FCC Auction Bidding System
User Guide

SIMULTANEOUS MULTIPLE ROUND AUCTION

Last updated: July 1, 2021

DISCLAIMER

The Federal Communications Commission (the "Commission" or "FCC") will make available a web-based auction bidding system for bidding purposes.

The Commission makes no warranty whatsoever with respect to the auction bidding system. In no event shall the Commission, or any of its officers, employees or agents, be liable for any damages whatsoever (including, but not limited to, loss of business profits, business interruption, loss of business information, or any other loss) arising out of, or relating to the existence, furnishing, functioning or use of the auction bidding system that is accessible to bidders in connection with this auction. Moreover, no obligation or liability will arise out of the Commission's technical, programming or other advice or service provided in connection with the auction bidding system.

The examples that appear in this document are based on fictitious data and do not represent the actual data for this auction. Additionally, they do not reflect any predictions or assumptions about the actual bidding in the auction, the number of rounds, or the outcome of the auction. Any similarity to actual company names, PINs, FCC Registration Numbers (FRNs), or other personal information is coincidental.

COPYRIGHT NOTICE

Contents

1. Introduction

This guide describes the features of the web-based FCC auction bidding system (ABS) used to bid in FCC spectrum auctions.

The simultaneous multiple-round (SMR) auction is conducted in a series of timed bidding rounds. During a bidding round, users are able to place bids for items. Each bid will specify either the minimum acceptable bid (MAB) or one of eight additional bid amounts. Bids can be submitted on the Place Bids screen or by uploading a bid file.

After a round closes, ABS processes the bids and posts the results. Users will get information about the status of the auction, including the total provisionally winning bid amount for the auction and number of new bids for the round. For each item, bidders can see the provisionally winning bid amount and whether they are the provisionally winning bidder. The MAB amount for each item for the next round is available on the Place Bids screen and in downloads.

1.1. Conventions

In this guide screen names are Capitalized, links in the system are <u>underlined</u>, and the following text represents a $\boxed{\text{Button}}$.

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

> ✍   *Care needed with this feature!*

In this guide, the term "bidder" refers to an applicant that has been identified by the FCC as qualified to bid in the auction based on review of its FCC Form 175 application. 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 ABS and to submit bids on behalf of the qualified bidder.

"Item" is a generic term for what is being auctioned. In Auction 109, the items are permits.

"Null" means a field is blank and has no value.

1.2. Guide Structure

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

- Section 2, System Requirements and Access, describes the system requirements for accessing the system and how to log in.
- Section 3, System Navigation and Overview, explains how to navigate the system and provides a summary of the screens available to bidders.

- Section 4, Auction Info, describes basic information about the items available during the auction.
- Section 5, Auction Schedule, describes how to view the auction schedule.
- Section 6, Announcements and Conversations, describes how to view the announcements that have been released for this auction and how a bidder can send messages to the FCC.
- Section 7, Bidding Functions, describes how to place and remove bids, create watchlists, upload bids and place a proactive waiver.
- Section 8, Activity and Eligibility, describes how to verify bids submitted, activity, eligibility and commitment in a round.
- Section 9, Round Summary, describes how to access summaries of bidding actions taken during a round.
- Section 10, Posted Results, describes how to access the results at the conclusion of each bidding round.
- Section 11, Downloads, describes the structure and format of the upload and download files.
- Section 12, Final Results, describes how to view auction results after the auction has concluded.

There are two appendices:

- Appendix 1, System Troubleshooting, provides troubleshooting tips for a number of different scenarios.
- Appendix 2, Data Type Definitions, provides an interpretation of data types defined in this document.

2. System Requirements and Access

This section explains the system requirements for accessing ABS, how to log in, and other matters related to access.

2.1. Minimum System Requirements

At the minimum, the following is required to access ABS:

- Microsoft® Windows® 8.1, Windows® 10, or Apple® Mac® OS X® 10.14 or higher

A web browser must be used to access the FCC auction bidding system.[1]

- Google Chrome™ 90 or higher or Mozilla® Firefox®
- Access to the Internet
- 1366 x 768 screen resolution[2]

Smartphones and tablets are not supported. ABS may run on different computer configurations, including browsers not listed above. It is the responsibility of the user to test any alternative configurations with ABS in advance of the auction—for example during the mock auction—and to ensure that they have access to one of the supported browsers should they experience problems. Any user attempting to access ABS with a computer configuration or device that does not meet the requirements listed above is solely responsible for any resulting failure to access ABS, failure to do so in a timely manner, or failure of the bidding system to process the user's attempted bidding or other actions (even if it appears that such actions were completed properly).

Users are discouraged from using web browsers containing third-party toolbars or other extensions. Third-party browser extensions potentially may cause problems for users of interactive websites, including ABS, and may make users' computers more vulnerable to hacker attacks. If in doubt, you should consult your internal information technology departments in order to disable third-party browser extensions or, if necessary, obtain a clean installation of a supported web browser.

To maximize protection against potential security vulnerabilities, users are advised to ensure the latest service pack (if applicable), security patches for their operating system (including Edge or Internet Explorer), and the most recent version of Google Chrome (where relevant), have been installed.

---

[1] In the past we have recommended using Mozilla® Firefox® or Google Chrome® but also supported Microsoft® Internet Explorer 9.0 or higher (with compatibility mode turned off). Please note that after January 31, 2020, Microsoft will no longer support any version of Internet Explorer prior to version 11. Microsoft recommends using the Microsoft Edge browser instead. At this time, the Commission has not fully tested the Auction Application System with Edge and therefore does not yet support it.

[2] Other screen sizes will work, but a minimum of 1366x768 is required to fit all of the information on a single screen without horizontal scrolling. If all of the information from ABS cannot fit on your display, you can either zoom out using your Internet browser or scroll right and left using the scroll bars. To adjust the zoom, hold down the control ("ctrl") key and use the "+" and "-" keys to zoom in and out.

2.2.   Logging In

Once ABS becomes available you can log in using the URL provided only to qualified bidders in the registration materials. When available, the link to the Login screen, as shown in Figure 1, will be visible. When the Login screen is not available, there will be a message on the screen and the link to access the Login screen will not be visible.

Figure 1: ABS homepage
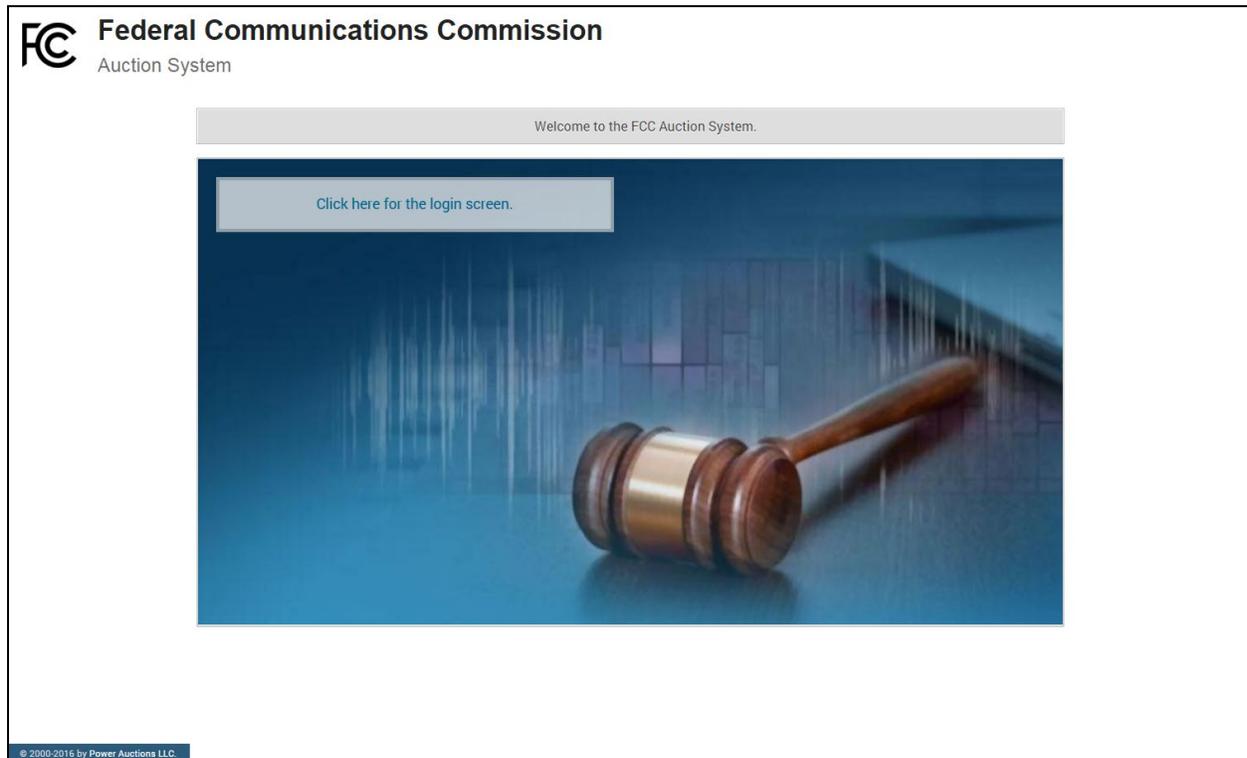
Click on the <u>Click here for the login screen</u> link in order to get to the Login screen shown in Figure 6 on page 8.

This guide provides two sets of login instructions: Section 2.2.1, initial login where an authorized bidder creates a personal identification number ("PIN") and logs in for the first time; and Section 2.2.2, the standard login used after the PIN is created.

Each authorized bidder listed on the qualified bidder's FCC Form 175 will have a unique username (user ID) provided by the Commission, which will be associated with a specific RSA SecurID® token (RSA token) assigned to the authorized bidder for the auction. All authorized bidders for a qualified bidder will use a password associated with the FRN (FCC Registration Number) used on the bidder's FCC Form 175. The FRN password may be either directly associated with the FRN in CORES or the password associated with the username that is linked to the FRN in CORES. The RSA tokens are specific to an authorized bidder, and each authorized bidder will need to set a private PIN for his or her token.

The RSA token generates a time-sensitive 6-digit tokencode that changes every 60 seconds. This tokencode is required as part of the login process along with the authorized bidder's username and password. RSA tokens will be sent by overnight delivery to the contact person identified in the FCC Form 175 for each qualified bidder listed on the Qualified Bidder PN, and must be distributed by the contact person to each of the specified authorized bidders.

The username and RSA token should be used only by the authorized bidder to which it was assigned. ABS logs all actions taken by a user based on the username entered when logging in.

Figure 2: An RSA SecurID® token

Please note that each RSA token is tailored to a specific auction. Therefore, RSA tokens issued for other auctions or obtained from a source other than the FCC will not work for this auction.

At the conclusion of the auction the Commission will send each bidder a pre-addressed, stamped envelope to return its RSA tokens.

2.2.1. First Time Login Procedures

The first time you log in to the system each authorized bidder for a particular qualified bidder will create a personal identification number (PIN). After the first-time login procedure has been completed and a PIN created, you will follow the standard login procedures (detailed in section 2.2.2. below).

You will need the following login credentials to access the system for the first time:

- Username (user ID):   FCC assigned
- Password: FRN password or associated Username password[3]
- RSA tokencode: a six-digit code generated by the RSA SecurID® token

In the ABS login area, type the username, password and current tokencode displayed on your RSA token as shown in Figure 3. Leave the PIN field blank and click Login » .

If you forget your FRN password, you can contact the FCC Support Center at (877) 480-3201 option 1 (Mon-Fri 8:00 a.m. – 6:00 p.m. Eastern Time (ET)).

---

[3] The FRN password may be either the password directly associated with the FRN in CORES or the password associated with the username that is linked to the FRN in CORES.

Figure 3: First time login procedure

An RSA tokencode will be generated by your RSA SecurID® token and will not be the same as the code shown in Figure 3.

This opens a screen to create a PIN as shown in Figure 4.

Figure 4: Set PIN screen

Type a 4-8 digit numeric PIN of your choice in the PIN field. Enter it twice as requested to ensure accuracy. Then click Change PIN . Be sure to memorize this PIN. There is a limited amount of time to set a new PIN and confirm your credentials, as shown by the expiration time on the screen.

A message will display in a yellow box above the PIN and tokencode fields to indicate that the new PIN was accepted, as shown in Figure 5.

Type in the PIN you just created and a new tokencode. Make sure that the number on the RSA token's display has changed, type this new number into the tokencode field, and then click Continue .

The new PIN was accepted. Please finalize the login with new RSA credentials.

Please wait until the tokencode changes on your RSA token. Then, enter the new tokencode.

PIN:

Continue

Expires in: 98 s

After completing the set-up procedure, you will be able to access ABS and see the navigation bar on the left-hand side. Thereafter, the standard login procedure applies.

2.2.2.   Standard Login Procedure

To log into ABS, you will need the following login credentials:

- Username (user ID):   FCC assigned
- Password: FRN password or associated Username password[4]
- PIN: numeric PIN created during the initial login
- RSA tokencode: a six-digit code generated by the RSA SecurID® token

Enter the information on the Login screen (see Figure 6) and click Login » .

If you forget your FRN password, you can contact the FCC Support Center at (877) 480-3201 option 1 (Mon-Fri 8:00 a.m. – 6:00 p.m. ET).

---

[4] The FRN password may be either the password directly associated with the FRN in CORES or the password associated with the username that is linked to the FRN in CORES.

Figure 6: Login screen
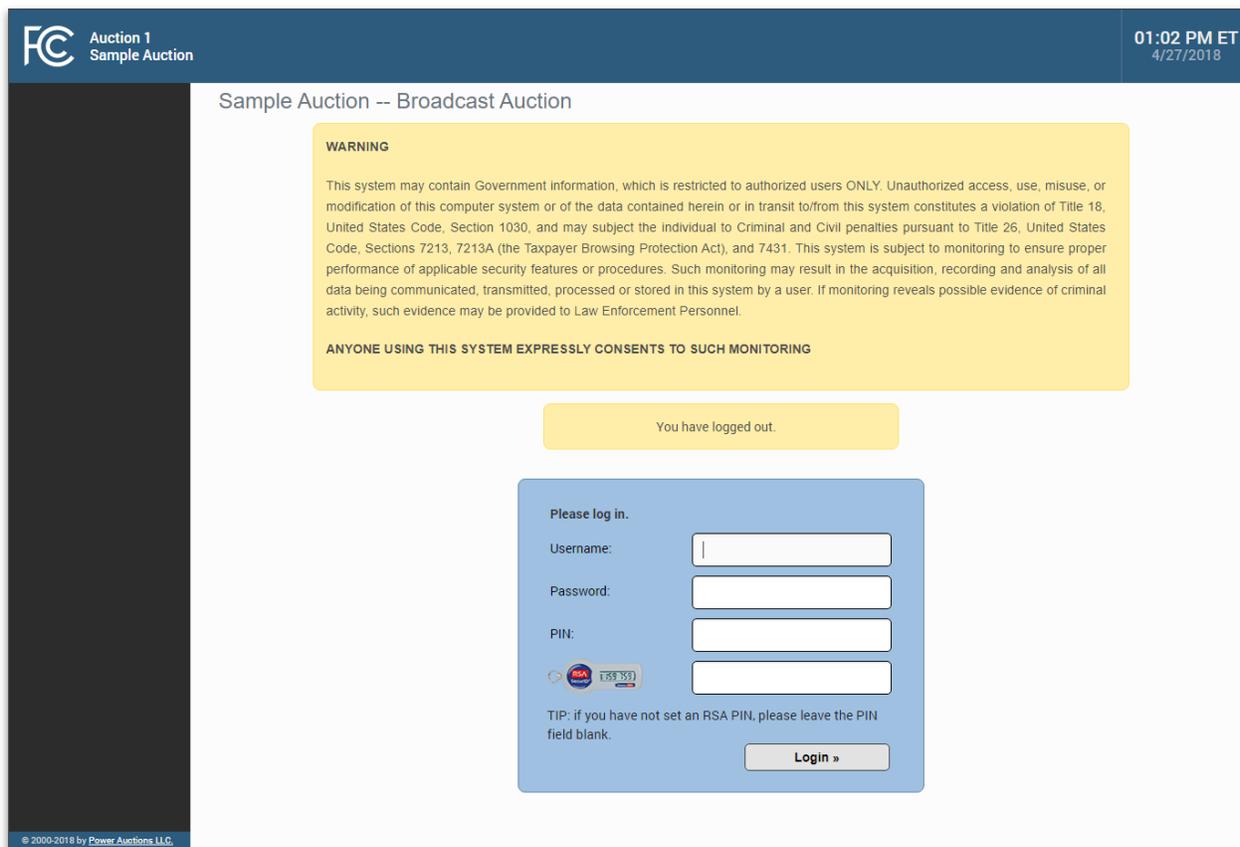
2.3.   Additional Information

2.3.1.   RSA SecurID Token Information

2.3.1.1.   Number of RSA Tokens Issued and Extra RSA Tokens

Each qualified bidder is issued three RSA tokens. A bidder with three authorized bidders is issued three RSA tokens. A bidder with two authorized bidders is issued two RSA tokens for its authorized bidders plus one extra RSA token. A bidder with one authorized bidder is issued one RSA token for its authorized bidder plus two extra RSA tokens. Each bidder is permitted to identify up to three authorized bidders on its FCC Form 175. Therefore, a bidder with fewer than three authorized bidders will have one or two extra tokens.

