



PUBLIC NOTICE

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NARROWBAND PCS SPECTRUM AUCTION SCHEDULED FOR OCTOBER 3, 2001

COMMENT SOUGHT ON RESERVE PRICES OR MINIMUM OPENING BIDS AND OTHER AUCTION PROCEDURAL ISSUES

Report No. AUC-01-41-A (Auction No. 41)

By this Public Notice, the Wireless Telecommunications Bureau (“Bureau”) announces the auction of 365 Personal Communications Service (PCS) licenses in the 900 MHz band (“narrowband PCS”) set to begin on October 3, 2001 (Auction No. 41).¹ In Auction No. 41, eight (8) licenses will be offered on a nationwide basis and seven (7) licenses will be offered in each of 51 Major Trading Areas (MTAs),² for a total of 357 MTA licenses. The following table describes the licenses that will be auctioned:

¹ See Amendment of the Commission’s Rules to Establish New Personal Communications Services, Narrowband PCS, GEN Docket No. 90-314, ET Docket No. 92-100, Implementation of Section 309(j) of the Communications Act – Competitive Bidding, Narrowband PCS, PP Docket No. 93-253, *Second Report and Order and Second Further Notice of Proposed Rulemaking*, 15 FCC Rcd 10456 (2000) (“*Narrowband PCS Second R&O/Second Further Notice*”); see also Amendment of the Commission’s Rules to Establish New Personal Communications Services, GEN Docket No. 90-314, ET Docket No. 92-100, Implementation of Section 309(J) of the Communications Act - Competitive Bidding, Narrowband PCS, PP Docket No. 93-253, *Third Report and Order and Order on Reconsideration*, FCC 01-135 (rel. May 3, 2001) (“*Narrowband PCS Third Report and Order/Order on Reconsideration*”).

² MTAs are based on the Rand McNally 1992 Commercial Atlas & Marketing Guide, 123rd Edition, at pages 38-39 (MTA Map). Rand McNally & Company has authorized interested parties to use MTAs under a blanket license agreement, which covers certain services, including narrowband PCS. Rand McNally organizes the 50 States and District of Columbia into 47 MTAs. For PCS licensing purposes, we adopted service areas that separated Alaska from the Seattle MTA and added five insular areas: Puerto Rico, U.S. Virgin Islands, Guam, Northern Mariana Islands and American Samoa. The MTA map is available for public inspection in the FCC’s Library, Room TW-B505, 445 12th Street SW, Washington, D.C.

Channel Number	Channel Description	Frequency Bands	Bandwidth (kHz)
Nationwide Licenses			
18	One 100 kHz unpaired channel	940.65 – 940.75 MHz	100 kHz
19	One 50 kHz/50 kHz paired channel	901.3 – 901.35, 930.5 – 930.55 MHz	100 kHz
20	One 50 kHz/50 kHz paired channel	901.9 – 901.95, 930.75 – 930.8 MHz	100 kHz
21	One 50 kHz/150 kHz paired channel	901.5 – 901.55, 930 – 930.15 MHz	200 kHz
22	One 50 kHz/150 kHz paired channel	901.6 – 901.65, 930.15 – 930.3 MHz	200 kHz
23	One 50 kHz/100 kHz paired channel	901.45 – 901.5, 940.55 – 940.65 MHz	150 kHz
24	One 50 kHz/100 kHz paired channel	901.55 – 901.6, 940.3 – 940.4 MHz	150 kHz
25	One 50 kHz/100 kHz paired channel	901.85 – 901.9, 940.45 – 940.55 MHz	150 kHz
Nationwide Subtotal			1,150 kHz
MTA Licenses			
26	One 50 kHz unpaired channel	901.35 – 901.4 MHz	50 kHz
27	One 50 kHz unpaired channel	901.4 – 901.45 MHz	50 kHz
28	One 50 kHz unpaired channel	940.4 – 940.45 MHz	50 kHz
*29	One 50 kHz/50 kHz paired channel	901.95 – 902.0, 930.8 – 930.85 MHz	100 kHz
30	One 50 kHz/100 kHz paired channel	901.65 – 901.7, 930.3 – 930.4 MHz	150 kHz
*31	One 50 kHz/150 kHz paired channel	901.7 – 901.75, 930.85 – 931 MHz	200 kHz
*32	One 12.5 kHz/100 kHz paired channel	901.8375 – 901.85, 940.9 – 941 MHz	112.5 kHz
MTA Subtotal			712.5 kHz
Grand Total			1,862.5 kHz

*NBPCS channels 29, 31, and 32 in MTA002 (Los Angeles-San Diego) will be available subject to protection of incumbent licenses held by Paging Systems, Inc. under call signs WPOI469, WPOI470, WPOI471, and WPOI472. See In the Matter of License Communications Services, Inc. *et al.*, *Memorandum Opinion and Order*, 12 FCC Rcd 16,436 (1998).

The Balanced Budget Act of 1997 requires the Commission to “ensure that, in the scheduling of any competitive bidding under this subsection, an adequate period is allowed . . . before issuance of bidding rules, to permit notice and comment on proposed auction procedures”³ Consistent with the provisions of the Balanced Budget Act and to ensure that potential bidders have adequate time to familiarize themselves with the specific rules that will govern the day-to-day conduct of an auction, the Commission directed the Bureau, under its existing delegated authority,⁴ to seek comment on a variety of auction-specific procedures prior to the start of each auction.⁵ We therefore seek comment on the following issues relating to Auction No. 41.

³ See 47 U.S.C. § 309(j) (as amended by Section 3002(a)(E)(i), Balanced Budget Act of 1997, Pub. L. 105-33, 111 Stat. 251 (1997) (“Balanced Budget Act”).

⁴ See 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, ¶ 16 (1997) (“*Part 1 Order*”) (“We also clarify that pursuant to Section 0.131 of our rules, the Chief, Wireless Telecommunications Bureau, has delegated authority to implement all of the Commission’s rules pertaining to auctions procedures.”).

⁵ 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, 448, ¶ 124 (1998) (“*Part 1 Third Report and Order*”). The Commission directed the Bureau to seek comment on specific mechanisms related to day-to-day auction conduct including, for example, the structure of

I. Auction Structure

A. Simultaneous Multiple Round Auction Design

We propose to award the licenses in a single, simultaneous multiple-round auction. As described further below, this methodology offers every license for bid at the same time with successive bidding rounds in which bidders may place bids. We seek comment on this proposal.

B. Upfront Payments and Initial Maximum Eligibility

The Bureau has been delegated authority and discretion to determine an appropriate upfront payment for each license being auctioned, taking into account such factors as the population in each geographic license area, and the value of similar spectrum.⁶ As described further below, the upfront payment is a refundable deposit made by each bidder to establish eligibility to bid on licenses. Upfront payments related to the specific spectrum subject to auction protect against frivolous or insincere bidding and provide the Commission with a source of funds from which to collect payments owed at the close of the auction.⁷ With these guidelines in mind for Auction No. 41, we propose to calculate upfront payments on a license-by-license basis using the following formula:

$$\$0.00002 * \text{kHz} * \text{License Area Population}^8 \text{ with a minimum of } \$1,000 \text{ per license.}^9$$

Accordingly, we list all licenses, including the related license area population and proposed upfront payment for each, in Attachment A. We seek comment on this proposal.

We further propose that the amount of the upfront payment submitted by a bidder will determine the number of bidding units on which a bidder may place bids – this limit is a bidder’s “maximum initial eligibility.” 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. This number does not change as prices rise during the auction. A bidder’s upfront payment is not attributed to specific licenses. Rather, a bidder may place bids on any combination of licenses as long as the total number of bidding units associated with those licenses does not exceed its maximum initial eligibility. Eligibility cannot be increased during the auction. Thus, in calculating its upfront payment amount, an applicant must determine the *maximum* number of bidding units it may wish to bid on (or hold high bids on) in any single round, and submit an upfront payment covering that number of bidding units. We seek comment on this proposal.

bidding rounds and stages, establishment of minimum opening bids or reserve prices, minimum accepted bids, initial maximum eligibility for each bidder, activity requirements for each stage of the auction, activity rule waivers, criteria for determining reductions in eligibility, information regarding bid withdrawal and bid removal, stopping rules, and information relating to auction delay, suspension or cancellation. *Id.* at ¶ 125.

⁶ See *Part 1 Order*, 12 FCC Rcd at 5697-98, ¶ 16 (1997); see also *Part 1 Third Report and Order*, 13 FCC Rcd at 425, ¶ 86.

⁷ See Implementation of Section 309(j) of the Communications Act - Competitive Bidding, PP Docket No. 93-253, *Second Report and Order*, 9 FCC Rcd 2348, 2378-79, ¶¶ 171-176 (1994).

⁸ All population figures are from the 4/1/90 U.S. Census, U.S. Department of Commerce, Bureau of the Census.

⁹ Results below \$10,000 are rounded to the nearest hundred; results above \$10,000 are rounded to the nearest thousand.

C. Activity Rules

In order to ensure that the auction closes within a reasonable period of time, an activity rule requires bidders to bid actively on a percentage of their maximum bidding eligibility during each round of the auction rather than waiting until the end to participate. A bidder that does not satisfy the activity rule will either lose bidding eligibility in the next round or must use an activity rule waiver (if any remain).

We propose to divide the auction into three stages, each characterized by an increased activity requirement. The auction will start in Stage One. We propose that the auction generally will advance to the next stage (i.e., from Stage One to Stage Two, and from Stage Two to Stage Three) when the auction activity level, as measured by the percentage of bidding units receiving new high bids, is approximately ten percent or below for three consecutive rounds of bidding. However, we further propose that the Bureau retain the discretion to change stages unilaterally by announcement during the auction. In exercising this discretion, the Bureau will consider a variety of measures of bidder activity, including, but not limited to, the auction activity level, the percentage of licenses (as measured in bidding units) on which there are new bids, the number of new bids, and the percentage increase in revenue. We seek comment on these proposals.

