



FCC Incentive Auction
Forward Auction
Assignment Phase Bidding System

USER GUIDE

Last updated: February 13, 2017

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1. Introduction

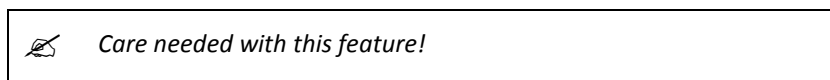
This guide describes the features of the web-based FCC bidding system, referred to as the “Assignment Phase Bidding System” or “bidding system”, which will be used to bid in the assignment phase of the forward auction. Note that this is a different system from the FCC bidding system that was used to bid in the clock phase of the forward auction.

Qualified applicants that have won paired blocks of generic spectrum in the forward auction clock phase are permitted to access the bidding system in order to bid for specific licenses in the assignment phase.

1.1. Conventions

In this guide screen names are Capitalized. Internet addresses are highlighted in blue, links in the system are underlined, and the following text represents a Button.

Text boxes are used to indicate points where care is needed:



Most of the examples are for “Big Wireless, Inc.,” a bidder with winnings from the clock phase in most Partial Economic Areas (“PEAs”) that does not have a bidding credit. Representative examples are also given for a bidder with a small business bidding credit.

In this guide, the term “bidder” refers to a winner from the forward auction clock phase. The terms “user,” “you,” and “authorized bidder” refer interchangeably to an individual authorized bidder identified on a qualified bidder’s Form 175 as an individual authorized to access the bidding system and to submit bids on behalf of the qualified bidder.

1.2. Guide Structure

After this introduction, the guide is set out as follows:

- Section 2 provides an overview of the assignment phase
- Section 3 describes the system requirements for accessing the system and how to log in
- Section 4 explains how to navigate the system and provides a summary of the screens available to bidders
- Section 5 describes how to view information relating to the blocks in the assignment phase and the bidder’s clock phase winnings
- Section 6 covers the auction schedule screen and the communications between the bidder and the FCC
- Section 7 describes bidding in the assignment phase of the forward auction, including viewing the bidding options, placing bids via the user interface and uploading bids
- Section 8 describes how to verify bids submitted in a round

- Section 9 describes how to access results of the assignment phase

There are also two appendices:

- Appendix 1 provides troubleshooting tips for a number of different scenarios
- Appendix 2 provides additional information about RSA SecurID® tokens

2. Overview of the Assignment Phase

During the assignment phase of the forward auction, winners from the clock phase can bid for frequency-specific licenses in a PEA corresponding to the number of generic blocks they won in the clock phase in that PEA. Bidding in the assignment phase of the forward auction is voluntary. All clock phase winners will be assigned contiguous frequency blocks regardless of bid amount and whether they bid, since all available spectrum blocks are contiguous and unimpaired.

The assignment phase progresses through a sequence of assignment rounds. In each round, each clock phase winner of one or more blocks in a PEA will have one opportunity to bid for frequency-specific licenses in that PEA. If the same bidders win the same number of blocks in more than one PEA, those PEAs will be grouped for bidding, and the same winning assignment will be made in all the PEAs in the group. For the high-demand PEAs, assignment rounds will be conducted for one PEA or PEA group at a time. Assignment rounds for non-high-demand PEAs are conducted simultaneously for one PEA (or PEA group) in each of the six defined REAGs.

Once the assignment phase system opens, a bidder can download a file that contains all its bidding options for the PEAs in which it has clock phase winnings. A bidder's bidding options for a PEA are all the contiguous options that are consistent with the bidder's clock phase winnings. A bidder can specify a bid amount for each bidding option for which it wishes to express a preference by indicating the amount above the impairment adjusted price that it is willing to pay for that option.

Once an assignment round closes, the bidding system will process the bids to determine the winning assignment and the assignment payment for each bidder. A bidder's assignment payment is in addition to the sum of the clock phase prices for the licenses in the option. To determine the assignment for a PEA (or PEA group), the bidding system utilizes mathematical optimization. The objective of the optimization is to maximize the sum of bid amounts for the various options while ensuring that each bidder is assigned contiguous spectrum blocks equal to the number of blocks that it won during the clock phase. A bidder's assignment payment is the lowest bid amount that would have resulted in the same winning assignment, in other words a "second price," and will be less than or equal to the bidder's bid amount for the option it is assigned. The bidder's final auction payment takes into account the final clock phase prices of the licenses it won and any assignment payments, adjusted for any bidding credit discounts.

3. System Requirements and Access

Please refer to the Forward Auction Bidding System User Guide (available on the Education tab of the Auction 1002 website, www.fcc.gov/auctions/1002) for an explanation of the requirements for accessing the bidding system, how to log in, and other matters related to access. The following topics are covered:

3.1. Minimum System Requirements¹

3.2. Logging In

3.2.1. First Time Login Procedures

3.2.2. Standard Login Procedure

3.3. Multiple Users for the Same Bidder

3.4. Automatic Logout

3.5. Lock Screen and Closing User Access

3.6. Additional Information

¹ Note that the minimum screen resolution specified for the Forward Auction Bidding System was 1920 x 1280. For the Assignment Round Bidding System, 1600 x 900 is sufficient.

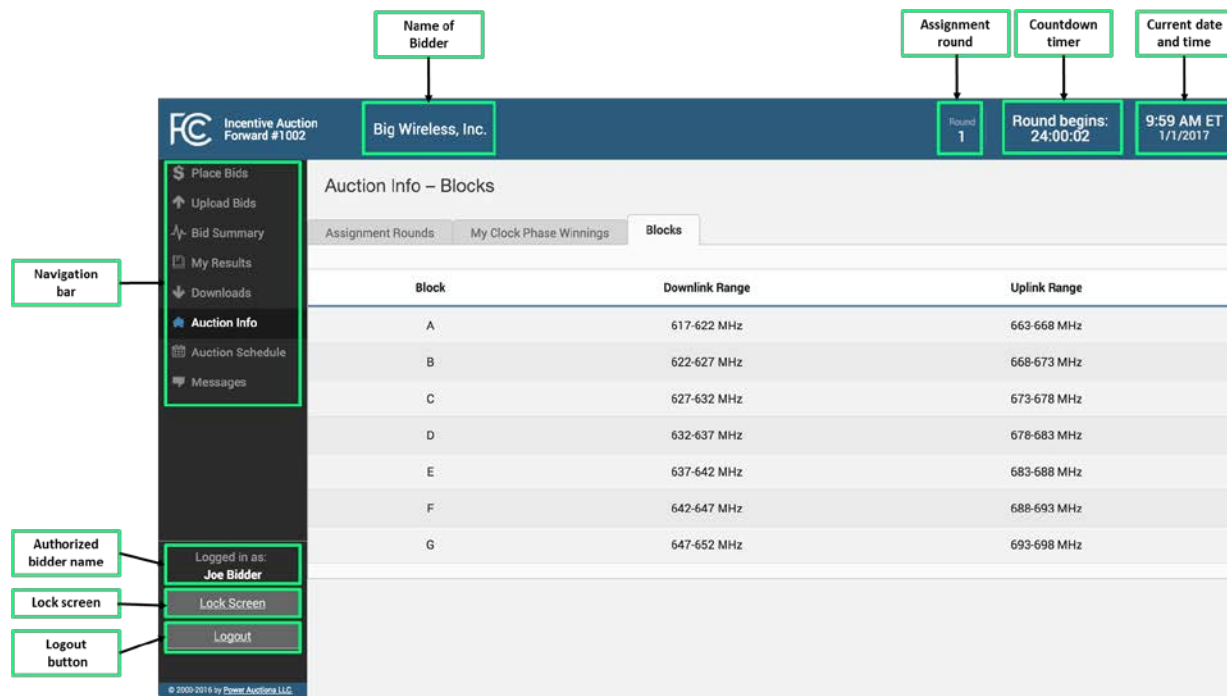
4. System Navigation and Overview

4.1. Navigation Bar and Features Common to All Screens

All screens have a navigation bar on the left, with links to the available screens. Beneath the navigation bar is your name (the name of the authorized bidder who has logged in), the **Lock Screen** button and the **Logout** button.

