

Auction 102 Assignment Phase Bidding System User Guide

April 12, 2019

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Contents

1.	Introduction			
	1.1. Conventions			
	1.2. Guide Structure			
2.	Overview of the Assignment Phase			
3.	System Requirements and Access			
	3.1. Minimum System Requirements			
	3.2. Logging In			
	3.2.1. First Time Login Procedures4			
	3.2.2. Standard Login Procedure4			
	3.2.3. Login Errors4			
	3.3. Multiple Users for the Same Bidder4			
	3.4. Automatic and Manual Logout4			
	3.5. Auction Bidder Line			
4.	System Navigation and Overview5			
	4.1. Navigation Bar and Features Common to All Screens			
	4.2. Summary of Bidding System Screens			
	4.3. Summary of Downloads			
5.	Viewing Product Information			
	5.1. Assignment Rounds			
	5.2. My Clock Phase Winnings			
	5.3. Blocks			
6.	Auction Schedule and Messages			
	6.1. Auction Schedule			
	6.2. Messages: Announcements and Conversations			
	6.2.1. Receiving and Reviewing Announcements			
	6.2.2. Conversations with the FCC			
7.	Bidding Functions			
	7.1. Viewing Available Bid Options			
	7.2. Placing Bids via the User Interface			
	7.2.1. Layout and Actions of the Place Bids Screen14			

	7.2.2. Entering and Submitting Bids	15	
	7.2.3. Changing Bids	17	
	7.2.4. Bidding in Rounds with REAGs	17	
	7.3. Placing Bids via File Upload	18	
8.	Verifying Bids		
	8.1. Bid Summary	22	
	8.2. My Bids and Options Download	24	
9.	Viewing Results	25	
	9.1. My Results Screen	25	
	9.2. Aggregate Payment Information	26	
	9.2.1. Gross Payment Information	26	
	9.2.2. Bidding Credits and Caps	27	
	9.3. Round-by-Round Bidder Results	29	
	9.4. Downloadable Results	30	
	9.4.1. My Results	30	
	9.4.2. My Cumulative Results	31	
Ар	pendix 1: System Troubleshooting	32	
	Situation 1: Page cannot be displayed error message on first access	32	
	Situation 2: Cookies must be enabled error message	32	
	Situation 3: JavaScript must be enabled error message	32	
	Situation 4: Page cannot be displayed error message when navigating to new screen	32	
	Situation 5: Page has expired error message when back button is clicked	32	
	Situation 6: Computer or web browser crashes	32	
	Situation 7: Certificate error message		
An	nendix 2: RSA SecurID® Token Information	33	

1. Introduction

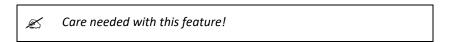
This guide describes the features of the web-based FCC bidding system that bidders will use to bid in the assignment phase of the 24 GHz Upper Microwave Flexible Use Licenses for Next-Generation Wireless Services auction (Auction 102). Additional information for this auction can be found on the FCC Auction 102 website: www.fcc.gov/auction/102.

Qualified applicants that have won generic blocks in the clock phase of the auction are permitted to access the bidding system in order to bid for frequency-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 "Reliable Access, Inc.", a bidder that does not have a bidding credit. Representative examples are also given for a bidder with a small business bidding credit and for a bidder with a rural service provider bidding credit.

In this guide, the term "bidder" refers to an applicant that was identified by the FCC as qualified to bid in Auction 102 and that won generic blocks in the 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 regarding the licenses 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 Auction 102, 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 Auction 102, winners from the clock phase can bid for frequency-specific license assignments corresponding to the number of generic blocks they won in the clock phase for a category and PEA. Bidding in the assignment phase is voluntary. All clock phase winners will be assigned contiguous licenses within a category and PEA regardless of their bid amounts and whether they bid.

The assignment phase progresses through a sequence of assignment rounds. In each round, each clock phase winner of one or more licenses in a PEA will have one opportunity to bid for licenses in that PEA. If the same bidders win the same number of licenses in more than one PEA, under certain conditions those PEAs will be grouped for bidding, and the same winning assignment will be made for all the PEAs in the group. For the Top 40 PEAs, assignment rounds will be conducted separately for each PEA. Assignment rounds for other 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 category in 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 clock phase payment 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. To determine the assignment for each category in 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 one of its bidding options, and that any unsold blocks are assigned contiguous frequencies. For Category L, 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. For Category U, the assignment payments may be higher than the "second prices" to ensure that no bidder or group of bidders is willing to pay more for an alternative feasible assignment. 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 Auction 102 24 GHz Clock Phase User Guide (available in the Education section of the Auction 102 website, www.fcc.gov/auction/102) 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 Requirements
- 3.2. Logging In
 - 3.2.1. First Time Login Procedures
 - 3.2.2. Standard Login Procedure
 - 3.2.3. Login Errors
- 3.3. Multiple Users for the Same Bidder
- 3.4. Automatic and Manual Logout
- 3.5. Auction Bidder Line

4. System Navigation and Overview

The bidding system provides bidding information in two ways: on screens, accessed through the navigation bar; and through downloadable files, generally accessed via the Downloads screen. In addition, the My-Bids-And-Options sample bids upload file is available on the Upload Bids screen once the bidding system becomes available prior to the start of the assignment phase of Auction 102.