For Auction No. 41, we propose the following activity requirements:

Stage One: In each round of the first stage of the auction, a bidder desiring to maintain its current eligibility is required to be active on licenses representing at least 80 percent of its current bidding eligibility. Failure to maintain the requisite activity level will result in a reduction in the bidder's bidding eligibility in the next round of bidding (unless an activity rule waiver is used). During Stage One, reduced eligibility for the next round will be calculated by multiplying the current round activity by five-fourths (5/4).

Stage Two: In each round of the second stage, a bidder desiring to maintain its current eligibility is required to be active on 90 percent of its current bidding eligibility. During Stage Two, reduced eligibility for the next round will be calculated by multiplying the current round activity by ten-ninths (10/9).

Stage Three: In each round of the third stage, a bidder desiring to maintain its current eligibility is required to be active on 98 percent of its current bidding eligibility. In this final stage, reduced eligibility for the next round will be calculated by multiplying the current round activity by fifty/forty-ninths (50/49).

We seek comment on these proposals. If commenters believe that these activity rules should be changed, they should explain their reasoning and comment on the desirability of an alternative approach. Commenters are advised to support their claims with analyses and suggested alternative activity rules.

D. Activity Rule Waivers and Reducing Eligibility

Use of an activity rule waiver preserves the bidder's current bidding eligibility despite the bidder's 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. Activity waivers are principally a mechanism for auction participants to avoid the loss of auction eligibility in the event that exigent circumstances prevent them from placing a bid in a particular round.

The FCC auction system assumes that bidders with insufficient activity would prefer to use an activity rule waiver (if available) rather than lose bidding eligibility. Therefore, the system will automatically apply a waiver (known as an "automatic waiver") at the end of any bidding period where a bidder's activity level 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 activity may wish to reduce its bidding eligibility rather than use an activity rule waiver. If so, the bidder must affirmatively override the automatic waiver mechanism during the bidding period by using the reduce eligibility function in the bidding system. In this case, the bidder's eligibility is permanently reduced to bring the bidder into compliance with the activity rules as described above. Once eligibility has been reduced, a bidder will not be permitted to regain its lost bidding eligibility.

A bidder may proactively use an activity rule waiver as a means to keep the auction open without placing a bid. If a bidder submits a proactive waiver (using the proactive waiver function in the bidding system) during a bidding period in which no bids or withdrawals are submitted, the auction will remain open and the bidder's eligibility will be preserved. An automatic waiver invoked in a round in which there are no new valid bids or withdrawals will not keep the auction open.

We propose that each bidder in Auction No. 41 be provided with five activity rule waivers that may be used at the bidder's discretion during the course of the auction as set forth above. We seek comment on this proposal.

E. Information Relating to Auction Delay, Suspension, or Cancellation

For Auction No. 41, we propose that, 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.¹⁰ 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. We seek comment on this proposal.

II. Bidding Procedures

A. Round Structure

The Commission will use its Automated Auction System to conduct the electronic simultaneous multiple round auction format for Auction No. 41. In contrast to prior auctions, Auction No. 41 will be conducted over the Internet. However, the Bureau's wide area network will be available at the standard charge, as in prior auctions. Prospective bidders concerned about their access to the Internet may want to establish a connection to the Bureau's wide area network as a backup. Full information regarding how to establish such a connection, and related charges, will be provided in the public notice announcing details of auction procedures. In past auctions, we have used the timing of bids to select a high bidder when multiple bidders submit identical high bids on a license in a given round. Given that bidders will access the Internet at differing speeds, we will not use this procedure in Auction No. 41. For Auction No. 41, we propose to use a random number generator to select a high bidder from among such bidders.¹¹ As with prior auctions, remaining bidders will be able to submit higher bids in subsequent rounds. The initial bidding schedule will be announced in a public notice to be released at least one week before the start of the auction, and will be included in the registration mailings. The simultaneous multiple round format will consist of sequential

¹⁰ See 47 C.F.R. § 1.2104(i).

¹¹ To ensure randomness, we will use a National Institute of Standards and Technology ("NIST") tested pseudorandom generator.

bidding rounds, each followed by the release of round results. Details regarding the location and format of round results will be included in the same public notice.

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. We seek comment on this proposal.

B. Reserve Price or Minimum Opening Bid

The Balanced Budget Act calls upon the Commission to prescribe methods for establishing a reasonable reserve price or a minimum opening bid when FCC licenses are subject to auction unless the Commission determines that a reserve price or minimum bid is not in the public interest.¹² Consistent with this mandate, the Commission has 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.¹³

Normally, a reserve price is an absolute minimum price below which an item will not be sold in a given auction. Reserve prices can be either published or unpublished. A minimum opening bid, on the other hand, is the minimum bid price set at the beginning of the auction below which *no bids* are accepted. It is generally used to accelerate the competitive bidding process. Also, the auctioneer often has the discretion to lower the minimum opening bid amount later in the auction. It is also possible for the minimum opening bid and the reserve price to be the same amount.

In light of the Balanced Budget Act's requirements, the Bureau proposes to establish minimum opening bids for Auction No. 41. The Bureau believes a minimum opening bid, which has been utilized in other auctions, is an effective bidding tool.¹⁴

Specifically, for Auction No. 41, the Commission proposes the following license-by-license formula for calculating minimum opening bids:

$$\$0.00004 * \text{kHz} * \text{License Area Population}^{15} \text{ with a minimum of } \$1,000 \text{ per license.}^{16}$$

The specific minimum opening bid for each license available in Auction No. 41 is set forth in Attachment A herein. Comment is sought on this proposal. If commenters believe that these minimum opening bids will result in substantial numbers of unsold licenses, or are not reasonable amounts, or should instead operate as reserve prices, they should explain why this is so, and comment on the desirability of an alternative approach. Commenters are advised to support their claims with valuation analyses and

¹² See 47 U.S.C. § 309(j) (as amended by Budget Act, Section 3002(a)). The Commission's authority to establish a reserve price or minimum opening bid is set forth in 47 C.F.R. § 1.2104(c) and (d).

¹³ See *Part 1 Third Report and Order*, 13 FCC Rcd at 454-455, ¶ 141.

¹⁴ See, e.g., Auction of 800 MHz SMR Upper 10 MHz Band, Minimum Opening Bids or Reserve Prices, DA 97-2147, *Order*, 12 FCC Rcd 16354 (1997); Auction of the Phase II 220 MHz Service Licenses, Auction Notice and Filing Requirements for 908 Licenses Consisting of Economic Area (EA), Economic Area Grouping (EAG), and Nationwide Licenses, Scheduled for September 15, 1998, Minimum Opening Bids and Other Procedural Issues, DA 98-1010 *Public Notice*, 13 FCC Rcd 16445 (1998).

¹⁵ All population figures are from the 4/1/90 U.S. Census, U.S. Department of Commerce, Bureau of the Census.

¹⁶ Results below \$10,000 are rounded to the nearest hundred; results above \$10,000 are rounded to the nearest thousand.

suggested reserve prices or minimum opening bid levels or formulas. In establishing the minimum opening bids, we particularly seek comment on such factors as the amount of spectrum being auctioned, levels of incumbency, the availability of technology to provide service, the size of the geographic service areas, issues of interference with other spectrum bands and any other relevant factors that could reasonably have an impact on valuation of the narrowband PCS spectrum. Alternatively, comment is sought on whether, consistent with the Balanced Budget Act, the public interest would be served by having no minimum opening bid or reserve price.

C. Minimum Acceptable Bids and Bid Increments

In each round, eligible bidders will be able to place bids on a given license in any of nine different amounts.¹⁷ The Automated Auction System interface will list the nine acceptable bid amounts for each license. Once there is a standing high bid on a license, the Automated Auction System will calculate a minimum acceptable bid for that license for the following round, as described below. The difference between the minimum acceptable bid and the standing high bid for each license will define the *bid increment*. The nine acceptable bid amounts for each license consist of the minimum acceptable bid (the standing high bid plus one bid increment) and additional amounts calculated using multiple bid increments (i.e., the second bid amount equals the standing high bid plus two times the bid increment, the third bid amount equals the standing high bid plus three times the bid increment, etc.).

Until a bid has been placed on a license, the minimum acceptable bid for that license will be equal to its minimum opening bid. The additional bid amounts for licenses that have not yet received a bid will be calculated differently, as explained below.

For Auction No. 41, we propose to calculate minimum acceptable bids by using a smoothing methodology, as we have done in several other auctions. The smoothing formula calculates minimum acceptable bids by first calculating a *percentage increment*, not to be confused with the *bid increment*, for each license based on a weighted average of the activity received on each license in all previous rounds. This methodology tailors the percentage increment for each license based on activity, rather than setting a global increment for all licenses.

In a given round, the calculation of the percentage increment for each license is made at the end of the previous round. The computation is based on an activity index, which is calculated as the weighted average of the activity in that round and the activity index from the prior round. The activity index at the start of the auction (round 0) will be set at 0. The current activity index is equal to a weighting factor times the number of new bids received on the license in the most recent bidding round plus one minus the weighting factor times the activity index from the prior round. The activity index is then used to calculate a percentage increment by multiplying a minimum percentage increment by one plus the activity index with that result being subject to a maximum percentage increment. The Commission will initially set the weighting factor at 0.5, the minimum percentage increment at 0.1 (10%), and the maximum percentage increment at 0.2 (20%).

Equations

$$A_i = (C * B_i) + ((1-C) * A_{i-1})$$

$$I_{i+1} = \text{smaller of } ((1 + A_i) * N) \text{ and } M$$

$$X_{i+1} = I_{i+1} * Y_i$$

where,

A_i = activity index for the current round (round i)

¹⁷ Bidders must have sufficient eligibility to place a bid on the particular license. See Section I(B) (“Upfront Payments and Initial Maximum Eligibility”), *supra*.

C = activity weight factor

B_i = number of bids in the current round (round i)

A_{i-1} = activity index from previous round (round i-1), A_0 is 0

I_{i+1} = percentage increment for the next round (round i+1)

N = minimum percentage increment or percentage increment floor

M = maximum percentage increment or percentage increment ceiling

X_{i+1} = dollar amount associated with the percentage increment

Y_i = high bid from the current round

Under the smoothing methodology, once a bid has been received on a license, the minimum acceptable bid for that license in the following round will be the high bid from the current round plus the dollar amount associated with the percentage increment, with the result rounded to the nearest thousand if it is over ten thousand or to the nearest hundred if it is under ten thousand.

