amount.¹²⁷ Therefore, in the event that there are unsold licenses while the aggregate reserve

¹²³ 47 U.S.C. § 309(j)(3)(D).

¹²⁴ Spectrum Exchange/Allen Comment at 3.

¹²⁵ Harstad Reply at 3.

¹²⁶ Spectrum Exchange/Allen notes that in prior auctions the Commission has established minimum opening bids as a very low percentage of expected final auction prices and suggests that reserve prices in this auction should be established as a similarly low percentage. Spectrum Exchange/Allen Comment at 3. The Bureau will retain the previously established minimum opening bids at their original levels.

¹²⁷ In the *Auction No. 31 Further Modifications Comment Public Notice*, the Bureau advised that when determining whether the provisionally winning set of bids equals or exceeds the aggregate reserve price the Bureau would value any licenses held by the Commission at the close of the auction at the minimum opening bids for those licenses. See *Auction No. 31 Further Modifications Comment Public Notice*, 17 FCC Rcd at 2123, n. 24 (citing the *Auction No. 31 Package Bidding Procedures Public Notice*,

is met, actual gross payments to the Treasury from winning bidders will be less than total gross revenues, since the latter figure includes FCC “bid” amounts for the unsold licenses. During the course of the auction, the Bureau will not entertain any requests to reduce the aggregate reserve price.

The specific minimum opening bids for each license are set forth in Attachment A of this Public Notice. Potential bidders should note that some of the population figures included in Attachment A to the *Package Bidder Procedures Public Notice* were incorrect. The corrected figures are included in Attachment A to this Public Notice. The discrepancies were relatively minor and do not affect the upfront payments or minimum opening bids.

The minimum opening bids that we have adopted are reducible at the discretion of the Bureau. We emphasize, however, that such discretion will be exercised, if at all, sparingly and early in the auction, *i.e.*, before bidders lose all waivers and begin to lose substantial eligibility. During the course of the auction, the Bureau will not entertain any requests to reduce the minimum opening bid on specific licenses.

3. Minimum Acceptable Bids and Bid Increments

In the *Auction No. 31 Further Modifications Comment Public Notice*, the Bureau sought comment on two potential changes, Options 1 and 2, to the previously-adopted procedures for calculating minimum acceptable bids.¹²⁸ In the previously-adopted procedures, the minimum acceptable bid for any particular license or package would be the greatest of: (i) the applicable minimum opening bid; (ii) the bidder's previous high bid on that license/package plus x%, where the Bureau would specify the value of x in each round; and (iii) the bidder's previous high bid on that particular license/package plus an amount based on the increase in the bidder's previous high bid needed to create a tie with the provisional winners.¹²⁹ If the bidder has not bid on a license or an already constructed package, the bidder's previous high bid for purposes of calculating part (iii) would be the applicable minimum opening bid. As Option 1, the Bureau proposed completely replacing part (iii) of the minimum acceptable bid calculation with a formula based on “current price estimates.”¹³⁰ In addition, as a second part of Option 1, the Bureau proposed

15 FCC Rcd at 11,550-51 (in determining provisionally winning bids, individual licenses on which no bids are available to be considered when determining the provisionally winning set will be treated as having a bid at the minimum opening bid)). The Bureau has determined that a minor modification to this procedure is necessary. In the *Auction No. 31 Package Bidding Procedures Modifications Public Notice*, the Bureau stated that, in order to avoid ties between bidders and the Commission at the minimum opening bid, the Bureau will treat all licenses as having Commission bids at some small amount less than the minimum opening bid. *Auction No. 31 Package Bidding Procedures Modifications Public Notice*, 16 FCC Rcd at 224, 232. Licenses should be valued consistently when determining the provisionally winning set of bids and whether the provisionally winning set of bids equals or exceeds the aggregate reserve price. Accordingly, when determining whether the provisionally winning set of bids equals or exceeds the aggregate reserve price, the Bureau will value any licenses held by the Commission at the close of the auction at the Commission bid, *i.e.*, at some small amount less than the minimum opening bid.

¹²⁸ *Auction No. 31 Further Modifications Comment Public Notice*, 17 FCC Rcd at 2120-22.

¹²⁹ *See Auction No. 31 Package Bidding Procedures Modification Public Notice*, 16 FCC Rcd at 219-221.

¹³⁰ *Auction No. 31 Further Modifications Comment Public Notice*, 17 FCC Rcd at 2121.

considering all bids submitted during the auction both when calculating current price estimates and when determining the provisionally winning set of bids.¹³¹ The Bureau proposed a much more modest change to part (iii) as Option 2. The Bureau proposed changing the mathematical formula applicable only when determining minimum acceptable bids on packages created and bid on in the same round.¹³²

The “current price estimate” is a measure, developed by the Bureau, which utilizes information from all current and past bids on a license and packages containing that license, to approximate a “price” for each license in every round of the auction. The precise methodology used to calculate price estimates is described in Attachment B, *Using the Smoothed Anchoring Method to Obtain Current Price Estimates*. Until a bid is placed on a license *or* on a package containing that license, by any bidder in any round, the current price estimate is the FCC bid amount, which is slightly below the minimum opening bid.¹³³ If a bid on a single license is part of the provisionally winning set of bids in a round, then the current price estimate for that license in that round will be equal to the provisionally winning bid. Generally, however, if a license is part of a package bid in the provisionally winning set, the current price estimate for an individual license is calculated using all of the bids placed that involve that license, since those bids together yield information on how bidders value that license. The set of current price estimates, one for each license, is then used as the basis for determining minimum acceptable bids for the next round, under part (iii) of the minimum acceptable bid rule. Specifically, for individual licenses, the part (iii) minimum acceptable bid amount is the current price estimate of the license plus $z\%$. For packages, it is the sum of the current price estimates for the licenses comprising that package, plus $z\%$ of the sum. Initially, the Bureau will set z at five, but retains the discretion to adjust the amount during the course of the auction, including setting z at less than zero, in order to control the pace of the auction.

Several commenters address Option 1. Paxson expresses no objection to the proposal.¹³⁴ In comments, Spectrum Exchange/Allen claim that Option 1 is too complex, and warn that the use of actual bids in approximating minimum acceptable bids may lead to unstable and unpredictable amounts.¹³⁵ They expand on this argument in reply comments, stating that Option 1 could lead to inefficient auction results.¹³⁶ In their comments, Harstad¹³⁷ claim that the Bureau does not justify its use of current price estimates on theoretical grounds, and assert that basing minimum acceptable bid amounts for packages on the sum of current price estimates for licenses does not take into account that licenses may have greater value as part of a package than as an individual license. In reply comments, Harstad challenge Spectrum Exchange/Allen’s comments that Option 1 is too complex, pointing out that it is actually computationally simpler than the alternative proposal. They state that Option 2, favored by Spectrum Exchange/Allen, is

¹³¹ *Auction No. 31 Further Modifications Comment Public Notice*, 17 FCC Rcd at 2121-22.

¹³² *Auction No. 31 Further Modifications Comment Public Notice*, 17 FCC Rcd at 2122.

¹³³ See Section IV.B.2, above.

¹³⁴ Comments of Paxson Communications Commission at 8, February 19, 2002.

¹³⁵ Comments of Spectrum Exchange Group, LLC and Allen & Company, Inc. at 6-7, February 19, 2002.

¹³⁶ Reply Comments of Spectrum Exchange Group, LLC and Allen & Company, Inc. at 2-3, February 26, 2002.

¹³⁷ Comments of Ronald M. Harstad, Aleksander Pekec and Michael H. Rothkopf at 3-4, February 19, 2002.

also an untested method, and in an appendix, demonstrate that Option 2 can produce unstable estimates.¹³⁸

We disagree with the assertions of Spectrum Exchange/Allen that the use of current price estimates adds complexity to Auction 31. While the calculations are complex, we feel that current price estimates actually are simpler, both computationally, as Harstad assert, and conceptually. We disagree with Harstad, however, that current price estimates do not take into account the complementarities within packages. The determination of current price estimates is based on the well-recognized economic theory of “shadow prices,” and these prices are determined using the information contained in all bids over all rounds. They therefore reflect what it would cost for any license (and therefore any package containing that license) to be competitive.

Consequently, we adopt Option 1. Thus, the minimum acceptable bid for any license or package will be the greatest of: (i) the minimum opening bid; (ii) the bidder’s own previous high bid on a license or package plus x%, where the Bureau will specify the value of x in each round; and (iii) the current price estimate of the license plus z%, or for a package, the sum of the current price estimates for the licenses in the package plus z%, where the Bureau will specify the value of z in each round. Initially, the Bureau will set x at ten, but retains the discretion to adjust the amount during the course of the auction.

The Bureau retains an exception to part (iii) for calculating the minimum acceptable bid for a “global” package — a package consisting of all of the licenses available in the auction. After the first round of the auction, the minimum acceptable bid for a global package will always be the revenue generated by the provisionally winning bid set in the previous round plus w%. The Bureau makes this distinction in order to retain the ability to ensure that bids for the global package will continue to increase even if we employ a percentage z that does not guarantee that outcome. Initially, the Bureau will set w at five, but retains the discretion to adjust the amount during the course of the auction.

Under our normal SMR auction design, we define a bid increment for a license as the difference between the minimum acceptable bid and the standing high bid. Under these package bidding procedures, we do not have standing high bids. Therefore, bid increments cannot be defined and used in the same manner. Minimum acceptable bids will be calculated as set forth above. To maintain consistency with our simultaneous multiple round auction design, we will still sometimes refer to the minimum acceptable bid as being a bid of one bid increment.

For bids higher than the minimum acceptable bid — *i.e.*, multi-increment bids — we are defining the amount of the additional bid increments as v% of the minimum acceptable bid, where the minimum accepted bid is determined as discussed above. Initially, the Bureau will set v at ten, but retains the discretion to adjust the amount during the course of the auction.¹³⁹ Thus, when v equals ten, bidders will be able to place multi-increment bids of the minimum acceptable bid plus approximately 10%, 20%, etc., with the maximum bid being approximately equal to the minimum acceptable bid plus 80%.¹⁴⁰

¹³⁸ Reply Comments of Ronald M. Harstad, Aleksander Pekec and Michael H. Rothkopf at 3-4, February 26, 2002.

¹³⁹ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11547.

¹⁴⁰ The calculation of the amount of the multi-increment bids will be performed as follows: $(MAB)(1+v\%) - MAB = Bi$. Then, the new bid amounts shall be (1) MAB; (2) MAB + Bi; (3) MAB + 2Bi; ...; (9) MAB + 8Bi.

We retain the discretion to change the minimum acceptable bid, and to do so on a license-by-license and package-by-package basis, if circumstances so dictate. We will notify bidders of any such change before it takes effect.¹⁴¹

As described in the *Auction No. 31 Further Modifications Comment Public Notice*, the adoption of Option 1 also involves a change in the number of rounds of bids being considered when determining the provisionally winning set.¹⁴² In contrast to the prior procedures in which two rounds of bids were considered, we now will consider every bid made in every round of the auction (except for bids that are placed and subsequently removed during the same round). Additionally, a set of “FCC” bids on each license in the auction at some small dollar amount less than the respective minimum opening bid will also be considered.

4. Renewed Bids

For each bidder, we will treat the bids it makes in different rounds as mutually exclusive. If a bidder does not want a bid from the previous round (including a provisionally winning bid) to be considered mutually exclusive with bids made in the current round, it can renew the bid in the current round.

Without regard to the minimum acceptable bid requirement, a bidder may “renew” in the current round the highest previous bid it made on any license or package; that is, it may resubmit the bid without increasing the amount bid. Renewed bids will be treated as being made in the current round.¹⁴³

Renewed provisionally winning bids confer bidding activity, while non-renewed provisional winners count toward eligibility activity. No eligibility or bidding activity will be conferred for renewing a non-provisionally winning bid. All bidding, including renewals of non-provisionally winning bids, is limited by initial eligibility, however.