The blue bar at the top of each screen displays status and timing information that is common to all screens. It shows the bidder name, the current assignment round, a countdown timer showing the time to the beginning or the end of a round and the current date and time in Eastern Time (ET). An illustration of the navigation bar and common screen features is shown in Figure 1.

Figure 1: Navigation bar and features common to all screens



4.2. Summary of Bidding System Screens

The navigation bar gives access to eight screens. Their functions are summarized in Table 1 below in the order in which they appear on the navigation bar.

Table 1: Summary of screens reached from the navigation bar

Place Bids	Allows you to place bids in a round by entering bids on a screen
Upload Bids	Allows you to place bids by uploading a bid file

Bid Summary	Allows you to view a summary of all bids submitted for the bidder during a particular round
My Results	Allows you to view the results of bid processing for the bidder for all rounds in which the bidder has assignments
Downloads	Allows you to download files about the bidder's bidding options, bids, and the auction results
Auction Info	Allows you to view information about the blocks in the auction, details about the assignment rounds, and a summary of the bidder's winnings from the clock phase
Auction Schedule	Allows you to view the schedule for upcoming assignment rounds
Messages	Allows you to view announcements and messages from the FCC—you may also use this screen to send messages to the FCC

5. Auction Info

The Auction Info screen provides pertinent information about the spectrum blocks available for bidding in each assignment round, as well as the bidder's clock phase winnings, if any, in that round. The screen has three tabs: Assignment Rounds, My Clock Phase Winnings, and Blocks, which are explained in further detail below. You may access the Auction Info screen at all times when the bidding system is available.

5.1. Assignment Rounds

The "Assignment Rounds" tab of the Auction Info screen displays information that is available to all bidders about each round of the assignment phase. For each round and each PEA (or PEA group) assigned in that round, the screen displays the name of the PEA(s) and the available categories (Reserved and Unreserved) with their clock phase prices. A contiguity outcome message indicates whether it is feasible to assign contiguous spectrum to all of the clock phase winners in that PEA or PEA group. In the band plan associated with the clearing target of the final stage, it will be possible to assign contiguous spectrum to all bidders in all PEAs.

Before the start of round 1, the screen lists all rounds. During subsequent rounds, the screen is filtered by default to show only the current round. The user can filter the data at any time by using the filter box on the top right hand corner of the screen. The data can be filtered by parameters including the round number (by typing "Round x" where "x" is the round number), the PEA number (by typing "PEAyyy" where "yyy" is the 3-digit PEA number), or the market name.

Figure 2, below, shows the "Assignment Rounds" tab before the start of Round 1.

Figure 2: Auction Info – Assignment Rounds

Round 1
 PEA001 New York, NY
 Contiguity Outcome: [feasible to assign contiguous spectrum to all bidders](#)

Market	C1-R Clock Phase Price	C1-U Clock Phase Price
PEA001	\$501,113,000	\$501,113,000

Round 2
 PEA002 Los Angeles, CA
 Contiguity Outcome: [feasible to assign contiguous spectrum to all bidders](#)

Market	C1-R Clock Phase Price	C1-U Clock Phase Price
PEA002	\$388,489,000	\$388,489,000

Figure 3 provides an example of the screen for a round where multiple REAGs are being assigned in the round.

Figure 3: Auction Info – Assignment Rounds (Round with Multiple REAGs)

Round 38

REAG 1 PEA060 Manchester, NH
 Contiguity Outcome: [feasible to assign contiguous spectrum to all bidders](#)

Market	C1-R Clock Phase Price	C1-U Clock Phase Price
PEA060	\$5,500,000	\$5,500,000

REAG 2 PEA412 Puerto Rico
 Contiguity Outcome: [feasible to assign contiguous spectrum to all bidders](#)

Market	C1-R Clock Phase Price	C1-U Clock Phase Price
PEA412	\$9,354,000	\$11,512,584

REAG 3 PEA066 Lansing, MI
 Contiguity Outcome: [feasible to assign contiguous spectrum to all bidders](#)

Market	C1-R Clock Phase Price	C1-U Clock Phase Price
PEA066	\$3,800,000	\$3,800,000

5.2. My Clock Phase Winnings

The “My Clock Phase Winnings” tab of the Auction Info screen displays a bidder’s clock phase winnings, ordered by the round in which it will be assigned. The “Region” column indicates whether the PEA is a high-demand market, and if not, provides its REAG number. The columns “C1 Winnings” and “C2 Winnings” provide a count of the bidder’s winnings in these categories. Note these are the total winnings across all PEAs in a group. For example, in the sample screenshot below the Bidder has won three blocks in each of PEA005, PEA007, PEA027, and PEA033.

Before the start of Round 1 the screen shows all rounds by default. During subsequent rounds, the screen shows the current round by default. In both cases the user can filter for the desired round by using the dropdown menu above the Round column. An example of this screen is shown in Figure 4 below.

Figure 4: Auction Info – My Clock Phase Winnings

Round	Region	Market Number	Market Name	C1 Winnings	C2 Winnings
1	high demand	PEA001	New York, NY	1	0
2	high demand	PEA002	Los Angeles, CA	2	0
3	high demand	PEA005 PEA007 PEA027 PEA033	Baltimore, MD-Washington, DC Boston, MA Salt Lake City, UT Virginia Beach, VA	12	0
4	high demand	PEA003	Chicago, IL	1	0
5	high demand	PEA004	San Francisco, CA	1	0
6	high demand	PEA006	Philadelphia, PA	2	0
7	high demand	PEA008	Dallas, TX	1	0
9	high demand	PEA010	Houston, TX	1	0
10	high demand	PEA011	Atlanta, GA	1	0

5.3. Blocks

The “Blocks” tab of the Auction Info screen, shown in Figure 5, displays the specific uplink and downlink frequencies of the licenses corresponding to the blocks in the auction.

Figure 5: Auction Info – Blocks

The screenshot displays the 'Auction Info - Blocks' page. At the top, the header includes the 'FC Incentive Auction Forward #1002' logo, the company name 'Big Wireless, Inc.', and auction details: 'Round 1', 'Round begins: 24:00:02', and '9:59 AM ET 1/1/2017'. A left-hand navigation menu contains options like 'Place Bids', 'Upload Bids', 'Bid Summary', 'My Results', 'Downloads', 'Auction Info', 'Auction Schedule', and 'Messages'. The main content area features a tabbed interface with 'Blocks' selected. Below the tabs is a table with the following data:

Block	Downlink Range	Uplink Range
A	617-622 MHz	663-668 MHz
B	622-627 MHz	668-673 MHz
C	627-632 MHz	673-678 MHz
D	632-637 MHz	678-683 MHz
E	637-642 MHz	683-688 MHz
F	642-647 MHz	688-693 MHz
G	647-652 MHz	693-698 MHz

At the bottom of the page, it indicates the user is 'Logged in as: Joe Bidder' and provides 'Lock Screen' and 'Logout' buttons. A copyright notice '© 2000-2016 by Power Auctions LLC' is visible in the footer.