Examples

License 1

C=0.5, N = 0.1, M = 0.2

Round 1 (2 new bids, high bid = \$1,000,000)

1. Calculation of percentage increment for round 2 using the smoothing formula:

$$A_1 = (0.5 * 2) + (0.5 * 0) = 1$$

$$I_2 = \text{The smaller of } ((1 + 1) * 0.1) = 0.2 \text{ or } 0.2 \text{ (the maximum percentage increment)}$$

2. Calculation of dollar amount associated with the percentage increment for round 2 (using I_2 from above):

$$X_2 = 0.2 * \$1,000,000 = \$200,000$$

3. Minimum acceptable bid for round 2 = \$1,200,000

Round 2 (3 new bids, high bid = \$2,000,000)

1. Calculation of percentage increment for round 3 using the smoothing formula:

$$A_2 = (0.5 * 3) + (0.5 * 1) = 2$$

$$I_3 = \text{The smaller of } ((1 + 2) * 0.1) = 0.3 \text{ or } 0.2 \text{ (the maximum percentage increment)}$$

2. Calculation of dollar amount associated with the percentage increment for round 3 (using I_3 from above):

$$X_3 = 0.2 * \$2,000,000 = \$400,000$$

3. Minimum acceptable bid for round 3 = \$2,400,000

Round 3 (1 new bid, high bid = \$2,400,000)

1. Calculation of percentage increment for round 4 using the smoothing formula:

$$A_3 = (0.5 * 1) + (0.5 * 2) = 1.5$$

$$I_4 = \text{The smaller of } ((1 + 1.5) * 0.1) = 0.25 \text{ or } 0.2 \text{ (the maximum percentage increment)}$$

2. Calculation of dollar amount associated with the percentage increment for round 4 (using I_4 from above):

$$X_4 = 0.2 * \$2,400,000 = \$480,000$$

3. Minimum acceptable bid for round 4 = \$2,880,000

As stated above, until a bid has been placed on a license, the minimum acceptable bid for that license will be equal to its minimum opening bid. The additional bid amounts are calculated using the difference between the minimum opening bid times one plus the minimum percentage increment, rounded as described above, and the minimum opening bid. That is, $I = (\text{minimum opening bid})(1 + N)\{\text{rounded}\} - (\text{minimum opening bid})$. Therefore, when N equals 0.1, the first additional bid amount will be approximately ten percent higher than the minimum opening bid; the second, twenty percent; the third, thirty percent; etc.

In the case of a license for which the standing high bid has been withdrawn,¹⁸ the minimum acceptable bid will equal the second highest bid received for the license. The additional bid amounts are calculated using the difference between the second highest bid times one plus the minimum percentage increment, rounded, and the second highest bid.

The Bureau retains the discretion to change the minimum acceptable bids and bid increments if it determines that circumstances so dictate. The Bureau will do so by announcement in the Automated Auction System. We seek comment on these proposals.

D. Information Regarding Bid Withdrawal and Bid Removal

For Auction No. 41, we propose the following bid removal and bid withdrawal procedures. Before the close of a bidding period, a bidder has the option of removing any bid placed in that round. By using the remove selected bids function in the bidding system, a bidder may effectively “unsubmit” any bid placed within that round. A bidder removing a bid placed in the same round is not subject to a withdrawal payment.

Once a round closes, a bidder may no longer remove a bid. However, in any subsequent round, a high bidder may withdraw its standing high bids from previous rounds using the withdraw function in the bidding system. A high bidder that withdraws its standing high bid from a previous round is subject to the bid withdrawal payment provisions of the Commission rules.¹⁹ We seek comment on these bid removal and bid withdrawal procedures.

In the *Part 1 Third Report and Order*, the Commission explained that allowing bid withdrawals facilitates efficient aggregation of licenses and the pursuit of efficient backup strategies as information becomes available during the course of an auction. The Commission noted, however, that, in some instances, bidders may seek to withdraw bids for improper reasons. The Bureau, therefore, has discretion, in managing the auction, to limit the number of withdrawals to prevent any bidding abuses. The Commission stated that the Bureau should assertively exercise its discretion, consider limiting the number of rounds in which bidders may withdraw bids, and prevent bidders from bidding on a particular market if the Bureau finds that a bidder is abusing the Commission’s bid withdrawal procedures.²⁰

Applying this reasoning, we propose to limit each bidder in Auction No. 41 to withdrawing standing high bids in no more than two rounds during the course of the auction. To permit a bidder to withdraw bids in more than two rounds would likely encourage insincere bidding or the use of withdrawals for anti-competitive purposes. The two rounds in which withdrawals are utilized will be at the bidder’s discretion; withdrawals otherwise must be in accordance with the Commission’s rules. There is no limit on the number of standing high bids that may be withdrawn in either of the rounds in which withdrawals are

¹⁸ See Section II(D) “Information Regarding Bid Withdrawal and Bid Removal,” *infra*.

¹⁹ See 47 C.F.R. §§ 1.2104(g), 1.2109.

²⁰ *Part 1 Third Report and Order*, 13 FCC Rcd at 460, ¶ 150.

utilized. Withdrawals will remain subject to the bid withdrawal payment provisions specified in the Commission's rules. We seek comment on this proposal.

E. Stopping Rule

For Auction No. 41, the Bureau proposes to employ a simultaneous stopping rule approach. The Bureau has discretion "to establish stopping rules before or during multiple round auctions in order to terminate the auction within a reasonable time."²¹ A simultaneous stopping rule means that all licenses remain open until the first round in which no new acceptable bids, proactive waivers, or withdrawals are received. After the first such round, bidding closes simultaneously on all licenses. Thus, unless circumstances dictate otherwise, bidding would remain open on all licenses until bidding stops on every license.

However, the Bureau proposes to retain the discretion to exercise any of the following options during Auction No. 41:

1. Utilize a modified version of the simultaneous stopping rule. The modified stopping rule would close the auction for all licenses after the first round in which no bidder submits a proactive waiver, withdrawal, or a new bid on any license on which it is not the standing high bidder. Thus, absent any other bidding activity, a bidder placing a new bid on a license for which it is the standing high bidder would not keep the auction open under this modified stopping rule. The Bureau further seeks comment on whether this modified stopping rule should be used at any time or only in stage three of the auction.
2. Keep the auction open even if no new acceptable bids or proactive waivers are submitted and no previous high bids are withdrawn. In this event, the effect will be the same as if a bidder had submitted a proactive waiver. The activity rule, therefore, will apply as usual, and a bidder with insufficient activity will either lose bidding eligibility or use a remaining activity rule waiver.
3. Declare that the auction will end after a specified number of additional rounds ("special stopping rule"). If the Bureau invokes this special stopping rule, it will accept bids in the specified final round(s) only for licenses on which the high bid increased in at least one of the preceding specified number of rounds.

The Bureau proposes to exercise these options 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 these options, the Bureau is likely to attempt to increase the pace of the auction by, for example, increasing the number of bidding rounds per day, and/or increasing the amount of the minimum bid increments for the limited number of licenses where there is still a high level of bidding activity. We seek comment on these proposals.

III. Conclusion

Comments are due on or before June 25, 2001, and reply comments are due on or before July 2, 2001. An original and four copies of all pleadings must be filed with the Commission's Secretary, Magalie Roman Salas, Office of the Secretary, Federal Communications Commission, Room TW-A325, 445 Twelfth Street, SW, Washington, DC 20554, in accordance with Section 1.51(c) of the Commission's rules²². In addition, one copy of each pleading must be delivered to each of the following locations: (1) the Commission's duplicating contractor, International Transcription Service, Inc. (ITS), 1231 20th Street, N.W., Washington, DC 20036; (2) Office of Media Relations, Public Reference Center, Room CY-A257, 445 Twelfth Street, SW, Washington, DC 20554; (3) Rana Shuler, Auctions and Industry Analysis Division, Wireless

²¹ See 47 C.F.R. § 1.2104(e).

²² See 47 C.F.R. § 1.51(c). Comments should not be filed using the Commission's Electronic Comment Filing System.

Telecommunications Bureau, Room 4-A628, 445 Twelfth Street, SW, Washington, DC 20554. Comments and reply comments will be available for public inspection during regular business hours in the FCC Public Reference Room, Room CY-A257, 445 12th Street, SW, Washington, DC 20554.

This proceeding has been designated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.²³ Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentations must contain summaries of the substance of the presentations and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.²⁴ Other rules pertaining to oral and written *ex parte* presentations in permit-but-disclose proceedings are set forth in Section 1.1206(b) of the Commission’s rules.²⁵

For further information concerning this proceeding, contact the Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Howard Davenport, Auctions Attorney, or Lyle Ishida, Auctions Analyst, at (202) 418-0660; or Lisa Stover, Project Manager, at (717) 338-2888.

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²³ See 47 C.F.R. §§ 1.1200(a), 1.1206.

²⁴ See 47 C.F.R. § 1.1206(b).

²⁵ See 47 C.F.R. § 1.1206(b).