This section describes how to access and navigate through the screens of the bidding system.

4.1. Navigation Bar and Features Common to All Screens

All screens in the bidding system have a navigation bar on the left side, which provides links to the other available screens. Beneath the navigation bar is your name (the name of the authorized bidder who has logged in) and the Logout button, as described in Section 3.4.

The blue bar at the top of each screen is also common to all screens. It displays status and timing information. It shows the name of the qualified bidder, the current 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.

Navigation bar

Navigation bar

Navigation for Assignment Places

Relation 102

Auction 102

Auction 103

Round 1 has not yet started.

Round 1 has not yet started.

Round 1 has not yet started.

Round 2 has action info

Auction info

Aucti

Figure 1: Navigation bar features common to all screens

Authorized bidder name Logout

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

Screen	Description		
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 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 send messages to the FCC and to view announcements and messages from the FCC		

4.3. Summary of Downloads

The following table provides a summary of the downloads available in the bidding system, and how to access these downloads.

Table 2: Summary of downloads available in the bidding system

Screen	Where to access	Description
My Bids and Options	Upload Bids, Downloads	This file is a template for placing bids via uploads during a round and contains the bidder's bidding options. It is available once the bidding system becomes available prior to the start of round 1.
My Results	Downloads	The results of bid processing for each of the assignment rounds
My Cumulative Results	Downloads	Cumulative payment information for the bidder after every round

5. Viewing Product Information

The Auction Info screen provides information about the licenses 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 clock phase prices for the categories in the PEA(s).

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.

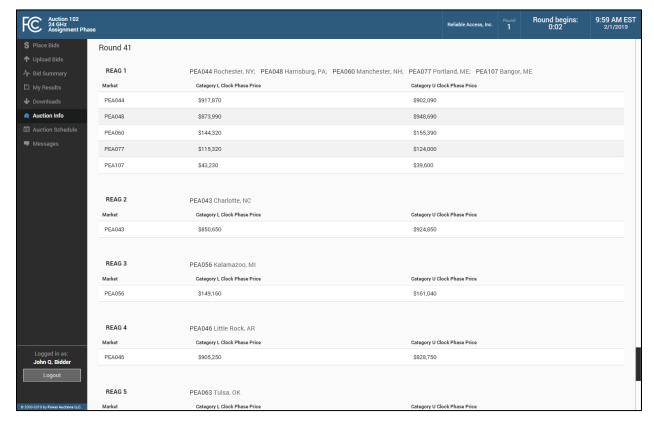
Figure 2, below, shows the Assignment Rounds tab before the start of round 1.

Auction 102
24 GHz
Assignment Phase Reliable Access, Inc. Roun Auction Info - Assignment Rounds Tupload Bids Assignment Rounds My Clock Phase Winnings Blocks ◆ Downloads Round 1 Auction Info Category L Clock Phase Price ■ Messages Category U Clock Phase Price Round 2 PEA002 Los Angeles, CA Category L Clock Phase Price Category U Clock Phase Price Market \$13,392,900 \$14,091,660 Round 3 PEA003 Chicago, IL Category U Clock Phase Price Market Category L Clock Phase Price \$6,461,850 \$6,218,360 Round 4 PEA004 San Francisco, CA Market Category L Clock Phase Price Category U Clock Phase Price

Figure 2: Auction Info screen - Assignment Rounds tab

Figure 3 provides an example of the screen for a round where some PEAs are grouped and where multiple REAGs are being assigned in the same round.

Figure 3: Auction Info screen - Assignment Rounds tab - round with multiple REAGs

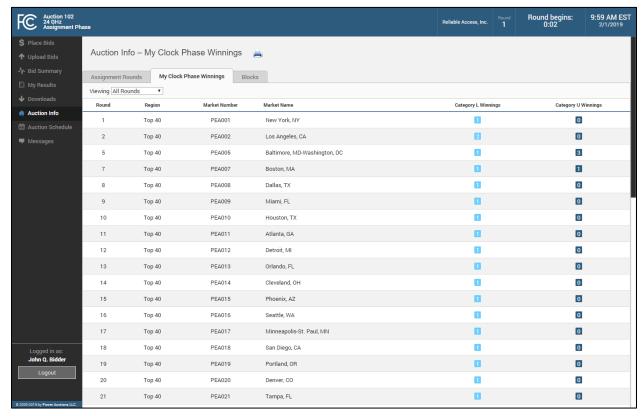


5.2. My Clock Phase Winnings

The My Clock Phase Winnings tab of the Auction Info screen displays a bidder's clock phase winnings, ordered by the round in which they will be assigned. The Region column indicates whether the PEA is in the Top 40 PEAs, and if not, provides its REAG number. The columns Category L Winnings and Category U Winnings provide the number of blocks the bidder won in the clock phase in these categories. These are the total winnings across all PEAs in a group. For example, if five PEAs were grouped and the bidder had won one Category L block in each of these PEAs, the bidder would have a total of five Category L Winnings for this PEA group.