5. Last and Best Bids

Bidders that wish to drop out of the auction or that believe they are about to lose their bidding eligibility will have the opportunity before they drop out to make “last and best” bids on any licenses or packages for which they remain eligible. This is a limited exception to the minimum acceptable bid rule and to click box bidding. If a bidder chooses this option, it will not be permitted to make any further bids during the auction.¹⁴⁴

¹⁴¹ As described further below in Section IV.B.4, Renewed Bids, and Section IV.B.5, Last and Best Bids, there are two exceptions to the minimum acceptable bid requirement. First, bidders who choose to place no further bids in the auction may place “last and best bids” at any amount between the bidder’s previous high bid — or, if the bidder has not placed a bid on the license or package, the minimum opening bid — and the eighth increment above the minimum acceptable bid. Second, at any time bidders may “renew” their highest previous bid on a license or package without increasing the bid; however, a bidder is not conferred activity of any kind for renewing a non-provisionally winning bid. Because bids in each round are considered mutually exclusive, renewing a provisionally winning bid does not double count that bid towards a bidder’s total eligibility activity credit.

¹⁴² *Auction No. 31 Further Modifications Comment Public Notice*, at 4.

¹⁴³ Renewed bids, however, do not count as new bids made in the current round for the purposes of the stopping rule. See Section IV.A.6 above.

¹⁴⁴ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11548.

A bidder may make up to two sets of last and best bids. The two sets of last and best bids must be submitted in a single round, but will be treated as mutually exclusive, as are bids placed in separate rounds.¹⁴⁵ Once last and best bids are placed, the bidder will not be permitted to place new bids or renew previous bids in any subsequent round. If a bidder chooses to submit last and best bids, then, for the remainder of the auction, those bids will be considered, as will all of the bidder's previous rounds of bidding.

The last and best bid amount for any license or package is any amount, in thousand dollar increments, greater than or equal to the bidder's previous high bid on the license or package and the eighth increment above the minimum acceptable for that license or package in the current round. Also, if the bidder has never placed a bid on a package or license, the lower bound on the last and best bid amount is equal to the minimum opening bid for that package or license.

Each set of last and best bids may consist of bids on any or all of the licenses selected on the Form 175 and any or all of the packages created by the bidder, consistent with the activity and eligibility rules and the twelve package limitation. Bidding activity for *each* of the sets of last and best bids must not exceed current eligibility, as determined at the beginning of the round in which these bids are placed. In other words, eligibility for the second set of last and best bids will not be recalculated based on eligibility activity associated with the first set of bids. Last and best bids are considered to be new bids in the round in which they are placed. However, a last and best bid equal to the bidder's previous high bid will be considered as a renewed bid.

6. Winning and Provisionally Winning Bids

The *winning bids* are the set of "consistent" bids (bids that (i) do not overlap and (ii) are made or renewed by an individual bidder in the same round) that maximizes total revenue when the auction closes, provided that the aggregate reserve has been met. The *provisionally winning bids* are the set of consistent bids that maximizes total revenue in a particular round.¹⁴⁶ When determining winning and provisionally winning bids, all bids made in every round throughout the course of the auction (except for bids that are placed and subsequently removed during the same round) will be considered. In addition, each license is treated as having a bid placed by the FCC at some small amount less than the minimum opening bid.¹⁴⁷ This procedure will ensure that a bid on a license or package at the minimum opening bid always beats the FCC bid.¹⁴⁸

Since there can be more than one set of consistent bids that produces the maximum revenue, a procedure for randomly selecting among these tied sets is used when determining the provisionally winning bids. This tie breaking procedure involves two steps: the assignment of a *selection number* to each bid, and the

¹⁴⁵ *Auction No. 31 Package Bidding Procedures Modification Public Notice*, at 16 FCC Rcd 222-223.

¹⁴⁶ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11548.

¹⁴⁷ *Auction No. 31 Package Bidding Procedures Modification Public Notice*, at 16 FCC Rcd 224.

¹⁴⁸ For example, suppose Bidder 1 bids \$110 for License A, there are no bids for License B, which has a minimum opening bid of \$100, and Bidder 2 bids \$200 for Package AB. In determining the provisional winners, we will consider License B to have been bid on by the FCC at some small amount less than the minimum opening bid. The provisional winning set will therefore consist of Bidder 1 holding License A and the FCC holding License B because the sum of their bids (\$110 + \$99 = \$209) exceeds Bidder 2's bid for Package AB (\$200).

determination of, among all tied bid sets, the set that produces the *maximum sum of selection numbers*.

A bid's *selection number* is the sum of n pseudo-random numbers where n is the number of licenses comprising the bid's package. Each pseudo-random number is generated by invoking a well-documented and well-tested routine developed by Pierre L'Ecuyer.¹⁴⁹ A bid's selection number as well as the beginning seed numbers used to produce it will be released at the close of each round.

Once the selection numbers have been generated for each bid, the second step of the tie breaking procedure will decide the provisionally winning bids. Computer software is used to determine, among all tied bid sets, the set that produces the maximum sum of selection numbers.¹⁵⁰ Thus, the set of provisionally winning bids is the set of consistent bids that maximizes revenue and maximizes the sum of selection numbers. Each bid will be assigned a new selection number in every round. The solver will not be run after the last round of the auction. See Section IV.A.6, "Auction Stopping Rules," for more information on the close of the auction.

The procedure we are adopting for last and best bids, described in Section IV.B.5, above, allows bidders to reduce the likelihood that their *final* bid on a license or package will be part of a randomly broken tied set. Generally, in the case of a tie, the bidder(s) whose bid is not chosen has the opportunity in the next round to continue bidding. However, if the bidder believes that the minimum acceptable bid is too high and so would ordinarily cease bidding on that license or package, it may use the last and best bid(s) procedure to make final bids on licenses and packages, which may be as little as \$1,000 more than the bidder's highest previous bid on each license or package.¹⁵¹

7. Packages

In addition to bidding on individual licenses, bidders will be permitted to create and bid on up to twelve different packages of their own choosing during the course of the auction. Bidders will not be required to identify or create their packages before the start of the auction, but may create their packages as the auction progresses.¹⁵² A bidder may modify or delete a package it has created up until the point where it has bid on the package and the round has closed. If the bidder submits a bid on a package and subsequently removes the bid during the same round, the bidder has the option of also deleting or modifying the package. However, once a bidder bids on a package and the round closes, the package may not be modified or deleted and counts as one of the bidder's twelve allowable packages. A bid on an individual license does not count as a bid on a package; packages consist of two or more licenses.

¹⁴⁹ This routine uses two multiple recursive random number generators of order three with period length 2^{219} . The description of the algorithms can be found in L'Ecuyer, P. (1999) "Good parameters and implementations for combined multiple recursive random number generators" *Operations Research* 47 (1) pp 159-164. The code can be downloaded from the author's website: www.iro.umontreal.ca/~lecuyer/papers.html.

¹⁵⁰ There is a rare chance that more than one set of bids can satisfy these conditions. If such a case exists, all such sets will be generated and assigned a random number. The set with the largest associated random number will be the set of provisionally winning bids.

¹⁵¹ The bidder would ordinarily choose the last and best bid option only when it has decided to stop bidding and drop out of the auction altogether.

¹⁵² Bidders are limited to bidding on, and hence creating packages from, those licenses which they selected on their FCC Form 175 and for which they have eligibility. See generally Section IV.A.2, Maximum Eligibility, and IV.A.3, Activity and Eligibility Rules.

8. Bidding

During a bidding round, a bidder may submit new bids or renewed bids for as many licenses and packages as it wishes, subject to its eligibility, its FCC Form 175 license selection, and the twelve package limitation; remove bids placed in the current bidding round; or permanently reduce eligibility. Bidders also have the option of making multiple submissions in each bidding round. If a bidder submits multiple bids for a single license or package in the same round, the system overwrites any previous bid with the last bid entered as that bidder's bid for the round. Bidders should note that the bidding units associated with licenses for which the bidder has removed its bid do not count towards the bidder's bidding activity at the close of the round.

Bidding is constrained by the eligibility and activity rules, which determine both minimum and maximum permissible levels of bidding, as measured in bidding units. As previously discussed, minimum bidding, as measured in bidding units, is constrained by the activity rules. In each round, a bidder desiring to maintain its current eligibility and not use an activity rule waiver must be active, based on eligibility activity, on licenses associated with enough bidding units to meet the activity requirement for the current round. For more details, please refer to Section IV.A.3. "Activity and Eligibility Rules."

Maximum bidding, as measured in bidding units, is constrained by the eligibility rules. *Bidding activity* for a round, defined as the maximum number of bidding units a bidder can win considering new bids and renewed provisionally winning bids placed in that round, cannot exceed current eligibility. That is, when a bidder submits a set of bids in a round, the system will not accept the set of bids if it determines that the bidding activity generated by those bids exceeds the bidder's current eligibility. Bidding in a round is further limited by the requirement that a bidder's *bidding exposure* in a round must be less than or equal to its initial eligibility. Bidding exposure is the maximum number of bidding units a bidder can win considering all the bids (new, renewed provisionally winning or non-provisionally winning) placed in the round. Similarly, when a bidder submits a set of bids in a round, the system will not accept the set of bids if it determines that the bidding exposure generated by those bids exceeds the bidder's initial eligibility. In either case, if a set of bids is rejected, the system will notify the bidder that its bids have not been accepted and report which rule is in violation.

Bidders are permitted only to bid on the specific licenses they selected on their FCC Form 175. Any packages they create must be comprised entirely of licenses selected on their Form 175. The bid submission screens are customized using the bidder's Form 175 information, and will not permit bidding on non-selected licenses (or packages of those licenses).

Please note that all bidding will take place remotely either through the FCC Automated Auction System or by telephonic bidding. (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.) There will be no on-site bidding during Auction No. 31.

The Automated Auction System requires each bidder to be logged in during the bidding round using the bidder identification number provided in the registration materials, and the generated SecurID code. Bidders are strongly encouraged to print bid confirmations after they submit their bids.

In each round, eligible bidders will be able to place new bids on a given license or package¹⁵³ in any of

¹⁵³ Bidders must have sufficient eligibility to place a bid on the particular license or package. See Section III.D.3 "Amount of Upfront Payment," *infra*.

nine different amounts.¹⁵⁴ Bidders must use the drop-down box to select bids from among the nine acceptable new bid amounts; to renew any bids (if applicable); or to remove any bids made within that same round.

Finally, bidders are cautioned in selecting their bid amounts because, as explained in the following section, bidders are not permitted to withdraw bids from prior rounds, even if mistakenly or erroneously made. As explained previously, when determining winning and provisionally winning bids, we consider all bids made throughout the course of the auction.¹⁵⁵

9. Bid Removal and Bid Withdrawal

Bid “removal” is the voiding of a bid made in the current round. For the reasons set forth below, we permit only the removal of bids placed in the current round. The withdrawal or cancellation of bids made in previous rounds is *prohibited*.¹⁵⁶

At any time before the close of a bidding round, a bidder has the option of removing any bids placed in that round. By using the remove bid function in the bidding system, a bidder may effectively “unsubmit” any bid placed within the current round. This is not the same as withdrawing a bid, which, in our SMR system, can occur in rounds subsequent to the round in which the high bid was placed. A bidder removing a bid placed in the same round is not subject to withdrawal payments. Once a round closes, a bidder may no longer remove a bid.

At the close of the auction, if a bid is declared the winner and the bidder does not pay the amount due, it is liable for a default payment as set forth in the Commission’s Rules.¹⁵⁷

We stated the following in the *Auction No. 31 Package Bidding Procedures Public Notice*, and it still holds true.

We believe that by making bids placed in different rounds mutually exclusive, we have limited a bidder’s exposure risk when changing strategies. Moreover, the bid withdrawal procedure was designed to allow bidders to back out of failed aggregations — to avoid winning some licenses that are worth less to them than the amount bid without the other licenses they need to implement their business plan. Therefore, since bidders may make package bids on all combinations of licenses with significant complementarities, the use of withdrawals to mitigate such risk is no longer necessary. Moreover, while there is no offsetting benefit from allowing bid withdrawals, there would still be potential harm. Withdrawals may be used strategically to provide incorrect price signals during the auction and lead other bidders to place inefficient bids. Also, when withdrawals are permitted, one cannot ensure that the auction will proceed at an acceptable pace. Moreover, the harm associated with withdrawals is likely to be more severe in auctions with package bidding since a single withdrawal of a bid (on either an individual license or a package) can affect the entire provisionally winning set. Accordingly, we will *not*

¹⁵⁴ For more detail on the bid amounts, see Section IV.B.8, “Bidding,” *infra*.

¹⁵⁵ See Section IV.B.6, *infra*.

