



Auction 103 Assignment Phase Bidding System User Guide

January 30, 2020

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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 Auction 103, Spectrum Frontiers – Upper 37 GHz, 39 GHz, and 47 GHz bands.

Additional information for this auction can be found on the FCC Auction 103 website:

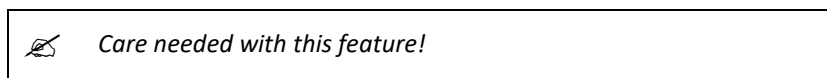
www.fcc.gov/auction/103.

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 non-incumbent bidder that does not have a bidding credit. Representative examples are also given for an incumbent bidder with a small business bidding credit and for a non-incumbent 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 103 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, 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 103, 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 assignment phase bid amounts and whether they bid in the assignment phase.

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 the opportunity to bid for specific licenses in that PEA. If the same bidders win the same number of licenses in more than one PEA, those PEAs will be grouped for bidding under certain conditions, and the same winning assignment will be made for all the PEAs in the group. For PEAs 1–20, assignment rounds will be conducted separately for each PEA. Assignment rounds for other PEAs will be conducted simultaneously for one PEA or PEA group in each of the six defined REAGs.

Once the assignment phase bidding 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 will consist of 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, in addition to 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. A bidder's Vickrey price is the lowest bid amount that would have resulted in the same winning assignment. The assignment payments may be higher than the Vickrey 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, any assignment payments, and the incentive payment (in the case of a 39 GHz incumbent), adjusted for any bidding credit discounts.

3. System Requirements and Access

Please refer to the Auction 103 Clock Phase Bidding System User Guide (available in the Education section of the Auction 103 website, www.fcc.gov/auction/103) 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 assignment phase bidding system becomes available.

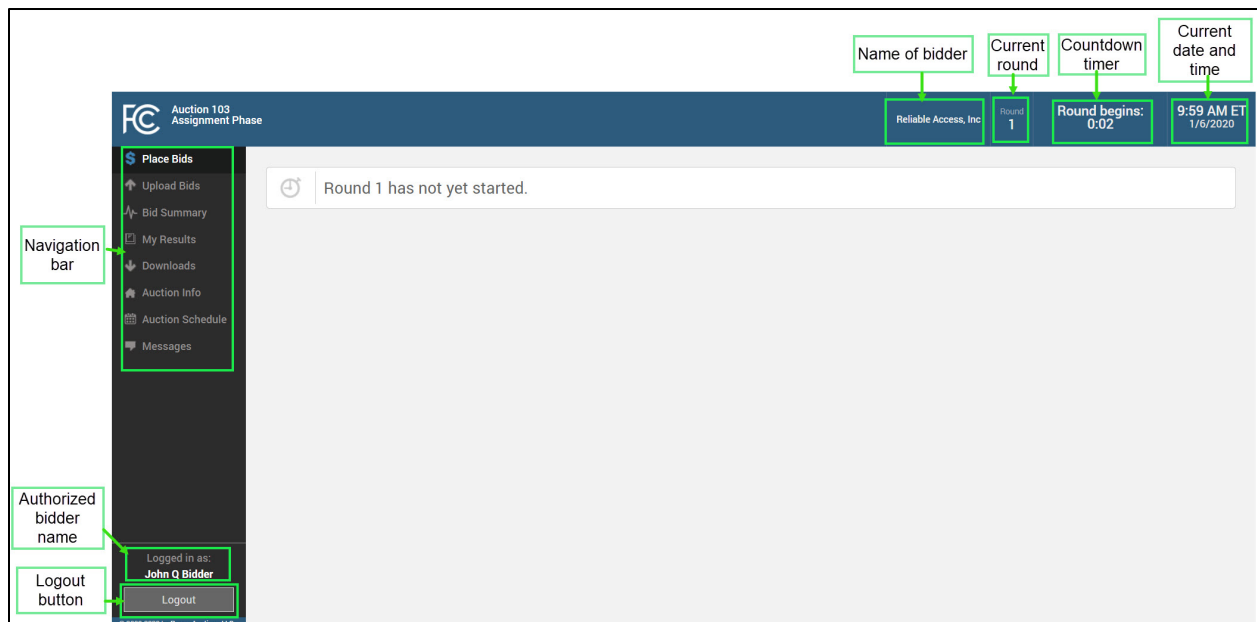
This section describes how to access and navigate through the screens of the bidding system.

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.

Figure 1: Navigation bar and features common to all screens



4.2. Bidding System Screens

The navigation bar gives access to eight screens. Their functions are summarized in Table 1 below.

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 view announcements and messages from the FCC, and to send messages to the FCC

4.3. 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

Download File	Where to access	Description
My Bids and Options	Upload Bids, Downloads	This file is a template for placing bids via uploads 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	This file contains the results of bid processing for each of the assignment rounds.
My Cumulative Results	Downloads	This file has the cumulative payment information for the bidder after every assignment round.
My Relinquished Credit	Downloads	This file is available only for bidders that are 39 GHz incumbents. It provides the incumbent's relinquishments in weighted MHz-pops and the corresponding final clock phase prices.

5. Viewing Auction 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. The data can also be filtered by using the round viewing filter on the top left-hand corner of the screen.