Before the start of round 1 the screen lists all rounds. 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 screen – My Clock Phase Winnings tab



5.3. Blocks

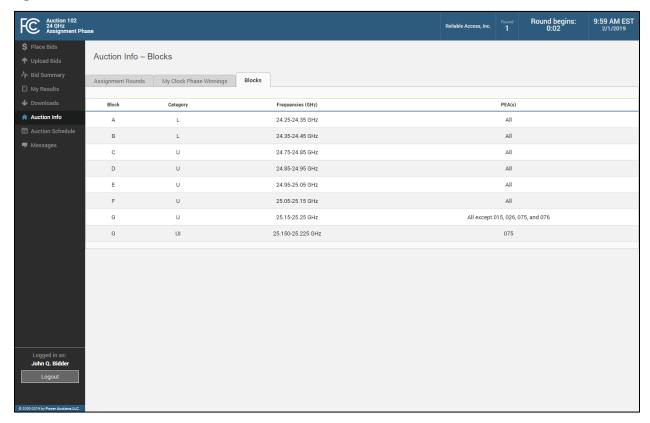
The Blocks tab of the Auction Info screen, shown in Figure 5, displays the specific frequencies corresponding to each block (license) in the auction.¹

¹ Auction 102 has four PEAs with supplies of blocks that differ from the rest of the PEAs: PEA015, PEA026, PEA075 and PEA076. Three of the PEAs (PEA015, PEA026 and PEA076) do not have a G block. In PEA075, the G block has reduced bandwidth (75 megahertz instead of 100 megahertz) and spans 25.150 to 25.225 GHz.

Page 9

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Figure 5: Auction Info screen – Blocks tab

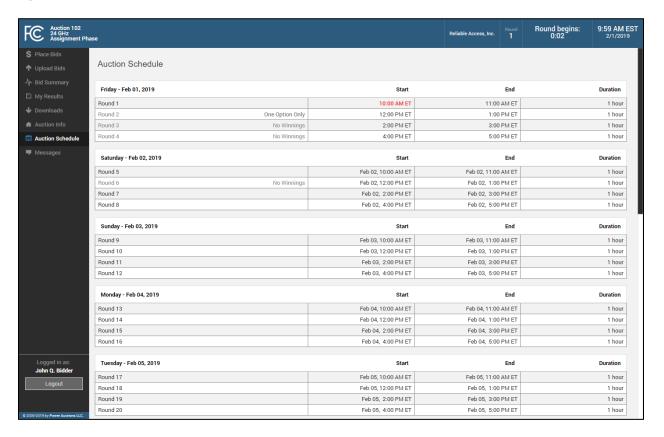


6. Auction Schedule and Messages

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 the bidder has no clock phase winnings and in which it is therefore unable to bid are grayed-out, with the words "No Winnings" (see round 3 in the sample screen below). Rounds in which a bidder has won all available Category L or Category U blocks, and no other licenses within the PEA or PEA group, the bidding screen will appear but the bidder will be automatically assigned the licenses and will not be able to place bids for this market since it has only one bidding option. In this case, the round in the auction schedule will be greyed out with the words "One Option Only" (see round 2 in sample screen below). The time of the next event, which is either the start or end time of a round, is displayed in bold red text.

Figure 6: Auction Schedule screen



6.2. Messages: Announcements and Conversations

Please refer to Auction 102 24 GHz Clock Phase User Guide (available in the Education section of the Auction 102 website, www.fcc.gov/auction/102) 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 file 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 in which it can bid based on its clock phase winnings. This file can also be used to upload bids for the current and future rounds, as described in Section 7.3.

Details about the specifications for these files may be found in the "Auction 102 Assignment Phase Bidding System File Formats" document located on the Auction 102 website in the Education section (available at www.fcc.gov/auction/102).

Audition to Code date

Downloads

From II Description

From Audition Echecule

Audition Echecule

Audition Echecule

Mossages

Inty Cumulative Results

Logged in az. John Q Bidder

Logged II az. John Q Bidder

Figure 7: Downloads screen

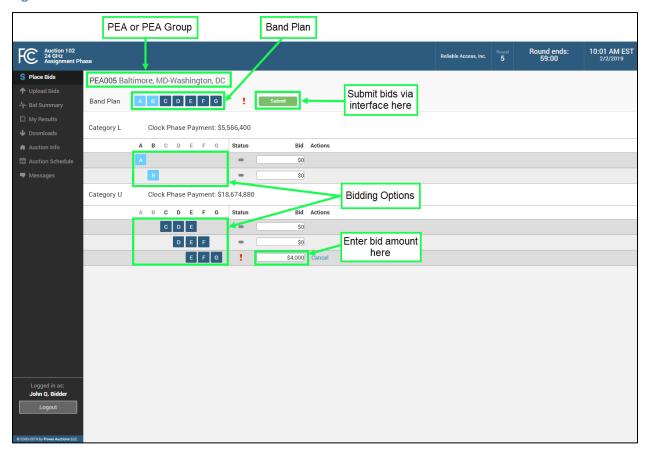
7.2. Placing Bids via the User Interface

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

7.2.1. 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 layout of the Place Bids screen before any bids have been submitted in a round. The bidder in this example has won one generic block of Category L and three generic blocks of Category U in the clock phase.