6. Auction Schedule and Messages

6.1. Auction Schedule

The Auction Schedule screen shows the current schedule for upcoming rounds in Eastern Time (ET), as illustrated in Figure 6. Rounds in which a bidder has no clock phase winnings and is therefore unable to bid are grayed-out, with the words “No Winnings” (see Round 8 in the sample screen below). The time of the next event, which is either the starting or ending time of a round, is highlighted in red.

Figure 6: Auction Schedule screen

Monday - Jan 02, 2017			
	Start	End	Duration
Round 1	Jan 02, 10:00 AM ET	Jan 02, 11:00 AM ET	1 hour
Round 2	Jan 02, 12:00 PM ET	Jan 02, 1:00 PM ET	1 hour
Round 3	Jan 02, 2:00 PM ET	Jan 02, 3:00 PM ET	1 hour
Round 4	Jan 02, 4:00 PM ET	Jan 02, 5:00 PM ET	1 hour

Tuesday - Jan 03, 2017				
	Start	End	Duration	
Round 5	Jan 03, 10:00 AM ET	Jan 03, 11:00 AM ET	1 hour	
Round 6	Jan 03, 12:00 PM ET	Jan 03, 1:00 PM ET	1 hour	
Round 7	Jan 03, 2:00 PM ET	Jan 03, 3:00 PM ET	1 hour	
Round 8	No Winnings	Jan 03, 4:00 PM ET	Jan 03, 5:00 PM ET	1 hour

Wednesday - Jan 04, 2017			
	Start	End	Duration
Round 9	Jan 04, 10:00 AM ET	Jan 04, 11:00 AM ET	1 hour
Round 10	Jan 04, 12:00 PM ET	Jan 04, 1:00 PM ET	1 hour
Round 11	Jan 04, 2:00 PM ET	Jan 04, 3:00 PM ET	1 hour
Round 12	Jan 04, 4:00 PM ET	Jan 04, 5:00 PM ET	1 hour

Thursday - Jan 05, 2017			
	Start	End	Duration

6.2. Messages: Announcements and Conversations

Please refer to the Forward Auction Bidding System User Guide (available on the Education tab of the Auction 1002 website, www.fcc.gov/auctions/1002) for an explanation of the messaging functions, including the following topics:

6.2.1. Receiving and Reviewing Announcements

6.2.2. Conversations with the FCC

7. Bidding Functions

7.1. Viewing Available Bid Options





At any time when the bidding system is available, including before the first round of the assignment phase starts, you can download the full list of bidding options for the bidder. This information is provided in the “My Bids and Options” download which is available on the Downloads screen, illustrated in Figure 7. This file provides information about all of the bidding options available to the bidder for all assignment rounds that it can bid in based on its winnings in the clock phase. This file can also be used to upload bids for the current and future rounds, as described in Section 7.3.

You can view further information about each bidding option by downloading the “My Bid Options Details” file from the Downloads screen (Figure 7). This file provides the details of each license in each bidding option listed in the “My Bids and Options” file. These details include the clock phase price of the license and whether the license will be designated as reserved or unreserved. The data within this file does not change during the assignment phase.

Details about the specifications for these files may be found in the “Forward Auction Assignment Phase File Formats” document located on the Auction 1002 website under the Data tab (available at www.fcc.gov/auctions/1002).

Figure 7: Downloads screen

The screenshot displays the 'Downloads' section of the bidding system interface. At the top, the header includes the FCC logo, 'Incentive Auction Forward #1002', the bidder's name 'Big Wireless, Inc.', and the current round information: 'Round 1', 'Round begins: 24:00:02', and '9:59 AM ET 1/1/2017'. A left-hand navigation menu contains options like 'Place Bids', 'Upload Bids', 'Bid Summary', 'My Results', 'Downloads' (highlighted), 'Auction Info', 'Auction Schedule', and 'Messages'. Below the menu, the user is logged in as 'Joe Bidder' with 'Lock Screen' and 'Logout' buttons. The main content area shows a table of download links:

Format	Description
	My Bids And Options
	My Bid Options Details
	My Results
	My Cumulative Results

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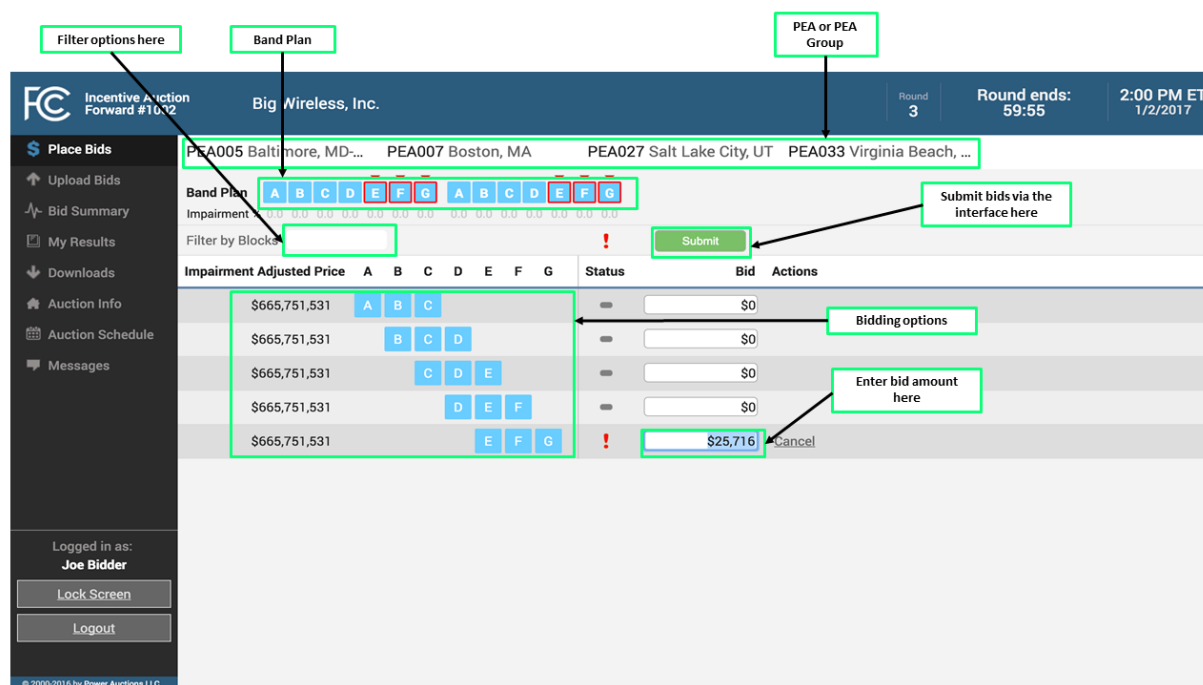
7.2. Placing Bids via the User Interface

When a round is open for bidding and you are permitted to bid in the round, you can enter bids through a graphical user interface on the Place Bids screen.