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

Figure 2: Auction Info screen – Assignment Rounds tab

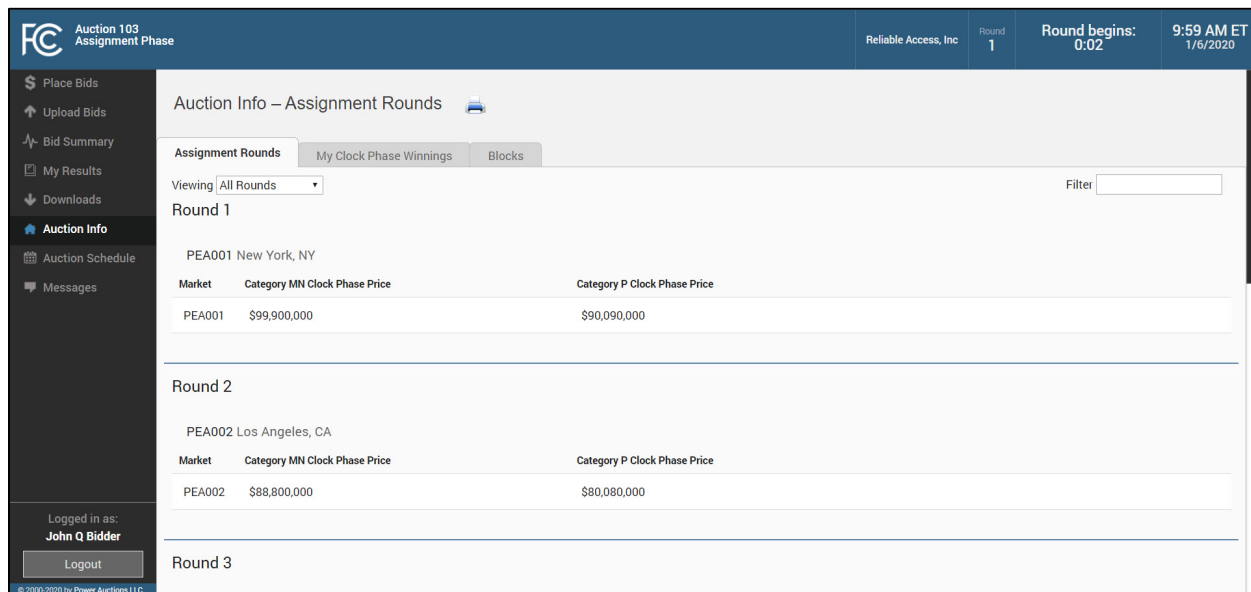


Figure 3 provides an example of the screen for a round where some PEAs are grouped and where multiple REAGs are being assigned in the same round.

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

Auction 103 Assignment Phase		Reliable Access, Inc	Round 1	Round begins: 0:02	9:59 AM ET 1/6/2020
Round 21					
REAG 1 PEA136 Williamsport, PA					
Market	Category MN Clock Phase Price		Category P Clock Phase Price		
PEA136	\$91,000		\$91,000		
REAG 2 PEA088 Frederick, MD; PEA100 Greenville, NC					
Market	Category MN Clock Phase Price		Category P Clock Phase Price		
PEA088	\$136,000		\$136,000		
PEA100	\$114,000		\$114,000		
REAG 3 PEA121 Altoona, PA; PEA123 Mansfield, OH					
Market	Category MN Clock Phase Price		Category P Clock Phase Price		
PEA121	\$98,000		\$98,000		
PEA123	\$97,000		\$97,000		
REAG 4 PEA051 Louisville, KY					
Market	Category MN Clock Phase Price		Category P Clock Phase Price		
PEA051	\$239,000		\$239,000		

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 they will be assigned. The Region column indicates whether the PEA is in the Top 20 PEAs, and if not, provides its REAG number. The columns Category MN Winnings and Category P 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 MN block in each of these PEAs, the bidder would have a total of five Category MN 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

Round	Region	Market Number	Market Name	Category MN Winnings	Category P Winnings
1	Top 20	PEA001	New York, NY	3	0
2	Top 20	PEA002	Los Angeles, CA	8	8
3	Top 20	PEA003	Chicago, IL	23	3
4	Top 20	PEA004	San Francisco, CA	23	3
5	Top 20	PEA005	Baltimore, MD-Washington, DC	0	10
6	Top 20	PEA006	Philadelphia, PA	3	3
7	Top 20	PEA007	Boston, MA	23	0
8	Top 20	PEA008	Dallas, TX	24	8
9	Top 20	PEA009	Miami, FL	3	3
10	Top 20	PEA010	Houston, TX	3	10
11	Top 20	PEA011	Atlanta, GA	3	10
12	Top 20	PEA012	Detroit, MI	3	0
14	Top 20	PEA014	Cleveland, OH	1	5
15	Top 20	PEA015	Phoenix, AZ	0	9

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.

Figure 5: Auction Info screen – Blocks tab

Block	Category	Frequencies (GHz)
M1	MN	37.6-37.7 GHz
M2	MN	37.7-37.8 GHz
M3	MN	37.8-37.9 GHz
M4	MN	37.9-38.0 GHz
M5	MN	38.0-38.1 GHz
M6	MN	38.1-38.2 GHz
M7	MN	38.2-38.3 GHz
M8	MN	38.3-38.4 GHz
M9	MN	38.4-38.5 GHz
M10	MN	38.5-38.6 GHz
N1	MN	38.6-38.7 GHz
N2	MN	38.7-38.8 GHz
N3	MN	38.8-38.9 GHz
N4	MN	38.9-39.0 GHz

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 13 in the sample screen below). Rounds in which a bidder has won all available Category MN or Category P 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 grayed out with the words “One Option Only” (see round 5 in the 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

Monday - Jan 06, 2020				
	Start	End	Duration	
Round 1	10:00 AM ET	11:00 AM ET	1 hour	
Round 2	12:00 PM ET	1:00 PM ET	1 hour	
Round 3	2:00 PM ET	3:00 PM ET	1 hour	
Round 4	4:00 PM ET	5:00 PM ET	1 hour	
Tuesday - Jan 07, 2020				
	Start	End	Duration	
Round 5	One Option Only	Jan 07, 10:00 AM ET	Jan 07, 11:00 AM ET	1 hour
Round 6		Jan 07, 12:00 PM ET	Jan 07, 1:00 PM ET	1 hour
Round 7		Jan 07, 2:00 PM ET	Jan 07, 3:00 PM ET	1 hour
Round 8		Jan 07, 4:00 PM ET	Jan 07, 5:00 PM ET	1 hour
Wednesday - Jan 08, 2020				
	Start	End	Duration	
Round 9	Jan 08, 10:00 AM ET	Jan 08, 11:00 AM ET	1 hour	
Round 10	Jan 08, 12:00 PM ET	Jan 08, 1:00 PM ET	1 hour	
Round 11	Jan 08, 2:00 PM ET	Jan 08, 3:00 PM ET	1 hour	
Round 12	Jan 08, 4:00 PM ET	Jan 08, 5:00 PM ET	1 hour	
Thursday - Jan 09, 2020				
	Start	End	Duration	
Round 13	No Winnings	Jan 09, 10:00 AM ET	Jan 09, 11:00 AM ET	1 hour
Round 14		Jan 09, 12:00 PM ET	Jan 09, 1:00 PM ET	1 hour
Round 15		Jan 09, 2:00 PM ET	Jan 09, 3:00 PM ET	1 hour
Round 16		Jan 09, 4:00 PM ET	Jan 09, 5:00 PM ET	1 hour