Figure 8: Place Bids screen



At the top of the Place Bids screen is a list of the PEA(s) being assigned in the current round. The Band Plan shows the blocks associated with the PEA.²

The lower portion of the screen shows all of the bidder's bidding options for each category. 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 allows you to submit the bids you indicated in the user interface.

² Auction 102 has four PEAs with band plans that differ from the rest of the PEAs: PEA015, PEA026, PEA075 and PEA076. Three of the PEAs (PEA015, PEA026 and PEA076) do not have a G block. PEA075 has a reduced bandwidth G block, which is denoted by a darker shade of blue. If a bidder wins Category UI (the reduced bandwidth G block) in PEA075, any other Category U licenses it is assigned in PEA075 will be contiguous to the G block.

7.2.2. Entering and Submitting Bids

To enter a bid on the Place Bids screen, enter a bid amount in the Bid column field corresponding to the desired bidding option. Once you enter a bid amount for an option, the status for this 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 it. You can then repeat this for all options for which you wish to place bids. If you change your mind and decide you do not wish to enter a bid for that option, you can click on Cancel in the Actions column next to the Bid column.

Auction 102 24 GHz Assignment Round ends: 59:00 PEA005 Baltimore, MD-Washington, DC Band Plan A B C D E F G Clock Phase Payment: \$5,566,400 Category L A B C D E F G Status Bid Actions \$2.018 Cancel \$17,832 Cancel Clock Phase Payment: \$18,674,880 Category U A B C D E F G Status Bid Actions C D E \$33,932 Cance D E F -E F G ! \$4,000 Cancel

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

For each bidding option with an entered bid, the bidding system displays a red exclamation mark (!) in the status column to indicate that a bid has not been submitted yet. For each bidding option for which no bid is entered, the bidding system displays a gray dash (-) in the status column. 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.

The bidding system requires bids to be non-negative whole dollar amounts. If you enter an invalid bid amount, the system will display an error message to the right of the <u>Cancel</u> link and the <u>Submit</u> button will be disabled until you enter a valid bid amount or click Cancel to discard your changes.

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



During bid processing of a round, the bidding system considers bids for all bidding options including bidding options for which the bidder specified a zero bid amount.

During a round, the bidding system will display a warning popup message if you try to navigate away from the Place Bids screen after entering a bid amount for a bidding option without submitting the bid. If you then choose to leave the screen, any bids that you entered but did not submit will be lost.



You must submit your bids using the <u>Submit</u> button before leaving the page and before the round is over. **Any bids that are entered but not submitted will be lost.**

Auction 102
24 GHz
Assignment Round ends: 59:00 PEA005 Baltimore, MD-Washington, DC Band Plan A B C D E F G Clock Phase Payment: \$5,566,400 Category L A B C D E F G Status Bid Actions \$2,018 Change Clock Phase Payment: \$18,674,880 Category U A B C D E F G Status Bid Actions \$33,932 Chang -E F G \$4,000 Change

Figure 10: Place Bids screen - Bids have been submitted

7.2.3. Changing Bids

As long as the round remains open, you may modify any submitted bids by clicking <u>Change</u> under the Actions column for a bidding option (see Figure 10). After you click <u>Change</u>, the bid input field becomes editable, and the bidding system will remove the green checkmark (\checkmark) for the bid option to indicate that any modified bid amount has not yet been submitted. You can then enter a new bid for the option. If you would like to delete a bid, change the bid amount to 0.

Only bids that have been submitted will be processed by the bidding system. Once you have finished making changes to your bids, you must click Submit again in order to submit those changes to the bidding system, otherwise the previously submitted bids will remain in the bidding system. The bidding system displays a large red exclamation mark (!) next to the Submit button to indicate that you have at least one unsubmitted bid.

7.2.4. Bidding in Rounds with REAGs

After the Top 40 PEAs are assigned, licenses will be assigned simultaneously in multiple REAGs. In these rounds, 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 licenses in the clock phase and therefore may bid in the assignment phase. 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).

As long as the round remains open, you may modify your bids for any of the PEAs or PEA groups being assigned during that round, 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 any bids that you entered but did not submit will be lost.



Bids in one REAG must be submitted before moving to another REAG, otherwise they will be lost.