¹⁵⁶ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11555.

¹⁵⁷ See 47 C.F.R. § 27.501(b).

permit bidders to withdraw their provisionally winning bids.¹⁵⁸

10. Round Results

Bids placed during a round will not be published until the conclusion of that bidding period. After a round closes, the Bureau will compile reports of all bids made in that round, the set of bids considered when determining the current provisionally winning bids, current price estimates, new minimum acceptable bids for all bidders, current provisionally winning bids, and bidder eligibility status (bidding eligibility and activity rule waivers), and post the reports for public access. Reports reflecting bidders' identities and bidder identification numbers for Auction No. 31 will be available before and during the auction. Thus, bidders will know in advance of this auction the identities of the bidders against which they are bidding.

The Bureau will release an additional public notice by April 30, 2002, detailing round results reports formats, explaining the round results process and providing sufficient information on our solving and tie-breaking procedures such that participants and interested observers will be able to replicate the FCC's official round results.

In the *Auction No. 31 Package Bidding Procedures Public Notice*, the Bureau stated in a footnote that we would "make available a bidder aid for bidders to be able to determine for themselves what bid amount would have been necessary to beat the other bids and become a provisional winner in the prior round." This bidder's aid tool was intended to calculate the "shortfall and deficit" amounts which have been superceded by current price estimates in part (iii) of the minimum acceptable bid rule.¹⁵⁹ The Bureau will **not** provide such a bidder aid, nor will it provide the FCC Auction Tracking Tool software.

11. Auction Announcements

The FCC will use auction announcements to announce items such as schedule changes. All FCC auction announcements will be available by clicking on a link in the Automated Auction System.

12. Default

The Commission adopted a special rule for calculating default payments in connection with package bidding in the Upper 700 MHz band.¹⁶⁰ In the event a winning bidder defaults on payments due after an auction closes or is disqualified after the auction, a default payment will be assessed. The default payment will consist of a deficiency portion and an additional 25% payment.¹⁶¹ The special default rule is modeled on the default rule used in other auctions. However, there are substantial differences, perhaps most significantly in the amount of the additional payment. The default rule used in other auctions sets the additional payment at three percent (3%) of the lesser of the subsequent winning bid and the defaulted

¹⁵⁸ *Auction No. 31 Package Bidding Procedures Public Notice*, 15 FCC Rcd at 11556.

¹⁵⁹ See Section IV.B.3, above.

¹⁶⁰ 47 C.F.R. § 27.501. With the exception of calculating default payments, the Commission's standard Part 1 rules governing defaults will apply in Auction No. 31, e.g., section 1.2109, which gives the Commission discretion to either reactivate a license or offer it to other highest bidders. See 47 C.F.R. §27.501(a) (except as otherwise provided, Part 1 rules apply to defaults); 47 C.F.R. § 1.2109(b).

¹⁶¹ 47 C.F.R. § 27.501(b).

bid.¹⁶² In contrast, the default rule for use with package bidding in the Upper 700 MHz bands sets the additional payment at twenty-five percent (25%) of the lesser of the subsequent winning bid and the defaulted bid.

The deficiency portion will make up any loss to the Commission that results when defaulted bid(s) are replaced by subsequent winning bid(s). If the subsequent winning bid(s) exceed the defaulted bid(s), no deficiency portion will be assessed. Even in the absence of a deficiency portion, however, an additional 25% payment will be due. Where a defaulting bidder held winning bids on individual licenses (*i.e.*, not as part of a package), and in a subsequent auction the licenses are also won individually, the deficiency portion will be calculated by subtracting the subsequent winning bid from the defaulted bid. The deficiency portion for such bids will be calculated on a license-by-license basis (*i.e.*, in the event of defaults on multiple bids, the differences between the amounts originally bid and the amounts subsequently bid will not be aggregated to determine a net amount owed).¹⁶³

Where a defaulting bidder won licenses in package(s), and in a subsequent auction the licenses are won either (a) in the same package(s), or (b) in smaller packages or as individual licenses that correlate to the defaulted package(s), the deficiency portion will be determined on a package-by-package basis. In the event a defaulting bidder defaults on more than one such bid, the differences between the amount originally bid and the amount(s) subsequently bid will not be aggregated to determine a net amount owed.¹⁶⁴ Thus, in this situation, the deficiency portion will be calculated in a manner analogous to where the licenses are sold individually. However, with regard to each individual package, where the licenses are subsequently sold individually or as part of smaller packages, the amounts received in the subsequent auction will be aggregated in order to determine any deficiency.

Where a defaulting bidder or bidders won licenses either individually or as part of packages, and in a subsequent auction the licenses are won as larger packages or different packages (not including the situation described in the preceding paragraph), the deficiency portion will be calculated by subtracting the aggregate amount originally bid for the licenses from the aggregate amount bid in the subsequent auction for the licenses.¹⁶⁵ Thus, in this situation, the deficiency portion will not be calculated on a bid-

¹⁶² 47 C.F.R. § 1.2104(g)(2).

¹⁶³ 47 C.F.R. § 27.501(b)(1). For example, if a bidder defaults on two bids, one for License A for \$100 and one for License B for \$150, and in a subsequent auction, the licenses are won as License A for \$150 and License B for \$120, the default payment would be calculated separately for License A (by comparing the original bid (\$100) to the amounts subsequently bid (\$150), yielding no deficiency but an additional 25% payment) and License B (by comparing the original bid (\$150) to the amount subsequently bid for License B (\$120), yielding a deficiency of \$30, plus an additional 25% payment)).

¹⁶⁴ 47 C.F.R. § 27.501(b)(2). For example, if a bidder defaults on Package ABC (*i.e.*, a package consisting of Licenses A, B and C) with a bid of \$900 and Package DE with a bid of \$600, and in a subsequent auction, the licenses are won as License A for \$200, Package BC for \$600, and Package DE for \$700, the default payment would be calculated separately for Package ABC (by comparing the original bid (\$900) to the amounts subsequently bid for License A and Package BC (\$200 and \$600, which equals \$800, yielding a \$100 deficiency plus the additional 25% payment) and Package DE (by comparing the original bid (\$600) to the amount subsequently bid for Package DE (\$700, yielding no deficiency, but an additional 25% payment)).

¹⁶⁵ 47 C.F.R. § 27.501(b)(3). For example, if a bidder defaults on Package AB with a bid of \$200 and Package CD with a bid of \$300, and in a subsequent auction the licenses are sold as Package AC for \$250 and Package BD for \$250, the default payment would be calculated by aggregating the amounts originally bid (\$200 plus \$300 equals \$500) and comparing the aggregate to the amounts subsequently bid (\$250 plus \$250 equals

by-bid basis.

If, in a situation requiring that bids be aggregated in order to determine the deficiency portion of the default payments for the bids, there are multiple defaulting bidders, the default payment (both the deficiency portion and the additional 25% payment portion) will be allocated to the defaulting bidders in proportion to their share of the aggregated default bids.¹⁶⁶

In the event that a bidding credit applies to any applicable bid(s), the Bureau will assess the deficiency portion of the default payment using the lesser of the difference between gross bids and the difference between net bids. (In the event that a bidder does not have a bidding credit, the bidder's gross bid and net bid are the same.) In other words, the Bureau will compare (i) the sum of the gross defaulted Auction No. 31 bid(s) minus the gross subsequent winning bid(s) and (ii) the sum of the net defaulted Auction No. 31 bid(s) minus the net subsequent winning bid(s). The Bureau will impose the lesser of (i) and (ii) as the deficiency portion.¹⁶⁷

As noted at the outset, the default payment consists of the deficiency portion **and** an additional 25% payment. The additional payment will be 25% of the lesser of the subsequent winning bid(s) and the defaulted bid(s).¹⁶⁸ The Bureau will use the same gross or net bid(s) that it used to calculate the deficiency portion when assessing the additional 25% payment. That is, the Bureau will compare the defaulted and subsequent bid(s) according to the methods described above for calculation of the deficiency portion of the default payment when determining whether the defaulted bid(s) or the subsequent winning bid(s) is the lesser amount. Should there be no difference between the gross or net bid(s) for purposes of assessing the deficiency portion, the Bureau will assess the additional 25% payment using the lesser of the gross or net bid(s).

\$500) to determine the deficiency amount (\$500 less \$500 equals \$0); the additional 25% payment would be based on either the original aggregate amount or the subsequent aggregate amount, whichever is less (in this case, they are the same, \$500).

¹⁶⁶ 47 C.F.R. § 27.501(b)(4). For example, if Bidder 1 defaults on Package ABC for \$200, and Bidder 2 defaults on Package DE for \$400, and in a subsequent auction the licenses are won in Package AB for \$150 and Package CDE for \$350, Bidder 1 would be liable for 1/3 of the default payment and Bidder 2 would be responsible for 2/3. Where Bidder 1 bid \$200 and Bidder 2 bid \$400, the total bid equals \$600 and Bidder 1's proportion equals $200/600$ or 1/3 and Bidder 2's proportion equals $400/600$ or 2/3. The total default payment would be equal to the difference between the total of the original bids (\$600) and the total of the subsequent amounts bid (\$500) plus an additional payment of 25% of the total of the subsequent amounts bid. The total default payment therefore would equal \$100 ($600-500$) plus 25% of \$500 (\$125), for a total default payment of \$225.

¹⁶⁷ 47 C.F.R. § 27.501(b).

¹⁶⁸ 47 C.F.R. § 27.501(b).

V. POST-AUCTION PROCEDURES

A. Down Payments

After bidding has ended, the Commission will issue a public notice declaring the auction closed, identifying winning bidders and down payments due.

Within ten business days after release of the auction closing notice, each winning bidder must submit sufficient funds (in addition to its upfront payment) to bring its total amount of money on deposit with the Government to 20 percent of its net winning bids (actual bids less any applicable small and very small business bidding credits). *See* 47 C.F.R. § 1.2107(b).

B. Auction Discount Voucher

On June 8, 2000, the Commission awarded Qualcomm, Inc. a transferable Auction Discount Voucher (“ADV”) in the amount of \$125,273,878.00.¹⁶⁹ This ADV may be used by Qualcomm or its transferee, in whole or in part, to adjust a winning bid in any spectrum auction prior to June 8, 2003, subject to terms and conditions set forth in the Commission’s Order. Qualcomm transferred \$10,848,000.00 of the ADV to a winning bidder in FCC Auction No. 35 and the transferee used its portion of the ADV to adjust one of its winning bids in Auction No. 35.¹⁷⁰ The remaining portion of Qualcomm’s ADV could be used to adjust winning bids in another FCC auction, including Auction No. 31.

C. Long-Form Application

Within ten business days after release of the auction closing notice, winning bidders must electronically submit a properly completed long-form application (FCC Form 601) and required exhibits for each license won through Auction No. 31. Winning bidders that are small or very small businesses must include an exhibit demonstrating their eligibility for small and very small business bidding credits. *See* 47 C.F.R. §§ 1.2112(b). Further filing instructions will be provided to auction winners at the close of the auction.

D. Tribal Land Bidding Credit

A winning bidder that intends to use its license(s) to deploy facilities and provide services to federally-recognized tribal lands that are unserved by any telecommunications carrier or that have a telephone service penetration rate equal to or below 70 percent is eligible to receive a tribal land bidding credit as set forth in 47 C.F.R. §§ 1.2107 and 1.2110(f). A tribal land bidding credit is in addition to, and separate

¹⁶⁹ Qualcomm Incorporated Petition for Declaratory Ruling Giving Effect to the Mandate of the District of Columbia Circuit Court of Appeals, *Order*, 16 FCC Rcd 4042 (2000).

¹⁷⁰ *See* Supplement to Public Notice Released August 22, 2001 By Wireless Telecommunications Bureau Announcing It Is Prepared to Grant Four C and F Block Broadband Personal Communications Services (PCS) Licenses Upon Full and Timely Payment, Auction Event No. 35, DA 01-2071, *Public Notice*, 16 FCC Rcd 16,025 (2001). All of the terms and conditions applicable to Qualcomm’s use of the ADV shall apply to its use by a transferee, except that a transferee may not transfer the ADV to an entity other than back to Qualcomm. *See* In the Matter of Qualcomm Incorporated, *Order*, 16 FCC Rcd 4042 (2000); *see also* Letter from Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, to Veronica M. Ahern, Attorney for Qualcomm Incorporated (December 22, 2000).

from, any other bidding credit for which a winning bidder may qualify.