> ✎   *Bidders cannot use an extra RSA token unless they contact the FCC to activate the extra RSA token for a specific user.*

Each RSA token must be associated with a specific authorized bidder. RSA tokens are not interchangeable among authorized bidders. The FCC must reassign the token in the RSA server for the token to become functional.

2.3.1.2.   Replacing Lost or Damaged RSA Tokens

In the event that an RSA token is lost or damaged, the person who has been designated as the authorized bidder, contact person, or certifying official listed on the bidder's FCC Form 175, should call the Auction Bidder Line telephone number provided with their registration materials to request activation of a replacement token.

2.3.1.3.   Change of User (Authorized Bidder)

A qualified bidder may change or replace its authorized bidders. For more information on changing the authorized bidder assigned to an RSA token, the person who has been designated as the contact person or certifying official on the bidder's FCC Form 175 application should call the Auction Bidder Line telephone number provided with the registration materials.

2.3.1.4.   Forgotten PIN

If an authorized bidder forgets his PIN, he should contact FCC Technical Support hotline ((877) 480-3201, option 9; (202) 414-1250; or (202) 414-1255 (TTY)) to have the PIN reset. Please note, however, that this process might not occur before the next round begins. In this event, a bidder with insufficient activity will either use an activity rule waiver or lose bidding eligibility. The FCC Technical Support Hotline is generally available Monday through Friday from 8:00 a.m. to 6:00 p.m. ET.

2.3.2.   Multiple Users for the Same Bidder

It is possible for more than one authorized bidder for the same qualified bidder to log in and access the system at the same time, each using their assigned username and credentials. Any updates made by one such authorized bidder will be displayed on the screen of the other users for the same bidder after the screen is refreshed.

However, **only one such authorized bidder should bid at any given time** to avoid a potential conflict in data that may produce a bid, or set of bids, that was not intended.

> ✍ *To avoid a potential conflict in data that may produce a bid, or set of bids, only one authorized bidder should bid at any given time.*

2.3.3.   Automatic Logout

A single user cannot be logged into ABS using two computers at the same time.

Trying to use the same username to access ABS from a second computer will automatically log the user out from the first computer and the first computer will display a log out notification. This is a protective feature for users, because it allows a user to log in to ABS using a second computer if the first computer crashes before the user was able to log out of the system.

2.3.4.   Lock Screen and Log Out

You may manually lock your screen by clicking on the Lock Screen button, located at the bottom of the navigation bar on every screen as shown in Figure 7 in the next section. If you are inactive for more than 15 minutes, ABS will automatically lock your screen. Unlocking the screen requires the password followed by clicking Unlock .

If you are inactive for more than 30 minutes, ABS will log you out completely. You will need to log in again to access the site. You may manually log out of ABS at any time using the Logout button, located at the bottom of the navigation bar on every screen, as shown in Figure 7.

2.3.5.   Login Errors

During an auction, the system keeps track of the success or failure of each login attempt. In case of incorrect entry of data into any of the four required fields during login, you will receive an error message with an error code. For assistance call the Auction Bidder Line at the number provided with your registration materials.

2.3.6.   Browser Navigation

Logged-in bidders are advised to use the navigation features of the ABS. Using the browser's forward and back navigation functions may produce unpredictable results.

2.3.7.   Bidding via the Auction Bidder Line

The Auction Bidder Line is available to assist bidders in first time login procedures, bidding actions, reviewing round results, announcements and auction related questions. The telephone number for the Auction Bidder Line is provided with your registration materials.

Bidders need to provide the telephonic bid assistant with the appropriate login information to access ABS. Telephonic bid assistants are required to follow a script, and the length of calls to place bids will vary depending upon the complexity and the number of bids. Bidders are therefore reminded to allow sufficient time to bid by placing their calls well in advance of the close of a round.

3. System Navigation and Overview

3.1. Navigation Bar and Features Common to All Screens

Once you have logged in successfully, you will see a blue bar at the top of the page and a black navigation bar on the left.

All screens have a black navigation bar with links to the available screens. Beneath the navigation bar is the name of the authorized bidder who has logged in, the Lock Screen button and the Logout button as described in Section 2.3.4.

The blue bar at the top of each screen displays status and timing information that is common to all screens. It shows the name of the qualified bidder, the stage and stage percentage, number of activity rule waivers remaining and withdrawals remaining (not available in all auctions), 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 7.

Figure 7: General ABS screen layout
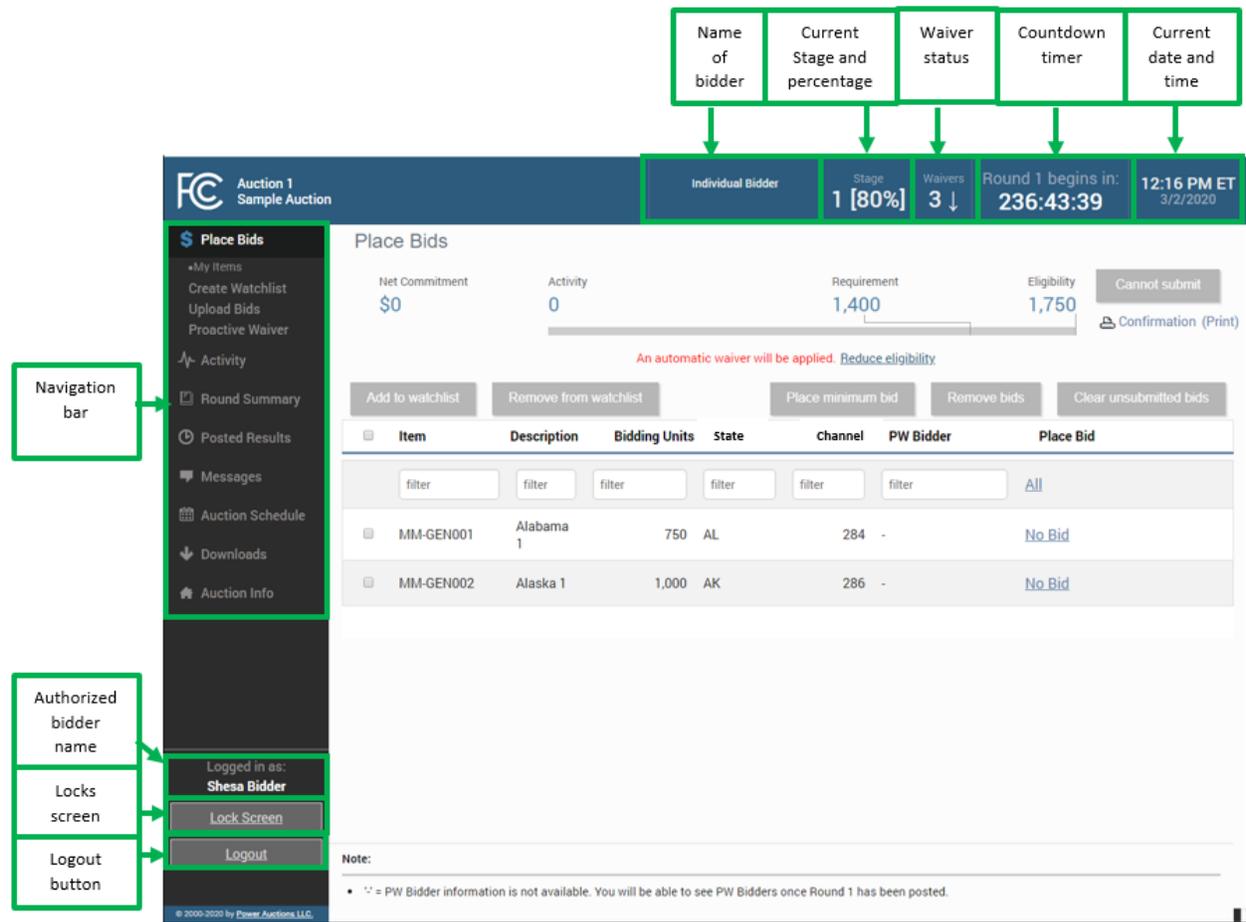
3.2.   Summary of ABS Screens

The navigation bar gives access to eight screens and the means to do the following:

Table 1: Summary of screens reached from the navigation bar

Place Bids	Allows you to submit bids and view bids for the round. After the auction has concluded this screen will show final results.
Create Watchlist	Allows you to create custom watchlists of items.
Upload Bids	Allows you to upload bids by using an upload bids file.
Proactive Waiver	Allows you to place a proactive waiver.
Activity	Allows you to see a summary of commitment, activity and eligibility for submitted bids and, in a separate table, the same information including selected but unsubmitted bids.
Round Summary	Allows you to view a summary of all bids submitted on behalf of the bidder during a particular round.
My Actions	Allows you to view all actions made during the round and provides information on commitment, activity, eligibility and waiver and withdrawal* status.

Confirmation	Allows you to view confirmations of bids placed in the current and past rounds.
Posted Results	Allows you to view results of past rounds.
My Bid Result	Allows you to see the results of your bidding, including personal statistics, filtered by round and items.
Last Posted Round	Allows you to see the status of the auction for the last posted round, including dollar and percentage changes and stage transition percentage. It also displays additional status information about the bidder's items, including withdrawn Bids (if allowed) and item status.
Messages	Allows you to view announcements and messages from the FCC. You may also use this screen to send messages to the FCC.
Auction Schedule	Allows you to view the schedule for upcoming bidding rounds.
Downloads	Allows you to download information, including submitted bids, item and bidder statuses, and prices.
Auction Info	Allows you to view information about the available items in the auction.
Auction Info	Allows you to view a list of items in the auction and information about each item.

*if withdrawals are allowed in the auction

Screens may be printed by using the browser print function or by clicking the Print button.

4.   Auction Info

The Auction Info screen displays information about all the items available during the auction. You may access the Auction Info screen once ABS becomes available.

As shown in Figure 8, the Auction Info screen lists all the items in the auction and details about each item. The information displayed in the first several columns is identical for all bidders. The last two columns have specific information about the items selected on your FCC Form 175 and possible bidding credits.

The screen also contains various links to related FCC websites.

Figure 8: Auction Info

5.   Auction Schedule

The Auction Schedule screen shows the current schedule for upcoming rounds in Eastern Time (ET), as illustrated in Figure 9. The schedule includes the date, duration, start time and end time for each round. The time of the next event is displayed in bold red text – in this example, the start of Round 1. The FCC may adjust the number of rounds per day as the auction proceeds. Additional rounds will be displayed as the auction progresses.

> ✎   *The schedule displayed in the example does not indicate the expected number of rounds in the auction. Similarly, the number of rounds displayed during the auction does not imply an expected number of rounds left in the auction; the schedule will show the next several rounds assuming the auction continues for that duration or longer.*

Figure 9: Auction Schedule screen

6. Announcements and Conversations

On the Messages screen you can read announcements posted by the FCC, and a bidder can communicate with the FCC by sending messages to and receiving responses from the FCC that are visible only to the bidder. If you have any unread announcements or conversations, the number of unread messages is indicated in parentheses next to the Messages link on the navigation bar or in a pop-up notification in the blue bar as shown in Figure 10.

Figure 10: Notification of new message
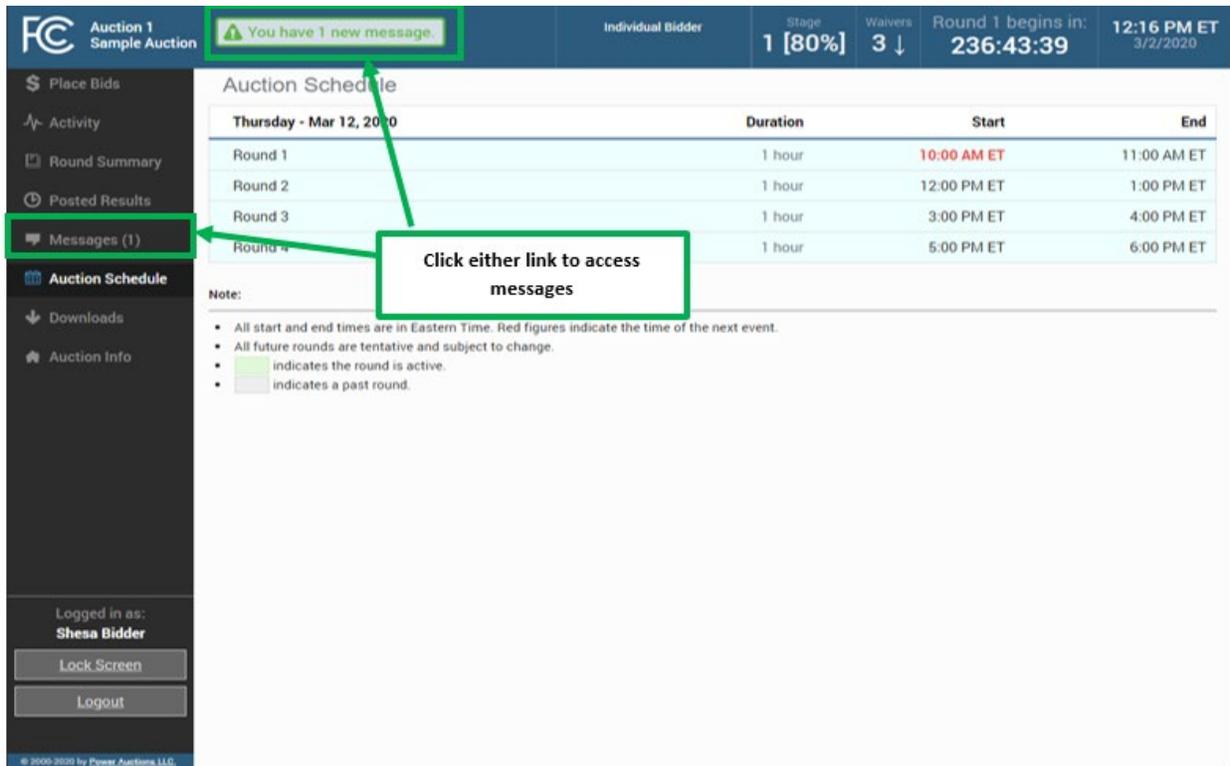
To read an announcement, send a message, or read a response from the FCC, click on the Messages link on the navigation bar. The Messages screen, as shown in Figure 11, will open, displaying all announcements and conversations, abbreviated where necessary, in reverse chronological order.