6.2. Messages: Announcements and Conversations

Please refer to the Auction 103 Clock Phase Bidding System User Guide (available in the Education section of the Auction 103 website, www.fcc.gov/auction/103) 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

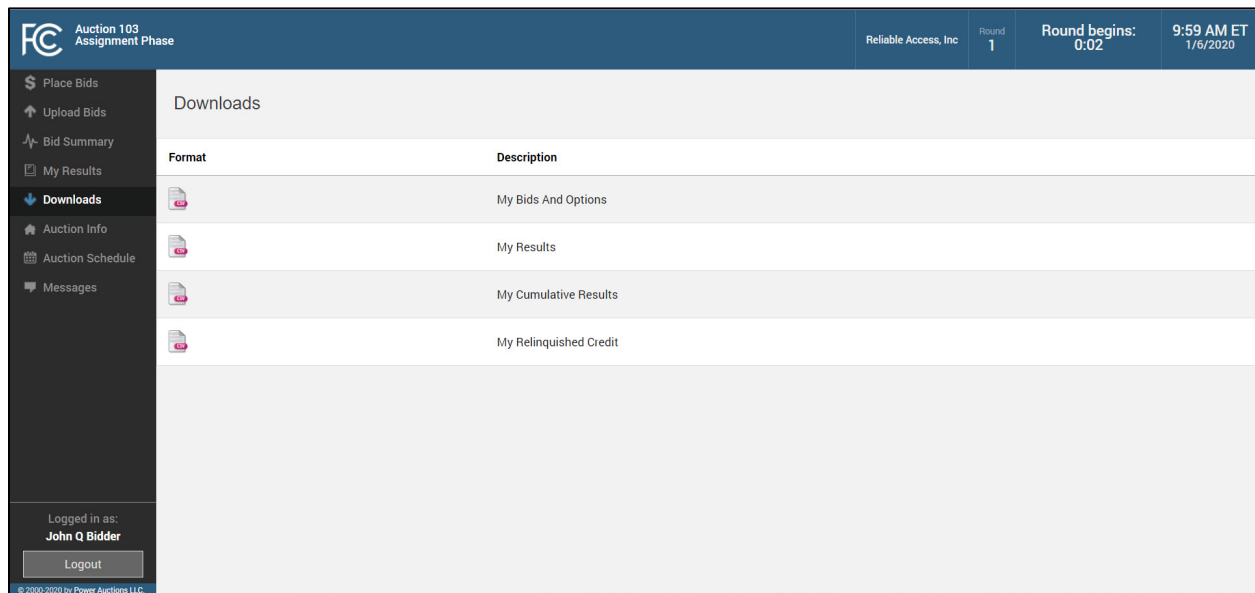
7. Bidding Functions

7.1. Viewing Available Bid Options

At any time when the bidding system is available, including before the first round of the assignment phase, 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 specification for this file may be found in the “Auction 103 Assignment Phase Bidding System File Formats” document located on the Auction 103 website in the Education section (available at www.fcc.gov/auction/103).

Figure 7: Downloads screen



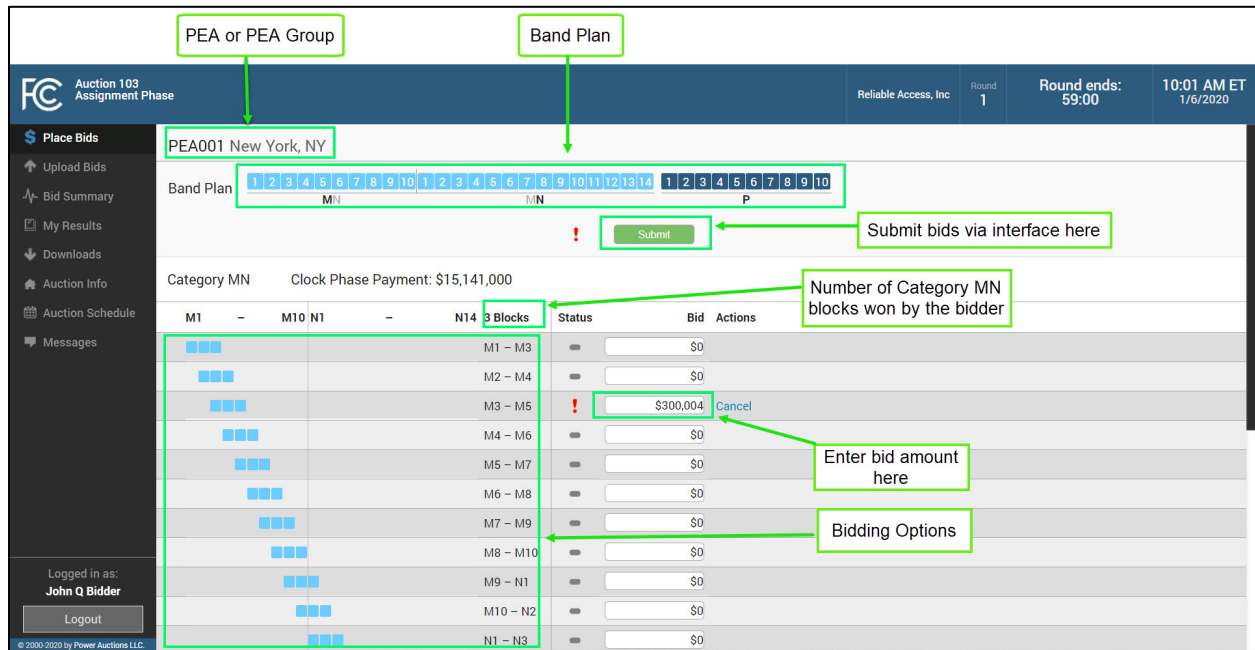
7.2. Placing Bids via the User Interface

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 three generic blocks of Category MN in the clock phase.