Unlike other bidding credits that are requested prior to the auction, a winning bidder applies for the tribal land bidding credit *after* winning the auction when it files its long-form application (FCC Form 601). When filing the long-form application, the winning bidder will be required to advise the Commission whether it intends to seek a tribal land bidding credit, for each market won in the auction, by checking the designated box(es). After stating its intent to seek a tribal land bidding credit, the applicant will have 90 days from the close of the long-form 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 land bidding credit are subject to performance criteria as set forth in 47 C.F.R. § 1.2110(f).

For additional information on the tribal land bidding credit, including how the amount of the credit is calculated, applicants should review the Commission's rule making proceeding regarding tribal land bidding credits and related public notices.¹⁷¹ Relevant documents can be viewed on the Commission's auctions web site at <http://wireless.fcc.gov/auctions> by clicking on the *Tribal Land Credits* link.

E. Default and Disqualification

Any high bidder that defaults or is disqualified after the close of the auction (*i.e.*, fails to remit the required down payment within the prescribed period of time, fails to submit a timely long-form application, fails to make full payment, or is otherwise disqualified) will be subject to the payments described in 47 C.F.R. § 27.501(b). In addition, if a default or disqualification involves gross misconduct, misrepresentation, or bad faith by an applicant, the Commission may declare the applicant and its principals ineligible to bid in future auctions, and may take any other action that it deems necessary, including institution of proceedings to revoke any existing licenses held by the applicant.¹⁷²

See Section IV.B.12 for more detail on the default rule for this auction.

F. Refund of Remaining Upfront Payment Balance

All applicants that submitted upfront payments but were not winning bidders for a license in Auction No. 31 may be entitled to a refund of their remaining upfront payment balance after the conclusion of the auction. All refunds will be returned to the payer of record, as identified on the FCC Form 159, unless the payer submits written authorization instructing otherwise.

At the end of the auction, those bidders who are eligible for a refund must submit a written refund request. If you have completed the refund instructions electronically, then only a written request for the refund is necessary. If not, the request must also include wire transfer instructions, Taxpayer Identification Number (TIN), and FCC Registration Number (FRN). Send refund request to:

¹⁷¹ See Extending Wireless Telecommunications Services to Tribal Lands, WT Docket No. 99-266, *Report and Order and Further Notice of Proposed Rule Making*, 15 FCC Rcd 11794 (2000); Wireless Telecommunications Bureau Announces Availability of Bidding Credits For Providing Wireless Services To Qualifying Tribal Lands, *Public Notice*, 15 FCC Rcd 18351 (2000); Wireless Telecommunications Bureau Releases Additional Information Regarding the Procedures for Obtaining a Tribal Lands Bidding Credit and List of Tribal Lands, *Public Notice*, DA 00-2836, (rel. December 14, 2000); 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*, DA 01-613, (rel. March 8, 2001).

¹⁷² See 47 C.F.R. § 1.2109(d).

Federal Communications Commission
Financial Operations Center
Auctions Accounting Group
Gail Glasser or Tim Dates
445 12th Street, SW, Room 1-C863
Washington, DC 20554

Bidders are encouraged to file their refund information electronically using the refund information portion of the FCC Form 175, but bidders can also fax their information to the Auctions Accounting Group at (202) 418-2843. Once the information has been approved, a refund will be sent to the party identified in the refund information.

NOTE: Refund processing generally takes up to two weeks to complete. Bidders with questions about refunds should contact Tim Dates or Gail Glasser at (202) 418-1995.

Media Contact: Meribeth McCarrick at (202) 418-0654

Auctions and Industry Analysis Division: For legal questions, Howard Davenport, Legal Branch, at (202) 418-0660; for general auction questions, Martha Stancill or Craig Bomberger, Auctions Operations Branch, at (202) 418-0660, or Lisa Stover, Auctions Operations Branch, at (717) 338-2888

Commercial Wireless Division: Gary Oshinsky, Policy and Rules Branch, or Melvin Spann, Licensing and Technical Analysis Branch, at (202) 418-0620

– FCC –

VI. ATTACHMENT A

PLACE HOLDER

VII. ATTACHMENT B

Using the Smoothed Anchoring Method to Obtain Current Price Estimates

This appendix describes the method by which bid information on packages and licenses is used to approximate a “price” associated with each license at the close of every round. These “current price estimates,” as they are called, are then used in the next round when calculating part (iii) of the minimum acceptable bid formula¹⁷³. Specifically, for a license, this value is the current price estimate of the license plus $z\%$. For a package, the value is the sum of the current price estimates of the licenses that make up the package plus $z\%$ of the sum.

The current price estimates of the licenses are based on the concept that every linear optimization problem has a dual problem that provides pricing information. We begin by discussing a simplified representation of the FCC winner determination problem and then discuss its linear programming relaxation before explaining the dual problem of interest. The winner determination problem is shown in (P1):

$$\begin{aligned} \max \quad & \sum_{j \in B^t} b_j x_j \\ \text{(P1): } \quad & s.t. \quad \sum_{j \in B^t} a_{ij} x_j = 1, \quad \text{for all } i \in L \quad (1) \\ & x_j \in \{0, 1\}, \quad \text{for all } j \in B^t \end{aligned}$$

where B^t is the set of considered bids in round t ,

b_j is the bid amount of bid j ,

L is the set of licenses being auctioned,

$$a_{ij} = \begin{cases} 1 & , \text{if license } i \text{ is in bid } j \\ 0 & , \text{otherwise} \end{cases} \text{ and,}$$

$$x_j = \begin{cases} 1 & , \text{if bid } j \text{ is in the winning set} \\ 0 & , \text{otherwise} \end{cases}$$

In this formulation, x_j is an indicator variable that equals one if bid j is in the provisionally winning set and zero otherwise. Thus, the sum of the bid amounts of all provisionally winning bids produces the maximum obtainable revenue for round t . Constraints (1) ensure that each license is awarded exactly once. The constraints that ensure that a bidder’s bids between rounds are mutually exclusive are not represented in (P1) since they will be ignored in the linear

¹⁷³ In addition to the part (iii) formula derived here, the minimum acceptable bid also considers parts (i) and (ii) amounts, where (i) is the minimum opening bid and (ii) is the bidder’s own previous high bid plus $x\%$, where x is specified by the Bureau. The minimum opening bid is the *greatest* of the three amounts.

representation of the problem.¹⁷⁴

The linear program of (P1) relaxes the restriction on the variables x_j , for all $j \in B^t$, allowing these variables to take on any value between zero and one. The linear programming representation of (P1) is shown in (P2):

$$(P2): \quad \begin{aligned} & \max \quad \sum_{j \in B^t} b_j x_j \\ & s.t. \quad \sum_{j \in B^t} a_{ij} x_j = 1, \quad \text{for all } i \in L \\ & \quad \quad x_j \geq 0, \quad \text{for all } j \in B^t \end{aligned}$$

The dual formulation of (P2) can be used to identify a price, π_i , for each license i , and is shown in the following linear program (P3):

$$(P3): \quad \begin{aligned} & \min \quad \sum_{i \in L} \pi_i \\ & s.t. \quad \sum_{i \in L} a_{ji} \pi_i \geq b_j, \quad \text{for all } j \in B^t \setminus F \\ & \quad \quad \pi_i \geq b_j, \quad \text{for all } j \in F \end{aligned} \quad (2)$$

and i is the license index associated with bid j (3)

where $F \subset B^t$ is the set of FCC bids on each license¹⁷⁵ and,

$$a_{ji} = \begin{cases} 1 & , \text{if bid } j \text{ contains license } i \\ 0 & , \text{otherwise} \end{cases}.$$

The optimal value of each variable, π_i , in (P3) corresponds to a dual price¹⁷⁶ – often called a

¹⁷⁴ These constraints will be ignored in the linear program representation since they are rarely binding in the relaxation of the integer-programming problem and because adding such constraints to the dual problem creates “degeneracy” in the solution thereby causing multiple alternative solutions.

¹⁷⁵ The bid amount for a FCC bid is some small amount less than the minimum-opening bid for that license. See Auction Of Licenses in the 747-762 and 777-792 MHz Bands Scheduled for March 6, 2001; Modifications to the Calculation for Determining Minimum Acceptable Bids and the Provisions Concerning “Last and Best Bids” and Other Procedural Issues, DA 01-12, *Public Notice*, 16 FCC Rcd 217 (2001)(Section III discusses the reasons for this approach).

¹⁷⁶ We note that for non-linear problems, these dual prices are also known as *Lagrange multipliers*.

“shadow price” – for each constraint, i.e., each license, in (P2). The dual price of each license measures the monetary cost of not awarding the license to whom it has been provisionally assigned under the solution to (P2). Thus, this monetary cost has a clear and natural use in estimating the current price of a license given the bids considered in the current round.

Constraints (2) in (P3) ensure that the dual price of a license must be at least as large as the greatest bid made on that license. For a package, these constraints ensure that the sum of the dual prices of the licenses that make up a particular package must be at least as large as the greatest bid made on that package. Constraints (3) in (P3) ensure that if a license has not been bid on, the dual price of that license is at least as large as the FCC bid amount.

Ideally, the solution to (P2) is identical to the solution of (P1). When this occurs, the sum of the dual prices of the licenses comprising any provisionally winning bid equals the winning bid amount. However, (P2) is only an approximation to the integer problem¹⁷⁷ and often *overestimates* the maximum revenue of (P1). When this occurs, the sum of the dual prices of the licenses in at least one provisionally winning bid will be greater than the respective bid amount. Thus, using the dual prices of (P3) can result in minimum acceptable bid amounts that are too high.

We propose to resolve this issue by using *pseudo-dual prices*,¹⁷⁸ rather than the dual prices of (P3). These pseudo-dual prices are obtained by forcing the sum of the dual prices of the licenses comprising a provisionally winning bid to equal its respective bid amount. For example, suppose there are two bids in the provisionally winning set in round t : a bid on license A for \$10 and a bid on package BC for \$25. The pseudo-dual price of A would exactly equal \$10 and the sum of the pseudo-dual prices of B and C would exactly equal \$25. These restrictions ensure that the sum of the pseudo-dual prices equals the maximum revenue for the round (e.g. \$35) and that minimum acceptable bid amounts reflect the bid amounts of bids in the provisionally winning set.

Pseudo-dual prices for each license i , denoted π_i , satisfy the following constraints:

¹⁷⁷ When the problem is a convex optimization problem, the primal and dual problems yield the same objective function values. This is called strong-duality. These conditions do not hold for integer programming problems, often resulting in a gap between the linear programming and integer programming solution values.

¹⁷⁸ In our research we found this term first applied to auction pricing in the paper by Rassenti, Smith and Bulfin (1982), “A combinatorial auction mechanism for airport slot allocation,” *Bell Journal of Economics*, vol. 13, pp. 402-417.

$$\sum_{i \in L} a_{ji} \pi_i + \delta_j \geq b_j, \text{ for all } j \in B^t \setminus (W^t \cup F) \quad (4)$$

$$\sum_{i \in L} a_{ji} \pi_i = b_j, \quad \text{for all } j \in W^t \quad (5)$$

$$\pi_i \geq b_j, \quad \text{for all } j \in F \setminus (W^t \cap F) \\ \text{and } i \text{ is the license index associated with bid } j \quad (6)$$

$$\delta_j \geq 0, \quad \text{for all } j \in B^t \setminus (W^t \cup F) \quad (7)$$

where $W^t \subset B^t$ is the provisionally winning bid set in round t and, δ_j is a slack variable that represents the difference between the bid amount of non-winning bid j and the sum of pseudo-dual prices of the licenses contained in non-winning bid j

Constraints (5) ensure that for each provisionally winning bid, the sum of the dual prices of the licenses comprising that bid equal its respective bid amount. This new restriction requires that we ease restriction (2) in (P3) for non-winning bids in order to ensure that a feasible solution exists. Constraints (4) provide this needed slack. Constraints (6) are equivalent to constraints (3) in (P3) and constraints (7) force the slack variables to be non-negative.

Satisfying constraints (5) implies that the sum of the pseudo-dual prices always yields the maximum revenue for the round. There are likely to be many sets of pseudo-dual prices that satisfy this constraint set. For instance, in the example provided earlier, the pseudo-dual prices of B and C might be any two numbers that together sum to \$25.