7.2.1. Basic Layout and Actions of the Place Bids Screen

The Place Bids screen is accessed through a link on the navigation bar on the left. Figure 8 illustrates the basic layout of the Place Bids screen before any bids have been submitted in a round. The bidder in this example is bidding on four PEAs that have been grouped together. This bidder has won three blocks in each of the four PEAs.

Figure 8: Basic layout of the Place Bids screen



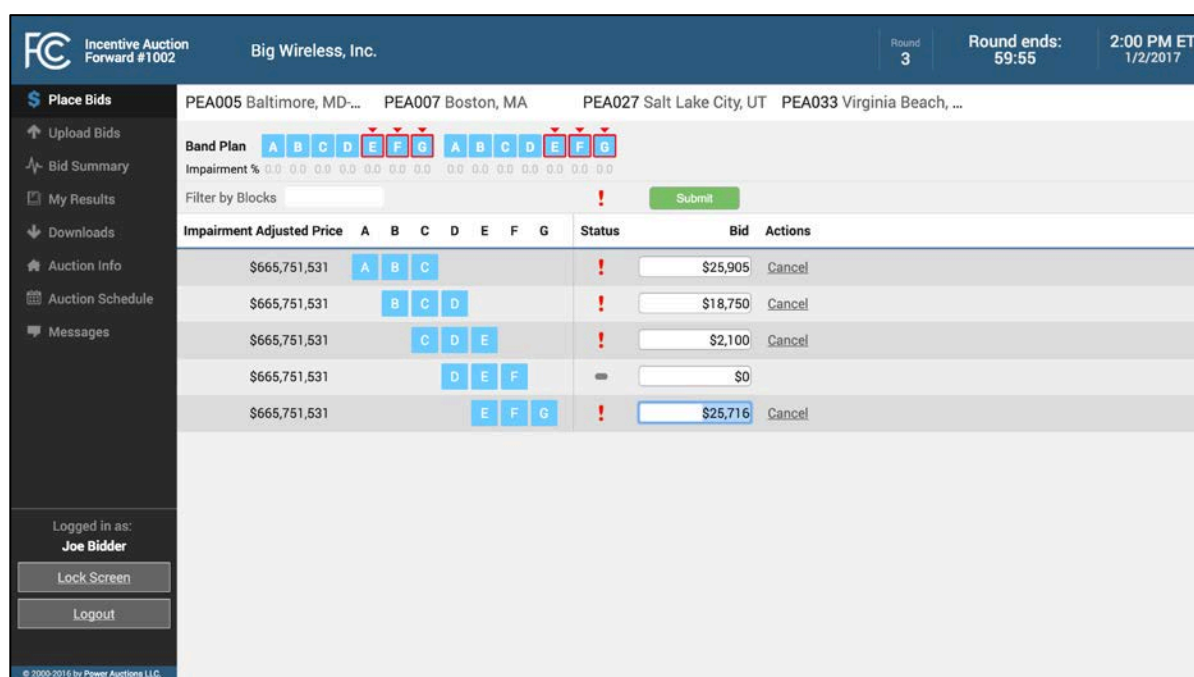
At the top of the Place Bids screen is a listing of the PEA(s) being assigned in the current round. The “Band Plan” shows the band plan associated with the 84 MHz clearing target, and below each block is its impairment percentage (which will be 0% in all cases). Below the “Band Plan” is a filter. You can filter for a particular bidding option by entering the specific block combination in the field next to “Filter by Block”.

The lower portion of the screen shows all of the bidder’s bidding options and their “Impairment Adjusted Prices” (final clock phase price(s) minus any impairment discounts). Next to each bidding option, the screen displays the bid status of that option and provides a field where you can enter a bid amount. The **Submit** button submits the bids to the bidding system.

7.2.2. Entering and Submitting Bids

To enter a bid on the Place Bids screen, enter a bid amount in the “Bid” field corresponding to the desired bidding option. Once you click on the field to enter the bid amount, the blocks of the selected bidding option will be highlighted in red on the band plan at the top of the screen as shown in Figure 9. Once you enter a bid amount for an option, the status of the bid option under the “Status” column will change from a gray dash to a red exclamation mark indicating that you have entered a bid but you have not yet submitted the bid. You can then repeat this for all options for which you wish to place bids. If change your mind and decide you do not wish to enter a bid amount for that option, you can click on Cancel in the “Actions” column next to the bid amount entry box.

Figure 9: Place Bids screen – Bids have been entered but have not been submitted




If you have any unsubmitted bids on the screen, there is also a red exclamation mark shown next to the Submit button as shown in Figure 9. If you enter an invalid bid amount, the system will display an error message to the right of the Cancel link and will disable the Submit button until you have resolved the invalid bid amount. Note that bids must be non-negative whole dollar amounts.

If you do not wish to specify a positive bid amount for a particular option, leave the bid amount at the default value of \$0.

During bid processing of a round, the system will consider a \$0 bid amount for all bidding options for which the bidder did not specify a different bid amount.

Once you have entered the bids for the options on which you wish to bid, click **Submit** before the round ends. This action submits all the bids. The “Status” column will show a green check mark to indicate the bids that have been submitted, as seen in Figure 10.

 You must submit your bids using the **Submit** button before leaving the page (such as by moving to a different screen, refreshing the screen, logging out or closing the browser window) and before the round is over.

Any bids that are entered but not submitted will be lost.

Figure 10: Place Bids screen with submitted bids

Impairment Adjusted Price	A	B	C	D	E	F	G	Status	Bid	Actions
\$665,751,531	✓	✓	✓					✓	\$25,905	Change
\$665,751,531		✓	✓	✓				✓	\$18,750	Change
\$665,751,531			✓	✓	✓			✓	\$2,100	Change
\$665,751,531				✓	✓	✓		✗	\$0	
\$665,751,531					✓	✓	✓	✓	\$25,716	Change

7.2.3. Changing bids

At any time during the round, any of the bids that you have placed can be edited by clicking Change under the “Actions” column on the Place Bids screen (see Figure 10). Once you click Change, the system allows you to enter a different bid amount in the bid field. To delete a bid, enter \$0 as the bid amount.