If any of the announcements or messages shown on the screen are being displayed for the first time, a summary box will display at the top of the screen indicating the number of new announcements or messages.

Figure 11: Messages screen
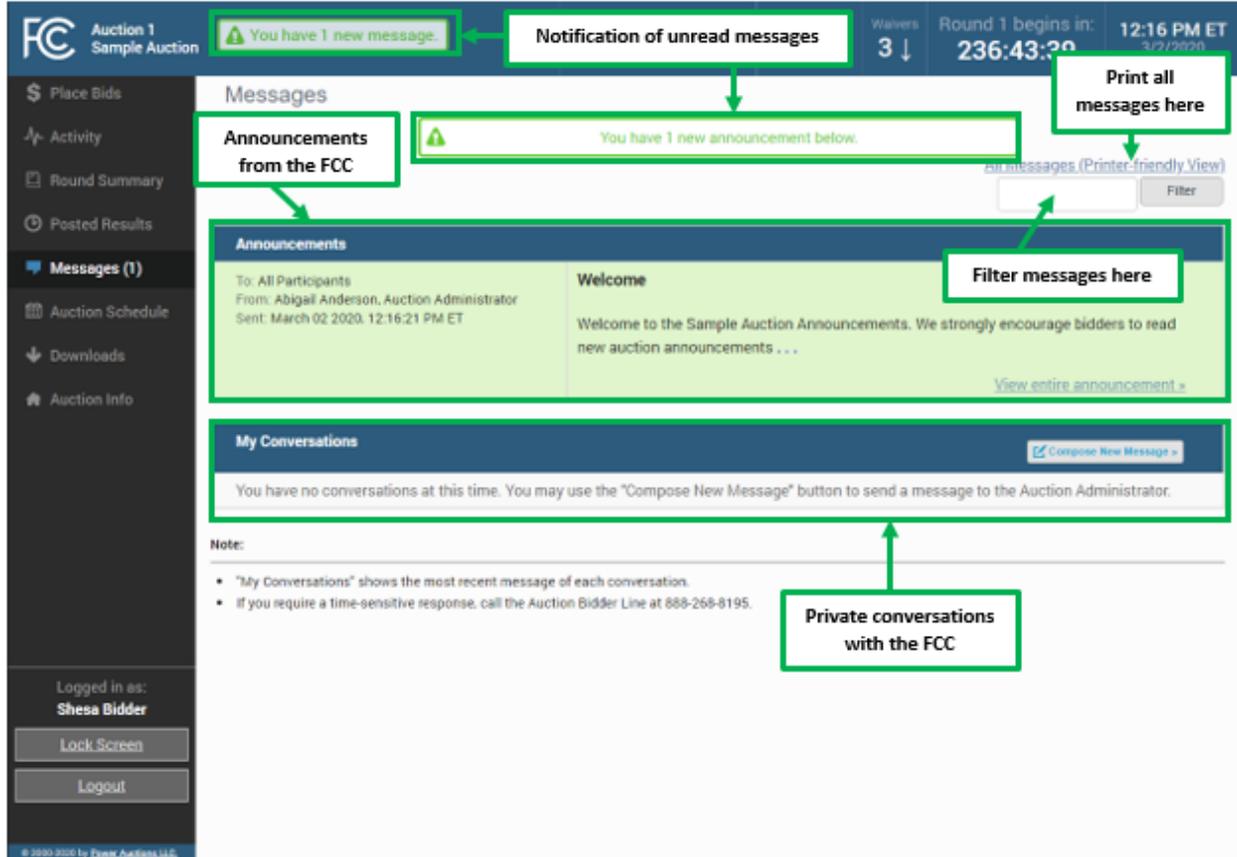
Any unread message is highlighted in green. In order to read a message, you will need to click on the relevant View entire announcement » or View entire conversation / Respond » link.

After an unread announcement or conversation has been opened, the number next to the Messages link will decrease accordingly. The number will not decrease until the View entire announcement » or View entire conversation / Respond » link has been clicked for the unread message. The notifications at the top of the screen will disappear once all messages have been opened.

> ✍ *Whenever you see an indication that a message is unread, go to the Messages screen and click on the relevant View entire announcement » or View entire conversation / Respond » link.*

At the top right-hand side of the screen, a filter allows you to find messages containing particular words. You can view all of your messages by clicking on the All Messages link at the top right, above the filter. This page can then be printed using the browser's print function.

6.1.   Announcements from the FCC

Announcements contain important bidder information, such as changes in the bidding schedule or the suspension of bidding due to unforeseen circumstances. The Messages screen will only show the top portion of an announcement. To view the entire text of an announcement you must open the announcement by clicking on the <u>View entire announcement »</u> link for the announcement you wish to read, as shown in Figure 12**.**

Figure 12: View entire announcement link

Clicking on the <u>View entire announcement »</u> link loads an Announcement screen which displays the full text of the announcement as shown in Figure 13. To close the announcement and return to the Messages screen, click the <u>« Back to Messages</u> link.

Figure 13: An open announcement
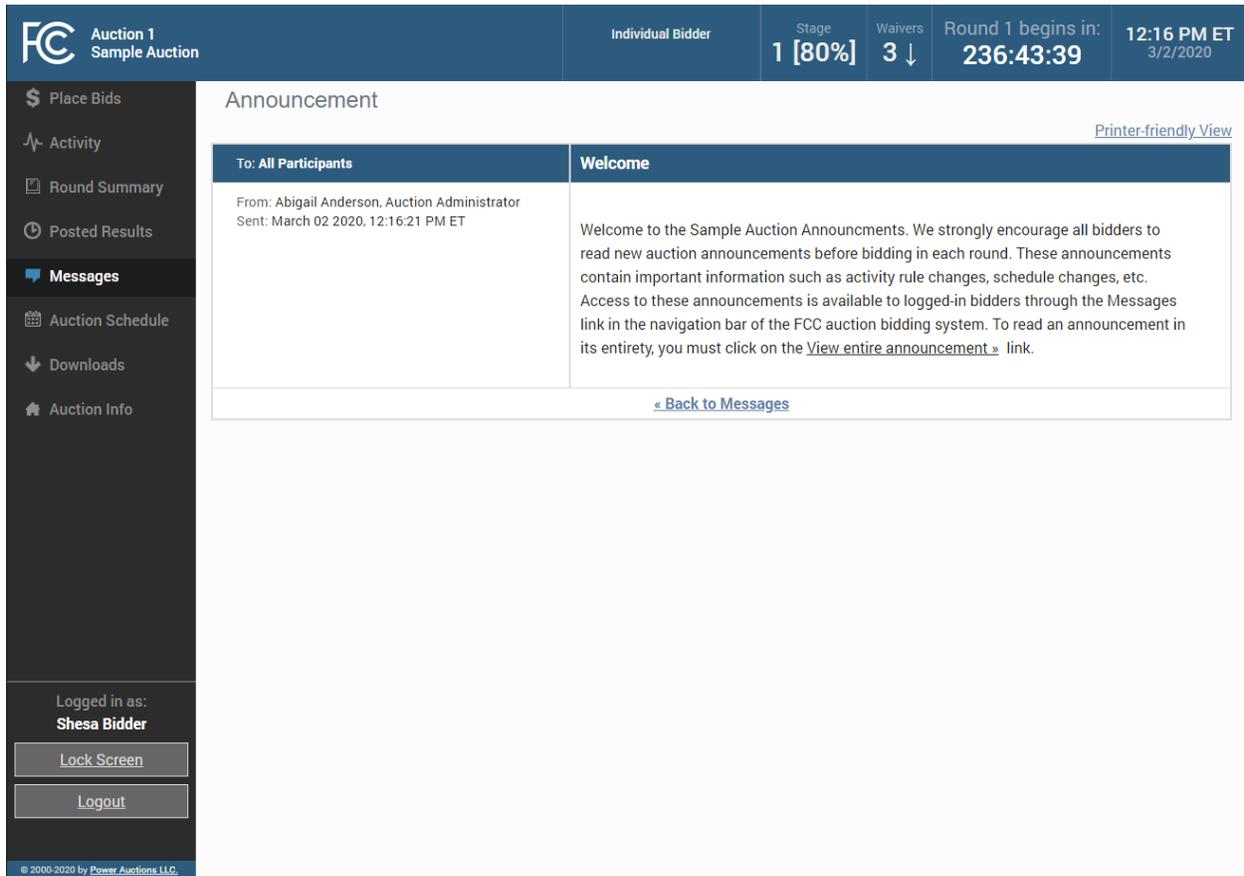
6.2.   Conversations with the FCC

You can communicate with the FCC through ABS. A message from a user is associated with a bidder's FRN and the authorized bidder who sent the message. Only authorized bidders for a bidder can see such messages.

> ✍ *For time-sensitive issues, users should call the Auction Bidder Line telephone number provided with your registration materials.*

To compose a new message to the FCC, click | Compose New Message » | in the My Conversations section of the Messages screen, as shown in Figure 11 above.

To compose a message, enter the subject and content of the message in the relevant fields as shown in Figure 14 below. When cutting and pasting a message it is necessary to insert a space somewhere on the page before being able to send the message. Click | Send | to send the message. To cancel an unsent message, click on the « Back to Messages link and return to the Messages screen.

Figure 14: Compose a message
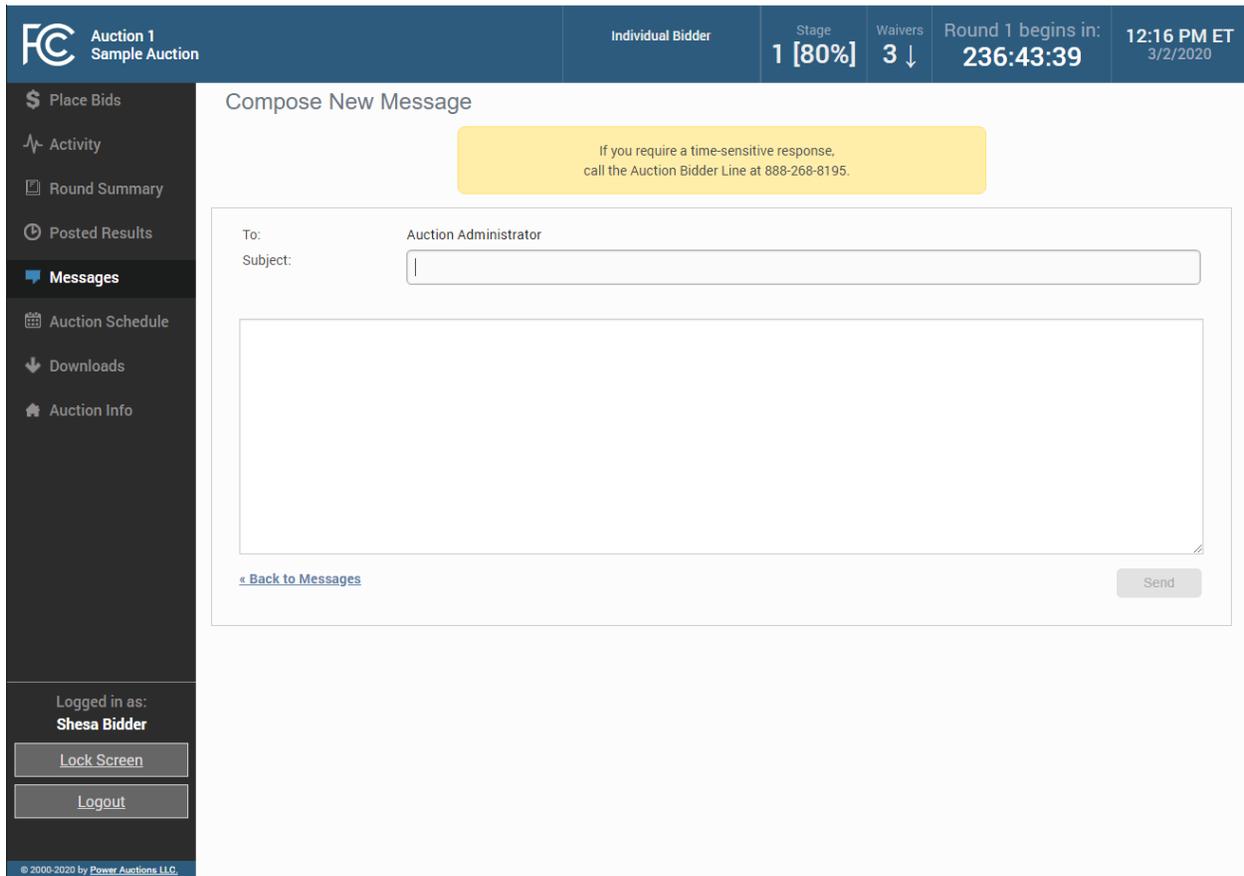
A sent message will appear as a new conversation in the My Conversations section of the Messages screen. The FCC may reply by sending an electronic message or by calling the contact person on the phone. If there is an electronic reply from the FCC, the reply will be added to that conversation, as demonstrated in Figure 15.

As with announcements, new messages are highlighted in green on the Messages screen until they are read. Only the most recent message of a conversation is shown on the Messages screen, as illustrated in Figure 15 To view the complete message and all messages in a conversation, click on the View entire conversation / Respond » link for that conversation. Click on the « Back to Messages link to return to the messages, or click on the Respond To This Conversation button to add a further message to the same conversation.

Figure 15: A response to a conversation initiated by an authorized bidder

View all announcements received and all communications with the auction administrator on a single page by clicking on All Messages (Printer-friendly View). This page can then be printed using the browser's print function.

If you are in the middle of writing a message as the round ends and the screen greys out, click on the Close without refreshing button on the pop-up to finish writing and sending the message without losing it.

7.   Bidding Functions

7.1.   Basic Layout and Functionality of the Place Bids Screen

Users conduct all bidding activities through the Place Bids screen, which is accessed from the navigation bar on the left. The basic layout of the Place Bids screen is broken into four sections (Figure 16).