**Auction #41 - Narrowband PCS
Attachment A (Corrected)**

Market No.	Market Name	License Number	Channel No.	Frequencies (MHz)	Band-width (KHz)	Population	Bidding Units	Upfront Payment	Minimum Opening Bid
Nationwide Licenses									
NWA255	Nationwide	CNNWA25518	18	940.65 - 940.75	100	252,556,989	505,000	\$505,000	\$1,010,000
NWA255	Nationwide	CNNWA25519	19	901.3 - 901.35 and 930.5 - 930.55	100	252,556,989	505,000	\$505,000	\$1,010,000
NWA255	Nationwide	CNNWA25520	20	901.9 - 901.95 and 930.75 - 930.8	100	252,556,989	505,000	\$505,000	\$1,010,000
NWA255	Nationwide	CNNWA25521	21	901.5 - 901.55 and 930.0 and 930.15	200	252,556,989	1,010,000	\$1,010,000	\$2,020,000
NWA255	Nationwide	CNNWA25522	22	901.6 - 901.65 and 930.15 and 930.3	200	252,556,989	1,010,000	\$1,010,000	\$2,020,000
NWA255	Nationwide	CNNWA25523	23	901.45 - 901.5 and 940.55 - 940.65	150	252,556,989	758,000	\$758,000	\$1,515,000
NWA255	Nationwide	CNNWA25524	24	901.55 - 901.6 and 940.3 - 940.4	150	252,556,989	758,000	\$758,000	\$1,515,000
NWA255	Nationwide	CNNWA25525	25	901.85 - 901.9 and 940.45 - 940.55	150	252,556,989	758,000	\$758,000	\$1,515,000
Nationwide Totals							5,809,000	\$5,809,000	\$11,615,000
Major Trading Area (MTA) Licenses									
MTA001	New York	CNMTA00126	26	901.35 - 901.4 MHz	50.0	26,410,597	26,000	\$26,000	\$53,000
MTA001	New York	CNMTA00127	27	901.4 - 901.45 MHz	50.0	26,410,597	26,000	\$26,000	\$53,000
MTA001	New York	CNMTA00128	28	940.4 - 940.45 MHz	50.0	26,410,597	26,000	\$26,000	\$53,000
MTA001	New York	CNMTA00129	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	26,410,597	53,000	\$53,000	\$106,000
MTA001	New York	CNMTA00130	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	26,410,597	79,000	\$79,000	\$158,000
MTA001	New York	CNMTA00131	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	26,410,597	106,000	\$106,000	\$211,000
MTA001	New York	CNMTA00132	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	26,410,597	59,000	\$59,000	\$119,000
MTA002	Los Angeles-San Diego	CNMTA00226	26	901.35 - 901.4 MHz	50.0	19,145,232	19,000	\$19,000	\$38,000
MTA002	Los Angeles-San Diego	CNMTA00227	27	901.4 - 901.45 MHz	50.0	19,145,232	19,000	\$19,000	\$38,000
MTA002	Los Angeles-San Diego	CNMTA00228	28	940.4 - 940.45 MHz	50.0	19,145,232	19,000	\$19,000	\$38,000
MTA002	Los Angeles-San Diego	CNMTA00229	29	901.95 - 902.0 MHz	50.0	19,145,232	19,000	\$19,000	\$38,000
MTA002	Los Angeles-San Diego	CNMTA00230	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	19,145,232	57,000	\$57,000	\$115,000
MTA002	Los Angeles-San Diego	CNMTA00231	31	901.7 - 901.75 MHz and 930.85 - 930.9 and 930.95 - 931.0 MHz	150.0	19,145,232	57,000	\$57,000	\$115,000
MTA002	Los Angeles-San Diego	CNMTA00232	32	901.8375 - 901.85 MHz and 940.975 - 941.0 MHz	37.5	19,145,232	14,000	\$14,000	\$29,000
MTA003	Chicago	CNMTA00326	26	901.35 - 901.4 MHz	50.0	12,069,700	12,000	\$12,000	\$24,000
MTA003	Chicago	CNMTA00327	27	901.4 - 901.45 MHz	50.0	12,069,700	12,000	\$12,000	\$24,000
MTA003	Chicago	CNMTA00328	28	940.4 - 940.45 MHz	50.0	12,069,700	12,000	\$12,000	\$24,000
MTA003	Chicago	CNMTA00329	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	12,069,700	24,000	\$24,000	\$48,000
MTA003	Chicago	CNMTA00330	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	12,069,700	36,000	\$36,000	\$72,000
MTA003	Chicago	CNMTA00331	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	12,069,700	48,000	\$48,000	\$97,000
MTA003	Chicago	CNMTA00332	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	12,069,700	27,000	\$27,000	\$54,000
MTA004	San Francisco-Oakland-San Jose	CNMTA00426	26	901.35 - 901.4 MHz	50.0	11,891,177	12,000	\$12,000	\$24,000

**Auction #41 - Narrowband PCS
Attachment A (Corrected)**

Market No.	Market Name	License Number	Channel No.	Frequencies (MHz)	Bandwidth (KHz)	Population	Bidding Units	Upfront Payment	Minimum Opening Bid
MTA004	San Francisco-Oakland-San Jose	CNMTA00427	27	901.4 - 901.45 MHz	50.0	11,891,177	12,000	\$12,000	\$24,000
MTA004	San Francisco-Oakland-San Jose	CNMTA00428	28	940.4 - 940.45 MHz	50.0	11,891,177	12,000	\$12,000	\$24,000
MTA004	San Francisco-Oakland-San Jose	CNMTA00429	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	11,891,177	24,000	\$24,000	\$48,000
MTA004	San Francisco-Oakland-San Jose	CNMTA00430	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	11,891,177	36,000	\$36,000	\$71,000
MTA004	San Francisco-Oakland-San Jose	CNMTA00431	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	11,891,177	48,000	\$48,000	\$95,000
MTA004	San Francisco-Oakland-San Jose	CNMTA00432	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	11,891,177	27,000	\$27,000	\$54,000
MTA005	Detroit	CNMTA00526	26	901.35 - 901.4 MHz	50.0	10,001,009	10,000	\$10,000	\$20,000
MTA005	Detroit	CNMTA00527	27	901.4 - 901.45 MHz	50.0	10,001,009	10,000	\$10,000	\$20,000
MTA005	Detroit	CNMTA00528	28	940.4 - 940.45 MHz	50.0	10,001,009	10,000	\$10,000	\$20,000
MTA005	Detroit	CNMTA00529	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	10,001,009	20,000	\$20,000	\$40,000
MTA005	Detroit	CNMTA00530	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	10,001,009	30,000	\$30,000	\$60,000
MTA005	Detroit	CNMTA00531	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	10,001,009	40,000	\$40,000	\$80,000
MTA005	Detroit	CNMTA00532	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	10,001,009	23,000	\$23,000	\$45,000
MTA006	Charlotte-Greensboro-Greenville-Raleigh	CNMTA00626	26	901.35 - 901.4 MHz	50.0	9,752,317	9,800	\$9,800	\$20,000
MTA006	Charlotte-Greensboro-Greenville-Raleigh	CNMTA00627	27	901.4 - 901.45 MHz	50.0	9,752,317	9,800	\$9,800	\$20,000
MTA006	Charlotte-Greensboro-Greenville-Raleigh	CNMTA00628	28	940.4 - 940.45 MHz	50.0	9,752,317	9,800	\$9,800	\$20,000
MTA006	Charlotte-Greensboro-Greenville-Raleigh	CNMTA00629	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	9,752,317	20,000	\$20,000	\$39,000
MTA006	Charlotte-Greensboro-Greenville-Raleigh	CNMTA00630	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	9,752,317	29,000	\$29,000	\$59,000
MTA006	Charlotte-Greensboro-Greenville-Raleigh	CNMTA00631	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	9,752,317	39,000	\$39,000	\$78,000
MTA006	Charlotte-Greensboro-Greenville-Raleigh	CNMTA00632	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	9,752,317	22,000	\$22,000	\$44,000
MTA007	Dallas-Fort Worth	CNMTA00726	26	901.35 - 901.4 MHz	50.0	9,694,157	9,700	\$9,700	\$19,000
MTA007	Dallas-Fort Worth	CNMTA00727	27	901.4 - 901.45 MHz	50.0	9,694,157	9,700	\$9,700	\$19,000
MTA007	Dallas-Fort Worth	CNMTA00728	28	940.4 - 940.45 MHz	50.0	9,694,157	9,700	\$9,700	\$19,000
MTA007	Dallas-Fort Worth	CNMTA00729	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	9,694,157	19,000	\$19,000	\$39,000
MTA007	Dallas-Fort Worth	CNMTA00730	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	9,694,157	29,000	\$29,000	\$58,000
MTA007	Dallas-Fort Worth	CNMTA00731	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	9,694,157	39,000	\$39,000	\$78,000
MTA007	Dallas-Fort Worth	CNMTA00732	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	9,694,157	22,000	\$22,000	\$44,000
MTA008	Boston-Providence	CNMTA00826	26	901.35 - 901.4 MHz	50.0	9,452,712	9,500	\$9,500	\$19,000
MTA008	Boston-Providence	CNMTA00827	27	901.4 - 901.45 MHz	50.0	9,452,712	9,500	\$9,500	\$19,000
MTA008	Boston-Providence	CNMTA00828	28	940.4 - 940.45 MHz	50.0	9,452,712	9,500	\$9,500	\$19,000
MTA008	Boston-Providence	CNMTA00829	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	9,452,712	19,000	\$19,000	\$38,000
MTA008	Boston-Providence	CNMTA00830	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	9,452,712	28,000	\$28,000	\$57,000
MTA008	Boston-Providence	CNMTA00831	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	9,452,712	38,000	\$38,000	\$76,000
MTA008	Boston-Providence	CNMTA00832	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	9,452,712	21,000	\$21,000	\$43,000
MTA009	Philadelphia	CNMTA00926	26	901.35 - 901.4 MHz	50.0	8,927,748	8,900	\$8,900	\$18,000
MTA009	Philadelphia	CNMTA00927	27	901.4 - 901.45 MHz	50.0	8,927,748	8,900	\$8,900	\$18,000
MTA009	Philadelphia	CNMTA00928	28	940.4 - 940.45 MHz	50.0	8,927,748	8,900	\$8,900	\$18,000
MTA009	Philadelphia	CNMTA00929	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	8,927,748	18,000	\$18,000	\$36,000