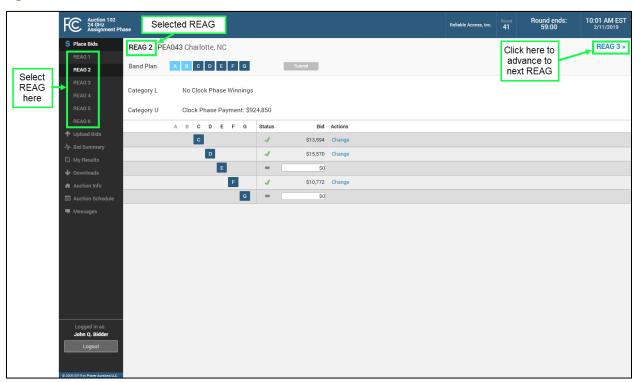


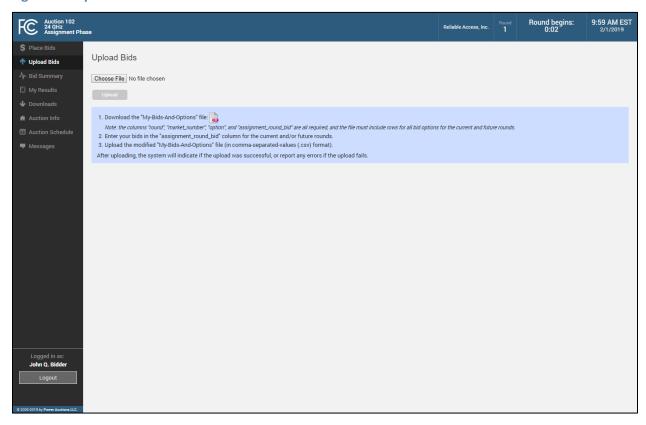
Figure 11: Place Bids screen - Round with REAGs

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. Any bids uploaded for past rounds will be ignored. Full details on the specification of the bid upload file are available in the "Auction 102 Assignment Phase Bidding System File Formats" document located on the Auction 102 website in the Education section (available at www.fcc.gov/auction/102).

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

Figure 12: Upload Bids screen

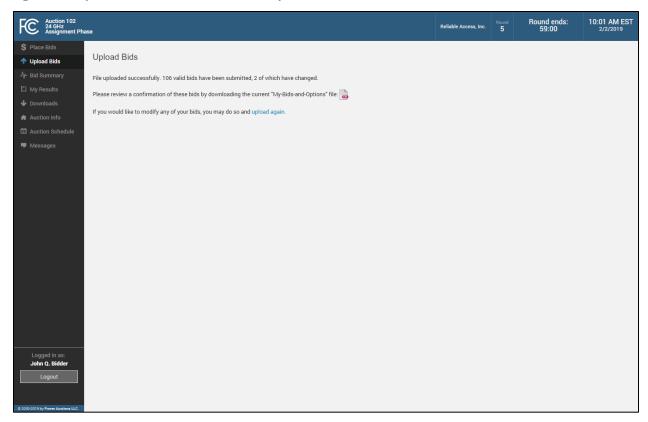


The screen provides instructions on how to upload bids. The steps are as follows:

- 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 round and for any 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 also upload bids for a future round at any time prior to the future round closing.
 - 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.
- 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.

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 - successful upload



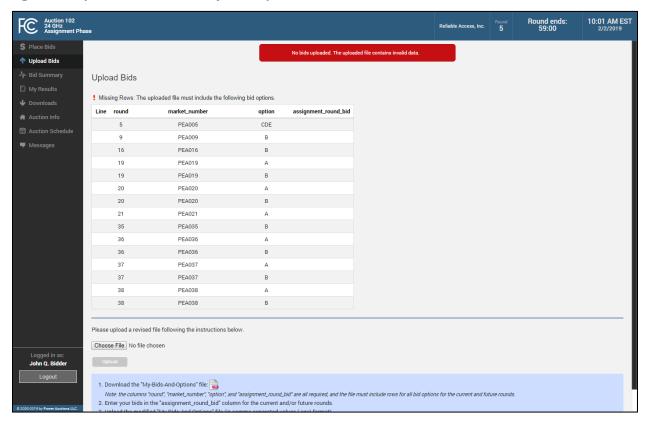
You can review the bids you have uploaded by downloading the My Bids and Options file. You can also view the bids you have uploaded for the current round by viewing the Bid Summary screen, described in Section 8.1.

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.

Page 20

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 - rejected upload



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 "option");
- **Missing Row(s)** there are bidding options that the bidder is permitted to bid for (in the current or in a 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 on behalf of the bidder, so far in the current round and for all 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.