- Commitment and Activity

- Action Buttons

- Filters

- Items bidder is eligible to bid on

Figure 16: Layout of Place Bids screen
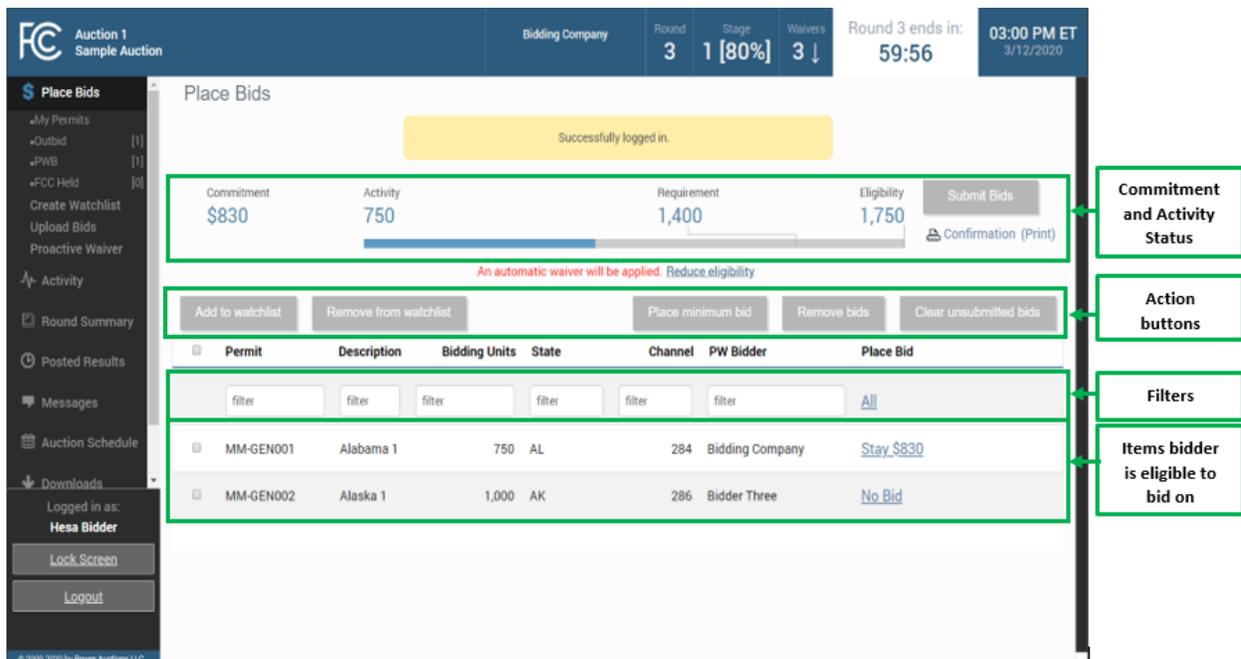
The commitment and activity status bar is located at the top of the Place Bids screen (Figure 17). This status bar provides a summary about your bidding status including:

- Requirement – The minimum number of bidding units you must be active on in the round to meet the activity requirement. If you fail to satisfy your required activity, ABS will apply an automatic waiver on your behalf if you have any waivers remaining; otherwise, it will permanently reduce your eligibility, possibly curtailing or eliminating your ability to place additional bids in the auction.

- Activity – The total number of bidding units of your active bids (new bids placed in the current round and provisionally winning bids from the previous round).

- Eligibility – The maximum number of bidding units on which you are permitted to bid and hold provisionally winning bids on during the round. The initial value of your eligibility is determined by the amount of upfront payment you submitted but will not exceed the sum of bidding units associated with the total number of items selected on your FCC Form 175 application. Note that initial eligibility is calculated differently for qualified bidders that have previously been in default on a Commission license or delinquent on a non-tax debt owed to a Federal agency.

- Commitment/Net Commitment – Whenever you successfully submit bids in the system, the system updates your requested commitment and submitted activity numbers on the screen. If a bidder has claimed bidding credit eligibility, the commitment reflects the net commitment (taking bidding credits into account) rather than the gross commitment. The activity bar changes color as bids are placed to provide a visual cue about the status of bids in relation to the activity requirement.

Figure 17: Commitment and activity status bar

The actions you can take on the Place Bids screen are highlighted in Figure 18 below.

- Create and manage watchlists

- Upload bids – This menu option allows you to upload a bid file rather than entering and submitting bids through the user interface (see Section 7.5).

- Apply a Proactive Waiver

- View waiver status or Reduce eligibility

- Apply bidding actions (Place minimum bid, Remove bids, Clear unsubmitted bids)

- Submit Bids – The Submit Bids button allows you to submit the bids you entered through the user interface.

Figure 18: Action buttons
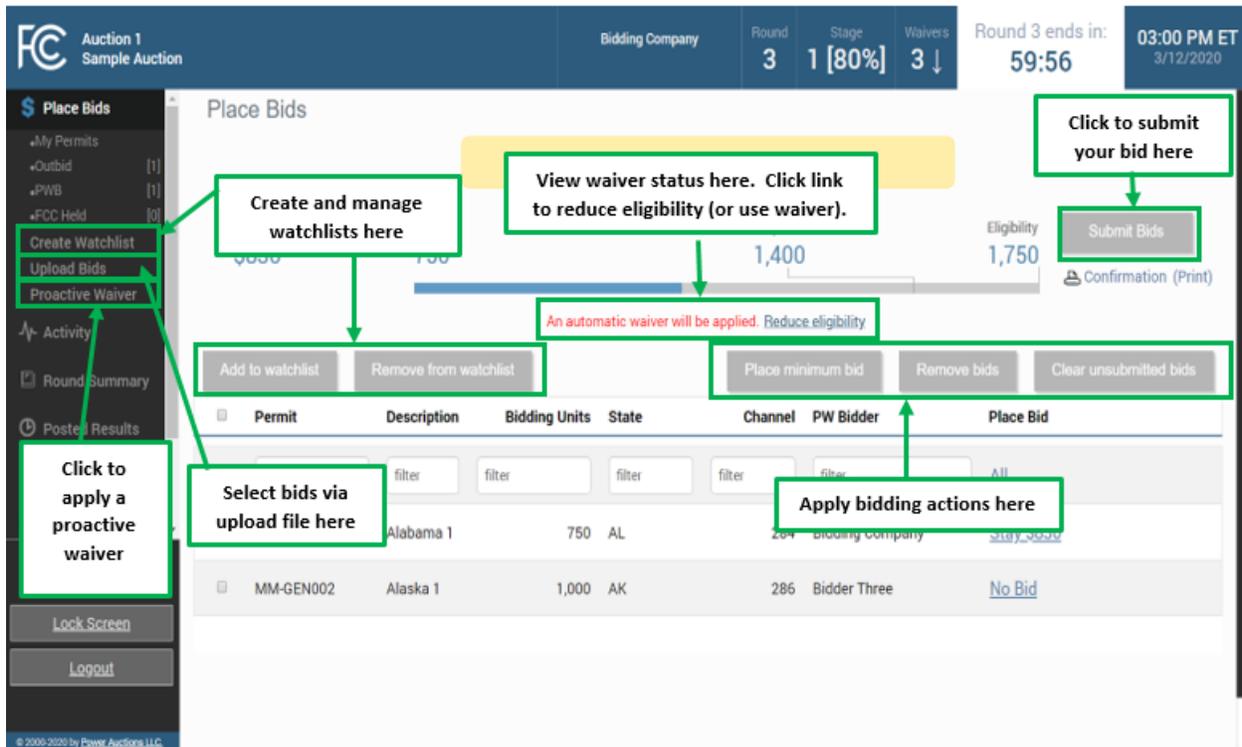
The Place Bids screen displays all items a bidder is qualified to bid on based on the items selected on the bidder's FCC Form 175.

Figure 19: Items a bidder is qualified to bid on

To filter the list of items, as shown in Figure 20, use the filter box under the column header to enter filter criteria. Items matching your filter criteria are displayed. To filter the place bids column, click <u>All</u> in the filter row and select an option from the drop-down menu.

Figure 20: Filters
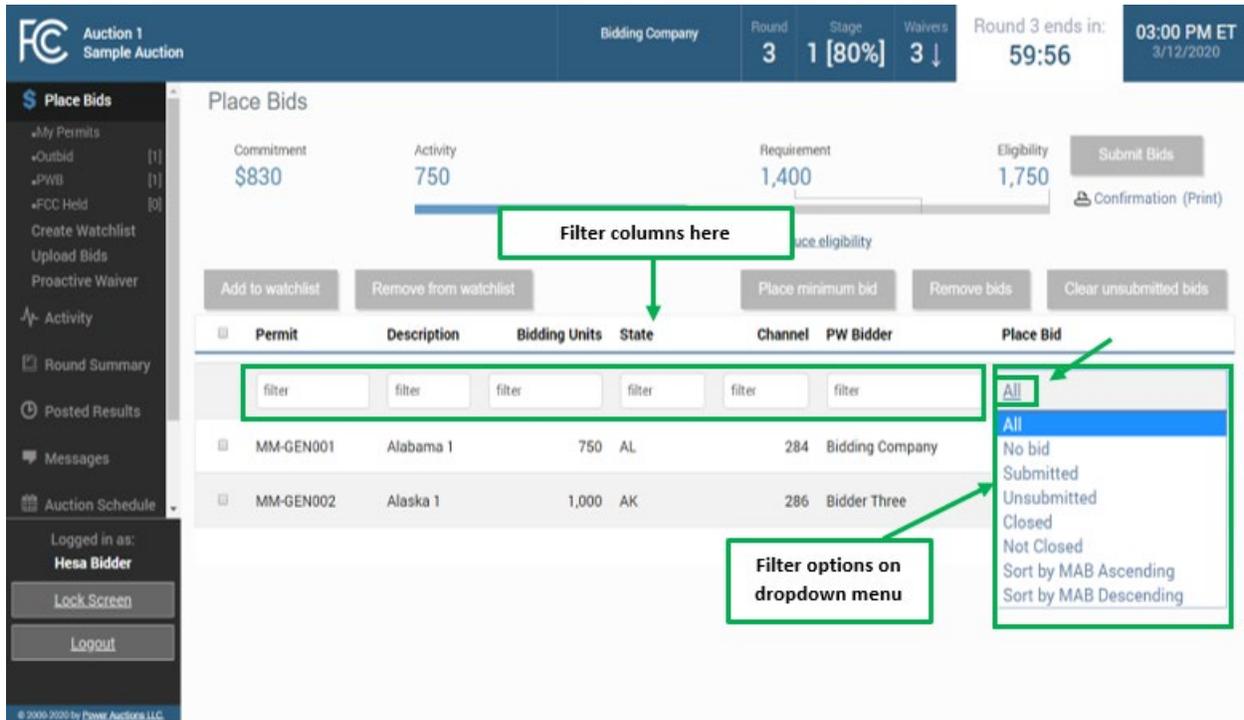
7.2. Selecting Bids

To place a bid on an item, click <u>Place Bids</u> on the navigation bar.

There are several ways to select bids for submission:

- click on <u>No Bid</u> and select the desired bid amount for an item from the drop-down box shown in Figure 21

- choose the item(s) to place bids on by clicking on the box next to the item, followed by clicking Place Minimum Bid

- use watchlist to filter for items to bid on as discussed in Section 7.4.5.

- use an upload file as explained in Section 7.5.

Before you place a bid for an item, the entry in the Place Bid column is <u>No Bid</u>. To select a bid amount on an individual item, click on <u>No Bid</u> to open the drop-down list and click on one of the bid amounts as shown in Figure 21. Each drop-down list will have all available bid amount options, the first of which is the minimum acceptable bid (MAB). If the bidder claimed eligibility for a bidding credit, in addition to the gross bid amount, the [net bid amount] is displayed. Once you have selected your bid amounts, click Submit Bids .

After round 1, items for which you are the Provisionally Winning (PW) Bidder have the bidder's name in the PW Bidder column and Stay in the Place Bids column, followed by the provisionally winning bid (PWB) amount. Items for which another bidder has the PWB have the name of the bidder in the PW Bidder column and "No Bid" in the Place Bid column. Items without a PWB read "FCC-Held" and "No Bid" in the respective columns.

Figure 21: Choosing bid options via drop-down menu
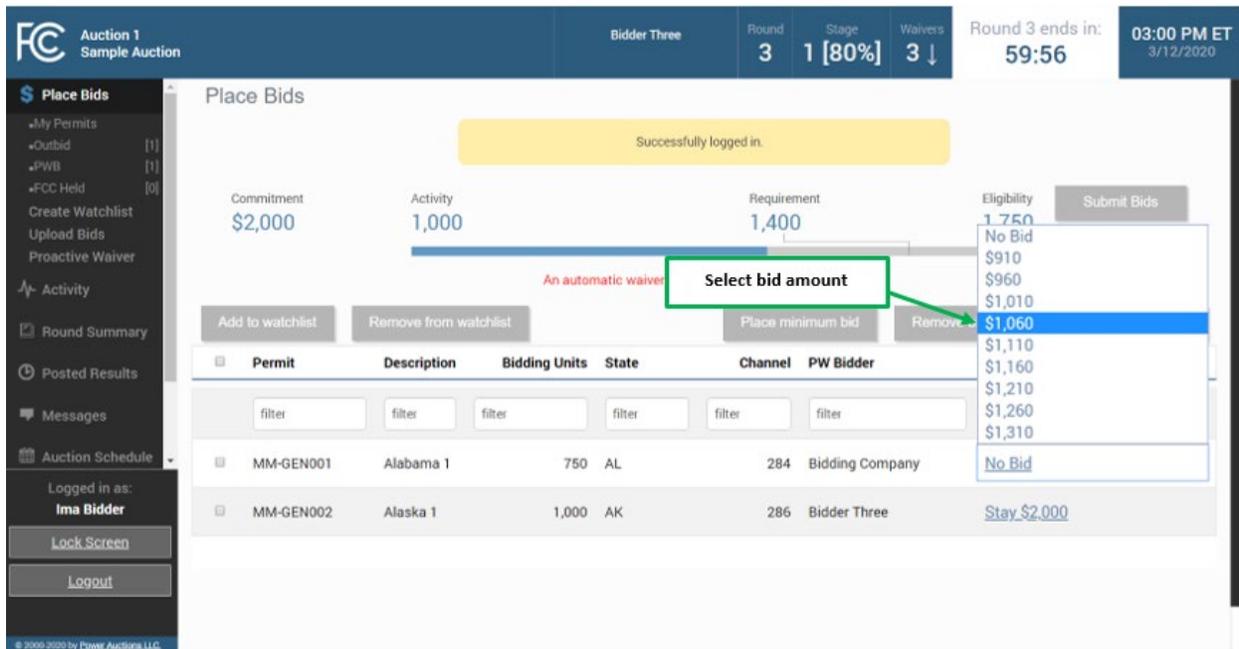
Permit   Description   Bidding Units   State   Channel   PW Bidder   Place Bid

In order to place a minimum bid on a group of items, choose the items by clicking on the box next to the item ID and then click Place Minimum Bid . Click Submit Bids to complete your bid submission as shown in Figure 22.

> ✍ Note: if an authorized bidder is in the process of placing bids when the round ends and has not clicked the ⌐Submit Bids¬ button, **those bids will not be submitted**. You **must** click the ⌐Submit Bids¬ button before the round ends **for that bid to be submitted**. Therefore, it is strongly recommended that bids are submitted well in advance of the ending time of the round.