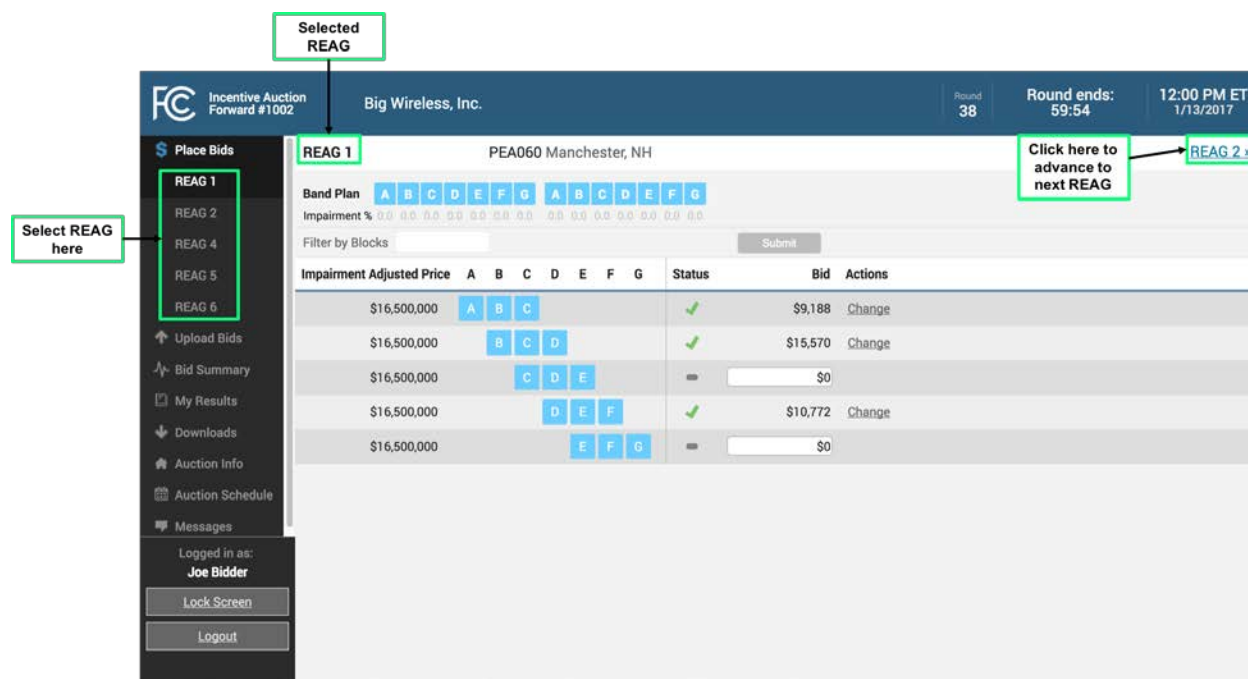
When you make any changes to your bids, it is necessary to click **Submit** again in order to save those changes before leaving the page and before the round is over. A red exclamation mark on top of the Status column next to the **Submit** button indicates that you have unsubmitted bids. Note that unsubmitted bids might not be visible on the screen, you may need to scroll up or down to view them.

7.2.4. Bidding in Rounds with REAGs

In rounds where licenses are being assigned simultaneously in multiple REAGs, each REAG will have a separate Place Bids screen. Figure 11 provides an example of a Place Bids screen in a round in which bidding is occurring for PEAs in six different REAGs. The navigation bar on the left hand side lists the REAGs for which the bidder has won blocks and therefore may bid. In the sample screenshot below, the bidder has won blocks in five REAGs. To place a bid for a PEA or PEA group in a particular REAG, click on the REAG number in the navigation bar to display the bidding screen for the PEA(s) being assigned in that REAG in that round. You can also navigate to the Place Bids screen of the next REAG by clicking on the link in the upper right hand corner of the screen (see Figure 11).

Note that you are free to modify your bids for any of the PEAs or groups of PEAs in REAGs being assigned during that round as long as the round is still open, as described in Section 7.2.3. However, you must submit your bids for options in one REAG before moving to a different REAG; otherwise those changes will be lost.

Figure 11: Place Bids screen in rounds with REAGs

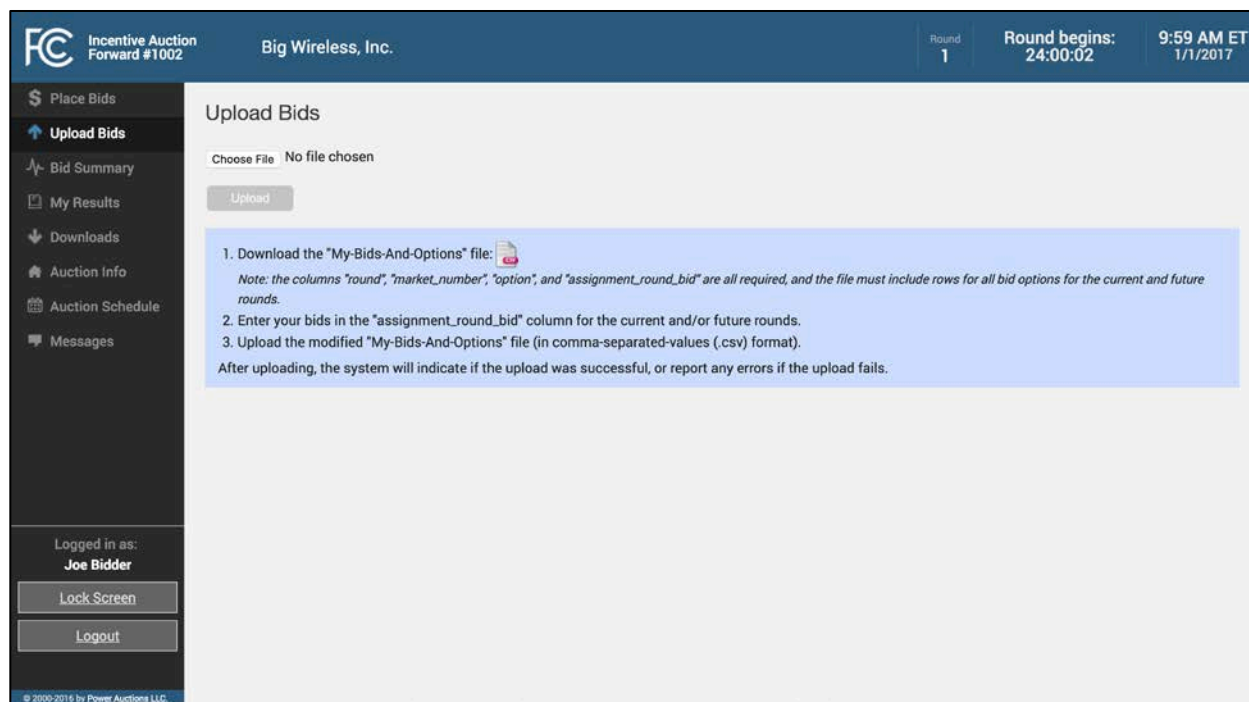


7.3. Placing Bids via File Upload

The Upload Bids screen allows you to upload and submit bids for all rounds in which the bidder is permitted to bid. You may upload bids at any time when the bidding system is available except during the brief period when bids are being processed following the end of each round. Note that any bids uploaded for past rounds will be ignored. Full details about the specifications for bid upload files may be found in the Forward Assignment Phase File Formats document located on the Auction 1002 website under the Data tab (available at www.fcc.gov/auctions/1002).

An example of the Upload Bids screen is shown in Figure 12 below.