Figure 8: Place Bids screen



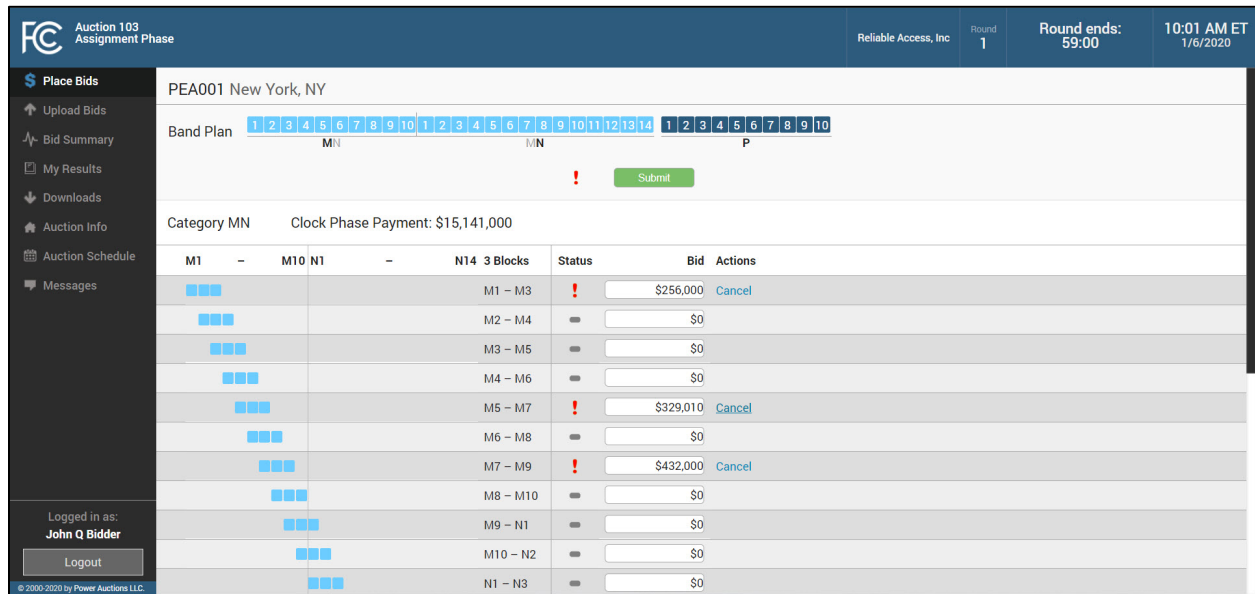
At the top of the Place Bids screen is a list of the PEA(s) being assigned in the current round.

The 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.

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. 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.


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 been entered but 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 above.

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 **Cancel** link, and the **Submit** 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.*

Only bids that have been submitted will be processed by the bidding system. Once you have entered the bids for all options on which you wish to bid, you must click **Submit** to submit all of the bids. The Status column will show a green check mark (✓) to indicate the bids that have been successfully submitted to the bidding system, as seen in Figure 10. For each bidding option for which you have a zero bid amount, the bidding system displays a gray dash (-) in the status column.

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.


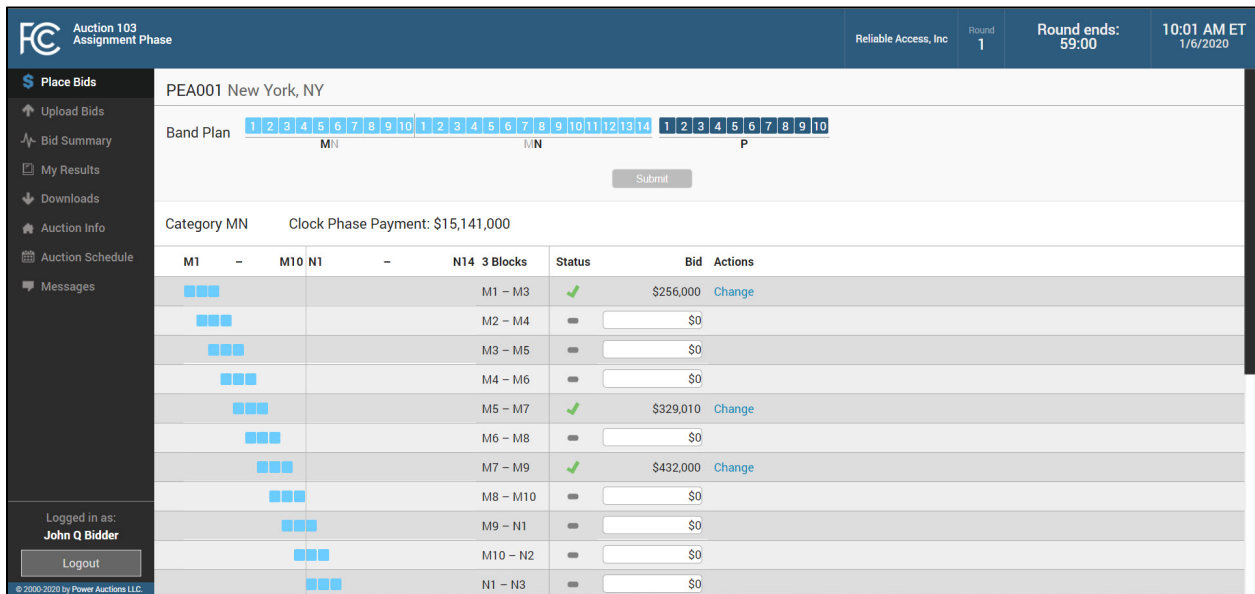
 You must submit your bids using the **Submit** button before leaving the page and before the round is over. **Any bids that are entered but not submitted will be lost.**

Figure 10: Place Bids screen – Bids have been submitted



The screenshot shows the 'Place Bids' interface for Auction 103. At the top, it displays 'PEA001 New York, NY' and 'Reliable Access, Inc'. The 'Round 1' information shows 'Round ends: 59:00' and '10:01 AM ET 1/6/2020'. A 'Submit' button is visible. Below, a table lists bidding options with columns for 'Category MN', 'Clock Phase Payment: \$15,141,000', 'Status', 'Bid', and 'Actions'.