Figure 22: Selecting bids by selection box
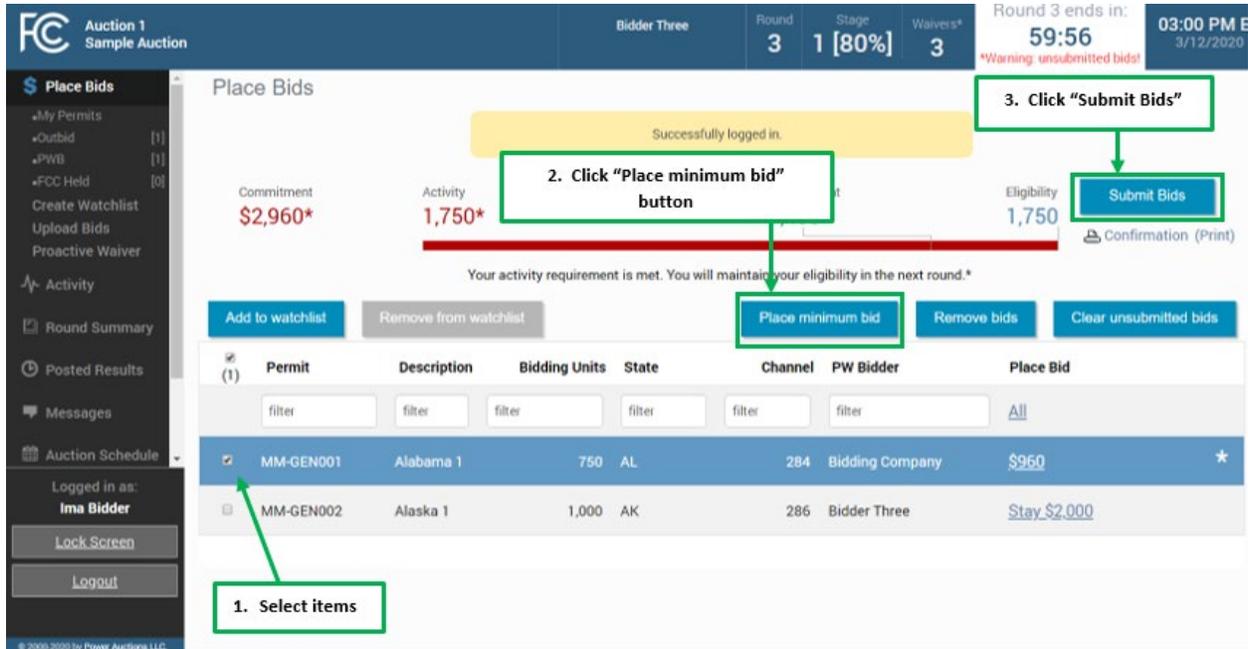
7.3.   Submitting Bids

Once bid amounts have been specified, submit them by clicking ⌐Submit Bids¬. Only bids that have been submitted will be processed by the system.

While bids are still unsubmitted, there is a warning under the countdown timer: *Warning: unsubmitted bids! An asterisk "*" appears to the right of the Place Bid column, and a red asterisk "*" appears to the right of the Net Commitment and Activity values in the commitment and activity status bar, indicating that all numbers are provisional and subject to the selected bids being submitted. Leaving the Place Bids screen without submitting selected bids will prompt a pop-up warning that bids have not been submitted. If you then choose to leave the screen, any bids that you entered but did not submit will remain as unsubmitted bids and will not be lost. You will still need to submit them if you want them to be processed by the system.

Figure 23: Unsubmitted bid warnings
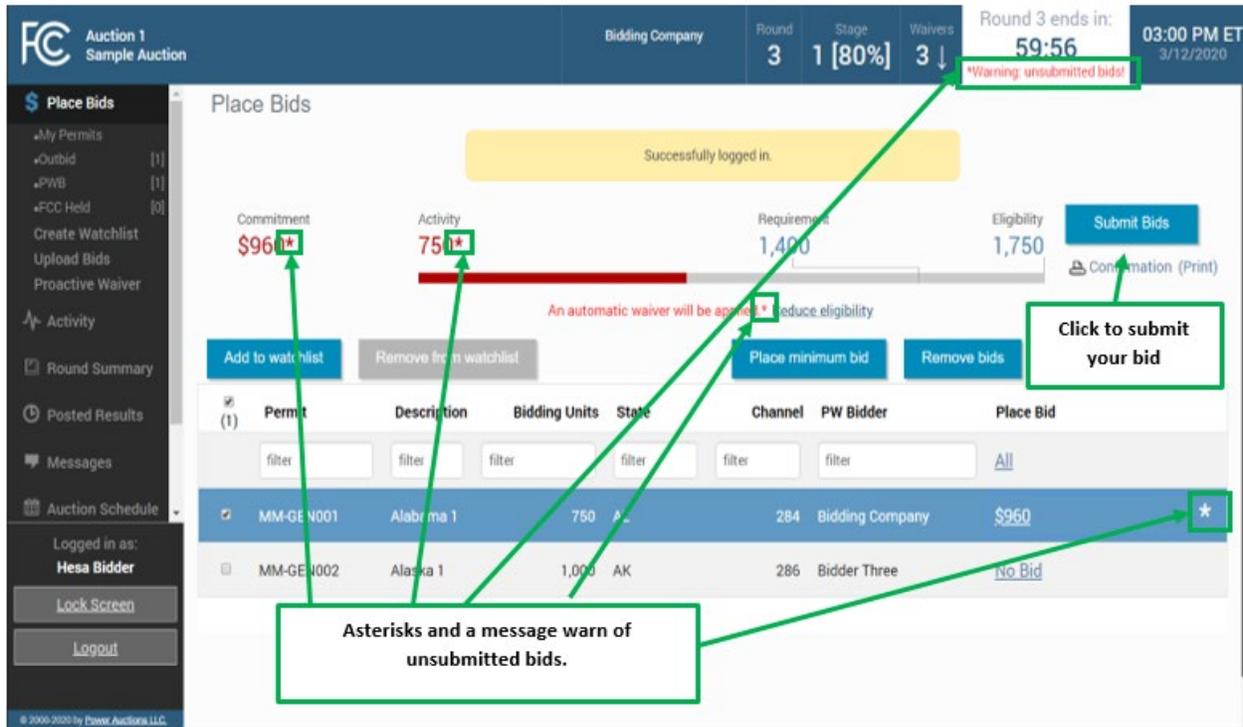
After bids are submitted, the system automatically updates the commitment and activity status bar to reflect the number of bidding units (Activity) and dollar amount (Commitment/Net Commitment) associated with your bids.

> ✎   *Bids that would cause your activity to exceed your eligibility cannot be submitted.*

A pop-up message confirms bidder actions when the Submit Bids button is clicked as shown in Figure 24.

Figure 24: Confirmation pop-up
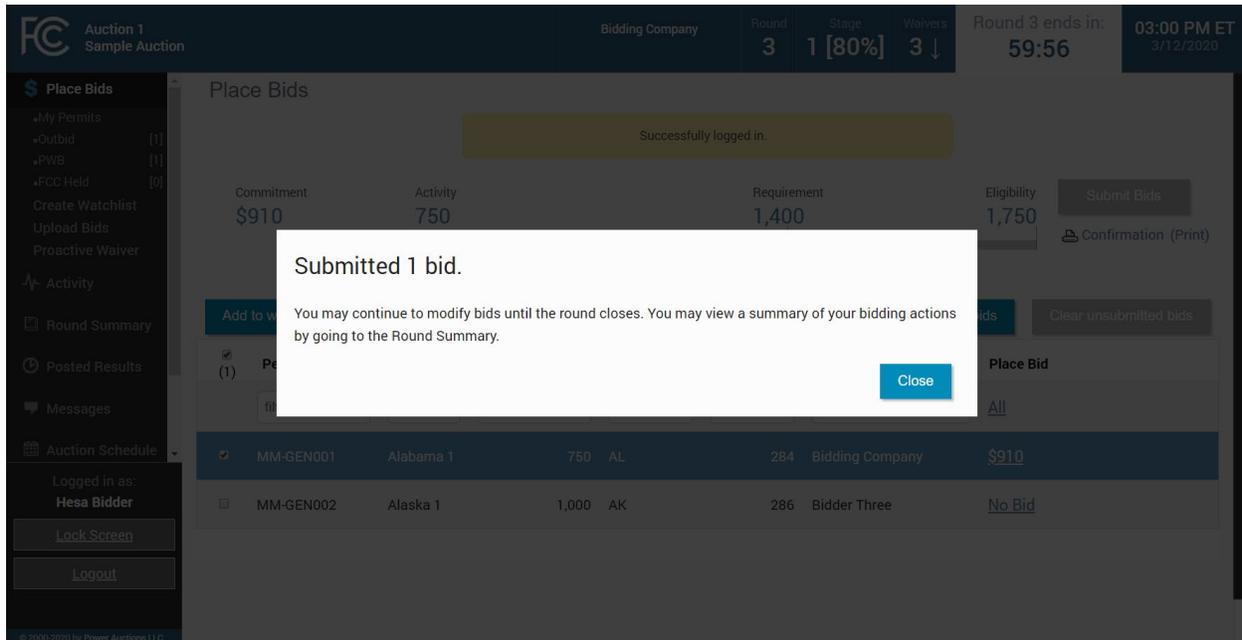
7.4. Watchlist

A watchlist is a grouping of items that are available for you to view and bid on, if eligible. Watchlists are useful ways for you, as a bidder, to divide the items into small, easy to manage groups, making it easier to navigate a long list of items. Items can appear in multiple watchlists, allowing you to group them together in ways that best meet your needs.

ABS automatically sets up a default watchlist of all your items, and you can set up additional watchlists of items of your own choosing. The system also provides a number of system-created watchlists after Round 1.

You may create and view custom watchlists via the Place Bids screen as soon as ABS is available. Once you have created a watchlist, you can add items to it, remove items from it or delete the watchlist entirely. While each authorized bidder may create a watchlist, all watchlists are shared amongst the authorized bidders for a bidder. Additionally, there is a limit of 25 custom watchlists that can exist at one time for a bidder.

To use a watchlist for bidding, click on the name of the desired watchlist in the left-hand navigation bar under Place Bids. This will cause the Place Bids screen to display only the items in that watchlist.

7.4.1. Create Watchlist

From the Place Bids screen, you may create a new custom watchlist. Select the checkbox next to the items that you would like to be part of the custom watchlist. Next, click on Create Watchlist as shown in Figure 25.

Figure 25: Create watchlist
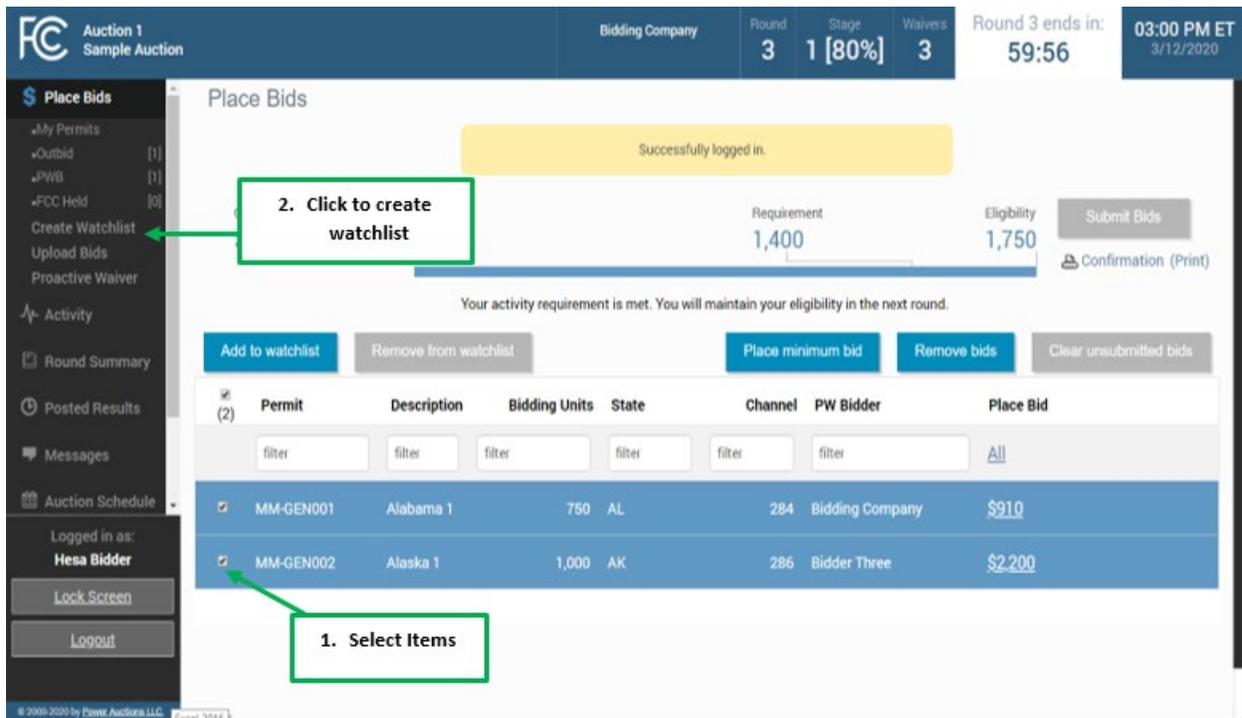
A screen appears that requires you to type a name into the name field and click Create as shown in Figure 26. Each custom watchlist must have a unique name. At any point, you may click Cancel to return to the Place Bids screen without creating a new custom watchlist.

Figure 26: Name watchlist
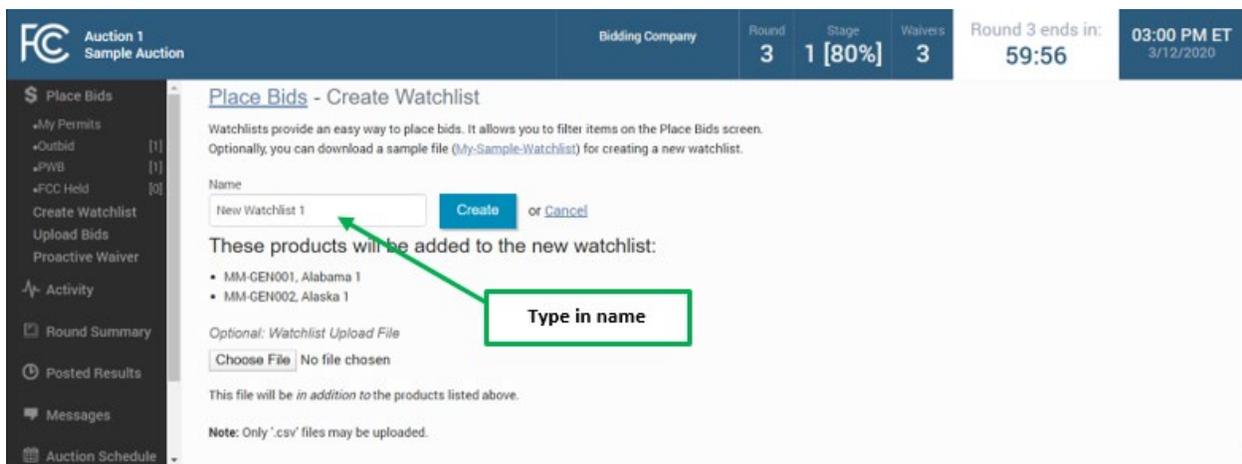
> ✍ *Watchlist names may only contain letters, numbers and spaces.*

7.4.2. Add Items to an Existing Watchlist

Working with existing watchlists you can easily add items to another watchlist. To do this, select the items to be included in the watchlist by clicking the box next to them and then click Add to watchlist . You must now specify the watchlist using the watchlist pop-up as shown in Figure 27. If the watchlist already exists, select its name from the drop-down. If the watchlist does not yet exist, type in the name in the New Watchlist Name field. Then click Add to watchlist .