Figure 12: Upload Bids screen



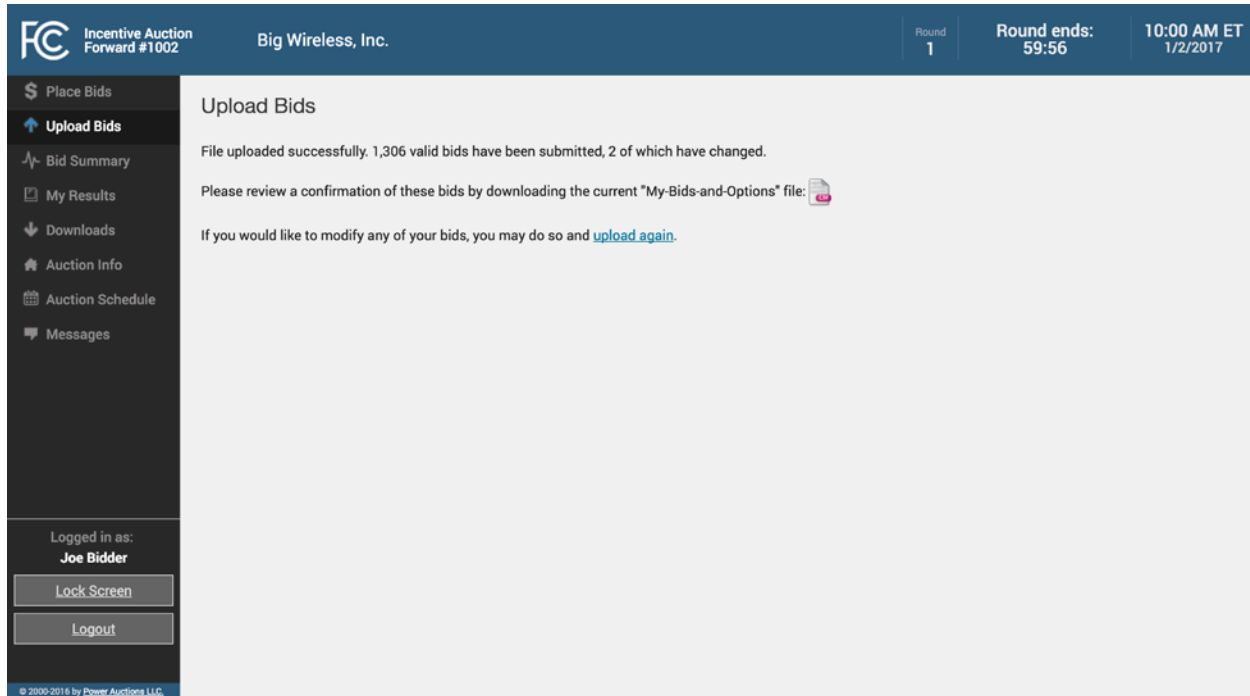
The screen provides instructions on how to upload bids. The steps are as follows:

1. Download the “My-Bids-and-Options” file by clicking on the file symbol.
2. In the file, make the necessary changes to the bid prices specified in the “assignment_round_bid” column. If the bidder has not previously entered a bid amount for an option, the “assignment_round_bid” column will show a \$0 bid amount for the bidding option.
 - Do not change the data in the columns “round”, “market_number” and “options.”
 - Ensure that there is a line for every bidding option for the current and future rounds.
 - If you wish, you can choose to upload bids only for the current round (by leaving zeros for all bidding options for future rounds). You may upload bids for a future round at any time prior to the future round closing.²
 - Only the columns “round”, “market_number”, “options”, and “assignment_round_bid” are required (and the column header in the first line of the file must use the precise name for these columns). All other columns will be ignored and can be deleted.
3. Save the modified file. Then, from the Upload Bids screen, browse to select the file by clicking on the **Choose File** button, then click on the **Upload** button.

² Except during the brief bid processing period just after each round.

If the file is accepted, the screen will display a message indicating that the upload was successful and will list the number of non-zero bids submitted and the number of bids that were changed as a result of the upload (see Figure 13).

Figure 13: Upload Bids screen after successful upload



You can review the bids you have uploaded by downloading the “My-Bids-and-Options” file. You can also view the bids you have uploaded for the current round by viewing the Bid Summary screen, described in Section 8.1.

If there are one or more errors in the bid file, the system will reject the entire upload and the Upload Bids screen will display a message with an explanation of why the upload was unsuccessful (see Figure 14).³ If a bid file is rejected, all previously submitted bids will remain saved by the bidding system.

³ If the file contains many errors, the system will only report the first 100 errors of a particular type.

Figure 14: Upload Bids screen after rejected upload

FC Incentive Auction Forward #1002 Big Wireless, Inc. Round 1 Round ends: 59:56 10:00 AM ET 1/2/2017

Place Bids
 Upload Bids
 Bid Summary
 My Results
 Downloads
 Auction Info
 Auction Schedule
 Messages

Logged in as: Joe Bidder
 Lock Screen
 Logout

No bids uploaded. The uploaded file had invalid data.

Upload Bids

! Missing Rows: The uploaded file must include the following bid options.

Line	round	market_number	option	assignment_round_bid
2		PEA002	AB	
2		PEA002	BC	
2		PEA002	CD	
2		PEA002	DE	
2		PEA002	EF	
2		PEA002	FG	
3		PEA005;PEA007;PEA027;PEA033	ABC	
3		PEA005;PEA007;PEA027;PEA033	BCD	
3		PEA005;PEA007;PEA027;PEA033	CDE	
3		PEA005;PEA007;PEA027;PEA033	DEF	
3		PEA005;PEA007;PEA027;PEA033	EFG	

Please upload a revised file following the instructions below.

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Errors on specific lines of the bid file can be one of the following:

- **Duplicate rows** – there is more than one row for the same bidding option (i.e. with the same value for “round”, “market_number” and “options”);
- **Missing row(s)** – there are bidding options that the bidder is permitted to bid for (in the current/future round) which are not included in the file;
- **Invalid Bid** – the file includes a bidding option that is not applicable to the bidder or is incorrect;
- **Invalid Bid Amount** – the bid amount entered for the bidding option is not valid – bids must be non-negative whole dollar amounts.

8. Verifying Bids

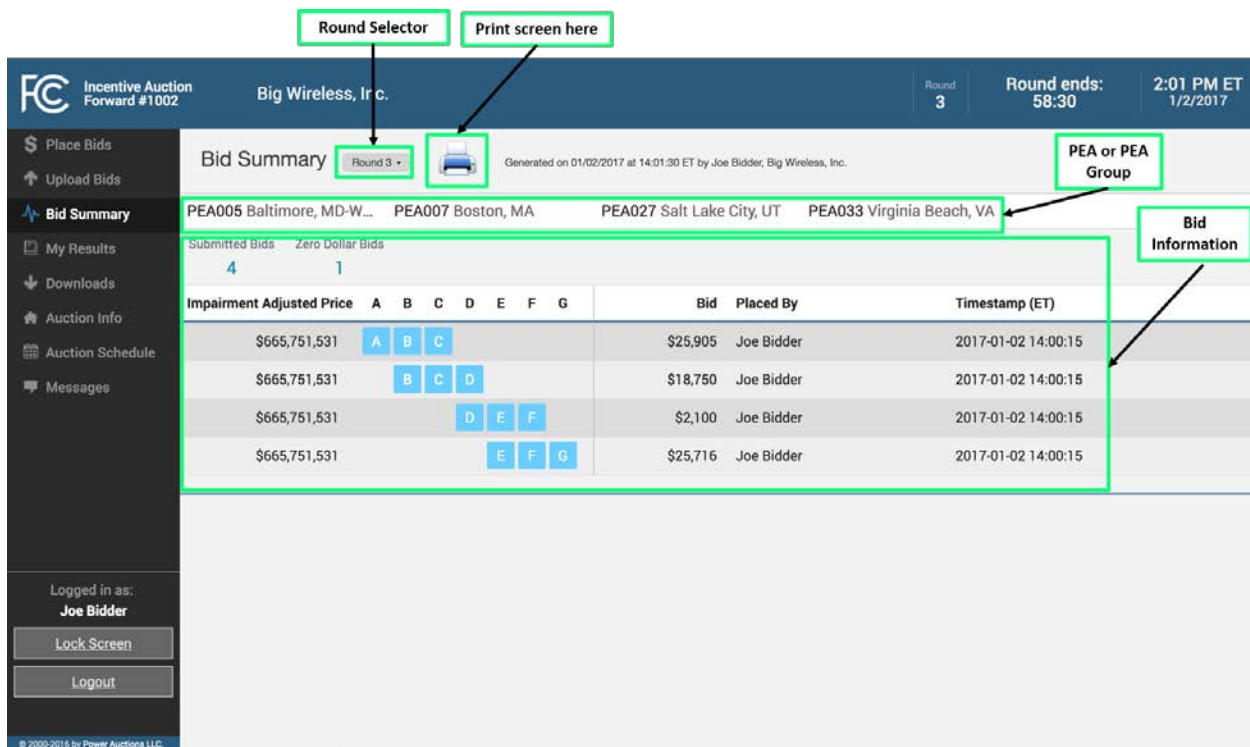
The bidding system only processes bids that were submitted correctly, and so to help bidders avoid errors, the system provides a bidder with two ways to verify that its bids were submitted correctly in addition to the bid status indicators on the Place Bids screen.