By keeping constraints (4)-(7), we have the flexibility to choose an objective function that will help in selecting among multiple solutions while still ensuring that the sum of the pseudo-dual prices yields the maximum revenue of the round. We would like an objective function that minimizes the values of the slack variables δ_j , for all $j \in B^t \setminus (W^t \cup F)$ in order to obtain pseudo-dual prices that are close to the dual prices of (P3). We have tested a number of alternative objective functions:

1. Minimization of the maximum δ_j for all $j \in B^t \setminus (W^t \cup F)$ followed by maximization of the minimum π_i for all i in license set L , in an iterative manner. (DeMartini, Kwasnica, Ledyard and Porter, 1999)
2. Minimization of the sum of the squares of δ_j for all $j \in B^t \setminus (W^t \cup F)$. (also DeMartini, Kwasnica, Ledyard and Porter, 1999)
3. Minimization of the sum of the δ_j for all $j \in B^t \setminus (W^t \cup F)$ using a “centering” algorithm¹⁷⁹ to solve, essentially finding an average among all sets of optimal pseudo-dual prices.

¹⁷⁹ The centering algorithm used in this testing was the barrier method available in CPLEX, a commercial optimization package.

In testing the above alternatives, we frequently observed instances where the pseudo-dual price of a license significantly changed from round to round. We acknowledge that prices of licenses should be allowed to reflect real changes, both increases and decreases, in the way bidders value the licenses over time. However, we believe that large oscillations in minimum acceptable bid amounts for the same bid that are due to irrelevant factors such as multiple optimal solutions, can be confusing to bidders. We have therefore chosen a method that attempts to balance minimizing the slack variables and reducing the fluctuations in pseudo-dual prices from round to round. This method requires solving two optimization problems, the first of which is alternative 3 above, which we present as (P4):

$$\begin{aligned}
 \Omega^* &= \min \sum_{j \in B^t \setminus (W^t \cup F)} \delta_j \\
 \text{s.t.} \quad & \sum_{i \in L} a_{ji} \pi_i + \delta_j \geq b_j, \text{ for all } j \in B^t \setminus (W^t \cup F) \\
 \text{(P4):} \quad & \sum_{i \in L} a_{ji} \pi_i = b_j, \quad \text{for all } j \in W^t \\
 & \pi_i \geq b_j, \quad \text{for all } j \in F \setminus (W^t \cap F) \\
 & \quad \quad \quad \text{and } i \text{ is the license index associated with bid } j \\
 & \delta_j \geq 0, \quad \text{for all } j \in B^t \setminus (W^t \cup F)
 \end{aligned}$$

Since multiple optimal solutions can exist to (P4) we solve a second optimization problem that chooses a solution in a way that reduces the magnitude of price fluctuations between rounds. Specifically, we use an objective function that applies the concepts of exponential smoothing¹⁸⁰ to choose among alternative pseudo-dual prices with the additional constraint on the problem that the sum of the slack variables equals Ω^* (the optimal value of (P4)). This objective function minimizes the sum of the squared deviations of the resulting pseudo-dual prices in round t , from their respective smoothed prices in round $t-1$.¹⁸¹ At the start of the auction, we use the minimum opening bid prices as the prior smoothed prices. Since these opening prices are based on bandwidth and population, the pricing algorithm begins with *a priori* information about the differences among licenses.

Let π_i^t be the pseudo-dual price of license i in round t . The smoothed price for license i in round t is calculated using the following exponential smoothing formula:

¹⁸⁰ Exponential smoothing often is used in determining minimum acceptable bids in FCC auctions. *See, e.g.,* Auction of Licenses in the 747-762 and 777-792 MHz Bands; Auction Notice and Filing Requirements for 12 Licenses in the 700 MHz Bands Auction Scheduled for May 10, 2000; Minimum Opening Bids and Other Procedural Issues, DA 00-292, *Public Notice*, 15 FCC Rcd 2921, Attachment G (2000).

¹⁸¹ This objective function is a convex, quadratic function. This quadratic optimization problem is solved using the barrier method.

$$p_i^t = \alpha \pi_i^t + (1 - \alpha) p_i^{t-1}$$

where p_i^{t-1} is the smoothed price in round $t-1$,

$$0 \leq \alpha \leq 1, \text{ and}$$

$p_i^0 =$ the minimum opening bid amount for license i .

Consistent with prior practice of the Commission, a weighting factor of $\alpha = 0.5$ has been chosen but can change, as the Commission requires.

The following quadratic program (QP) will find the pseudo-dual price, π_i^t , for each license i in round t that minimizes the sum of the squared deviations from the respective smoothed prices in round $t-1$ while ensuring that the pseudo-dual prices sum up to the provisionally winning bid amounts and that the sum of the slack variables is minimized.

$$\begin{aligned}
 & \min \sum_{i \in L} (\pi_i^t - p_i^{t-1})^2 \\
 & \text{s.t.} \quad \sum_{i \in L} a_{ji} \pi_i^t + \delta_j \geq b_j, \quad \text{for all } j \in B^t \setminus (W^t \cup F) \\
 & \quad \quad \sum_{i \in L} a_{ji} \pi_i^t = b_j, \quad \text{for all } j \in W^t \\
 \text{(QP):} \quad & \sum_{j \in B^t \setminus (W^t \cup F)} \delta_j = \Omega^* \\
 & \quad \quad \pi_i^t \geq b_j, \quad \text{for all } j \in F \setminus (W^t \cap F) \\
 & \quad \quad \quad \quad \quad \text{and } i \text{ is the license index associated with bid } j \\
 & \quad \quad \delta_j \geq 0, \quad \text{for all } j \in B^t \setminus (W^t \cup F)
 \end{aligned}$$

where p_i^{t-1} is known and treated as a constant within the optimization.¹⁸²

Among alternative prices that satisfy all constraints, the objective function of this optimization problem chooses one that forces the pseudo-dual prices to be as close as possible to the previous round's smoothed price. Thus, we call this the *Smoothed Anchoring Method* since we “anchor” on the smoothed prices when solving for the pseudo-dual prices. We define the “current price estimate” for license i in round t as the pseudo-dual price, π_i^t , obtained by solving (QP).

The minimum acceptable bid amount for a license in round $t+1$ under part (iii) will be the current price estimate of the license, as calculated above, plus $z\%$. For a package, the value will be the sum of the current price estimates of the licenses that make up the package plus $z\%$ of the

¹⁸² Once the pseudo-dual prices, π_i^t , have been determined, the smoothed prices, p_i^t , can be calculated and used for solving (QP) in round $t+1$.

sum. This part (iii) amount is then compared to the amounts of parts (i) and (ii), and the greatest is the minimum acceptable bid for the next round.

VIII. ATTACHMENT C

FCC AUCTION SEMINAR REGISTRATION FORM

Auction No. 31

The FCC will sponsor a one-day seminar for Auction No. 31 applicants. The seminar is free of charge and will provide information about pre-auction procedures, service and auction rules, conduct of the auction, and the Automated Auction System.

A maximum of two representatives from each company may attend on a reservation basis, first-come first-served until room capacity is filled. Additional seating may be available on a stand-by basis the day of the seminar. The seminar will be held:

Tuesday, April 30, 2002
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Registration 9:30 a.m. – 10:00 a.m.

Seminar 10:00 a.m. - 4 p.m.

If hotel accommodations are needed

Please contact 1-888-225-5322 (option #2) for a list of hotels in the area

To register, complete the form below and return no later than

Friday, April 26, 2002, by mail or fax to:

FCC Auction 31
Auctions Operations Branch
1270 Fairfield Road
Gettysburg, PA 17325-7245

FAX: 717-338-2850

Phone: 717-338-2888

I/We will attend the Auction No. 31 Seminar, scheduled for Tuesday, April 30, 2002.

Name of attendee: _____

Name of attendee: _____

Company name: _____

Phone: _____

Fax: _____

IX. ATTACHMENT D

ELECTRONIC FILING AND REVIEW OF THE FCC FORM 175

Applicants must submit their FCC Form 175 applications electronically. The FCC recommends submitting your Form 175 via the Internet. As a contingency, you can submit via the FCC Wide-Area Network. FCC Form 175 applications must be submitted and confirmed by **6:00 p.m. ET on Wednesday, May 8, 2002**. Late applications or unconfirmed submissions of electronic data will not be accepted.

Applicants must click the **SUBMIT Application** button on the *Submission* page to successfully submit their FCC Form 175. The electronic filing process consists of an initial filing period and a resubmission period to make minor corrections. During each filing period, submitted applications may be updated and amended multiple times until the filing deadline.

A. Software Requirements

Applicants will need to meet the following minimum software requirements:

- Web Browser, either of the following:
 - ◆ Microsoft® Internet Explorer 4.0 or higher (recommended). Your browser must have either Microsoft VM or Java Plug-In Version 1.3.1 installed.
 - ◆ Netscape® Communicator™ 4.0 or higher, with Java Plug-In Version 1.3.1.

Java Plug-In Version 1.3.1 is available for downloading at <http://java.sun.com/getjava/download.html>.

- PDF Viewer: Adobe Acrobat Reader 4.0 or higher (available at <http://www.adobe.com>)
- If you wish to use the download feature on the Search Results page, you will need a .tar file extraction utility, e.g., Winzip (available at <http://www.winzip.com>) or Pkzip for Windows (available at <http://www.pkware.com/shareware>).

B. Submitting FCC Form 175 Applications

You can submit FCC Form 175 applications electronically via the Internet. Start your web browser and point it to either <https://auctions.fcc.gov/> (primary location) or <https://auctions2.fcc.gov/> (secondary location). On the FCC Auctions page, click **Form 175 Application & Search** to obtain the Form 175 Homepage.

Note: As a contingency, you may submit FCC Form 175 applications via the FCC Wide Area Network, using Dial-Up Networking. To access the Wide Area Network, configure your dial-up network to dial **800-378-7435**. (Alternatively, you can configure your dial-up network to dial **877-844-2788**.)

1. Logging On

The Form 175 Homepage has a Form 175 Logon area at the top right. This area provides fields that let you identify yourself to the system before submitting a Form 175 application.

Important: On December 3, 2001, the FCC Registration Number (FRN) became mandatory for all parties conducting business with the FCC. An FRN is mandatory for all filers logging onto the 175 Application System.

Once you have logged on with your FRN, you can click the **New Form** link to obtain the *Profile* page for the auction.

2. Uploading Attachments

When uploading attachments from the Form 175 *Attachments* page, applicants may use a variety of file formats--including Word 2000 or earlier, WordPerfect 6.x or earlier, Adobe PDF, and ASCII text -- and should verify that the files contain all exhibit information. Also note the following about files to be uploaded:

- Graphics files (e.g., *.bmp*, *.tiff*, *.jpg*) and spreadsheets (e.g., Excel, Lotus) are not supported,
- Word processing files that are uploaded may not contain graphic images.
- Do not include punctuation marks (e.g., ? . - ,) in the name of a file to be uploaded. The FCC system will not be able to convert that file.
- Do not upload a password-protected file. The FCC system will not be able to open it or convert it.

The system converts each uploaded attachment to PDF format. (The conversion process generally completes within 30 minutes.) Until the system has converted your file to PDF format, the description field shows *Not converted*.

Repeat this procedure for each additional attachment you want to add. When you have finished adding attachments, click the **Continue to CERTIFICATION** button to obtain the *Certification* page.

a. Unreadable Attachment Files

If you are unable to read an attachment file after it has been converted, please do the following:

1. Re-upload the attachment.
2. If the file still has not been converted properly, then simplify the formatting of the file.

For example, if you are using a Table structure in a WordPerfect document, remove the Table structure and leave the contents of the table, then re-upload the attachment.

After you have successfully re-uploaded an attachment, please delete the old, unreadable attachment files using their **Delete** links.

3. Completing the Submission Procedure

Applicants must press the **SUBMIT Application** button on the *Submission* page to successfully submit their FCC Form 175. Pressing **SUBMIT Application** produces a *Submission Confirmation* page showing the assigned FCC Account Number. During each filing period, submitted applications may be updated and amended multiple times until the filing deadline.