**Auction #41 - Narrowband PCS
Attachment A (Corrected)**

Market No.	Market Name	License Number	Channel No.	Frequencies (MHz)	Bandwidth (KHz)	Population	Bidding Units	Upfront Payment	Minimum Opening Bid
MTA009	Philadelphia	CNMTA00930	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	8,927,748	27,000	\$27,000	\$54,000
MTA009	Philadelphia	CNMTA00931	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	8,927,748	36,000	\$36,000	\$71,000
MTA009	Philadelphia	CNMTA00932	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	8,927,748	20,000	\$20,000	\$40,000
MTA010	Washington-Baltimore	CNMTA01026	26	901.35 - 901.4 MHz	50.0	7,777,875	7,800	\$7,800	\$16,000
MTA010	Washington-Baltimore	CNMTA01027	27	901.4 - 901.45 MHz	50.0	7,777,875	7,800	\$7,800	\$16,000
MTA010	Washington-Baltimore	CNMTA01028	28	940.4 - 940.45 MHz	50.0	7,777,875	7,800	\$7,800	\$16,000
MTA010	Washington-Baltimore	CNMTA01029	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	7,777,875	16,000	\$16,000	\$31,000
MTA010	Washington-Baltimore	CNMTA01030	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	7,777,875	23,000	\$23,000	\$47,000
MTA010	Washington-Baltimore	CNMTA01031	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	7,777,875	31,000	\$31,000	\$62,000
MTA010	Washington-Baltimore	CNMTA01032	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	7,777,875	18,000	\$18,000	\$35,000
MTA011	Atlanta	CNMTA01126	26	901.35 - 901.4 MHz	50.0	6,942,084	6,900	\$6,900	\$14,000
MTA011	Atlanta	CNMTA01127	27	901.4 - 901.45 MHz	50.0	6,942,084	6,900	\$6,900	\$14,000
MTA011	Atlanta	CNMTA01128	28	940.4 - 940.45 MHz	50.0	6,942,084	6,900	\$6,900	\$14,000
MTA011	Atlanta	CNMTA01129	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	6,942,084	14,000	\$14,000	\$28,000
MTA011	Atlanta	CNMTA01130	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	6,942,084	21,000	\$21,000	\$42,000
MTA011	Atlanta	CNMTA01131	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	6,942,084	28,000	\$28,000	\$56,000
MTA011	Atlanta	CNMTA01132	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	6,942,084	16,000	\$16,000	\$31,000
MTA012	Minneapolis-St. Paul	CNMTA01226	26	901.35 - 901.4 MHz	50.0	5,986,039	6,000	\$6,000	\$12,000
MTA012	Minneapolis-St. Paul	CNMTA01227	27	901.4 - 901.45 MHz	50.0	5,986,039	6,000	\$6,000	\$12,000
MTA012	Minneapolis-St. Paul	CNMTA01228	28	940.4 - 940.45 MHz	50.0	5,986,039	6,000	\$6,000	\$12,000
MTA012	Minneapolis-St. Paul	CNMTA01229	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	5,986,039	12,000	\$12,000	\$24,000
MTA012	Minneapolis-St. Paul	CNMTA01230	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	5,986,039	18,000	\$18,000	\$36,000
MTA012	Minneapolis-St. Paul	CNMTA01231	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	5,986,039	24,000	\$24,000	\$48,000
MTA012	Minneapolis-St. Paul	CNMTA01232	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	5,986,039	13,000	\$13,000	\$27,000
MTA013	Tampa-St. Petersburg-Orlando	CNMTA01326	26	901.35 - 901.4 MHz	50.0	5,417,788	5,400	\$5,400	\$11,000
MTA013	Tampa-St. Petersburg-Orlando	CNMTA01327	27	901.4 - 901.45 MHz	50.0	5,417,788	5,400	\$5,400	\$11,000
MTA013	Tampa-St. Petersburg-Orlando	CNMTA01328	28	940.4 - 940.45 MHz	50.0	5,417,788	5,400	\$5,400	\$11,000
MTA013	Tampa-St. Petersburg-Orlando	CNMTA01329	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	5,417,788	11,000	\$11,000	\$22,000
MTA013	Tampa-St. Petersburg-Orlando	CNMTA01330	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	5,417,788	16,000	\$16,000	\$33,000
MTA013	Tampa-St. Petersburg-Orlando	CNMTA01331	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	5,417,788	22,000	\$22,000	\$43,000
MTA013	Tampa-St. Petersburg-Orlando	CNMTA01332	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	5,417,788	12,000	\$12,000	\$24,000
MTA014	Houston	CNMTA01426	26	901.35 - 901.4 MHz	50.0	5,190,849	5,200	\$5,200	\$10,000
MTA014	Houston	CNMTA01427	27	901.4 - 901.45 MHz	50.0	5,190,849	5,200	\$5,200	\$10,000
MTA014	Houston	CNMTA01428	28	940.4 - 940.45 MHz	50.0	5,190,849	5,200	\$5,200	\$10,000
MTA014	Houston	CNMTA01429	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	5,190,849	10,000	\$10,000	\$21,000
MTA014	Houston	CNMTA01430	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	5,190,849	16,000	\$16,000	\$31,000
MTA014	Houston	CNMTA01431	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	5,190,849	21,000	\$21,000	\$42,000
MTA014	Houston	CNMTA01432	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	5,190,849	12,000	\$12,000	\$23,000

**Auction #41 - Narrowband PCS
Attachment A (Corrected)**

Market No.	Market Name	License Number	Channel No.	Frequencies (MHz)	Bandwidth (KHz)	Population	Bidding Units	Upfront Payment	Minimum Opening Bid
MTA015	Miami-Fort Lauderdale	CNMTA01526	26	901.35 - 901.4 MHz	50.0	5,136,581	5,100	\$5,100	\$10,000
MTA015	Miami-Fort Lauderdale	CNMTA01527	27	901.4 - 901.45 MHz	50.0	5,136,581	5,100	\$5,100	\$10,000
MTA015	Miami-Fort Lauderdale	CNMTA01528	28	940.4 - 940.45 MHz	50.0	5,136,581	5,100	\$5,100	\$10,000
MTA015	Miami-Fort Lauderdale	CNMTA01529	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	5,136,581	10,000	\$10,000	\$21,000
MTA015	Miami-Fort Lauderdale	CNMTA01530	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	5,136,581	15,000	\$15,000	\$31,000
MTA015	Miami-Fort Lauderdale	CNMTA01531	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	5,136,581	21,000	\$21,000	\$41,000
MTA015	Miami-Fort Lauderdale	CNMTA01532	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	5,136,581	12,000	\$12,000	\$23,000
MTA016	Cleveland	CNMTA01626	26	901.35 - 901.4 MHz	50.0	4,945,749	4,900	\$4,900	\$9,900
MTA016	Cleveland	CNMTA01627	27	901.4 - 901.45 MHz	50.0	4,945,749	4,900	\$4,900	\$9,900
MTA016	Cleveland	CNMTA01628	28	940.4 - 940.45 MHz	50.0	4,945,749	4,900	\$4,900	\$9,900
MTA016	Cleveland	CNMTA01629	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	4,945,749	9,900	\$9,900	\$20,000
MTA016	Cleveland	CNMTA01630	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	4,945,749	15,000	\$15,000	\$30,000
MTA016	Cleveland	CNMTA01631	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	4,945,749	20,000	\$20,000	\$40,000
MTA016	Cleveland	CNMTA01632	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	4,945,749	11,000	\$11,000	\$22,000
MTA017	New Orleans-Baton Rouge	CNMTA01726	26	901.35 - 901.4 MHz	50.0	4,925,269	4,900	\$4,900	\$9,900
MTA017	New Orleans-Baton Rouge	CNMTA01727	27	901.4 - 901.45 MHz	50.0	4,925,269	4,900	\$4,900	\$9,900
MTA017	New Orleans-Baton Rouge	CNMTA01728	28	940.4 - 940.45 MHz	50.0	4,925,269	4,900	\$4,900	\$9,900
MTA017	New Orleans-Baton Rouge	CNMTA01729	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	4,925,269	9,900	\$9,900	\$20,000
MTA017	New Orleans-Baton Rouge	CNMTA01730	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	4,925,269	15,000	\$15,000	\$30,000
MTA017	New Orleans-Baton Rouge	CNMTA01731	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	4,925,269	20,000	\$20,000	\$39,000
MTA017	New Orleans-Baton Rouge	CNMTA01732	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	4,925,269	11,000	\$11,000	\$22,000
MTA018	Cincinnati-Dayton	CNMTA01826	26	901.35 - 901.4 MHz	50.0	4,716,655	4,700	\$4,700	\$9,400
MTA018	Cincinnati-Dayton	CNMTA01827	27	901.4 - 901.45 MHz	50.0	4,716,655	4,700	\$4,700	\$9,400
MTA018	Cincinnati-Dayton	CNMTA01828	28	940.4 - 940.45 MHz	50.0	4,716,655	4,700	\$4,700	\$9,400
MTA018	Cincinnati-Dayton	CNMTA01829	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	4,716,655	9,400	\$9,400	\$19,000
MTA018	Cincinnati-Dayton	CNMTA01830	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	4,716,655	14,000	\$14,000	\$28,000
MTA018	Cincinnati-Dayton	CNMTA01831	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	4,716,655	19,000	\$19,000	\$38,000
MTA018	Cincinnati-Dayton	CNMTA01832	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	4,716,655	11,000	\$11,000	\$21,000
MTA019	St. Louis	CNMTA01926	26	901.35 - 901.4 MHz	50.0	4,663,926	4,700	\$4,700	\$9,300
MTA019	St. Louis	CNMTA01927	27	901.4 - 901.45 MHz	50.0	4,663,926	4,700	\$4,700	\$9,300
MTA019	St. Louis	CNMTA01928	28	940.4 - 940.45 MHz	50.0	4,663,926	4,700	\$4,700	\$9,300
MTA019	St. Louis	CNMTA01929	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	4,663,926	9,300	\$9,300	\$19,000
MTA019	St. Louis	CNMTA01930	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	4,663,926	14,000	\$14,000	\$28,000
MTA019	St. Louis	CNMTA01931	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	4,663,926	19,000	\$19,000	\$37,000
MTA019	St. Louis	CNMTA01932	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	4,663,926	10,000	\$10,000	\$21,000
MTA020	Milwaukee	CNMTA02026	26	901.35 - 901.4 MHz	50.0	4,541,432	4,500	\$4,500	\$9,100
MTA020	Milwaukee	CNMTA02027	27	901.4 - 901.45 MHz	50.0	4,541,432	4,500	\$4,500	\$9,100
MTA020	Milwaukee	CNMTA02028	28	940.4 - 940.45 MHz	50.0	4,541,432	4,500	\$4,500	\$9,100