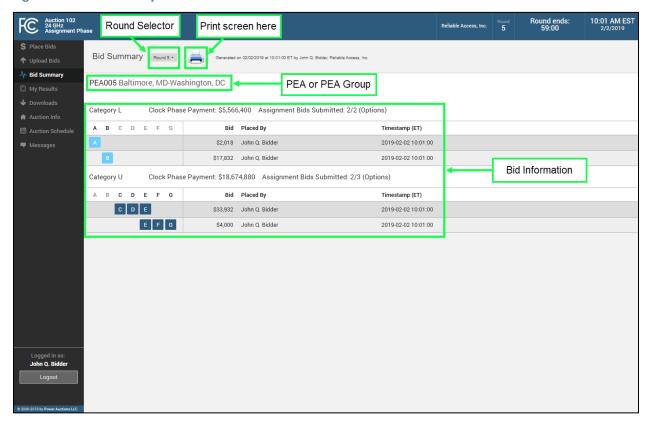
At the top of the Bid Summary screen is a round selector and a printer icon.

The lower portion of the screen shows the bidder's bidding options with submitted bids for each PEA or PEA group assigned in the selected round. Next to each bidding option, the screen displays the bid for that option, the name of the authorized bidder that submitted the bid, and the time of bid submission. If no bids have been submitted for options in a category, the words "All Zero Dollar Bids" appear in the Bid column.

Page 22

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.

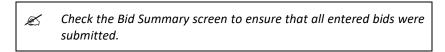
Figure 15: Bid Summary screen



Bid information for the most recent current or completed round is shown by default. To see bid information for a previous round, select the round number from the round drop-down menu, located at the top of the screen.

At all times you may print a record of submitted bids in a round by clicking on the printer icon on the Bid Summary screen.

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.

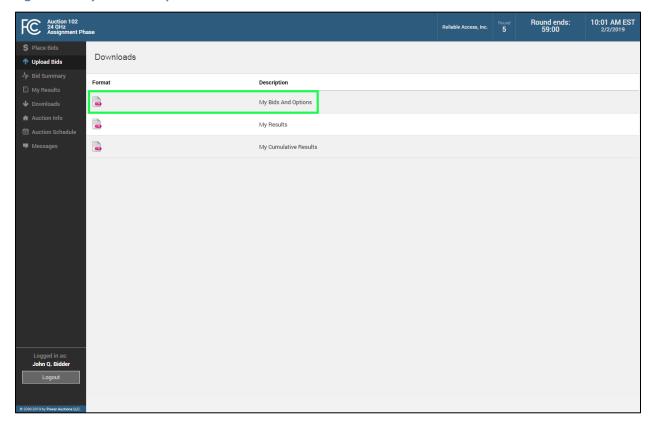


The Bid Summary screen contains the last submitted bid for each option. It does not contain earlier bids that were submitted for that option but subsequently changed.

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 file can be accessed at any time when the bidding system is available. Details about the specifications for downloadable files may be found in the Auction 102 Clock Phase File Formats document located on the Auction 102 website in the Education section (available at www.fcc.gov/auction/102).

Figure 16: My Bids and Options download



The My Bids and Options file provides up-to-date information about bids submitted during the current and past rounds, including bids submitted by upload for future rounds. The My Bids and Options file does not contain bids that were submitted earlier in a round but subsequently changed. 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

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 from the Downloads screen. Note that, unlike during the clock phase, the Public Reporting System does not display the schedule or round-by-round results from the assignment phase.

9.1. My Results Screen

The layout of the My Results screen is provided in Figure 17. The top portion of the screen displays the bidder's aggregate payment information, specifically the clock phase payment for all PEAs, the assignment payment to date, which updates after each round, and the total, which is the sum of the clock phase payment and the assignment payment. If a bidder has claimed a bidding credit, the bidding system will also display net payments and bidding credit discounts (capped and uncapped), as shown in Section 9.2.

The lower part of the My Results screen lists the bidder's round-by-round assignment results. An assignment round number is displayed in the first column. The next three columns provide information about each assignment phase market, specifically, the region number⁵ and market number(s) and name(s). The next column provides the bidder's clock phase payment for the assignment phase market across both categories. The last four columns provide information about the assignment, assignment bid and payment, and gross payment, which is the sum of the clock phase payment and the assignment payment.

Page 25

⁵ The six Regional Economic Area Groupings (REAG) are Northeast, Southeast, Great Lakes, Mississippi Valley, Central, and West. Each of the remaining REAGs (Alaska, Hawaii, Puerto Rico and US Virgin Islands, Guam and the Northern Mariana Islands, American Samoa, and the Gulf of Mexico) will be merged in one of the 6 REAGs covering the contiguous United States. For PEAs 1–40, the region is listed as "Top 40."