Category MN	Clock Phase Payment: \$15,141,000	Status	Bid	Actions
M1 - M3		✓	\$256,000	Change
M2 - M4		-	\$0	
M3 - M5		-	\$0	
M4 - M6		-	\$0	
M5 - M7		✓	\$329,010	Change
M6 - M8		-	\$0	
M7 - M9		✓	\$432,000	Change
M8 - M10		-	\$0	
M9 - N1		-	\$0	
M10 - N2		-	\$0	
N1 - N3		-	\$0	

7.2.3. Changing Bids

As long as the round remains open, you may modify any submitted bids by clicking Change under the Actions column for a bidding option (see Figure 10). After you click Change, the bid input field becomes editable, and the bidding system will remove the green 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.

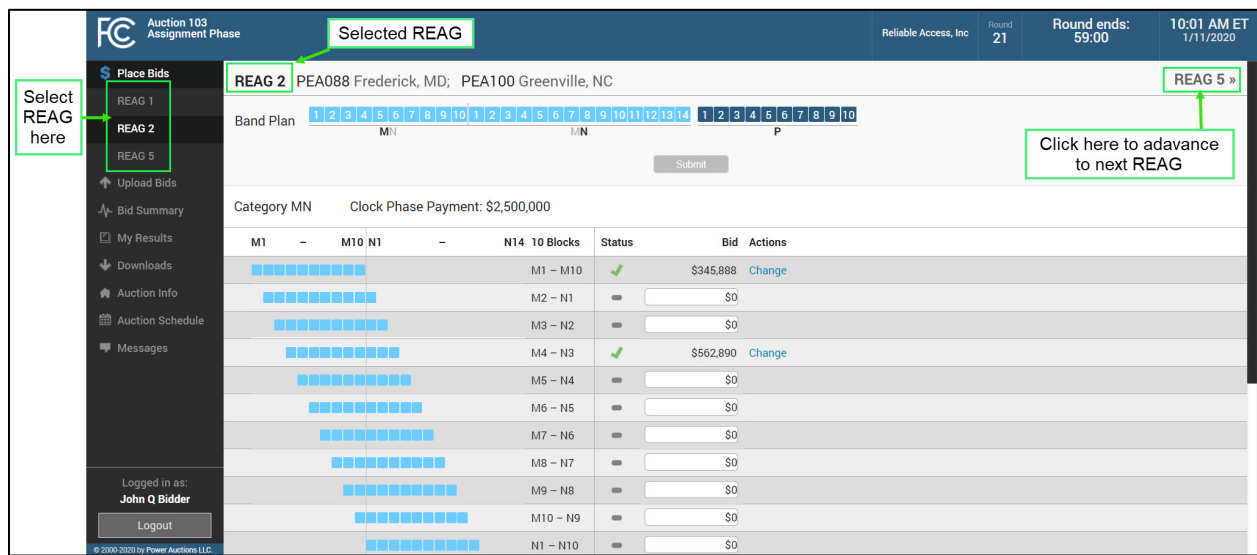
7.2.4. Bidding in Rounds with REAGs

After PEAs 1–20 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



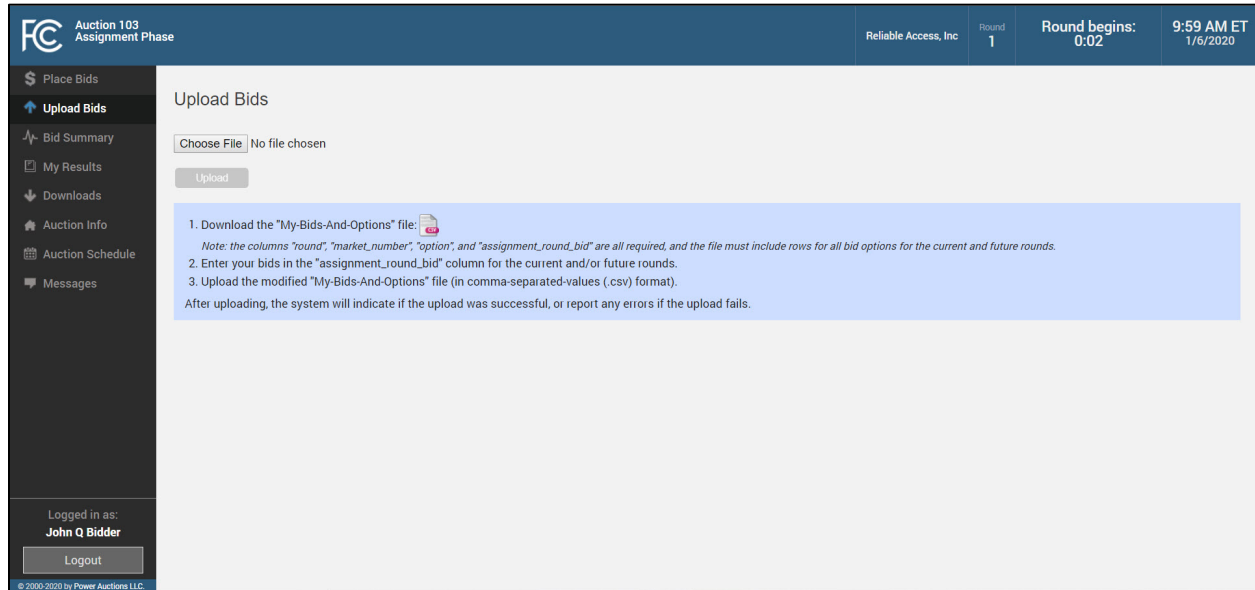
7.3. Placing Bids via File Upload

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 103 Assignment Phase Bidding System File Formats” document located on the Auction 103 website in the Education section (available at www.fcc.gov/auction/103).