Figure 27: Watchlist pop-up
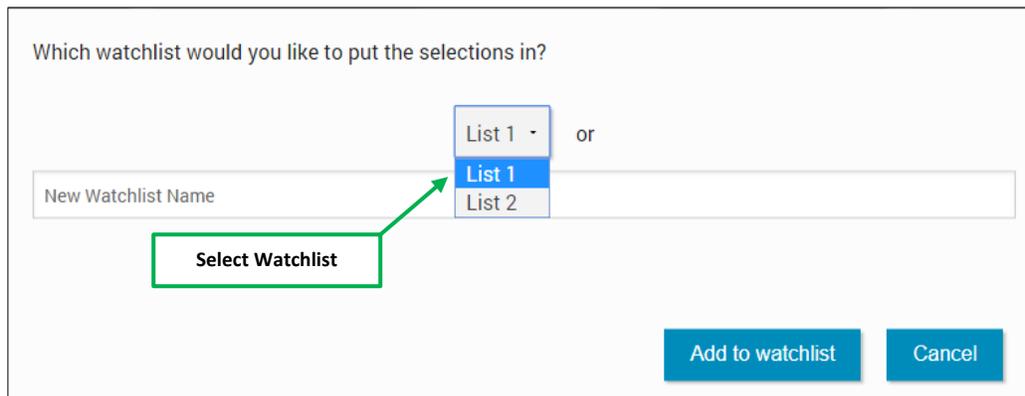
7.4.3. Create Watchlist by File Upload

Another way to create a custom watchlist is by using the file upload function. This allows you to download a sample watchlist file, modify it to include the items you want in the watchlist, and upload it into the system.

First click Create Watchlist on the navigation bar. You may download a sample .csv file from the screen, modify it to include the desired items, and save it to your computer. Then click on the Choose File button, select your file, and click Open . After uploading the watchlist, type a name into the name field, and click the Create button.

Figure 28: Upload watchlist
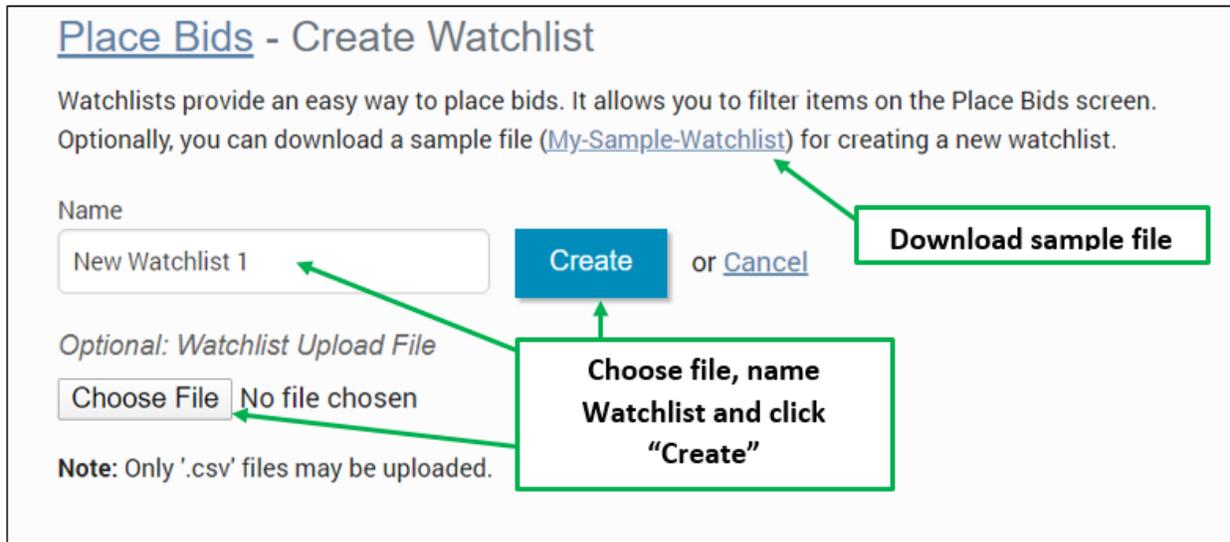
7.4.3.1.   File Structure – Sample Watchlist Upload File

The sample watchlist .csv file, which bidders can download and edit to create a watchlist upload file, uses the file format specified below, and it will contain only the items that the bidder is qualified to bid on. Note that the item field is required. The item_description field and any other fields the bidder adds are optional and will be ignored during the upload process.

Column (no column heading)	Description	DataType	Examples/*Notes*
item	Unique ID for the item	String {1..20}	MM-FM598A
item_description	Description of the item	String {1..50}	Freer, TX *Optional field, ignored during upload*

7.4.4.   Viewing and Editing Watchlists

When you return to the Place Bids page, your watchlist will be listed on the navigation bar on the left side of the page. To view a watchlist, click on the watchlist name under Place Bids on the navigation bar (see Figure 29). This filters for items in that watchlist to display on the Place Bids screen and makes it more convenient for placing bids on a subset of items.

Items may be added to a watchlist by following the procedure outlined above in Section 7.4.2. Remove items from a watchlist by selecting them and clicking Remove from watchlist . A pop-up confirms the removal.

To delete a watchlist entirely, click the [x] next to the name of the watchlist you wish to delete. A pop-up message appears to confirm that you wish to delete the watchlist. Click Remove watchlist to confirm.

A bidder can edit or delete only the watchlists it created. Bidders cannot edit or delete system-defined watchlists, which are described below in Table 2.

Figure 29: Viewing and editing watchlists
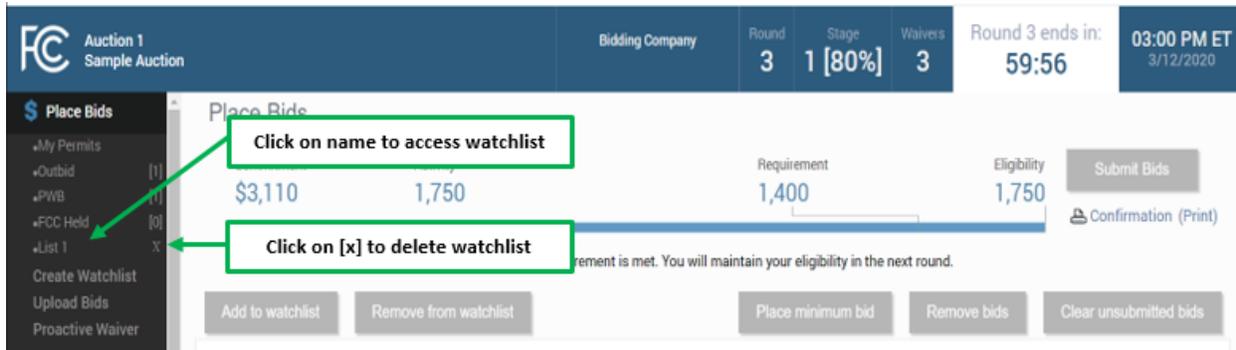
7.4.5.   Filtering by Watchlist

Starting with Round 2, the system creates dynamic watchlists that are helpful tools for selecting the items you want to bid on in later rounds. Similar to the custom watchlists, the dynamic watchlists group items and can be used to filter for that group. Numbers in parentheses on the navigation bar show how many items are in each dynamic watchlist.

Table 2: System-defined watchlists

Watchlists	Descriptions
My Permits	All items the bidder is eligible to bid on based on the items it selected on its FCC Form 175
Outbid	Items for which the bidder submitted a bid in the previous round, but for which another bidder holds the PWB
PWB	Items for which the bidder holds the PWB
FCC Held	Items for which there is no PWB

By default, the system displays the system-defined "My Permits" watchlist on the Place Bids screen. If you want to select a different watchlist, click on the desired watchlist on the navigation bar.

Figure 30: Place Bids – filtering by watchlist
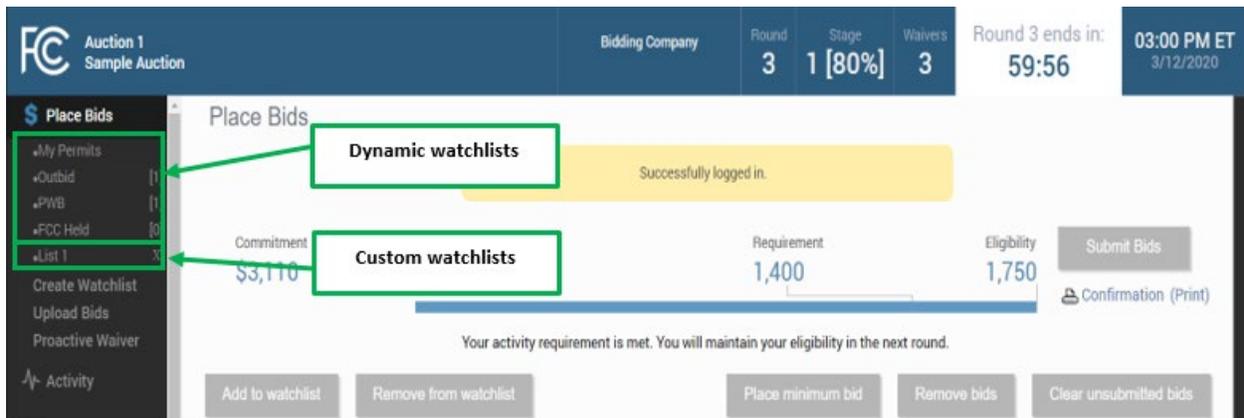
7.5.   Upload Bids

The Upload Bids function provides an alternative to selecting items and bid amounts manually through the user interface. This allows you to download a sample file, modify it to reflect your desired bids, and upload it into the system.

To access the Upload Bids page, select Upload Bids on the navigation bar.

Figure 31: Upload bids
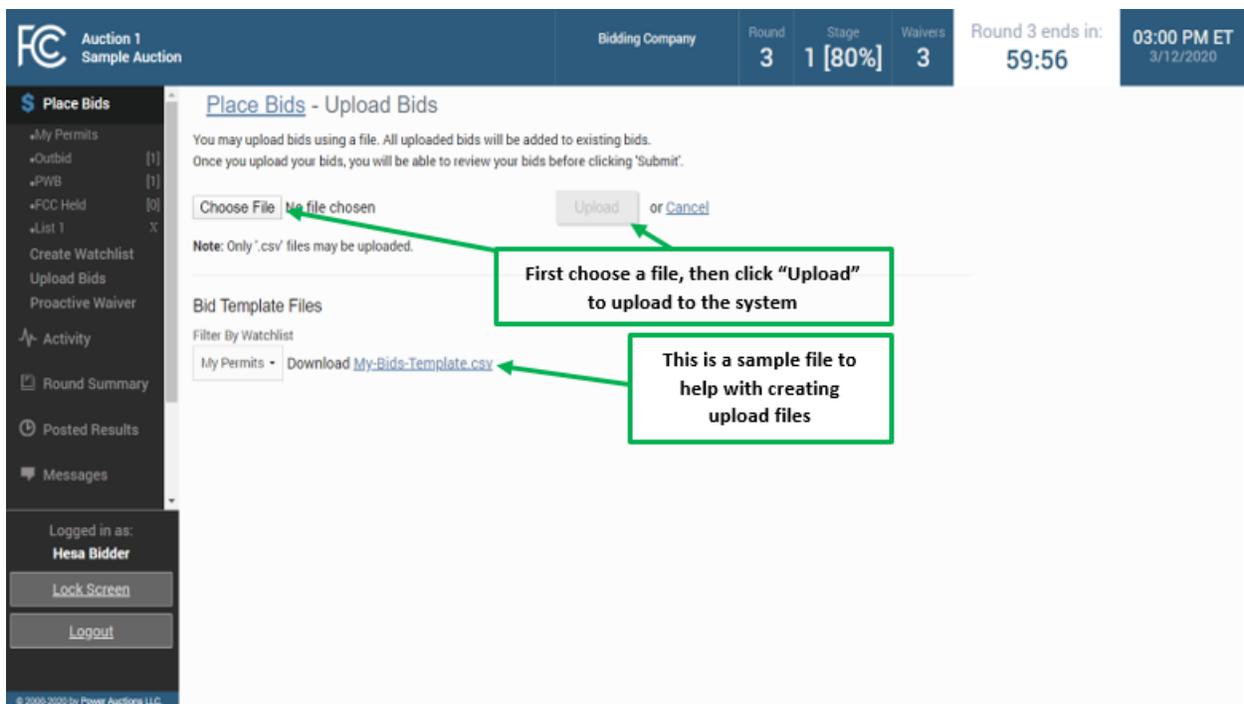
Download a sample .csv file (see Section 7.5.1.), modify it to include your bid selections, and save the file. Then click Choose File , select your upload file, and click Upload . After the file has been uploaded, you must return to the Place Bids screen to review and submit your bids.

> ✍ *If an authorized bidder is in the process of uploading bids when the round ends and has not clicked the* Submit Bids *button, those bids will not be submitted.* **You must click the** Submit Bids **button before the round ends** *for the bids to be submitted.*

If the system has found no errors in the upload file, it will show an Upload Bids Summary screen, as shown in Figure 32. This page displays a summary of the type of bids that were uploaded.

Figure 32: Upload Bids Summary
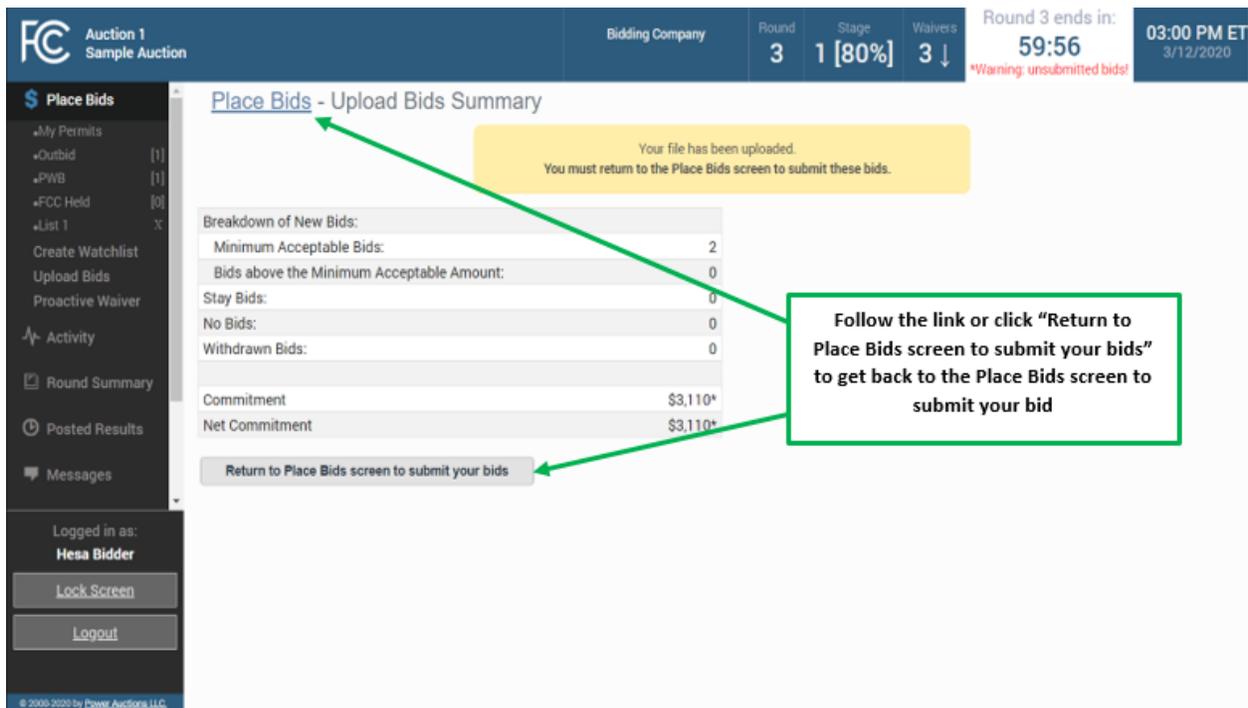
If a file contains errors, the system shows an error message listing the lines that contained errors. The upload file will need to be corrected and uploaded again.