C. Reviewing FCC Form 175 Applications

Once the FCC has completed the 175 Review process, you can view FCC Form 175 applications electronically by searching for them in the FCC database. Start your web browser and point it to either <https://auctions.fcc.gov/> (primary location) or <https://auctions2.fcc.gov/> (secondary location). Click the **Form 175 Application & Search** link, then click the **SEARCH** link at the top of the page. When the *Form 175 Search* page appears, select the search criteria you want and then click the **Submit** button.

D. Help

For technical assistance with using FCC software, contact the FCC Technical Support Hotline at (202) 414-1250 (V) or (202) 414-1255 (TTY). The FCC Technical Support Hotline is generally available Monday through Friday from 7 a.m. to 10 p.m. ET, Saturday from 8 a.m. to 7 p.m. ET, and Sunday from 12 noon to 6 p.m. ET. *All calls to the FCC Technical Support Hotline are recorded.*

You can also contact Technical Support via e-mail. To obtain the address, click the **Support** tab on the Form 175 Homepage.

X. ATTACHMENT E

GUIDELINES FOR COMPLETION OF FCC FORM 175 AND EXHIBITS

A. FCC Form 175

Because of the significance of the FCC Form 175 application to the auction, bidders should especially note the following:

Applicant: Name given is used as your bidder name in the auction.

Address: Applicants must provide a street address (not a Post Office box number) for the applicant, suitable for mail or private parcel delivery.

Legal Classification: Applicants must indicate their legal classification. The FCC Form 175 requires the applicant to classify itself as an individual, joint venture, partnership, trust, corporation, consortium, association, limited liability corporation (LLC) or government entity.

Applicant Status: Applicants are requested to indicate their status as a rural telephone company, minority- and/or women-owned business, so that the FCC can monitor its performance in promoting economic opportunities for these designated entities.

Contact person/address: If the Commission wishes to communicate with the applicant by telephone or fax, those communications will be directed to the contact person identified on the FCC Form 175. Space is provided for an address, telephone number, fax number, and e-mail address. All written communication and registration information will be directed to the applicant's contact person at the address specified on the FCC Form 175. Applicants must provide a street address; **no P.O. Box addresses may be used.**

Authorized Bidders: Applicants must list the name(s) of the person(s) (no more than three) authorized to represent them at the auction. Only those individuals listed on the FCC Form 175 will be authorized to place or withdraw bids for the applicant during the auction.

Bidding Credit Eligibility: Applicants that qualify for a small or very small business bidding credit must select the applicable bidding credit (15 percent or 25 percent) in the bidding credit eligibility item on the Form 175. Applicants are advised that this is the sole opportunity applicants have to elect small business status and bidding credit level (if applicable). There is no opportunity to change the election once the short-form filing deadline passes on May 8, 2002.

Telephonic or Electronic Bidding Options: Bidders may participate in the auction either electronically or telephonically, and must specify their preference. To participate in the auction, every authorized bidder must have a SecurID card, which the FCC will provide free of charge.

License Selection: Applicants should select all licenses on which they want to be eligible to bid in the auction. Be advised that there is no opportunity to change this list once the short-form filing deadline passes on May 8, 2002. It is critically important that you confirm the licenses that you have selected because the Automated Auction System will not allow you to create packages with or place bids on licenses for which an applicant has not applied on its FCC Form 175.

B. Exhibits and Attachments

In addition to the FCC Form 175 itself, applicants must submit additional information required by the FCC’s rules. If attachments are not uploaded, the FCC Form 175 submission process cannot be completed. Although the FCC does not require a particular format for this information, it has developed the following guidelines that will facilitate the processing of short-form applications. The FCC encourages applicants to submit this information using the following format.

If you find that an attachment has not converted properly to Adobe PDF format, take the following steps:

- 1) *Simplify the formatting of the file. For example, if using a Table structure in a WordPerfect document, remove the Table structure leaving the contents of the table, re-save the document.*
- 2) *Re-upload the attachment.*
- 3) *When the re-uploaded attachment has successfully converted, delete the failed attachment.*

NOTE: Applicants should not list their TIN numbers on any exhibits to their FCC Form 175s.

Exhibit A -- Applicant Identity and Ownership Information: 47 C.F.R. § 1.2105(a)(2)(ii) requires each applicant to fully disclose the real party or parties-in-interest in an exhibit to its FCC Form 175 application. Each member of an applicant applying to bid as a small or very small business consortium must provide this information. The following information is required:

1. General Information

<i>Applicant Status</i>	<i>Required Information</i>
General Partnership	Name, citizenship, and address of all partners, and the share or interest participation of each partner
Limited Partnership	Name, citizenship, and address of each limited partner whose interest in the applicant is equal to or greater than 10 percent (as calculated according to the percentage of equity paid in and the percentage of distribution of profits and losses)
Corporation	Corporate name and address; name, title, and citizenship of a responsible officer or director
Limited Liability Corporation	Corporate name and address; name, address, and citizenship of all members whose interest in the applicant is equal to or greater than 10 percent (as calculated according to the percentage of equity paid in and the percentage of distribution of profits and losses)
Trust	Name, citizenship, and address of trustee
None of the above	Name, citizenship, title or other relation to the applicant, and address of a principal or other responsible person

2. Ownership Information

Applicant Status

All applicants

Required Information

Name, citizenship, and address of all controlling interests of the applicant as discussed in Part II.C.3 of this public notice.

All applicants

Name, citizenship, and address of all parties holding 10 percent or more of each class of stock, warrants, options or debt securities and the amount and percentage held.

All applicants

Name of all parties holding a 10 percent or greater interest in the applicant and the specific amount held.

All applicants

List of all parties holding indirect ownership interests in the applicant that equals 10 percent or more, as determined by successive multiplication of the ownership percentages in each link of the vertical ownership chain, except that if the ownership percentage for any link in the chain exceeds 50 percent or represents actual control, it shall be reported as if it were a 100 percent interest.

Example. Company A owns 10% of Company B, which owns 60% of Company C, which owns 25% of the applicant. Company B's interest in the applicant would be 25% (the same as Company C's interest since Company B's interest in Company C exceeds 50%), and Company A's interest in the applicant would be 2.5% ($0.1 * 0.25$). Under the 10% attribution benchmark, Company B's interest in the applicant must be reported on the applicant's FCC Form 175 Exhibit A, while Company A's interest in the applicant need not be reported. However, if Company A owned 40% of Company B in the above example, then Company A's interest in the applicant would be 10% ($0.4 * 0.25$), and the applicant would need to report it on the applicant's FCC Form 175 Exhibit A

All applicants

List of any FCC-regulated entity or applicant for an FCC license, in which

- a. the applicant;
- b. any party with a 10 percent or greater interest in the applicant; or
- c. a controlling interest (as discussed in Part II.C.3 of this public notice)

owns a 10 percent or greater interest of the applicant or 10 percent or more of any class of stock, warrants, options or debt securities of the applicant. (*See also* 47 C.F.R. § 1.2110) This list must include a description of each such entities' principal business and a description of each such entities' relationship to the applicant.

Example of a. The applicant owns 10 percent of Company A (an FCC regulated entity or an applicant for an FCC license). The applicant must list Company A on its FCC Form 175 Exhibit A and provide the required

Applicant Status

Required Information

information.

Example of b. Company A owns 10 percent of the applicant and 10 percent of Company B (an FCC regulated entity or an applicant for an FCC license). The applicant must list both Company A and Company B on its FCC Form 175 Exhibit A and provide the required information.

Example of c. Company A owns 55% of the applicant and owns 10 percent of Company B (an FCC regulated entity or an Applicant for an FCC license). The applicant must list both Company A and Company B on its FCC Form 175 Exhibit A and provide the required information.

Exhibit B – Agreements with Other Parties/Joint Bidding Arrangements: Applicants must attach an exhibit identifying all parties with which they have entered into any agreements, arrangements or understandings which relate in any way to the licenses being auctioned, including any relating to the post-auction market structure. *See* 47 C.F.R. §1.2105(a)(2)(viii).

Be aware that pursuant to Certification (4) on the FCC Form 175, the applicant certifies that it will not enter into any explicit or implicit agreements or understandings of any kind with parties not identified in the application regarding bid amounts, bidding strategies, or the particular licenses on which the applicant will or will not bid. *See* 47 C.F.R. § 1.2105(a)(2)(ix). *To prevent collusion, the Commission’s Rules generally prohibit applicants for licenses covering the same geographic area from communicating concerning bids, bidding strategies, or settlements during the period between the initial short-form applications filing deadline and the deadline for down payments on licenses won in the auction.* 47 C.F.R. § 1.2105(c).

Exhibit C – Status as a Small Business or Very Small Business: Applicants claiming status as a small or very small business must attach an exhibit providing the following information regarding this status.

Entity

Required Information

Applicant

Average annual gross revenues for the preceding three years set forth *both separately (e.g., for each of the preceding three years individually) and in the aggregate* (for all of the preceding three years combined). Certification that the average of the aggregated annual gross revenues for the preceding three years do not exceed the required limit, or providing average gross revenues for the 3-year period without providing the gross revenues for each of the preceding three years, is insufficient.

Applicant’s Affiliates
See 47 CFR §§ 1.2110, 1.2112

Same information required as discussed above

Applicant’s Controlling Interests
See 47 CFR §§ 1.2110, 1.2112.

Same information required as discussed above

Example. The applicant had gross revenues of \$500,000 in 1998, \$1,000,000 in 2000, and \$3,000,000 in 2001, with average gross revenues for that time period of \$1,500,000. The applicant owns 60% of Company A, making Company A an affiliate of the applicant under

Entity

Required Information

Section 1.2110(c)(5)(i)(B). Company B owns 52% of the applicant, making Company B a controlling interest of the applicant, as defined in Part II.C.3 of this public notice. Company B owns 100% of Company C, making Company C an affiliate of the applicant's controlling interest, under Section 1.2110(c)(5)(i)(C). The applicant's Exhibit C would look like this:

Applicant Name

1999 gross revenues	\$ 500,000
2000 gross revenues	\$ 1,000,000
2001 gross revenues	\$ 3,000,000

Average gross revenues

for the preceding 3 years	\$ 1,500,000
---------------------------	--------------

Company A (an affiliate of the applicant)

1999 gross revenues	\$ enter amount
2000 gross revenues	\$ enter amount
2001 gross revenues	\$ enter amount

Average gross revenues for the preceding 3 years	enter amount	\$
--	--------------	----

Company B (a controlling interest in the applicant)

1999 gross revenues	\$ enter amount
2000 gross revenues	\$ enter amount
2001 gross revenues	\$ enter amount

Average gross revenues for the preceding 3 years	\$ enter amount
--	-----------------

Company C (an affiliate of the applicant's controlling interest)

1999 gross revenues	\$ enter amount
2000 gross revenues	\$ enter amount
2001 gross revenues	\$ enter amount

Average gross revenues for the preceding 3 years	enter amount	\$
--	--------------	----

NOTE: Each member of an applicant that is applying to bid as a consortium of small or very small businesses must provide this information and qualify for the claimed status.

Exhibit D – Information Required of All Applicants Regarding Prior Defaults and Prior Delinquencies:

Each applicant must include at Exhibit D a statement made under penalty of perjury indicating whether or not the applicant, its affiliates, its controlling interests, or the affiliates of its controlling interest have ever been in default on any Commission licenses or have ever been delinquent on any non-tax debt owed to any Federal agency. The applicant must provide such information for itself, for each of its controlling interests and affiliates, and for each affiliate of its controlling interests as defined by Section 1.2110 of the Commission’s rules (as amended in the *Part 1 Fifth Report and Order*).

Exhibit E – Information Requested of Designated Entities: Applicants owned by minorities or women, as defined in 47 C.F.R. § 1.2110(c), or that are rural telephone companies, may attach an exhibit regarding this status. This information, in conjunction with the information requested on the FCC Form 175, will assist the Commission in monitoring the participation of these “designated entities” in its auctions.

Exhibit F – Miscellaneous Information: Applicants wishing to submit additional information should include it in Exhibit F.

Waivers: Applicants requesting waiver of any rules must submit a statement of reasons sufficient to justify the waiver sought. *See* 47 C.F.R. §§ 1.3, 1.925.