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

Figure 12: Upload Bids screen

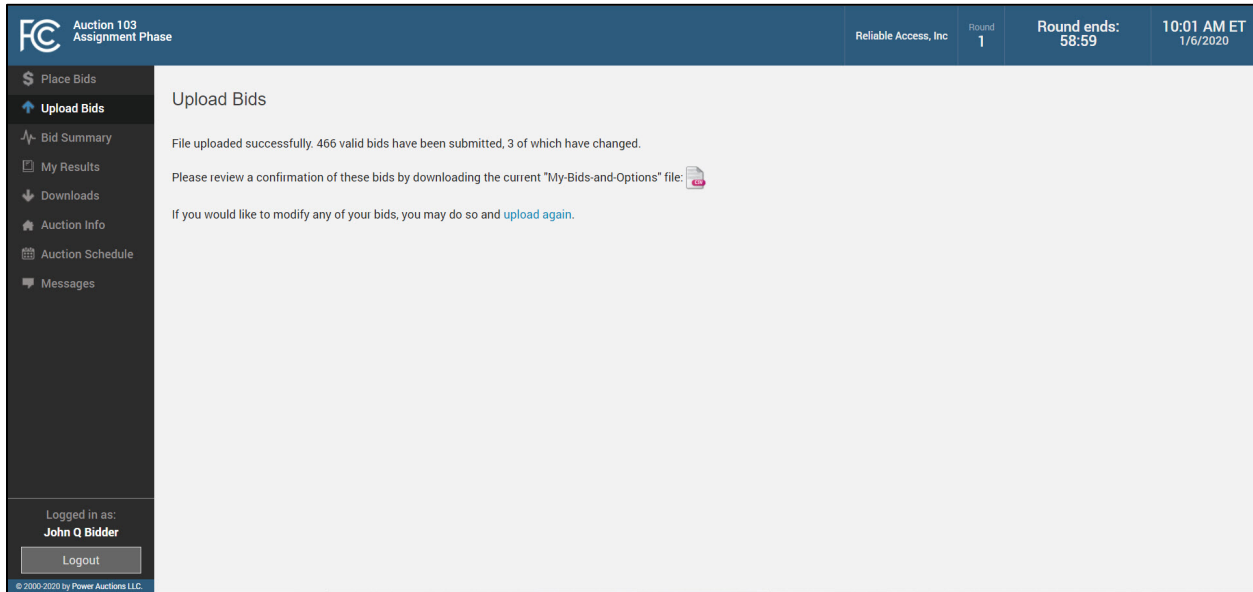


The screen provides instructions on how to upload bids. The steps are as follows:

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 “option.”
 - 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”, “option”, and “assignment_round_bid” are required (and the column header in the first line of the file must use the precise names 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, and 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).

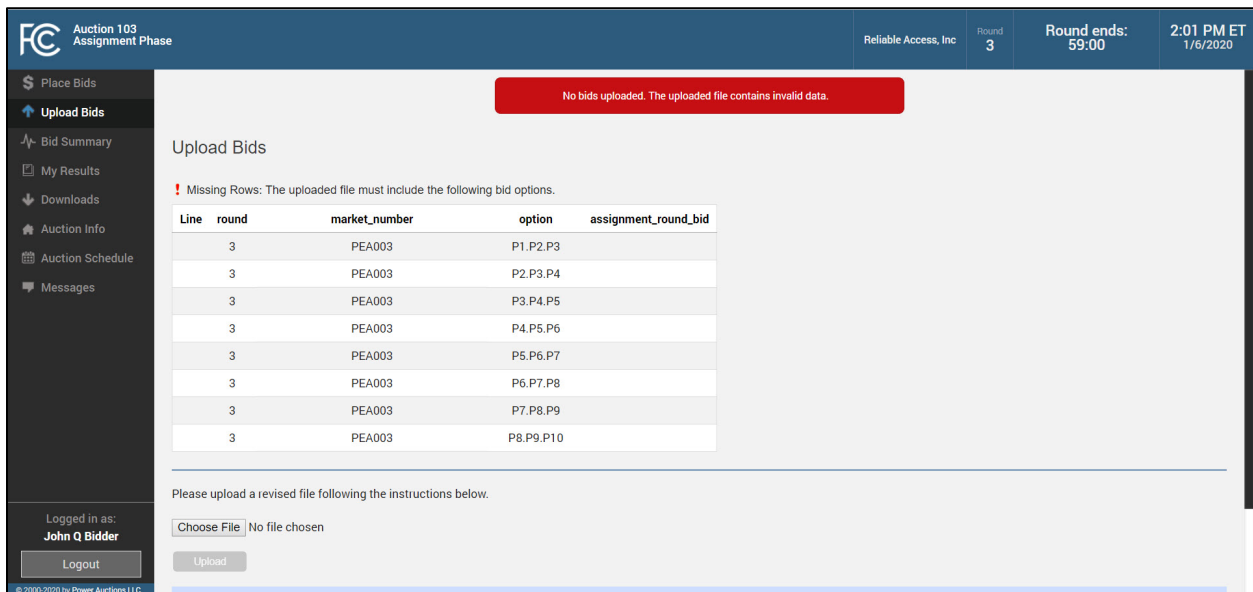
Figure 13: Upload Bids screen – successful upload



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). If the file contains many errors, the system will only report the first 100 errors of a particular type. If a bid file is rejected, all previously submitted bids will remain saved by the bidding system.

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.