Figure 33: Error messages for invalid upload

A bidder may upload and submit bids using multiple files during a round. For example, a bidder may wish to upload separate files for different watchlists. If a bidder uploads and submits multiple files, they are additive; the bids from a subsequent file do not replace all of the bids from a previous file (unless all of the bids are for the same items).

7.5.1.   File Structure – Upload File

An upload file must be a comma-separated-values (.csv) file. The file requires three fields, and each row contains a bid for an item. Bidders may create their own files or download and edit bid template files from the bidding system. Note that this section details the required fields, which must be the first three fields in the file. Any additional fields are ignored when the file is uploaded. The bid template files available in the bidding system which are described in the following section, provide additional columns of data for informational purposes only.

Field	Description	DataType	Examples/Notes
item	Unique ID for the item	String {1..20}	Permit: MM-FM598A

Field	Description	DataType	Examples/Notes
bid_type	Type of bid	String [bid|no_bid|stay|withdraw]	bid = a bid as defined by the bid_index no_bid = change a bid to no bid (does not apply to a PWB). stay = no new bid on your PWB (*i.e., not raising your own bid)* withdraw = withdraw a PWB (only if allowed)*
bid_index	Bid_option_index	Integer [0, 1-9]	0 – Revert back to what the status was at the start of the round. 1 – Minimum acceptable bid 2 – Second allowable price … 9 – Ninth allowable price *Null when bid_type = no_bid, stay, or withdraw*.

*if withdrawals are allowed in the auction

7.5.2.   File Structure — My Bids Template File

File name: My-Bids-Template.csv

Field	Description	DataType	Examples/Notes
item	Unique ID for the item	String {9}	MM-FM598A

Field	Description	DataType	Examples/Notes
bid_type	Type of bid	String [bid|no_bid|stay|withdraw]	bid = a bid as defined by the bid_index no_bid = no bid for the item, or remove a bid that you already placed in the round stay = no new bid on your PWB (*i.e., not raising your own bid)* withdraw = withdraw a PWB (only if allowed)* You may include in a bid upload file all items for which you are qualified to bid, but you only need to include those for which you are specifying a change Omitting from the file an itemfor which you have the provisionally winning bid is effectively a stay bid Omitting from the file an item for which you already placed a bid in the round does not remove that bid
bid_index	Bid option index	Integer [0, 1-9]	0 – Revert back to what the status was at the start of the round. 1 – Minimum acceptable bid 2 – Second allowable price … 9 – Ninth allowable price *Null when bid_type = no_bid, stay, or withdraw**
The following fields are not required for a bid upload file, but they are included in the template for the convenience of bidders.			
item_description	Description of the item	String {1..50}	
round	Round that prices pertain to	Integer	13
mab	MAB price	Dollar	*Minimum acceptable bid amount*

Field	Description	DataType	Examples/Notes
price2	2nd bid amount price	Dollar	*First additional bid amount above the MAB*
price3	3rd bid amount price	Dollar	*Next additional bid amount*
price4	4th bid amount price	Dollar	*Next additional bid amount*
price5	5th bid amount price	Dollar	*Next additional bid amount*
price6	6th bid amount price	Dollar	*Next additional bid amount*
price7	7th bid amount price	Dollar	*Next additional bid amount*
price8	8th bid amount price	Dollar	*Next additional bid amount*
price9	9th bid amount price	Dollar	*Next additional bid amount*
pwb_stay_price	Indicates the price for bid_type = stay	Dollar	*PWB price for bid_type = stay; null if not PWB*
withdraw_option	Indicates whether bid_type = withdraw is valid	String [option]	option *Contains "option" if the bidder has a PWB for the item that it may withdraw** *Null if the bidder does not have the PWB for the item or does not have any withdrawal rounds left*

*if withdrawals are allowed in the auction

Note that Microsoft Excel may replace large numbers with an abbreviated form (such as '1.55E+6'). You may wish to convert these back to "normal" notation (by selecting a number format of 0 decimal places) before saving the file to upload.

7.6.   Revising Bids and Removing Bids

As long as the round is open, a bidder may revise or remove its bid selections placed in that round.

To revise a bid, click on the bid amount and change the selection to No Bid or a different bid amount and then click Submit bids . To remove submitted bids, click the box next to the item, followed by Remove bids and then Submit bids . Alternatively, use the filter function of the Place Bids column to access submitted bids, followed by clicking Remove bids and then Submit bids .

Figure 34: Filter Place Bid column

To delete unsubmitted bids, use the filter in the Place Bids column drop-down to select Unsubmitted to view only your unsubmitted bids. Then click the checkbox next to the item, and then click Clear unsubmitted bids to remove the bids.

7.7.   Withdraw Bids

Note this feature is not available in all auctions.

Each bidder is allowed a specified number of rounds in which it may withdraw any or all of its current provisionally winning bids. The rounds in which a bidder makes withdrawals are at the bidder's discretion, and a bidder may withdraw as many bids as it wishes during the round.

Items for which you are the provisionally winning bidder will have Withdraw as one of the bidding options in the drop-down menu of the Place Bids column. To withdraw a one or more bids, choose this option and click Submit Bids .

Figure 35: Withdraw option in drop-down menu

After submission, withdrawals will be indicated on the blue bar at the top of the screen as pending with a downward arrow next to the number of withdrawal rounds remaining.

Withdrawals may be revised or removed during the round in which the withdrawal was placed. As soon as the round has ended, withdrawals are permanent. Withdrawals may be subject to a bid withdrawal payment, as detailed in the public notice announcing the procedures for the auction.

Figure 36: Withdrawal count on blue bar

If a provisionally winning bid is withdrawn, then the minimum acceptable bid in the next round will be the second highest bid submitted for that item. That amount may be less than or, in the case of tie bids, equal to the amount of the withdrawn bid. The FCC will serve as a placeholder provisionally winning bidder on the item until a new bid is submitted for that item.

7.8.   Waivers

Each bidder is required to be active on a specific percentage of its current eligibility in each round of the auction. This percentage may change during the auction. If the new bids from the current round plus your provisionally winning bids satisfy the activity requirement, the activity bar goes beyond the Requirement tick mark. The note under the commitment and activity bar confirms your activity requirement has been met as shown in Figure 37.

Figure 37: Activity Requirement is met
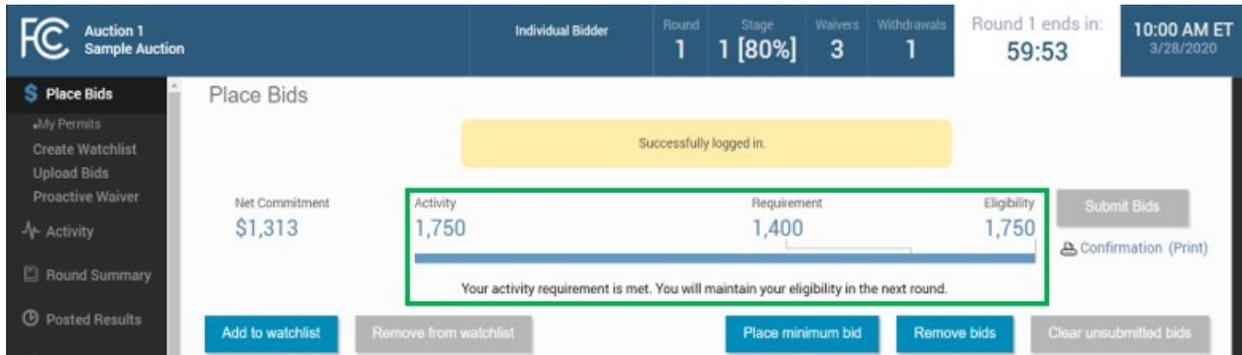
If you are below the required activity for the round, then the options are to place new bids, reduce eligibility, or use an activity rule waiver, if any are remaining. All decisions are reversible during the round but become permanent once the round has ended.

If a bidder fails to meet its activity requirement, then ABS places a waiver automatically, if any are remaining for the bidder. In this case, the bidder's eligibility will stay the same in the following round. The note below the activity bar reads: "An automatic waiver will be applied."

Figure 38: Automatic waiver
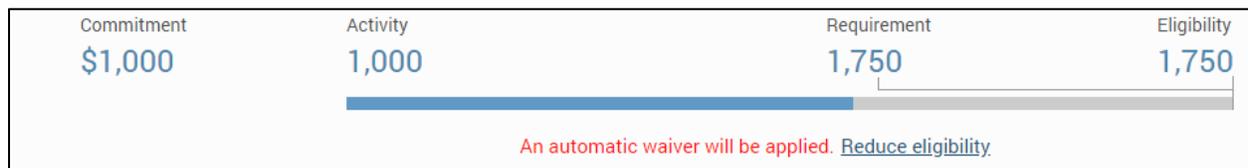
If the bidder is using a waiver in the current round, then the waiver count in the upper blue bar shows a downward arrow to indicate that the count will be reduced by one in the next round.

Figure 39: Waiver count change for next round shown on blue bar
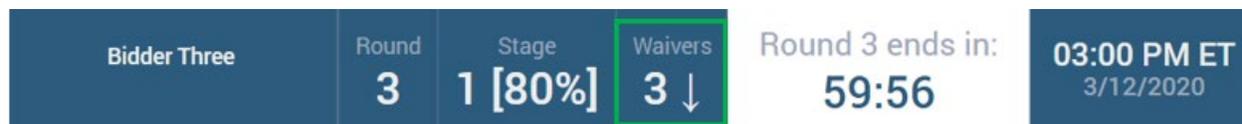
If no waivers remain and the activity requirement is not satisfied, then ABS will permanently reduce the bidder's eligibility based on the current activity at the close of the round.

Automatic waivers do not keep the auction open in the absence of bids, withdrawals (if allowed), or proactive waivers.

7.8.1.   Proactive Waiver

A bidder can submit a waiver proactively in order to avoid having to meet the activity requirement in a given round. A proactive waiver will keep the auction open when no new bids or withdrawals (if allowed) are submitted in a round.

As mentioned above, each bidder is limited in the total number of waivers (proactive and automatic) it may use during the auction. Be advised that once you submit a proactive waiver, you will not be able to place bids, withdraw provisionally winning bids (if allowed), or reduce your eligibility for the rest of the round unless you remove the proactive waiver and then place new bids, withdrawals (if allowed) or reduce your eligibility.

To submit a proactive waiver, click Proactive Waiver on the navigation bar. On the pop-up screen click Apply Proactive Waiver to confirm the decision or click Cancel to return to the place bids page. If a bidder is unable to apply a proactive waiver, a pop-up message will provide the reasons why a proactive waiver may not be applied.

Figure 40: Apply proactive waiver
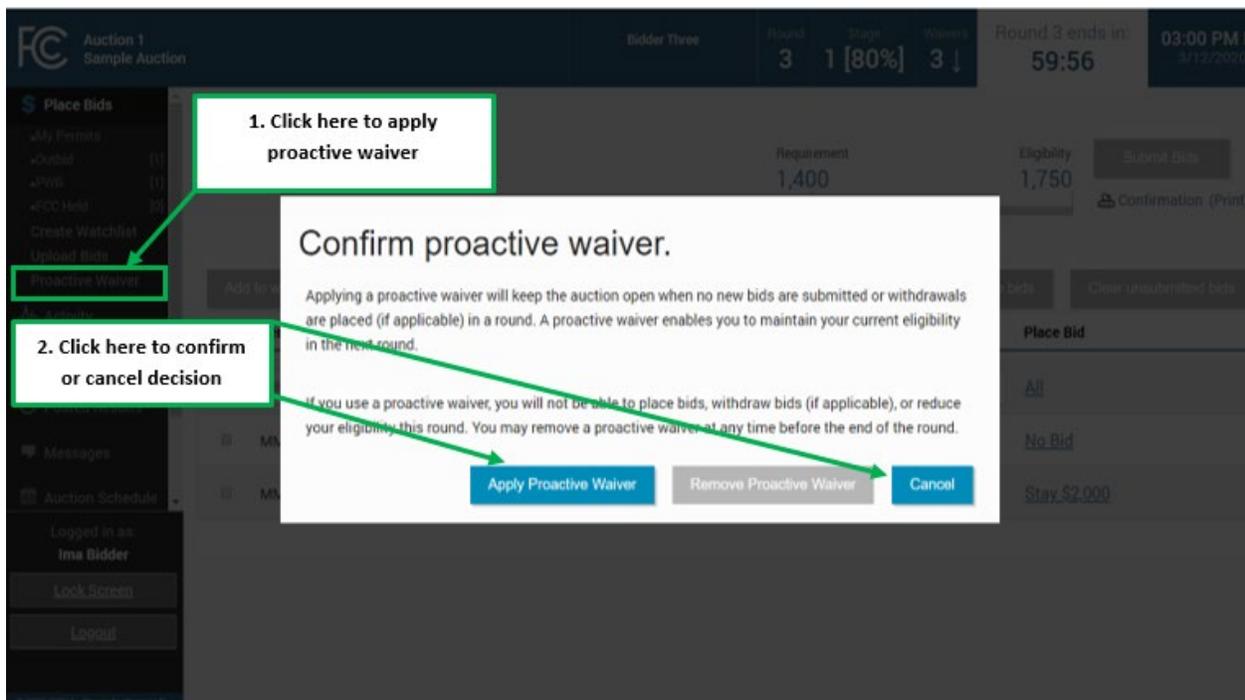
Once a proactive waiver has been applied, the note under the activity bar changes to read, "You are using a proactive waiver."

Figure 41: Activity bar – proactive waiver

To remove the proactive waiver during the current round, click on <u>Remove Proactive Waiver</u> under the activity bar or click <u>Proactive Waiver</u> on the navigation bar and click ⟨ Remove Proactive Waiver ⟩ on the pop-up screen.

Figure 42: Remove proactive waiver
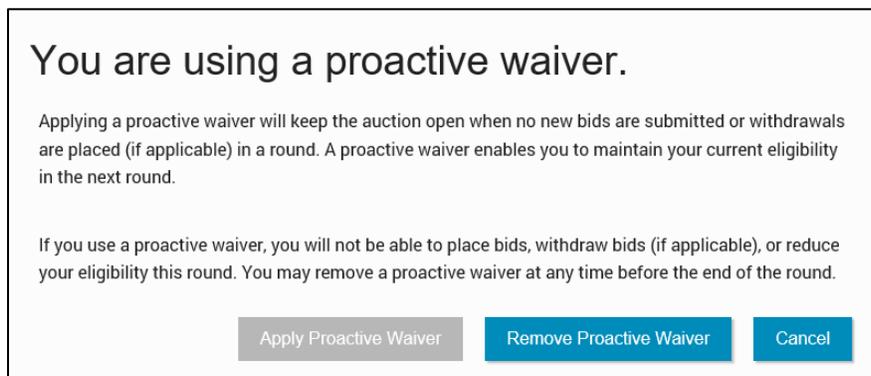
7.9.   Reduce Eligibility

If your activity is below your required activity for the round, you may continue to place new bids, reduce your current eligibility, or use a waiver, if any are remaining. If you choose to reduce your eligibility, be advised that this will be a permanent reduction once the round ends.