**Auction #41 - Narrowband PCS
Attachment A (Corrected)**

Market No.	Market Name	License Number	Channel No.	Frequencies (MHz)	Bandwidth (KHz)	Population	Bidding Units	Upfront Payment	Minimum Opening Bid
MTA020	Milwaukee	CNMTA02029	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	4,541,432	9,100	\$9,100	\$18,000
MTA020	Milwaukee	CNMTA02030	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	4,541,432	14,000	\$14,000	\$27,000
MTA020	Milwaukee	CNMTA02031	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	4,541,432	18,000	\$18,000	\$36,000
MTA020	Milwaukee	CNMTA02032	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	4,541,432	10,000	\$10,000	\$20,000
MTA021	Pittsburgh	CNMTA02126	26	901.35 - 901.4 MHz	50.0	4,102,766	4,100	\$4,100	\$8,200
MTA021	Pittsburgh	CNMTA02127	27	901.4 - 901.45 MHz	50.0	4,102,766	4,100	\$4,100	\$8,200
MTA021	Pittsburgh	CNMTA02128	28	940.4 - 940.45 MHz	50.0	4,102,766	4,100	\$4,100	\$8,200
MTA021	Pittsburgh	CNMTA02129	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	4,102,766	8,200	\$8,200	\$16,000
MTA021	Pittsburgh	CNMTA02130	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	4,102,766	12,000	\$12,000	\$25,000
MTA021	Pittsburgh	CNMTA02131	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	4,102,766	16,000	\$16,000	\$33,000
MTA021	Pittsburgh	CNMTA02132	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	4,102,766	9,200	\$9,200	\$18,000
MTA022	Denver	CNMTA02226	26	901.35 - 901.4 MHz	50.0	3,880,637	3,900	\$3,900	\$7,800
MTA022	Denver	CNMTA02227	27	901.4 - 901.45 MHz	50.0	3,880,637	3,900	\$3,900	\$7,800
MTA022	Denver	CNMTA02228	28	940.4 - 940.45 MHz	50.0	3,880,637	3,900	\$3,900	\$7,800
MTA022	Denver	CNMTA02229	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,880,637	7,800	\$7,800	\$16,000
MTA022	Denver	CNMTA02230	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,880,637	12,000	\$12,000	\$23,000
MTA022	Denver	CNMTA02231	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,880,637	16,000	\$16,000	\$31,000
MTA022	Denver	CNMTA02232	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,880,637	8,700	\$8,700	\$17,000
MTA023	Richmond-Norfolk	CNMTA02326	26	901.35 - 901.4 MHz	50.0	3,846,210	3,800	\$3,800	\$7,700
MTA023	Richmond-Norfolk	CNMTA02327	27	901.4 - 901.45 MHz	50.0	3,846,210	3,800	\$3,800	\$7,700
MTA023	Richmond-Norfolk	CNMTA02328	28	940.4 - 940.45 MHz	50.0	3,846,210	3,800	\$3,800	\$7,700
MTA023	Richmond-Norfolk	CNMTA02329	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,846,210	7,700	\$7,700	\$15,000
MTA023	Richmond-Norfolk	CNMTA02330	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,846,210	12,000	\$12,000	\$23,000
MTA023	Richmond-Norfolk	CNMTA02331	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,846,210	15,000	\$15,000	\$31,000
MTA023	Richmond-Norfolk	CNMTA02332	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,846,210	8,700	\$8,700	\$17,000
MTA024	Seattle (Excluding Alaska)	CNMTA02426	26	901.35 - 901.4 MHz	50.0	3,827,175	3,800	\$3,800	\$7,700
MTA024	Seattle (Excluding Alaska)	CNMTA02427	27	901.4 - 901.45 MHz	50.0	3,827,175	3,800	\$3,800	\$7,700
MTA024	Seattle (Excluding Alaska)	CNMTA02428	28	940.4 - 940.45 MHz	50.0	3,827,175	3,800	\$3,800	\$7,700
MTA024	Seattle (Excluding Alaska)	CNMTA02429	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,827,175	7,700	\$7,700	\$15,000
MTA024	Seattle (Excluding Alaska)	CNMTA02430	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,827,175	11,000	\$11,000	\$23,000
MTA024	Seattle (Excluding Alaska)	CNMTA02431	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,827,175	15,000	\$15,000	\$31,000
MTA024	Seattle (Excluding Alaska)	CNMTA02432	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,827,175	8,600	\$8,600	\$17,000
MTA025	Puerto Rico-U.S. Virgin Islands	CNMTA02526	26	901.35 - 901.4 MHz	50.0	3,623,846	3,600	\$3,600	\$7,200
MTA025	Puerto Rico-U.S. Virgin Islands	CNMTA02527	27	901.4 - 901.45 MHz	50.0	3,623,846	3,600	\$3,600	\$7,200
MTA025	Puerto Rico-U.S. Virgin Islands	CNMTA02528	28	940.4 - 940.45 MHz	50.0	3,623,846	3,600	\$3,600	\$7,200
MTA025	Puerto Rico-U.S. Virgin Islands	CNMTA02529	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,623,846	7,200	\$7,200	\$14,000
MTA025	Puerto Rico-U.S. Virgin Islands	CNMTA02530	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,623,846	11,000	\$11,000	\$22,000
MTA025	Puerto Rico-U.S. Virgin Islands	CNMTA02531	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,623,846	14,000	\$14,000	\$29,000

**Auction #41 - Narrowband PCS
Attachment A (Corrected)**

Market No.	Market Name	License Number	Channel No.	Frequencies (MHz)	Bandwidth (KHz)	Population	Bidding Units	Upfront Payment	Minimum Opening Bid
MTA025	Puerto Rico-U.S. Virgin Islands	CNMTA02532	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,623,846	8,200	\$8,200	\$16,000
MTA026	Louisville-Lexington-Evansville	CNMTA02626	26	901.35 - 901.4 MHz	50.0	3,556,648	3,600	\$3,600	\$7,100
MTA026	Louisville-Lexington-Evansville	CNMTA02627	27	901.4 - 901.45 MHz	50.0	3,556,648	3,600	\$3,600	\$7,100
MTA026	Louisville-Lexington-Evansville	CNMTA02628	28	940.4 - 940.45 MHz	50.0	3,556,648	3,600	\$3,600	\$7,100
MTA026	Louisville-Lexington-Evansville	CNMTA02629	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,556,648	7,100	\$7,100	\$14,000
MTA026	Louisville-Lexington-Evansville	CNMTA02630	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,556,648	11,000	\$11,000	\$21,000
MTA026	Louisville-Lexington-Evansville	CNMTA02631	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,556,648	14,000	\$14,000	\$28,000
MTA026	Louisville-Lexington-Evansville	CNMTA02632	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,556,648	8,000	\$8,000	\$16,000
MTA027	Phoenix	CNMTA02726	26	901.35 - 901.4 MHz	50.0	3,510,140	3,500	\$3,500	\$7,000
MTA027	Phoenix	CNMTA02727	27	901.4 - 901.45 MHz	50.0	3,510,140	3,500	\$3,500	\$7,000
MTA027	Phoenix	CNMTA02728	28	940.4 - 940.45 MHz	50.0	3,510,140	3,500	\$3,500	\$7,000
MTA027	Phoenix	CNMTA02729	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,510,140	7,000	\$7,000	\$14,000
MTA027	Phoenix	CNMTA02730	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,510,140	11,000	\$11,000	\$21,000
MTA027	Phoenix	CNMTA02731	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,510,140	14,000	\$14,000	\$28,000
MTA027	Phoenix	CNMTA02732	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,510,140	7,900	\$7,900	\$16,000
MTA028	Memphis-Jackson	CNMTA02826	26	901.35 - 901.4 MHz	50.0	3,465,226	3,500	\$3,500	\$6,900
MTA028	Memphis-Jackson	CNMTA02827	27	901.4 - 901.45 MHz	50.0	3,465,226	3,500	\$3,500	\$6,900
MTA028	Memphis-Jackson	CNMTA02828	28	940.4 - 940.45 MHz	50.0	3,465,226	3,500	\$3,500	\$6,900
MTA028	Memphis-Jackson	CNMTA02829	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,465,226	6,900	\$6,900	\$14,000
MTA028	Memphis-Jackson	CNMTA02830	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,465,226	10,000	\$10,000	\$21,000
MTA028	Memphis-Jackson	CNMTA02831	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,465,226	14,000	\$14,000	\$28,000
MTA028	Memphis-Jackson	CNMTA02832	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,465,226	7,800	\$7,800	\$16,000
MTA029	Birmingham	CNMTA02926	26	901.35 - 901.4 MHz	50.0	3,244,076	3,200	\$3,200	\$6,500
MTA029	Birmingham	CNMTA02927	27	901.4 - 901.45 MHz	50.0	3,244,076	3,200	\$3,200	\$6,500
MTA029	Birmingham	CNMTA02928	28	940.4 - 940.45 MHz	50.0	3,244,076	3,200	\$3,200	\$6,500
MTA029	Birmingham	CNMTA02929	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,244,076	6,500	\$6,500	\$13,000
MTA029	Birmingham	CNMTA02930	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,244,076	9,700	\$9,700	\$19,000
MTA029	Birmingham	CNMTA02931	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,244,076	13,000	\$13,000	\$26,000
MTA029	Birmingham	CNMTA02932	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,244,076	7,300	\$7,300	\$15,000
MTA030	Portland	CNMTA03026	26	901.35 - 901.4 MHz	50.0	3,059,948	3,100	\$3,100	\$6,100
MTA030	Portland	CNMTA03027	27	901.4 - 901.45 MHz	50.0	3,059,948	3,100	\$3,100	\$6,100
MTA030	Portland	CNMTA03028	28	940.4 - 940.45 MHz	50.0	3,059,948	3,100	\$3,100	\$6,100
MTA030	Portland	CNMTA03029	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,059,948	6,100	\$6,100	\$12,000
MTA030	Portland	CNMTA03030	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,059,948	9,200	\$9,200	\$18,000
MTA030	Portland	CNMTA03031	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,059,948	12,000	\$12,000	\$24,000
MTA030	Portland	CNMTA03032	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,059,948	6,900	\$6,900	\$14,000
MTA031	Indianapolis	CNMTA03126	26	901.35 - 901.4 MHz	50.0	3,017,475	3,000	\$3,000	\$6,000
MTA031	Indianapolis	CNMTA03127	27	901.4 - 901.45 MHz	50.0	3,017,475	3,000	\$3,000	\$6,000