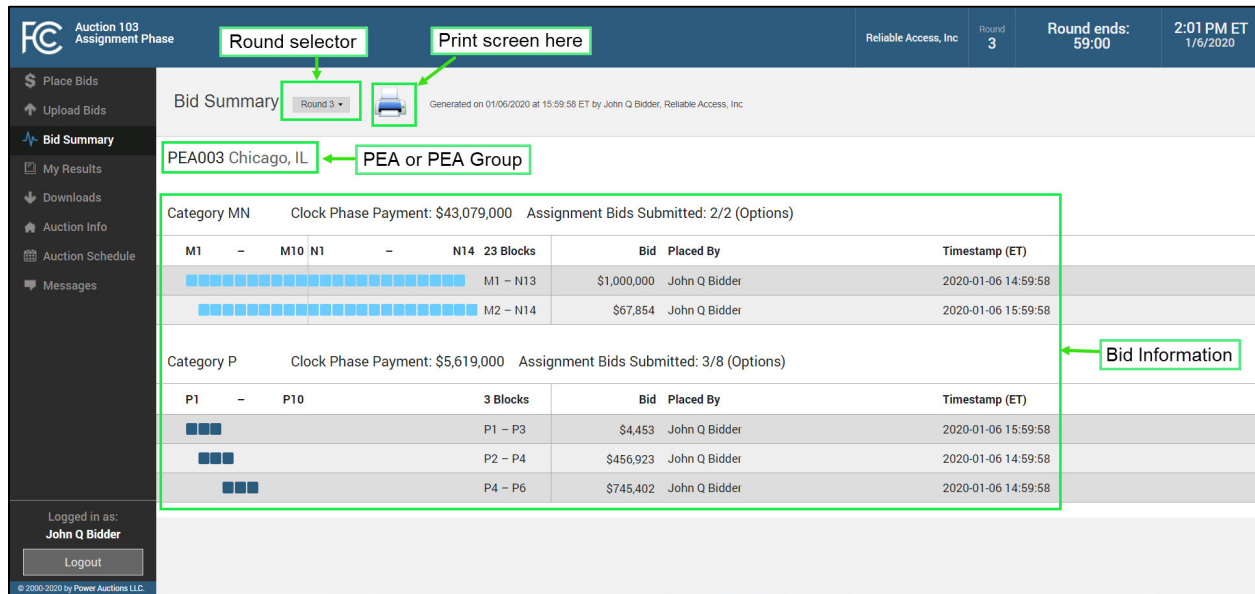
8.1. Bid Summary

After the first round opens and throughout the assignment phase, you may verify the bids that have been submitted on behalf of the bidder in the current round and for all past rounds, on the Bid Summary screen.¹ 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 amount 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.

¹ 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.

 *Check the Bid Summary screen to ensure that all entered bids were submitted.*

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.

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.

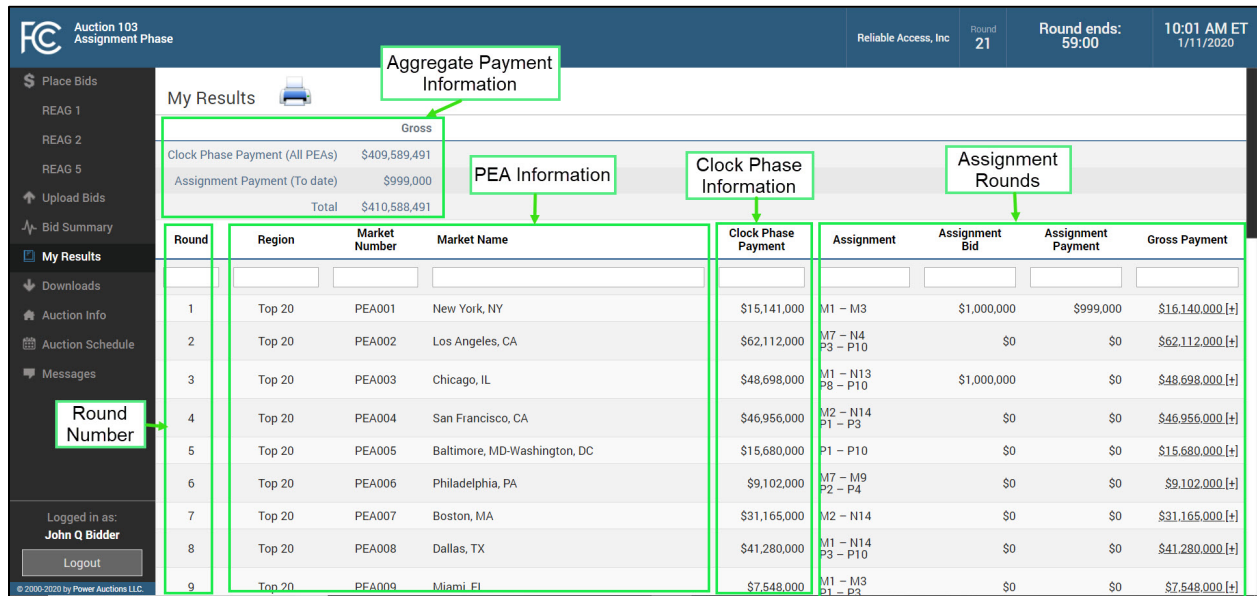
9.1. My Results Screen

The layout of the My Results screen is provided in Figure 16. 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 an incentive payment and/or has claimed a bidding credit, the bidding system will display net payments taking into account any incentive payment and/or any bidding credit discounts and bidding credit discount caps, 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 number² 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 (across both categories), and gross payment, which is the sum of the clock phase payment and the assignment payment.

² 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) have been merged in one of the 6 REAGs covering the contiguous United States. For PEAs 1–20, the region is listed as "Top 20."

Figure 16: 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 the 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 if the bidder has an incentive payment and/or has claimed 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:

- **Clock Phase Payment (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 assigned and the PEAs that will be assigned in future rounds of the assignment phase.
- **Assignment Payment (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 below (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 an incentive payment and/or a bidding credit will see additional columns of information related to its incentive payment and/or discounts as well as its net payments, as described in the following section.

9.2.2. Net Payment Information

For a bidder that is a 39 GHz incumbent, in addition to gross payment information, the My Results screen contains the incumbent's incentive payment and net payment information. For a bidder that has claimed a bidding credit, in addition to gross payment information, the My Results screen contains information about net payments, bidding credit discounts, and bidding credit caps.

An example of the aggregate payment information for an incumbent bidder with a small business bidding credit is provided in Figure 17 below. In addition to the Gross column, the following columns are displayed:

- **Incentive:** The incentive payment for an incumbent bidder that made an initial commitment to relinquish all its licenses. The incentive payment is calculated based on the final clock phase prices.
- **Discount Capped (All Markets):** The bidder's discount taking into account the applicable bidding credit caps.
- **Net:** The gross payment minus the incentive payment (applicable only for an incumbent bidder) minus the capped discount (applicable only for a bidder that has claimed a bidding credit).
- **Discount Uncapped (All Markets):** The gross payment minus the incentive payment (in the case of an incumbent bidder), multiplied by the 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 gross payment in small markets minus the incentive payment in small markets (in the case of an incumbent bidder), multiplied by the bidding credit percentage. If the bidder has reached its small markets cap, the total amount will be shown in red. The uncapped amount provides an indication of how far over the small markets cap the bidder is at that point in the assignment phase.