8.1. Bid Summary

After the first round opens and throughout the assignment phase, you may verify the bids that have been submitted for current or past rounds on the Bid Summary screen.⁴ The Bid Summary screen does not display bids that have been submitted for future rounds via the bid upload feature. Confirmation of bids submitted for future rounds can be found in the My Bids and Options Download (see Section 8.2).

The layout of the Bid Summary screen is shown in Figure 15 below.

Figure 15: Basic layout of the Bid Summary screen



Bid information for the most recent current or completed round in which bids for the bidder were submitted are shown by default. You may select bid information for a previous round by selecting the round number from the round drop-down menu, located at the top of the screen. You can print a record of your submitted bids by clicking on the print icon next to the round selector. In addition to

⁴ A bid may have been submitted by you during the round, by another authorized bidder for the bidder, or by a telephonic bid assistant entering bids on the bidder’s behalf during the round. This will be indicated in the “Placed By” column for the bid.

displaying the bids placed in the round, the screen also displays the name of the authorized bidder who placed the bid and a timestamp of when the bid was placed. Only bidding options with non-zero bids are listed, the number of which is indicated by the figure “Submitted Bids” shown on the screen. Next to the number of submitted bids, the screen displays the number of “Zero Dollar Bids” – i.e. bidding options with a bid of \$0.



It is recommended that you view this screen before the current round is over to confirm that the bids displayed reflect your intentions for the round. If they do not, you can return to the Place Bids screen to make further changes and submit these before the round is over.

Note: the Bid Summary screen contains the last submitted bid for each option, it does not contain earlier bids that were submitted for that option but subsequently changed.

8.2. My Bids and Options Download

You may also verify the bids that have been submitted via the “My Bids and Options” download file, available from the Downloads screen (see Figure 7 in Section 7.1). The “My Bids and Options” download provides information about bids submitted during the current and past rounds, including bids submitted by upload for future rounds, and can be accessed at any time when the bidding system is available.

The My Bids and Options file contains identical information to the Bid Summary screen for the current and past rounds (see Section 8.1).

9. Viewing Results

After a brief bid processing period following the end of a round, the results for that round are posted. You can view your assignment results on the My Results screen, which can be accessed using the navigation bar. Information displayed on this screen is also downloadable on the Downloads screen. Note that, unlike the forward auction clock phase, the Public Reporting System does not display round-by-round results from the assignment phase.

9.1. Basic Layout of the My Results Screen

The basic layout of the My Results screen is provided in Figure 16. The top portion of the screen displays the bidder’s aggregate payment information, specifically the aggregate payment for all assigned PEAs, the aggregate commitment amount for PEAs that have not yet been assigned based on the bidder’s clock phase winnings, and the total of these two values which provides an ongoing indication of the bidder’s expected aggregate payment. If the bidder has a bidding credit, additional columns of payment information are shown (see Section 9.2). The lower part of the My Results screen lists the bidder’s round-by-round assignment results, with the most recently posted round shown at the top.

Figure 16: Basic layout of My Results screen

The screenshot shows the 'My Results' screen for 'Big Wireless, Inc.' in an 'Incentive Auction Forward # 1002'. The top header includes 'Round 7', 'Round begins: 0:02', and '1:59 PM ET 1/3/2017'. A summary table shows: Adjusted Payment (Assigned PEAs) at \$2,378,352,079; Unadjusted Commitment (Unassigned PEAs) at \$1,802,506,402; and a Total of \$4,180,858,481. Below this is a table of round-by-round results with columns for Round, Region, Market Number, Market Name, C1 Winnings, C2 Winnings, Assignment, and Payment.

Round ↓	Region	Market Number	Market Name	C1 Winnings	C2 Winnings	Assignment	Payment
6	high demand	PEA006	Philadelphia, PA	2	0	AB	\$188,958,403 [+]
5	high demand	PEA004	San Francisco, CA	1	0	G	\$108,957,683 [+]
4	high demand	PEA003	Chicago, IL	1	0	C	\$136,593,462 [+]
3	high demand	PEA005 PEA007 PEA027 PEA033	Baltimore, MD-Washington, DC Boston, MA Salt Lake City, UT Virginia Beach, VA	12	0	ABC	\$665,751,531 [+]
2	high demand	PEA002	Los Angeles, CA	2	0	AB	\$776,978,000 [+]
1	high demand	PEA001	New York, NY	1	0	G	\$501,113,000 [+]

9.2. Aggregate Payment Information

The top portion of the My Results screen shows a bidder a running total of its payment obligations, including the sum of the final clock phase prices and assignment round payments for PEAs that have been assigned and, for PEAs that have not been assigned, the estimated aggregate payment based on final clock phase prices alone. The screen shows additional information for bidders with a bidding credit, as described in the sections below.

9.2.1. Gross Payment Information

The My Results screen shown in Figure 16 provides an example of the gross aggregate payment information that is displayed in the top portion of the screen. This information includes:

- **Adjusted Payment (Assigned PEAs):** the first line shows the bidder's aggregate adjusted gross payments for all PEAs that have been assigned thus far in the assignment phase. This is the total of the "Payment" figures displayed in the round-by-round table underneath (see Section 9.3).
- **Unadjusted Commitment (Unassigned PEAs):** the second line shows the bidder's total commitment based on final clock phase prices only, for PEAs that will be assigned in a future round of the assignment phase. If there were any impaired licenses to be assigned, this estimate would not take into account any adjustments for impairment.
- **Total:** the third line provides the total of the first two lines which represents the known aggregate payment amount for the bidder at that point in the assignment phase.

When results are posted for a round in which the bidder was assigned one or more licenses, the bidder's unadjusted commitment corresponding to that round will be subtracted from the second line and the bidder's adjusted payment corresponding to that round will be added to the first line. Therefore, as rounds are processed, the amount shown for the adjusted payment will increase, and the unadjusted commitment will decrease, eventually dropping to zero when the bidder has no further licenses to be assigned.

In addition to gross aggregate payment information, bidders with a bidding credit will see additional columns of information related to discounts and caps, as described in the next two sections.