Certifications: Applicants should carefully read the list of certifications on the FCC Form 175. These certifications help to ensure a fair and competitive auction and require, among other things, disclosure to the Commission of certain information on applicant ownership and agreements or arrangements concerning the auction. Submission of an FCC Form 175 application constitutes a representation by the certifying official that he or she is an authorized representative of the applicant, has read the form’s instructions and certifications, and that the contents of the application and its attachments are true and correct. Submission of 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.

Completeness: Applicants must submit all information required by the FCC Form 175 and by applicable rules. Failure to submit required information by the resubmission date will result in dismissal of the application and inability to participate in the auction. *See* 47 C.F.R. § 1.2105(b).

NOTE: Applicants must press the “SUBMIT Application” button on the “Submission” page to successfully submit their FCC Form 175.

Continuing Accuracy: Each applicant is responsible for the continuing accuracy and completeness of information furnished in the FCC Form 175 and its exhibits. *See* 47 C.F.R. § 1.65. It is the FCC’s position that during the conduct of an auction, thirty business days from a reportable change is a reasonable period of time. Applicants are reminded that they consent to be audited in the certification section of the FCC Form 175 (see certification item number 6).

Applicants are reminded that all information required in connection with applications to participate in spectrum auctions is necessary to determine the applicants’ qualifications, and as such will be available for public inspection. Required proprietary information may be redacted, or confidentiality may be requested,

following the procedures set forth in 47 C.F.R. § 0.459. Such requests must be submitted by electronic mail to the attention of Margaret Wiener, Chief, Auctions and Industry Analysis Division, at the following address: auction31@fcc.gov, in which case the applicant must indicate in Exhibit F that it has filed a confidentiality request. Because the required information bears on applicants' qualifications, the FCC envisions that confidentiality requests will not be routinely granted.

The electronic mail summarizing the request must include a subject or caption referring to Auction No. 31. The Bureau requests that parties format any attachments to electronic mail as Adobe® Acrobat® (pdf) or Microsoft® Word documents.

A separate copy of the letter should be faxed to the attention of Kathryn Garland at (717) 338-2850.

XI. ATTACHMENT F

**AUCTION-SPECIFIC INSTRUCTIONS FOR
FCC REMITTANCE ADVICE (FCC FORM 159-February 2000 edition)**

A. Upfront Payments

The following information supplements the standard instructions for FCC Form 159 (Revised 2/00), and is provided to help ensure correct completion of FCC Form 159 for upfront payments for Auction No. 31. Applicants need to complete FCC Form 159 carefully, since:

- **Mistakes may affect their bidding eligibility; and**
- **Lack of consistency between information set forth in FCC Form 159 (Revised 2/00), FCC Form 175, long-form application, and correspondence about an application may cause processing delays.**

Therefore appropriate cross-references between the FCC Form 159 Remittance Advice and the FCC Form 175 Short Form Application are described below:

Block Number	Required Information
1	LOCKBOX # - Enter "358430"
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 as FCC Form 175.
3	Total Amount Paid - Enter the amount of the upfront payment associated with the FCC Form 159 (Revised 2/00).
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 ten-digit FCC Registration Number (FRN) registered in the Commission Registration System (CORES).
12	Payer TIN – Enter the payer’s nine-digit Taxpayer Identification Number (TIN).
24A	Payment Type Code - Enter "A31U"

- 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 "31" (indicating Auction No. 31).

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 22 for the applicant, using the same information shown on FCC Form 175. Otherwise leave them blank.
- Since credit card payments will not be accepted for this auction, leave Section E blank.

B. Winning Bidder Requirements, Down Payments and Final Payments

Specific information regarding down payments and final payments will be included in a post-auction public notice announcing the winning bidders.

XII. ATTACHMENT G

Summary of Package Bidding Rules for 700 MHz Auction

A. Available Packages

- A bidder may bid only on those licenses selected on its Form 175 and on packages created from those licenses.¹⁸³
- Bidders will be permitted to create and bid on up to twelve different packages of their own choosing during the course of the auction. Bidders will not be required to identify or create their packages before the start of the auction, but may create their packages as the auction progresses.¹⁸⁴ A bidder may modify or delete a package it has created up until the point where it has bid on the package and the round has closed. If the bidder submits a bid on a package and subsequently removes the bid during the same round, the bidder has the option of also deleting or modifying the package. However, once a bidder bids on a package and the round closes, the package may not be modified or deleted and counts as one of the bidder's twelve allowable packages.

B. New Bids

- *Minimum acceptable bid.* A bidder may make a minimum acceptable bid on a license/package.¹⁸⁵ A minimum acceptable bid is the *greatest* of:
 - i. The *minimum opening bid*. The Commission sets the minimum opening bids for licenses prior to the auction. Minimum opening bids for packages are the sum of the minimum opening bids for the licenses composing the package.¹⁸⁶
 - ii. A bidder's *previous high bid* on the license/package *plus x%*. The Commission sets x and may vary it during the course of the auction.¹⁸⁷ Part (ii) does not apply if a bidder has not bid on a license/package.
 - iii. A current price estimate of the license or package *plus z%*. A current price estimate for each license will be calculated at the close of each round using the Smoothed Anchoring Method (see Attachment B). The current price estimate for a package will be the sum of the current price

¹⁸³ See Auction of Licenses in the 747-762 and 777-762 and 777-792 MHz Bands Scheduled for September 6, 2000, Procedures Implementing Package Bidding for Auction No. 31; Bidder Seminar Scheduled for July 24, 2000, *Public Notice*, DA 00-1486, 15 FCC Rcd 11526, 11554 (rel July 3, 2000) ("*Auction No. 31 Package Bidding Procedures Public Notice*").

¹⁸⁴ Bidders are limited to bidding on, and hence creating packages from, those licenses which they selected on their FCC Form 175 and for which they have eligibility. See *generally* Section II.A.2, Maximum Eligibility, and II.A.3, Activity Rules.

¹⁸⁵ *Id.* 15 FCC Rcd. at 11543-11547; see also Auction of Licenses in the 747-762 and 777-792 MHz Bands Scheduled for March 6, 2001, Modifications to the Calculation for Determining Minimum Acceptable Bids and Changing the Provisions Concerning Last and Best Bids and Other Procedural Issues, Bidder Seminar Scheduled for January 23, 2001 and Test of Package Bidding System Set For January 24, 25, and 26, 2001, *Public Notice*, DA 01-12, January 5, 2001, at 2-4. ("*Auction No. 31 Package Bidding Further Procedures Public Notice*").

¹⁸⁶ *Id.* 15 FCC Rcd. at 11543.

¹⁸⁷ *Id.* 15 FCC Rcd. at 11545.

estimates of the licenses that comprise the package.

After the first round of the auction, part (iii) of the minimum acceptable bid rule for a global package will always be the revenue generated by the provisionally winning bid set in the previous round plus w%.

- *Multi-Increment bid.* A bidder may make multi-increment bids on a license/package. For multi-increment bids, an increment is equal to v% of the minimum acceptable bid, where v% is determined by the Commission.¹⁸⁸ Thus, if v equals 10, bidders will be able to place multi-increment bids of the minimum acceptable bid plus approximately 10%, 20%, etc., with the maximum bid being approximately equal to the minimum acceptable bid plus 80%.¹⁸⁹
- *Last and best bids.* A bidder may make up to two sets of last and best bids.¹⁹⁰ The two sets of last and best bids must be submitted in a single round but will be treated as mutually exclusive.¹⁹¹ Once last and best bids are placed the bidder will not be permitted to place new bids or renew previous bids in any subsequent round.¹⁹² Each set of last and best bids may consist of bids on any or all of the licenses and any or all of the packages created by the bidder, consistent with activity rules and the twelve package limitation.¹⁹³ The last and best bid amount for any license or package may be any amount, in thousand dollar increments, greater than or equal to the bidder's previous high bid on the license or package and less than or equal to the eighth increment above the minimum acceptable bid for that license or package.¹⁹⁴ Also, if a bidder has never placed a bid on a package or license the lower bound on the last and best bid is equal to the minimum opening bid for that package or license.

C. Renewed Bids

- A bidder may renew a bid made previously on a license/package at the highest amount it previously bid on that license/package.¹⁹⁵ Thus, a bidder can renew only its own last bid on a license/package, and a bidder's bids on a license/package may not decrease.¹⁹⁶

¹⁸⁸ *Id.*

¹⁸⁹ The calculation of the amount of the multi-increment bids will be performed as follows: $(MAB)(1+v\%) - MAB = Bi$. Then, the new bid amounts shall be (1) MAB; (2) MAB + Bi; (3) MAB + 2Bi; ...; (9) MAB + 8Bi.

¹⁹⁰ *See Auction No. 31 Package Bidding Further Procedures Public Notice* at 5-6.

¹⁹¹ *Id.*

¹⁹² *Id.*

¹⁹³ *Id.* In applying activity rules, bidding activity for each of the sets of last and best bids must not exceed current eligibility, as determined at the beginning of the round in which these bids are place. In other words, eligibility for the second set of last and best bids will not be recalculated based on eligibility activity associated with the first set of bids.

¹⁹⁴ *See* 15 FCC Rcd. at 11548-50.

¹⁹⁵ *See* 15 FCC Rcd. at 11548.

¹⁹⁶ *Id.*

- As discussed below (in the section on activity and eligibility), renewed provisionally winning bids count as bidding activity, while renewed *non*-provisionally winning bids do not receive any activity. Thus a bidder can renew non-provisionally winning bids without regard to its current eligibility, provided it has not made a last-and-best bid. Renewal of non-provisionally winning bids is constrained by initial eligibility, however.
- Renewed bids are treated as being made in the current round.¹⁹⁷

D. Determining Winners

- In determining provisionally winning bids in the current round, we *consider*:
 - i. All bids (new and renewed) placed in the auction
 - ii. A set of “FCC bids” on each license in the auction at some small dollar amount less than the respective minimum opening bid
- Bids made by the same bidder in different rounds are treated as *mutually exclusive* (“or”) bids.¹⁹⁸ Thus for each bidder, any bids in the provisionally winning set must have been made in the same round. If a bidder does not want a bid from a previous round (including a provisionally winning bid) to be considered mutually exclusive with bids made in the current round, it must renew or increase the bid in the current round.¹⁹⁹
- Overlapping bids (bids that include the same license) by the same bidder in the same round are treated as *mutually exclusive* (“or”) bids.²⁰⁰
- The *provisionally winning* bids at the end of each round consist of those non-mutually exclusive considered bids that maximize revenue while assigning each license only once.
- The *winning bids* are the provisionally winning bids when the auction closes.
- *Ties*. Ties will be broken randomly using a two-step process.²⁰¹ To begin, each considered bid is assigned a selection number as the sum of n pseudo-random numbers where n is the number of licenses comprising the bid's package (n = 1 for individual license bids). Then with knowledge of the maximum revenue for the round, a second optimization determines the provisionally winning set by choosing a set of non-mutually exclusive considered bids that maximizes the sum of selection numbers while still yielding the maximum revenue.
- A bid at the minimum opening bid beats the “FCC bid”. This is accomplished by putting in “FCC bids” at some small amount less than the minimum opening bid.

¹⁹⁷ Renewed bids, however, do not count as new bids made in the current round for the purposes of the stopping rule. See Section IV.A.6 above.

¹⁹⁸ See 15 FCC Rcd. at 11549-51.

¹⁹⁹ *Id.*

²⁰⁰ *Id.* at 11554.

²⁰¹ *Id.* at 11549-50.

E. Closing Rules

- The auction closes after the second round in which no new bids have been placed.²⁰² Renewed bids (whether provisionally winning or non-provisionally winning) are not new bids. Last and best bids are considered to be new bids in the round in which they are placed except for those last and best bids placed at the bidder's previous high bid.²⁰³
- After the first round in which no new bids have been placed, bidders will receive a message warning that if no new bids are placed in the next round, the auction will close and the current provisionally winning bids will become the winning bids.
- We run the solver after every round *except* the last round.