**Auction #41 - Narrowband PCS
Attachment A (Corrected)**

Market No.	Market Name	License Number	Channel No.	Frequencies (MHz)	Bandwidth (KHz)	Population	Bidding Units	Upfront Payment	Minimum Opening Bid
MTA031	Indianapolis	CNMTA03128	28	940.4 - 940.45 MHz	50.0	3,017,475	3,000	\$3,000	\$6,000
MTA031	Indianapolis	CNMTA03129	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,017,475	6,000	\$6,000	\$12,000
MTA031	Indianapolis	CNMTA03130	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,017,475	9,100	\$9,100	\$18,000
MTA031	Indianapolis	CNMTA03131	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,017,475	12,000	\$12,000	\$24,000
MTA031	Indianapolis	CNMTA03132	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,017,475	6,800	\$6,800	\$14,000
MTA032	Des Moines-Quad Cities	CNMTA03226	26	901.35 - 901.4 MHz	50.0	3,006,139	3,000	\$3,000	\$6,000
MTA032	Des Moines-Quad Cities	CNMTA03227	27	901.4 - 901.45 MHz	50.0	3,006,139	3,000	\$3,000	\$6,000
MTA032	Des Moines-Quad Cities	CNMTA03228	28	940.4 - 940.45 MHz	50.0	3,006,139	3,000	\$3,000	\$6,000
MTA032	Des Moines-Quad Cities	CNMTA03229	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	3,006,139	6,000	\$6,000	\$12,000
MTA032	Des Moines-Quad Cities	CNMTA03230	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	3,006,139	9,000	\$9,000	\$18,000
MTA032	Des Moines-Quad Cities	CNMTA03231	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	3,006,139	12,000	\$12,000	\$24,000
MTA032	Des Moines-Quad Cities	CNMTA03232	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	3,006,139	6,800	\$6,800	\$14,000
MTA033	San Antonio	CNMTA03326	26	901.35 - 901.4 MHz	50.0	2,986,524	3,000	\$3,000	\$6,000
MTA033	San Antonio	CNMTA03327	27	901.4 - 901.45 MHz	50.0	2,986,524	3,000	\$3,000	\$6,000
MTA033	San Antonio	CNMTA03328	28	940.4 - 940.45 MHz	50.0	2,986,524	3,000	\$3,000	\$6,000
MTA033	San Antonio	CNMTA03329	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	2,986,524	6,000	\$6,000	\$12,000
MTA033	San Antonio	CNMTA03330	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	2,986,524	9,000	\$9,000	\$18,000
MTA033	San Antonio	CNMTA03331	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	2,986,524	12,000	\$12,000	\$24,000
MTA033	San Antonio	CNMTA03332	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	2,986,524	6,700	\$6,700	\$13,000
MTA034	Kansas City	CNMTA03426	26	901.35 - 901.4 MHz	50.0	2,913,604	2,900	\$2,900	\$5,800
MTA034	Kansas City	CNMTA03427	27	901.4 - 901.45 MHz	50.0	2,913,604	2,900	\$2,900	\$5,800
MTA034	Kansas City	CNMTA03428	28	940.4 - 940.45 MHz	50.0	2,913,604	2,900	\$2,900	\$5,800
MTA034	Kansas City	CNMTA03429	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	2,913,604	5,800	\$5,800	\$12,000
MTA034	Kansas City	CNMTA03430	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	2,913,604	8,700	\$8,700	\$17,000
MTA034	Kansas City	CNMTA03431	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	2,913,604	12,000	\$12,000	\$23,000
MTA034	Kansas City	CNMTA03432	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	2,913,604	6,600	\$6,600	\$13,000
MTA035	Buffalo-Rochester	CNMTA03526	26	901.35 - 901.4 MHz	50.0	2,777,046	2,800	\$2,800	\$5,600
MTA035	Buffalo-Rochester	CNMTA03527	27	901.4 - 901.45 MHz	50.0	2,777,046	2,800	\$2,800	\$5,600
MTA035	Buffalo-Rochester	CNMTA03528	28	940.4 - 940.45 MHz	50.0	2,777,046	2,800	\$2,800	\$5,600
MTA035	Buffalo-Rochester	CNMTA03529	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	2,777,046	5,600	\$5,600	\$11,000
MTA035	Buffalo-Rochester	CNMTA03530	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	2,777,046	8,300	\$8,300	\$17,000
MTA035	Buffalo-Rochester	CNMTA03531	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	2,777,046	11,000	\$11,000	\$22,000
MTA035	Buffalo-Rochester	CNMTA03532	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	2,777,046	6,200	\$6,200	\$12,000
MTA036	Salt Lake City	CNMTA03626	26	901.35 - 901.4 MHz	50.0	2,573,372	2,600	\$2,600	\$5,100
MTA036	Salt Lake City	CNMTA03627	27	901.4 - 901.45 MHz	50.0	2,573,372	2,600	\$2,600	\$5,100
MTA036	Salt Lake City	CNMTA03628	28	940.4 - 940.45 MHz	50.0	2,573,372	2,600	\$2,600	\$5,100
MTA036	Salt Lake City	CNMTA03629	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	2,573,372	5,100	\$5,100	\$10,000
MTA036	Salt Lake City	CNMTA03630	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	2,573,372	7,700	\$7,700	\$15,000

**Auction #41 - Narrowband PCS
Attachment A (Corrected)**

Market No.	Market Name	License Number	Channel No.	Frequencies (MHz)	Bandwidth (KHz)	Population	Bidding Units	Upfront Payment	Minimum Opening Bid
MTA036	Salt Lake City	CNMTA03631	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	2,573,372	10,000	\$10,000	\$21,000
MTA036	Salt Lake City	CNMTA03632	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	2,573,372	5,800	\$5,800	\$12,000
MTA037	Jacksonville	CNMTA03726	26	901.35 - 901.4 MHz	50.0	2,274,933	2,300	\$2,300	\$4,500
MTA037	Jacksonville	CNMTA03727	27	901.4 - 901.45 MHz	50.0	2,274,933	2,300	\$2,300	\$4,500
MTA037	Jacksonville	CNMTA03728	28	940.4 - 940.45 MHz	50.0	2,274,933	2,300	\$2,300	\$4,500
MTA037	Jacksonville	CNMTA03729	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	2,274,933	4,500	\$4,500	\$9,100
MTA037	Jacksonville	CNMTA03730	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	2,274,933	6,800	\$6,800	\$14,000
MTA037	Jacksonville	CNMTA03731	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	2,274,933	9,100	\$9,100	\$18,000
MTA037	Jacksonville	CNMTA03732	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	2,274,933	5,100	\$5,100	\$10,000
MTA038	Columbus	CNMTA03826	26	901.35 - 901.4 MHz	50.0	2,145,561	2,100	\$2,100	\$4,300
MTA038	Columbus	CNMTA03827	27	901.4 - 901.45 MHz	50.0	2,145,561	2,100	\$2,100	\$4,300
MTA038	Columbus	CNMTA03828	28	940.4 - 940.45 MHz	50.0	2,145,561	2,100	\$2,100	\$4,300
MTA038	Columbus	CNMTA03829	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	2,145,561	4,300	\$4,300	\$8,600
MTA038	Columbus	CNMTA03830	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	2,145,561	6,400	\$6,400	\$13,000
MTA038	Columbus	CNMTA03831	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	2,145,561	8,600	\$8,600	\$17,000
MTA038	Columbus	CNMTA03832	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	2,145,561	4,800	\$4,800	\$9,700
MTA039	El Paso-Alberquerque	CNMTA03926	26	901.35 - 901.4 MHz	50.0	2,113,890	2,100	\$2,100	\$4,200
MTA039	El Paso-Alberquerque	CNMTA03927	27	901.4 - 901.45 MHz	50.0	2,113,890	2,100	\$2,100	\$4,200
MTA039	El Paso-Alberquerque	CNMTA03928	28	940.4 - 940.45 MHz	50.0	2,113,890	2,100	\$2,100	\$4,200
MTA039	El Paso-Alberquerque	CNMTA03929	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	2,113,890	4,200	\$4,200	\$8,500
MTA039	El Paso-Alberquerque	CNMTA03930	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	2,113,890	6,300	\$6,300	\$13,000
MTA039	El Paso-Alberquerque	CNMTA03931	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	2,113,890	8,500	\$8,500	\$17,000
MTA039	El Paso-Alberquerque	CNMTA03932	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	2,113,890	4,800	\$4,800	\$9,500
MTA040	Little Rock	CNMTA04026	26	901.35 - 901.4 MHz	50.0	2,051,667	2,100	\$2,100	\$4,100
MTA040	Little Rock	CNMTA04027	27	901.4 - 901.45 MHz	50.0	2,051,667	2,100	\$2,100	\$4,100
MTA040	Little Rock	CNMTA04028	28	940.4 - 940.45 MHz	50.0	2,051,667	2,100	\$2,100	\$4,100
MTA040	Little Rock	CNMTA04029	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	2,051,667	4,100	\$4,100	\$8,200
MTA040	Little Rock	CNMTA04030	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	2,051,667	6,200	\$6,200	\$12,000
MTA040	Little Rock	CNMTA04031	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	2,051,667	8,200	\$8,200	\$16,000
MTA040	Little Rock	CNMTA04032	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	2,051,667	4,600	\$4,600	\$9,200
MTA041	Oklahoma City	CNMTA04126	26	901.35 - 901.4 MHz	50.0	1,877,478	1,900	\$1,900	\$3,800
MTA041	Oklahoma City	CNMTA04127	27	901.4 - 901.45 MHz	50.0	1,877,478	1,900	\$1,900	\$3,800
MTA041	Oklahoma City	CNMTA04128	28	940.4 - 940.45 MHz	50.0	1,877,478	1,900	\$1,900	\$3,800
MTA041	Oklahoma City	CNMTA04129	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	1,877,478	3,800	\$3,800	\$7,500
MTA041	Oklahoma City	CNMTA04130	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	1,877,478	5,600	\$5,600	\$11,000
MTA041	Oklahoma City	CNMTA04131	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	1,877,478	7,500	\$7,500	\$15,000
MTA041	Oklahoma City	CNMTA04132	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	1,877,478	4,200	\$4,200	\$8,400
MTA042	Spokane-Billings	CNMTA04226	26	901.35 - 901.4 MHz	50.0	1,863,335	1,900	\$1,900	\$3,700