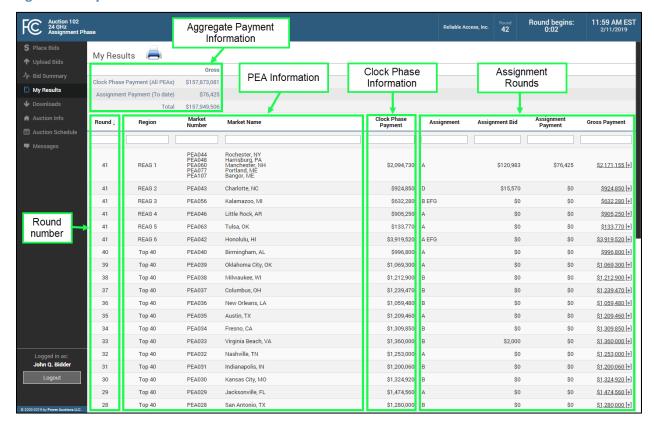


Figure 17: My Results screen

You may print a record of the bidder's assignment results to-date by clicking on the printer icon on the My Results screen.

9.2. Aggregate Payment Information

The top portion of the My Results screen shows a bidder a running total of its payment obligations, equal to the sum of the bidder's clock phase payment across all PEAs and the assignment phase payments, if any, for all PEAs that have been assigned to date. 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 17 provides an example of the gross aggregate payment information that is displayed in the top portion of the screen. This information includes:

- Clock Phase Payments (All PEAs): The first line shows the bidder's total commitment for all winnings in the clock phase. It includes all PEAs: the PEAs that have already been assigned and the PEAs that will be assigned in future rounds of the assignment phase.
- Assignment Payments (To date): The second line shows the bidder's total assignment payment
 for all assignment phase markets that have been assigned thus far in the assignment phase. This

- is the total of the "Assignment Payment" column displayed in the round-by-round table underneath (see Section 9.3).
- **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.

The Clock Phase Payment (All PEAs) does not change as the assignment phase progresses. The Assignment Payment may increase when results are posted for a round in which the bidder was assigned one or more licenses. Therefore, as the rounds are processed, the bidder's total payment, which is the sum of bidder's Clock Phase Payment and Assignment Payment, may increase by the amount of the Assignment Payment.

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

9.2.2. Bidding Credits and Caps

If a bidder has claimed a bidding credit, the My Results screen contains information about gross and net payments, bidding credit discounts, and bidding credit caps. An example of the aggregate payment information for a bidder with a small business bidding credit is provided in Figure 18 below. Figure 18 highlights the additional information displayed for a bidder with a small business bidding credit. For each of the "rows" (Clock Phase Payments (All PEAs), Assignment Payments (To Date), and Total), these additional columns are:

- **Discount Capped (All Markets):** The bidder's aggregate discount taking into account the applicable bidding credit caps.
- Net: The bidder's aggregate net payment amount (gross payment minus capped discount).
- Discount Uncapped (All Markets): The bidder's gross payment multiplied by its bidding credit percentage. This calculation does not take into account any applicable bidding credit caps. If the uncapped discount exceeds the capped discount, the uncapped discount amount in the Total row 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 total 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.

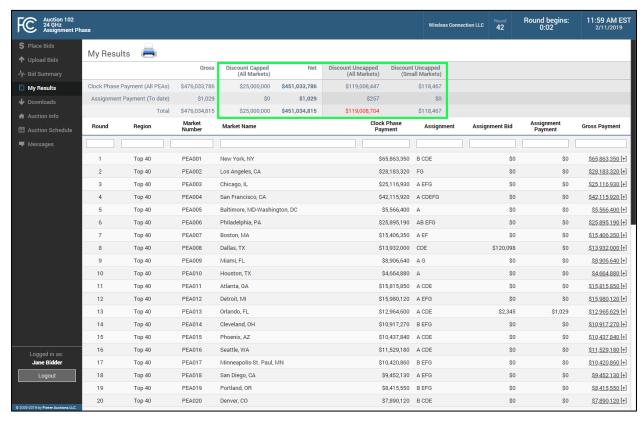


Figure 18: My Results screen - Bidder with a small business bidding credit

A bidder with a rural service provider bidding credit will see similar information. This bidder will not see Discount Uncapped (Small Markets), the last column, as it is only applicable to bidders with a small business bidding credit (see Figure 19).

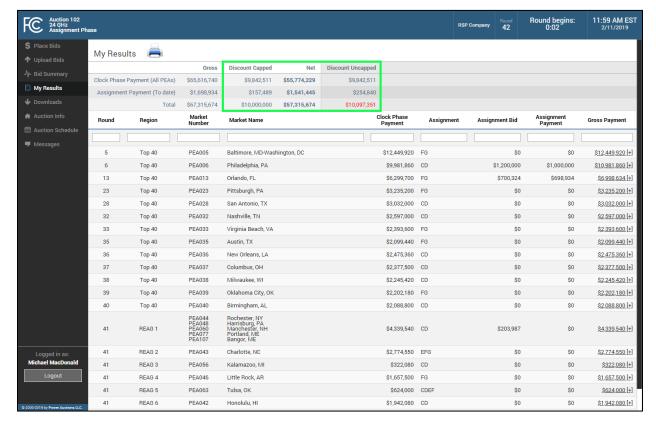


Figure 19: My Results screen – Bidder with a rural service provider bidding credit

The bidding credit caps apply to the sum of aggregate payments from both the clock phase and assignment phase of Auction 102. A bidder with a bidding credit discount may reach its bidding credit cap(s) in the clock phase or assignment phase. For example, the bidder in Figure 18 reached its overall bidding credit cap in the clock phase; the bidder in Figure 19 reached its bidding credit cap in the assignment phase. When a bidder reaches its overall bidding credit cap, the total value in the Discount Uncapped column is shown in red. When a bidder with a small business bidding credit discount reaches its small markets bidding credit cap, the total value in the Discount Uncapped (Small Markets) column is shown in red.