F. Activity and Eligibility

- *Bidding units.* Prior to the auction, licenses are assigned a specific number of bidding units for the purpose of calculating bidder compliance with the activity rules. The number of bidding units assigned to a license is fixed and does not increase as prices rise during the auction.
- *Bidding activity.* *Bidding activity* in a round is the maximum number of bidding units a bidder can win considering new bids and renewed provisionally winning bids placed in that round.²⁰⁴ A bidder's *bidding activity* in the current round must be *less* than or equal to its *current* eligibility.²⁰⁵
- *Bidding exposure.* *Bidding exposure* in a round is the maximum number of bidding units a bidder can win considering *all* the bids (new, renewed provisionally winning, renewed non-provisionally winning) placed in that round. A bidder's *bidding exposure* in the current round must be *less* than or equal to its *initial* eligibility.
- *Initial eligibility.* A bidder's *initial eligibility* is determined by its selection on Form 175 and the upfront payment it makes.²⁰⁶ Its initial eligibility in bidding units is equal to its upfront payment in dollars.
- *Eligibility activity.* *Eligibility activity* in a round is the maximum number of bidding units a bidder can win considering new bids and renewed provisionally winning bids placed in that round, and the bidder's provisionally winning bids at the end of the previous round. Since bids made in different rounds are mutually exclusive, *eligibility activity* in a round is the *greater* of (i) bidding activity in the round; and (ii) the bidding units associated with the bidder's bids that remain in the provisionally winning set.

²⁰² See 15 FCC Rcd at 11541-42. In addition, the Bureau has discretion to employ a Special Stopping Rule. See *id.*

²⁰³ *Id.* at 11541.

²⁰⁴ See 15 FCC Rcd at 11538.

²⁰⁵ *Id.*

²⁰⁶ See 15 FCC Rcd at 11536, 11554.

- *Current eligibility.* A bidder's *eligibility* in the *current* round is the *lesser* of (i) its eligibility in the previous round and (ii) the reciprocal of the *activity requirement* (1/activity requirement) multiplied by its *eligibility activity* in the previous round.²⁰⁷ When the auction begins the eligibility activity requirement is one-half, so until we change it, the current eligibility is the lesser of previous round eligibility, and the reciprocal of previous round eligibility activity. Absent activity rule waivers, if eligibility activity in the current round falls below the eligibility activity requirement (*e.g.*, one-half times current eligibility, eligibility in the next round will be reduced.
- *Eligibility activity waivers.* If a bidder's eligibility activity does not meet the activity requirement, its eligibility is not reduced if it has a waiver available.²⁰⁸ Each bidder initially has five waivers.²⁰⁹ If a bidder has used up its five waivers and then fails to meet the activity requirement, the bidder's eligibility is reduced in the next round to meet the activity requirement, just as if it had affirmatively reduced its eligibility. A bidder may also affirmatively reduce its eligibility if it wishes in order not to use a waiver.²¹⁰

G. Dollar Exposure

- *Dollar exposure.* *Dollar exposure* in a round is the maximum dollar amount a bidder can owe considering *all* bids (new, renewed provisionally winning, renewed non-provisionally winning) placed in that round. A bidder's *dollar exposure* in the current round does not apply any bidding credits the bidder may have.
- *Overall dollar exposure.* *Overall dollar exposure* in a round is the maximum dollar amount a bidder can owe considering all bids (new, renewed provisionally winning, renewed non-provisionally winning) placed by that bidder in the auction. A bidder's *overall dollar exposure* in the current round does not apply any bidding credits the bidder may have.

²⁰⁷ See 15 FCC Rcd. at 11536-37.

²⁰⁸ See 15 FCC Rcd. at 11540.

²⁰⁹ See 15 FCC Rcd at 11539.

²¹⁰ *Id.* at 11539-40.

XIII. ATTACHMENT H

PACKAGE BIDDING ACTIVITY CALCULATIONS

Name	Definition	Rule/Application
Bidding activity	Maximum number of bidding units a bidder can win considering: <ul style="list-style-type: none"> • New bids • Renewed provisionally winning bids made or renewed in the current round 	Bidding activity \leq current eligibility In the current round, a bidder may not place new bids or renew provisionally winning bids so that it can win more bidding units than its <i>current</i> eligibility.
Bidding exposure	Maximum number of bidding units a bidder can win considering: <ul style="list-style-type: none"> • New bids • Renewed provisionally winning bids • Renewed non-provisionally winning bids made or renewed in the current round 	Bidding exposure \leq initial eligibility In the current round, a bidder may not place new bids or renew provisionally winning or non-provisionally winning bids so that it can win more bidding units than its <i>initial</i> eligibility.
Eligibility activity	Maximum number of bidding units a bidder can win considering: <ul style="list-style-type: none"> • New bids • Renewed provisionally winning bids made or renewed in the current round • Provisionally winning bids at the end of the previous round Eligibility activity = max [bidding activity, bidding units associated with a bidder's provisionally winning bids]	$\text{Eligibility}(t+1) = \min [\text{eligibility}(t), 1/\text{eligibility activity requirement} * \text{eligibility activity}(t)]$ A bidder's eligibility in the current round is the <i>lesser</i> of: <ol style="list-style-type: none"> (i) its eligibility in the previous round, or (ii) its eligibility activity in the previous round times the reciprocal of the eligibility activity requirement, if it does not use an activity rule waiver.

XIV. ATTACHMENT I

SUMMARY LISTING OF DOCUMENTS FROM THE COMMISSION AND THE WIRELESS TELECOMMUNICATIONS BUREAU ADDRESSING APPLICATION OF THE ANTI-COLLUSION RULES

A. Commission Decisions:

Second Report and Order in PP Docket No. 93-253, FCC 94-61, 9 FCC Rcd. 2348, 2386-2388 (1994), paragraphs 221-226.

Fifth Report and Order in PP Docket No. 93-253, FCC 94-178, 9 FCC Rcd. 5532, 5570-5571 (1994), paragraphs 91-92.

Fourth Memorandum Opinion and Order in PP Docket No. 93-253, FCC 94-264, 9 FCC Rcd. 6858, 6866-6869 (1994), paragraphs 47-60.

Second Memorandum Opinion and Order in PP Docket No. 93-253, FCC 94-215, 9 FCC Rcd. 7245, 7253-7255 (1994), paragraphs 48-55.

Memorandum Opinion and Order in PP Docket No. 93-253, FCC 94-295, 9 FCC Rcd. 7684, 7687-7689 (1994), paragraphs 8-12.

In re Commercial Realty St. Pete, *Notice of Apparent Liability for Forfeiture*, 10 FCC Rcd. 4277 (1995),
In re Commercial Realty St. Pete, *Memorandum Opinion and Order*, 11 FCC Rcd. 15,374 (1996).

In re Applications of Mercury PCS II, LLC, *Notice of Apparent Liability for Forfeiture*, 12 FCC Rcd. 17,970 (1997) (petition for partial reconsideration pending).

Amendment of Part 1 of the Commission's rules -- Competitive Bidding Procedures, Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, 4660-4685 MHz, WT Docket No. 97-82, ET Docket No. 94-32, FCC 97-413, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd. 374, 463-469 (1997), paragraphs 155-166.

In re Application of US West Communications, Inc., *Notice of Apparent Liability for Forfeiture*, 13 FCC Rcd 8286 (1998); In the Matter of Notice of Apparent Liability for Forfeiture of US West Communications, Inc., *Order*, FCC 99-90 (May 7, 1999).

In re Application of Western PCS BTA I Corporation, *Notice of Apparent Liability for Forfeiture*, FCC 98-42 (March 16, 1998); In the Matter of Notice of Apparent Liability for Forfeiture of Western PCS BTA I Corporation, *Memorandum Opinion and Order*, 14 FCC Rcd 21571, 21577-78, ¶ 20 (rel. Dec. 13, 1999).

In the Matter of Amendment of Part 1 of the Commission's Rules—Competitive Bidding Procedures, *Seventh Report and Order*, FCC 01-270 (rel. September 27, 2001).

B. Wireless Telecommunications Bureau Decisions:

Amendment of Parts 21 and 74 of the Commission's rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service, *Order*, 11 FCC Rcd. 9655 (Wireless Tel. Bur. 1995).

In re Applications of GWI PCS, Inc. For Authority to Construct and Operate Broadband PCS Systems Operating on Frequency Block C, *Memorandum Opinion and Order*, 12 FCC Rcd. 6441 (Wireless Tel. Bur. 1997).

In re Applications of Mercury PCS II, LLC, For Facilities in the Broadband Personal Communications Services in the D, E, and F Blocks, *Memorandum Opinion and Order on Reconsideration*, 12 FCC Rcd. 18,093 (Wireless Tel. Bur. 1997).

In the Matter of Applications of High Plains Wireless, L.P., For Authority to Construct and Operate Broadband PCS Systems on Frequency Blocks D, E, and F, *Memorandum Opinion and Order*, 12 FCC Rcd. 19,627 (Wireless Tel. Bur. 1997).

In the Matter of Applications of Mercury PCS II, LLC, For Authority to Construct and Operate Broadband PCS Systems on Frequency Blocks D, E, and F, *Memorandum Opinion and Order*, 13 FCC Rcd. 5756 (Wireless Tel. Bur. 1997).

1. Public Notices:

Wireless Telecommunications Bureau Clarifies Spectrum Auction Anti-Collusion Rules, *Public Notice*, 11 FCC Rcd. 9645 (1995).

FCC Staff Clarifies Application of Anti-Collusion Rule to Broadband PCS 'C' Block Reauction, *Public Notice*, 11 FCC Rcd. 7031 (1996).

Wireless Telecommunications Bureau Provides Guidance on the Anti-Collusion Rule for D, E and F Block Bidders, *Public Notice*, 11 FCC Rcd. 10,134 (1996).

Wireless Telecommunications Bureau Responds to Questions About the Local Multipoint Distribution Service Auction, *Public Notice*, DA 98-37 (rel. January 9, 1998).

2. Letters from the Office of General Counsel and the Wireless Telecommunications Bureau:

Letter to Gary M. Epstein and James H. Barker from William E. Kennard, General Counsel, Federal Communications Commission (released October 25, 1994).

Letter to Alan F. Ciamporcero from William E Kennard, General Counsel, Federal Communications Commission (released October 25, 1996).

Letter to R. Michael Senkowski from Rosalind K. Allen, Acting Chief, Commercial Radio Division, Wireless Telecommunications Bureau (released December 1, 1994).

Letter to Leonard J. Kennedy from Rosalind K. Allen, Acting Chief, Commercial Radio Division, Wireless

Telecommunications Bureau (released December 14, 1994).

Letter to Jonathan D. Blake and Robert J. Rini from Kathleen O'Brien Ham, Chief, Auctions Division, Wireless Telecommunications Bureau, DA 95-2404 (released November 28, 1995).

Letter to Mark Grady from Kathleen O'Brien Ham, Chief, Auctions Division, Wireless Telecommunications Bureau, 11 FCC Rcd. 10,895 (1996).

Letter to David L. Nace from Kathleen O'Brien Ham, Chief, Auctions Division, Wireless Telecommunications Bureau, 11 FCC Rcd. 11,363 (1996).

Letter to Elliott J. Greenwald from Christopher J. Wright, General Counsel, Federal Communications Commission (released April 6, 1998).

Letter to Robert Pettit, Wiley, Rein & Fielding from Margaret W. Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, DA 00-2905 (released December 26, 2000).

3. Civil Actions Initiated by U.S. Department of Justice:

U.S. v. Omnipoint Corp., Proposed Final Judgements and Competitive Impact Statements, Department of Justice, 63 FR 65,228 (November 25, 1998).

“Justice Department Sues Three Firms Over FCC Auction Practices,” *Press Release*, U.S. Department of Justice (November 10, 1998).

Complaint, *U.S. v. Omnipoint Corp.*, No. 1:98CV02750 (D.D.C. November 10, 1998).

Complaint, *U.S. v. Mercury PCS II, L.L.C.*, No. 1:98CV02751 (D.D.C. November 10, 1998).

Complaint, *U.S. v. 21st Century Bidding Corp.*, No. 1:98CV02752 (D.D.C. November 10, 1998).

How to Obtain Copies of the Anti-Collusion Decisions:

Many of the documents listed in this attachment can be retrieved from the following Commission web site: <http://wireless.fcc.gov/auctions/anticollusion>.

The documents may be located by using our search engine (select the link “search”). Documents retrieved from the web site are available in various formats including Word, WordPerfect, Acrobat Reader, Excel, and ASCII Text. To review a document in its entirety, including footnotes, it is necessary to access the document in WordPerfect, MS Word, or Acrobat Reader.

Additionally, all of these documents can be ordered in hard copy for a fee from the Commission’s contractor, Qualex International at (202) 863-2893.