Figure 17: My Results screen – Incumbent bidder with a small business bidding credit

Auction 103 Assignment Phase		Wireless Connection LLC		Round 27	Round begins: 0:02	12:59 PM ET 1/12/2020		
My Results								
	Gross	Incentive	Discount Capped (All Markets)	Net	Discount Uncapped (All Markets)	Discount Uncapped (Small Markets)		
Clock Phase Payment (All PEAs)	\$15,770,000	\$8,750,993	\$1,754,752	\$5,264,255	\$1,754,752	\$769,078		
Assignment Payment (To date)	\$313,744	\$0	\$78,436	\$235,308	\$78,436	\$0		
Total	\$16,083,744	\$8,750,993	\$1,833,188	\$5,499,563	\$1,833,188	\$769,078		
Round	Region	Market Number	Market Name	Clock Phase Payment	Assignment	Assignment Bid	Assignment Payment	Gross Payment
2	Top 20	PEA002	Los Angeles, CA	\$3,882,000	M1	\$200,000	\$187,399	\$4,069,399 [+]
3	Top 20	PEA003	Chicago, IL	\$3,746,000	P1 – P2	\$34,524	\$2,345	\$3,748,345 [+]
8	Top 20	PEA008	Dallas, TX	\$2,580,000	P9 – P10	\$0	\$0	\$2,580,000 [+]
11	Top 20	PEA011	Atlanta, GA	\$2,174,000	M1 – M2	\$134,000	\$124,000	\$2,298,000 [+]
22	REAG 6	PEA195	Lewiston, ID	\$640,000	M1 – M10	\$0	\$0	\$640,000 [+]
24	REAG 5	PEA335	Natchitoches, LA	\$20,000	M1	\$45,632	\$0	\$20,000 [+]
25	REAG 5	PEA337	Mineral Wells, TX	\$247,000	M1 – N3	\$12,345	\$0	\$247,000 [+]
26	REAG 4	PEA193	Saint Joseph, MO	\$1,280,000	M1 – M10 P1 – P5	\$56,436	\$0	\$1,280,000 [+]
Assignment Rounds (To date)				\$14,569,000			\$313,744	\$14,882,744

The Incentive column is displayed only if the bidder is a 39 GHz incumbent. The Discount Uncapped (Small Markets) column is displayed only if the bidder has claimed a small business bidding credit. For a bidder that has claimed a rural service provider bidding credit, the Discount Capped, Net, and Discount Uncapped columns will be displayed in addition to the Gross column. An example of the aggregate payment information for a non-incumbent bidder with a rural service provider bidding credit is provided in Figure 18 below.

Figure 18: My Results screen – Non-incumbent bidder with a rural service provider bidding credit

Auction 103 Assignment Phase		RSP Company		Round 27	Round begins: 0:02	12:59 PM ET 1/12/2020		
My Results								
	Gross	Discount Capped	Net	Discount Uncapped				
Clock Phase Payment (All PEAs)	\$193,630,000	\$10,000,000	\$183,630,000	\$29,044,500				
Assignment Payment (To date)	\$0	\$0	\$0	\$0				
Total	\$193,630,000	\$10,000,000	\$183,630,000	\$29,044,500				
Round	Region	Market Number	Market Name	Clock Phase Payment	Assignment	Assignment Bid	Assignment Payment	Gross Payment
1	Top 20	PEA001	New York, NY	\$151,410,000	M4 – N3 P1 – P10	\$0	\$0	\$151,410,000 [+]
2	Top 20	PEA002	Los Angeles, CA	\$38,820,000	N5 – N14	\$0	\$0	\$38,820,000 [+]
Assignment Rounds (To date)				\$190,230,000			\$0	\$190,230,000

The bidding credit caps apply to the sum of aggregate payments from both the clock phase and assignment phase of Auction 103. 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 17 has not reached its overall bidding credit cap in the clock phase or by round 26 of the assignment phase; the non-incumbent bidder in Figure 18 reached its bidding credit cap in the clock phase.

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 (see Figure 18). 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 19. If a bidder has winnings in both Category MN and Category P 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 (see Figure 19). For a PEA group, the detailed table displays a clock phase payment for each PEA in the group 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 19.

Figure 19: My Results screen – Payment breakdown detail

Auction 103 Assignment Phase		Reliable Access, Inc		Round 27	Round begins: 0:02	12:59 PM ET 1/12/2020		
Round	Region	Market Number	Market Name	Clock Phase Payment	Assignment	Assignment Bid	Assignment Payment	Gross Payment
		PEA186 PEA200 PEA215	Rock Hill, SC Danville, VA Hickory, NC					
20	REAG 3	PEA092 PEA106 PEA114	Decatur, IL Zanesville, OH Morgantown, WV	\$6,498,000	N5 – N14 P2 – P10	\$0	\$0	\$6,498,000 [+]
20	REAG 4	PEA150 PEA162 PEA164 PEA170 PEA174 PEA178 PEA196 PEA198	Rolla, MO Elizabethtown, KY Montgomery, AL Dothan, AL Springfield, MO Sedalia, MO Cape Girardeau, MO Jonesboro, AR	\$5,076,000	P2 – P10	\$0	\$0	\$5,076,000 [+]
20	REAG 5	PEA094 PEA102 PEA104	Waco, TX Grand Junction, CO Fort Collins, CO	\$6,650,000	M1 – M10 P2 – P10	\$0	\$0	\$6,650,000 [+]
21	REAG 1	PEA136	Williamsport, PA	\$910,000	M1 – M5 P4 – P8	\$345,888	\$45,632	\$955,632 [-]
		Category	Market Number	Clock Phase Payment	Assignment	Assignment Bid	Assignment Payment	Gross Payment
		MN	PEA136	\$455,000	M1 – M5	\$345,888	\$45,632	\$500,632
		P	PEA136	\$455,000	P4 – P8	\$0	\$0	\$455,000
		Total		\$910,000	M1 – M5 P4 – P8	\$345,888	\$45,632	\$955,632
21	REAG 2	PEA088 PEA100	Frederick, MD Greenville, NC	\$4,750,000	M1 – M10 P1 – P9	\$345,888	\$0	\$4,750,000 [+]
21	REAG 5	PEA080	Omaha, NE	\$3,080,000	N5 – N14 P1 – P10	\$0	\$0	\$3,080,000 [+]

Click here to collapse

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 103 Assignment Phase Bidding System File Formats” document located on the Auction 103 website in the Education section (available at www.fcc.gov/auction/103).

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 round-by-round results on 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 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 aggregate payment information on 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 103 Clock Phase Bidding System User Guide (available in the Education section of the Auction 103 website, www.fcc.gov/auction/103) 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 103 Clock Phase Bidding System User Guide (available in the Education section of the Auction 103 website, www.fcc.gov/auction/103) 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)