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. You may filter the data shown in the table by entering a value in the input field at the top of each column. You may sort the table by clicking on a column header to sort the values in that column in ascending order. Clicking on the column header a second time re-sorts the values in that column in descending order.

For each of these rounds, the table lists the bidder's assignment, assignment bid and payment, and gross payment. To view the breakdown of a payment into its respective components, click on the "+" next to the gross payment value. The system will then display a detailed table, as shown in Figure 20. For a PEA group, the detailed table displays a clock phase payment for each PEA in the group as well as

the total (see Figure 20). If a bidder has winnings in both Category L and Category U in the assignment phase market, then the detailed table displays the bidder's assignment, assignment bid and payment, and gross payment for each category as well as the total. After viewing the details of the gross payment, the table can be collapsed by clicking on the "-" next to the payment value as indicated in Figure 20.

Auction 102
24 GHz
Assignment Phase Round begins: 11:59 AM EST My Results ock Phase Payment (All PEAs) Click here to My Results \$76,425 Assignment Payment (To date) collapse \$157,949,506 Region Clock Phase Gross Payment Round 1 Market Name \$2,171,15 [-] 41 REAG 1 \$2,094,730 A \$120,983 \$76,425 Assignment Payment Assignment Bid Gross Payment \$120,983 \$76,425 \$2,171,155 REAG 2 PEA043 \$924,850 D Charlotte, NC \$15,570 \$924,850 [+] 41 \$632,280 [+] REAG 3 PEA056 Kalamazoo, MI \$632,280 B EFG \$0 \$0 41 REAG 5 PFA063 \$133,770 A ŝ0 \$133,770 [+] 41 REAG 6 PEA042 Honolulu, HI \$3,919,520 A EFG \$3,919,520 [+] PEA040 \$996,800 A \$0 40 Top 40 Birmingham, AL \$996,800 [+] 39 Top 40 PEA039 Oklahoma City, OK \$1,069,300 A \$0 \$0 \$1,069,300 [+] Top 40 PEA038 \$1,212,900 B <u>\$1,212,900 [+]</u> 37 Top 40 PEA037 \$1.239.470 B \$1,239,470 [+] \$1.059.480 B PEA036 New Orleans, LA \$1,059,480 [+] Top 40 PEA035 \$1,209,460 \$1,209,460 [+] \$0 34 Top 40 PEA034 Fresno, CA \$1.309.850 B \$0 \$1,309,850 [+]

Figure 20: My Results screen - Payment breakdown detail

9.4. Downloadable Results

You can also download two files containing results on the Downloads screen (see Figure 7): My Results and My Cumulative Results. Full details about the specifications for downloadable files may be found in the "Auction 102 Assignment Phase Bidding System File Formats" document located on the Auction 102 website in the Education section (available at www.fcc.gov/auction/102).

9.4.1. My Results

The My Results file provides the bidder's assignment results, showing the winning assignment and any associated assignment bid and payment, and gross payment for each assignment phase market (PEA or PEA group) and category that has been assigned so far in the assignment phase. The information contained in the My Results file mirrors the round-by-round information contained on the bottom portion of the My Results screen (see Section 9.3 for details about the My Results screen). The file shows assignment and payment information for different categories in separate rows. However, in the

case of a PEA group, the file does not show the clock phase payment breakdown for each PEA as provided in the detail table that can be viewed when clicking on the "+" next to a gross payment (see Figure 20) on the My Results screen.

9.4.2. My Cumulative Results

The 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 (see Section 9.2 for details about the My Results screen). However, unlike the My Results screen, it includes cumulative data for past rounds as well as for the most recently posted round. When the results of a round are posted, an additional row of data is 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 viewing the data corresponding to that round.

Appendix 1: System Troubleshooting

Please refer to the Auction 102 24 GHz Clock Phase User Guide (available in the Education section of the Auction 102 website, www.fcc.gov/auction/102) 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: Computer or web browser crashes

Situation 7: Certificate error message

Appendix 2: RSA SecurID® Token Information

Please refer to the Auction 102 24 GHz Clock Phase User Guide (available in the Education section of the Auction 102 website, www.fcc.gov/auction/102) for information about RSA tokens, including the following topics:

- Number of RSA Tokens Issued and Extra RSA Tokens
- Replacing Lost or Damaged RSA Tokens
- Change of User (Authorized Bidder)