**Auction #41 - Narrowband PCS
Attachment A (Corrected)**

Market No.	Market Name	License Number	Channel No.	Frequencies (MHz)	Bandwidth (KHz)	Population	Bidding Units	Upfront Payment	Minimum Opening Bid
MTA042	Spokane-Billings	CNMTA04227	27	901.4 - 901.45 MHz	50.0	1,863,335	1,900	\$1,900	\$3,700
MTA042	Spokane-Billings	CNMTA04228	28	940.4 - 940.45 MHz	50.0	1,863,335	1,900	\$1,900	\$3,700
MTA042	Spokane-Billings	CNMTA04229	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	1,863,335	3,700	\$3,700	\$7,500
MTA042	Spokane-Billings	CNMTA04230	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	1,863,335	5,600	\$5,600	\$11,000
MTA042	Spokane-Billings	CNMTA04231	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	1,863,335	7,500	\$7,500	\$15,000
MTA042	Spokane-Billings	CNMTA04232	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	1,863,335	4,200	\$4,200	\$8,400
MTA043	Nashville	CNMTA04326	26	901.35 - 901.4 MHz	50.0	1,767,391	1,800	\$1,800	\$3,500
MTA043	Nashville	CNMTA04327	27	901.4 - 901.45 MHz	50.0	1,767,391	1,800	\$1,800	\$3,500
MTA043	Nashville	CNMTA04328	28	940.4 - 940.45 MHz	50.0	1,767,391	1,800	\$1,800	\$3,500
MTA043	Nashville	CNMTA04329	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	1,767,391	3,500	\$3,500	\$7,100
MTA043	Nashville	CNMTA04330	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	1,767,391	5,300	\$5,300	\$11,000
MTA043	Nashville	CNMTA04331	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	1,767,391	7,100	\$7,100	\$14,000
MTA043	Nashville	CNMTA04332	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	1,767,391	4,000	\$4,000	\$8,000
MTA044	Knoxville	CNMTA04426	26	901.35 - 901.4 MHz	50.0	1,721,911	1,700	\$1,700	\$3,400
MTA044	Knoxville	CNMTA04427	27	901.4 - 901.45 MHz	50.0	1,721,911	1,700	\$1,700	\$3,400
MTA044	Knoxville	CNMTA04428	28	940.4 - 940.45 MHz	50.0	1,721,911	1,700	\$1,700	\$3,400
MTA044	Knoxville	CNMTA04429	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	1,721,911	3,400	\$3,400	\$6,900
MTA044	Knoxville	CNMTA04430	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	1,721,911	5,200	\$5,200	\$10,000
MTA044	Knoxville	CNMTA04431	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	1,721,911	6,900	\$6,900	\$14,000
MTA044	Knoxville	CNMTA04432	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	1,721,911	3,900	\$3,900	\$7,700
MTA045	Omaha	CNMTA04526	26	901.35 - 901.4 MHz	50.0	1,659,273	1,700	\$1,700	\$3,300
MTA045	Omaha	CNMTA04527	27	901.4 - 901.45 MHz	50.0	1,659,273	1,700	\$1,700	\$3,300
MTA045	Omaha	CNMTA04528	28	940.4 - 940.45 MHz	50.0	1,659,273	1,700	\$1,700	\$3,300
MTA045	Omaha	CNMTA04529	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	1,659,273	3,300	\$3,300	\$6,600
MTA045	Omaha	CNMTA04530	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	1,659,273	5,000	\$5,000	\$10,000
MTA045	Omaha	CNMTA04531	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	1,659,273	6,600	\$6,600	\$13,000
MTA045	Omaha	CNMTA04532	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	1,659,273	3,700	\$3,700	\$7,500
MTA046	Wichita	CNMTA04626	26	901.35 - 901.4 MHz	50.0	1,124,174	1,100	\$1,100	\$2,200
MTA046	Wichita	CNMTA04627	27	901.4 - 901.45 MHz	50.0	1,124,174	1,100	\$1,100	\$2,200
MTA046	Wichita	CNMTA04628	28	940.4 - 940.45 MHz	50.0	1,124,174	1,100	\$1,100	\$2,200
MTA046	Wichita	CNMTA04629	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	1,124,174	2,200	\$2,200	\$4,500
MTA046	Wichita	CNMTA04630	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	1,124,174	3,400	\$3,400	\$6,700
MTA046	Wichita	CNMTA04631	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	1,124,174	4,500	\$4,500	\$9,000
MTA046	Wichita	CNMTA04632	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	1,124,174	2,500	\$2,500	\$5,100
MTA047	Honolulu	CNMTA04726	26	901.35 - 901.4 MHz	50.0	1,108,229	1,100	\$1,100	\$2,200
MTA047	Honolulu	CNMTA04727	27	901.4 - 901.45 MHz	50.0	1,108,229	1,100	\$1,100	\$2,200
MTA047	Honolulu	CNMTA04728	28	940.4 - 940.45 MHz	50.0	1,108,229	1,100	\$1,100	\$2,200
MTA047	Honolulu	CNMTA04729	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	1,108,229	2,200	\$2,200	\$4,400

**Auction #41 - Narrowband PCS
Attachment A (Corrected)**

Market No.	Market Name	License Number	Channel No.	Frequencies (MHz)	Bandwidth (KHz)	Population	Bidding Units	Upfront Payment	Minimum Opening Bid
MTA047	Honolulu	CNMTA04730	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	1,108,229	3,300	\$3,300	\$6,600
MTA047	Honolulu	CNMTA04731	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	1,108,229	4,400	\$4,400	\$8,900
MTA047	Honolulu	CNMTA04732	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	1,108,229	2,500	\$2,500	\$5,000
MTA048	Tulsa	CNMTA04826	26	901.35 - 901.4 MHz	50.0	1,096,396	1,100	\$1,100	\$2,200
MTA048	Tulsa	CNMTA04827	27	901.4 - 901.45 MHz	50.0	1,096,396	1,100	\$1,100	\$2,200
MTA048	Tulsa	CNMTA04828	28	940.4 - 940.45 MHz	50.0	1,096,396	1,100	\$1,100	\$2,200
MTA048	Tulsa	CNMTA04829	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	1,096,396	2,200	\$2,200	\$4,400
MTA048	Tulsa	CNMTA04830	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	1,096,396	3,300	\$3,300	\$6,600
MTA048	Tulsa	CNMTA04831	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	1,096,396	4,400	\$4,400	\$8,800
MTA048	Tulsa	CNMTA04832	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	1,096,396	2,500	\$2,500	\$4,900
MTA049	Alaska	CNMTA04926	26	901.35 - 901.4 MHz	50.0	550,043	1,000	\$1,000	\$1,100
MTA049	Alaska	CNMTA04927	27	901.4 - 901.45 MHz	50.0	550,043	1,000	\$1,000	\$1,100
MTA049	Alaska	CNMTA04928	28	940.4 - 940.45 MHz	50.0	550,043	1,000	\$1,000	\$1,100
MTA049	Alaska	CNMTA04929	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	550,043	1,100	\$1,100	\$2,200
MTA049	Alaska	CNMTA04930	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	550,043	1,700	\$1,700	\$3,300
MTA049	Alaska	CNMTA04931	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	550,043	2,200	\$2,200	\$4,400
MTA049	Alaska	CNMTA04932	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	550,043	1,200	\$1,200	\$2,500
MTA050	Guam-Northern Mariana Islands	CNMTA05026	26	901.35 - 901.4 MHz	50.0	176,497	1,000	\$1,000	\$1,000
MTA050	Guam-Northern Mariana Islands	CNMTA05027	27	901.4 - 901.45 MHz	50.0	176,497	1,000	\$1,000	\$1,000
MTA050	Guam-Northern Mariana Islands	CNMTA05028	28	940.4 - 940.45 MHz	50.0	176,497	1,000	\$1,000	\$1,000
MTA050	Guam-Northern Mariana Islands	CNMTA05029	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	176,497	1,000	\$1,000	\$1,000
MTA050	Guam-Northern Mariana Islands	CNMTA05030	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	176,497	1,000	\$1,000	\$1,100
MTA050	Guam-Northern Mariana Islands	CNMTA05031	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	176,497	1,000	\$1,000	\$1,400
MTA050	Guam-Northern Mariana Islands	CNMTA05032	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	176,497	1,000	\$1,000	\$1,000
MTA051	American Samoa	CNMTA05126	26	901.35 - 901.4 MHz	50.0	46,773	1,000	\$1,000	\$1,000
MTA051	American Samoa	CNMTA05127	27	901.4 - 901.45 MHz	50.0	46,773	1,000	\$1,000	\$1,000
MTA051	American Samoa	CNMTA05128	28	940.4 - 940.45 MHz	50.0	46,773	1,000	\$1,000	\$1,000
MTA051	American Samoa	CNMTA05129	29	901.95 - 902.0 MHz and 930.8 - 930.85 MHz	100.0	46,773	1,000	\$1,000	\$1,000
MTA051	American Samoa	CNMTA05130	30	901.65 - 901.7 MHz and 930.3 - 930.4 MHz	150.0	46,773	1,000	\$1,000	\$1,000
MTA051	American Samoa	CNMTA05131	31	901.7 - 901.75 MHz and 930.85 - 931.0 MHz	200.0	46,773	1,000	\$1,000	\$1,000
MTA051	American Samoa	CNMTA05132	32	901.8375 - 901.85 MHz and 940.9 - 941.0 MHz	112.5	46,773	1,000	\$1,000	\$1,000
	MTA Totals						3,544,200	\$3,544,200	\$7,072,600
	Auction Grand Total						\$9,353,200	\$9,353,200	\$18,687,600