9.2.2. Bidding Credits and Caps

For a bidder with a bidding credit, the My Results screen provides additional columns of aggregate payment information. An example of the aggregate payment information for a bidder with a small business bidding credit is provided in Figure 17 below. In addition to aggregate gross information, Figure 17 highlights additional columns of payment information that are displayed which pertain to the bidder's applicable discounts and caps. For each of the "rows" (Adjusted Payment, Unadjusted Commitment, and Total), these additional columns are:

- **Discount Capped (All Markets):** the bidder's aggregate discount taking into account the applicable bidding credit cap.

- **Net:** the bidder’s aggregate net payment amount (gross minus capped discount).
- **Discount Uncapped (All Markets):** the bidder’s aggregate discount not taking into account the applicable bidding credit cap. If the bidder has reached its cap, the amount will be shown in red. The uncapped amount provides an indication of how far over the cap the bidder is at that point in the assignment phase.
- **Discount Uncapped (Small Markets):** the bidder’s aggregate discount for small markets not taking into account the small markets bidding credit cap. If the bidder has reached its small market cap, the amount will be shown in red. The uncapped amount provides an indication of how far over the small market cap the bidder is at that point in the assignment phase.

Figure 17: Aggregate payment information for a bidder with a small business bidding credit

FC Incentive Auction Forward #1002		BC Bidding Co.		Round 10	Round ends: 59:53	12:00 PM ET 1/4/2017		
Place Bids	My Results			Gross	Discount Capped (All Markets)	Net	Discount Uncapped (All Markets)	Discount Uncapped (Small Markets)
Upload Bids	Adjusted Payment (Assigned PEAs)			\$418,932,257	\$104,733,064	\$314,199,193	\$104,733,064	\$0
Bid Summary	Unadjusted Commitment (Unassigned PEAs)			\$62,418,654	\$15,604,664	\$46,813,990	\$15,604,664	\$0
My Results	Total			\$481,350,911	\$120,337,728	\$361,013,183	\$120,337,728	\$0
Downloads	Round ↓	Region	Market Number	Market Name	C1 Winnings	C2 Winnings	Assignment	Payment
Auction Info								
Auction Schedule	9	high demand	PEA010	Houston, TX	2	0	AB	\$142,261,839 [+]
Messages	8	high demand	PEA009	Miami, FL	2	0	DE	\$184,977,418 [+]
	6	high demand	PEA006	Philadelphia, PA	1	0	E	\$91,693,000 [+]
Logged in as: Norma Jeane Lock Screen Logout © 2000-2016 by Power Auctions LLC								

Bidders with a rural service provider bidding credit will see similar information but will not see the last column “Discount Uncapped (Small Markets)” as it is only applicable to bidders with a small business bidding credit.

9.3. Round-by-Round Bidder Results

The lower part of the My Results screen displays the bidder’s assignment and payment results for all posted assignment rounds in which the bidder had winnings in the clock phase. Results can be sorted by clicking on the column header, and filtered by typing the desired parameter in the box under the relevant header.

For each of these rounds, the table lists the bidder’s assigned option and the associated adjusted gross payment amount. This payment is the total of the impairment adjusted clock phase price(s) for all licenses in the option plus the assignment phase payment, not taking into account any bidding credits or

caps. To view the breakdown of a payment into its respective components, click on the “+” next to the payment figure. The system will then display a detail table below the payment amount, as shown in Figure 18. After viewing the details of the adjusted gross payment, the table can be collapsed by clicking on the “-” next to the payment figure as indicated in Figure 18.

Figure 18: My Results screen showing the breakdown of a payment

My Results

Adjusted Payment (Assigned PEAs) \$2,378,352,079

Unadjusted Commitment (Unassigned PEAs) \$1,802,506,402

Total \$4,180,858,481

Round ↓	Region	Market Number	Market Name	C1 Winnings	C2 Winnings	Assignment	Payment
6	high demand	PEA006	Philadelphia, PA	2	0	AB	\$188,958,403 [+]

Market	Block	Category	Clock Phase Price	Impairment	Impairment Discount	Impairment Adjusted Price
PEA006	A	C1-U	\$94,462,639	0.0%	\$0	\$94,462,639
PEA006	B	C1-U	\$94,462,639	0.0%	\$0	\$94,462,639
Total Impairment Adjusted Price						\$188,925,278
Assignment Payment						\$33,125
Adjusted Gross Payment						\$188,958,403

5	high demand	PEA004	San Francisco, CA	1	0	G	\$108,957,683 [+]
4	high demand	PEA003	Chicago, IL	1	0	C	\$136,593,462 [+]
3	high demand	PEA005 PEA007 PEA027 PEA033	Baltimore, MD-Washington, DC Boston, MA Salt Lake City, UT Virginia Beach, VA	12	0	ABC	\$665,751,531 [+]
2	high demand	PEA002	Los Angeles, CA	2	0	AB	\$776,978,000 [+]
1	high demand	PEA001	New York, NY	1	0	G	\$501,113,000 [+]

9.4. Downloadable Results

You can also download two files containing results from the Downloads screen (see Figure 7 on page 12) “My Results” and “My Cumulative Results”. Full details about the specifications for downloadable files may be found in the “Forward Auction Assignment Phase File Formats” document located on the Auction 1002 website under the Data tab (available at www.fcc.gov/auctions/1002).

9.4.1. My Results

The downloadable “My Results” file provides the bidder’s assignment results, showing the winning assignment and any associated assignment phase payment for each PEA or PEA group that has been assigned so far in the assignment phase. It reflects the round-by-round information displayed on the bottom portion of the My Results screen. The file does not include the payment breakdown information provided in the detail table that can be viewed when clicking on the “+” next to a payment (see Figure 18) on the My Results screen. However, the clock phase prices of blocks can be found in the downloadable “My Bid Options Details” file.

9.4.2. My Cumulative Results

The downloadable “My Cumulative Results” file contains the cumulative payment amounts for the bidder as of the end of each round (once the round has been posted), and reflects the information displayed in the top portion of the My Results screen. However, unlike the screen, it includes cumulative data for past rounds as well as the most recently posted round. When the results of a round are posted, an additional three rows of data are appended to the end of the file containing the new cumulative payment amounts. Therefore, it is possible to view cumulative results as of the point in time when a past round was posted by the viewing the data corresponding to that round.

Appendix 1: System Troubleshooting

Please refer to the Forward Auction Bidding System User Guide (available on the Education tab of the Auction 1002 website, www.fcc.gov/auctions/1002) for guidance on system troubleshooting. The following topics are covered:

Situation 1: Page cannot be displayed error message on first access

Situation 2: Cookies must be enabled error message

Situation 3: JavaScript must be enabled error message

Situation 4: Page cannot be displayed error message when navigating to new screen

Situation 5: Page has expired error message when back button is clicked

Situation 6: Security settings do not allow you to download error message

Situation 7: Computer or web browser crashes

Situation 8: Certificate error message

Appendix 2: RSA SecurID® Token Information

Please refer to the Forward Auction Bidding System User Guide (available on the Education tab of the Auction 1002 website, www.fcc.gov/auctions/1002) for information about RSA tokens, including the following topics:

- 1. Number of RSA Tokens Issued and Extra RSA Tokens**
- 2. Replacing Lost or Damaged RSA Tokens**
- 3. Change of User (Authorized Bidder)**