If you reduce your eligibility, ABS will reduce your eligibility to the amount at which your required activity equals your current activity. (These fields are shown as Activity, Requirement, and Eligibility on the commitment and activity status bar.) In other words, it makes what is required of you equal to what you are currently active on. If you plan to place bids and reduce your eligibility in the same round, be sure to place your bids before reducing your eligibility.

To reduce eligibility, click <u>Reduce Eligibility</u> under the activity bar on the Place Bids screen.

Figure 43: Reduce eligibility
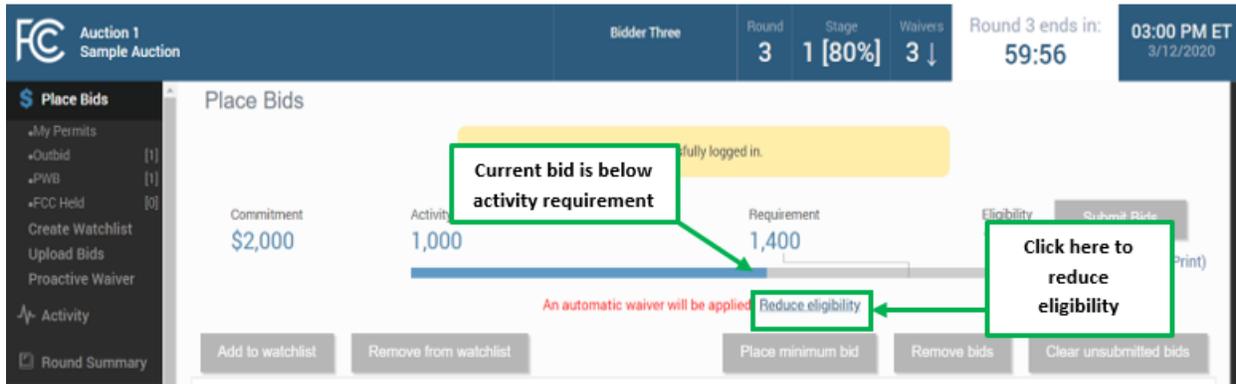
ABS will display the reduction requested pop-up with a summary of the new activity and eligibility for submitted bids as shown in Figure 44. Check this summary and then either implement the eligibility reduction by clicking Reduce Eligibility or cancel it by clicking Cancel . Either action directs you back to the Place Bids screen.

Figure 44: Reduction Requested summary pop-up
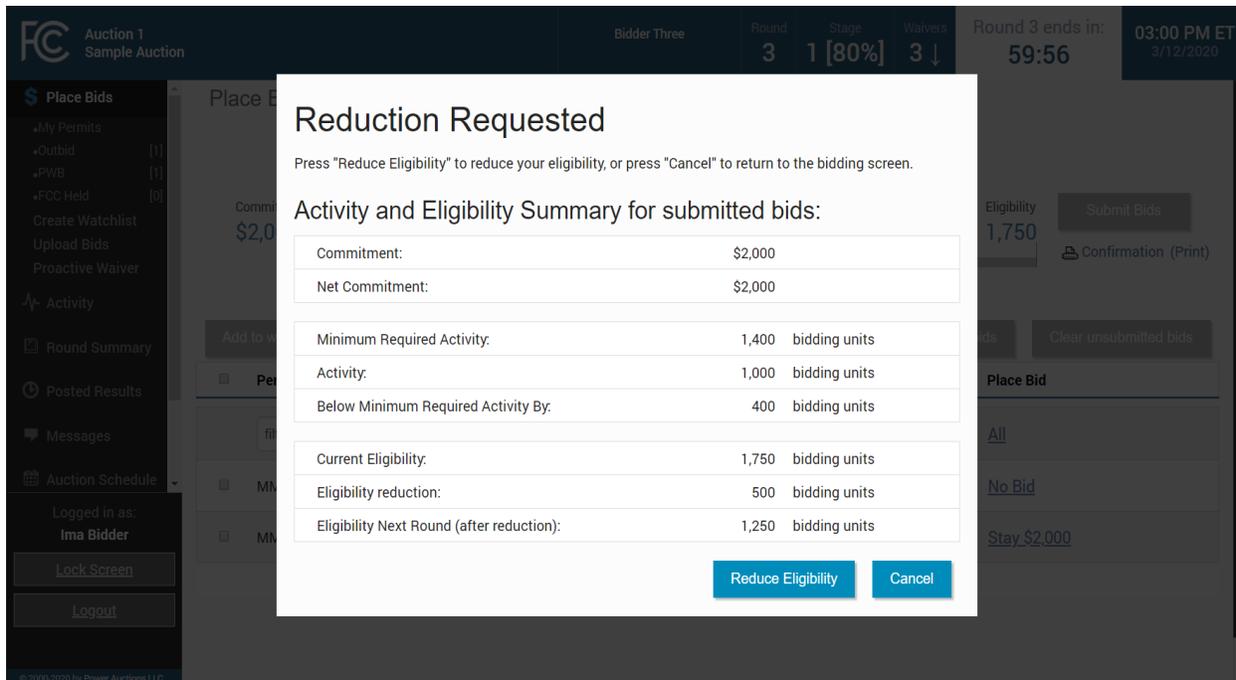
Once the eligibility reduction has taken place, the note under the activity bar shows the status of the eligibility decision as shown in Figure 45.

Figure 45: Eligibility Reduction

You may undo your eligibility reduction while the round is active by clicking the Use waiver/Maintain eligibility link under the activity bar and then clicking Use Waiver in the pop-up screen.

Figure 46: Using waiver summary pop-up
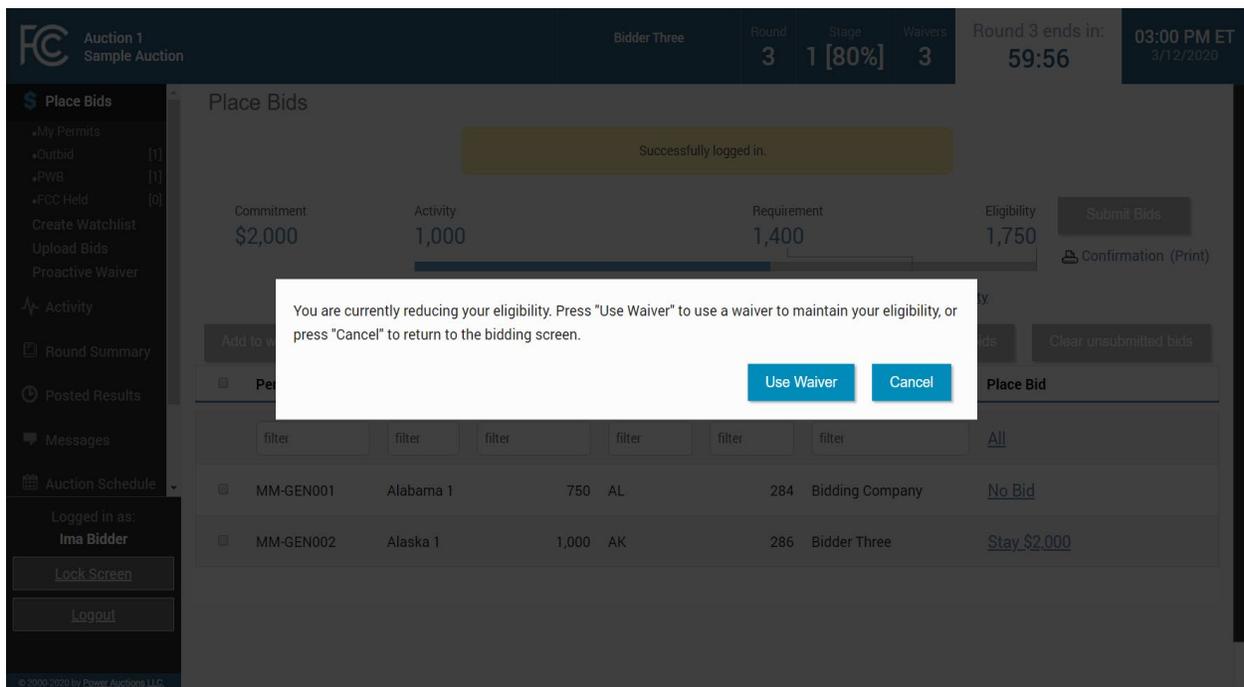
8.   Activity and Eligibility

The Activity tab may be accessed at any time during the auction to check your activity and eligibility as shown in Figure 47. The table can have two parts: one for submitted bids and another for submitted plus pending bids.

Figure 47: Activity and Eligibility Summary

9.   Round Summary

The Round Summary contains two tabs: My Actions and Confirmation. Access this screen by clicking the Round Summary tab on the navigation bar or the Confirmation (Print) link below the Submit Bids button.

A table available on both tabs displays Commitment, Net Commitment, Waivers, Withdrawal Rounds (if allowed), and Activity and Eligibility information, all of which are based on the current activity this round.

9.1.   My Actions

The My Actions screen summarizes all the bidding actions taken by the bidder during the round. Each action is time stamped, and a column denotes which authorized bidder took the action. It is strongly recommended that this screen be saved or printed before the round ends for a record of your bidding actions. In addition to the current round, round summaries for past rounds can be accessed by clicking on the "Filter" drop-down box containing round numbers.

Figure 48: Round Summary screen – My Actions

9.2.   Confirmation

The Confirmation screen displays the actions that will be processed by the bidding system at the close of the round. Unlike the My Actions screen, the Confirmation screen does not include any actions that were undone, such as removing a bid. This screen may also be accessed by clicking the Confirmation

(Print) link in the Place Bids screen. In addition to the current round, confirmations for past rounds can be accessed by clicking on the "Filter" drop-down box containing round numbers.

Figure 49: Round Summary screen – Confirmation

10. Posted Results

When a round ends ABS calculates the results of bidding in the round. To view round results, click on the Posted Results link on the navigation bar. The Posted Results screen has two tabs: My Bid Result and Last Posted Round shown in Figure 50.

10.1. My Bid Result

My Bid Result displays your results from any completed round (Figure 50). The upper portion of the screen shows your status (commitment, waiver, withdrawal (if allowed), activity and eligibility). The lower table shows the status of the items on which you are qualified to bid. Filter options can narrow the data in various ways to show customized information. Filtering by round and watchlist can be done using the "Filters" drop-down boxes. Additional filtering can be done using the filter boxes under the column headers.

PWB amounts for all items with a PWB are shown as well as the Net PWB Amounts for the items for which the bidder is the PW Bidder.

Figure 50: My Bid Result tab

10.2. Last Posted Round

Last Posted Round gives the status of the auction after the last posted round as shown in Figure 51. The top portion of the screen shows the total of all PWB amounts for the round, the dollar and percentage

changes, the stage transition percentage, the number of new bids, withdrawals (if allowed), proactive waivers, and the number of items with PWBs, and the number of FCC-held items.

The lower portion of the screen breaks the information down according to items. This screen also shows whether any PWBs were withdrawn (if allowed) for a given item.

Figure 51: Last Posted Round tab

11. Downloads

The Downloads screen has four tabs, as illustrated in Figure 52.

Figure 52: Download tabs
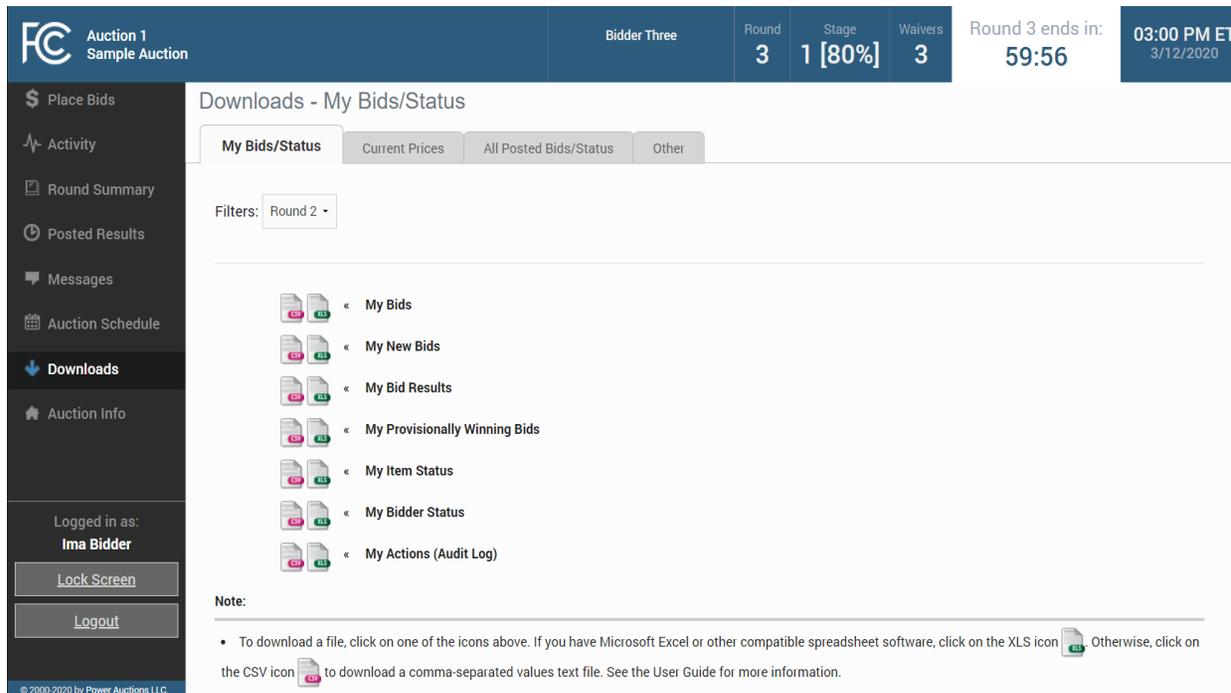
The My Bids/Status and All Posted Bids/Status tab files can be filtered by round.

The table below shows the files that are available on each tab during the auction.

Downloads screen tabs and files

My Bids/Status	Current Prices	All Posted Bids/Status	Other
My Bids	Current Minimum Acceptable Bids	All New Bids	Auction Summary
My New Bids	My Bids Upload (with current prices)	All Withdrawn Bids*	Round Summary

My Bids/Status	Current Prices	All Posted Bids/Status	Other
My Withdrawn Bids*		All Provisionally Winning Bids	Items Info
My Bid Results		All Item Status	Pricing Formulas
My Provisionally Winning Bids		All Bidder Status	All Bidder Items
My Item Status			
My Bidder Status			
My Actions (Audit Log)			

*if withdrawals are allowed in the auction

Each report is available in comma-separated-values (.csv) format and in Excel (.xls) format. The first row of each file is a header that contains the field names. To download a particular file, click on the corresponding icon and follow the instructions in your browser.

The download files contain information that is consistent with the information policy of the auction. For example, you will be able to see a list of all bids placed in a round by downloading the All New Bids file after that round has been posted. However, you will not be able to see the identity of other bidders who placed bids. Bids pertaining to other bidders will be denoted by an asterisk (*) for fields that are strings and null for fields that are numeric (e.g., integer or dollar).[5]

11.1. My Bids/Status Tab

11.1.1. My Bids

The My Bids report lists all the bids you submitted for the selected round. Note that not all examples in the specifications below are relevant for the My Bids file, as the specifications also apply to other files (My New Bids, My Withdrawn Bids, All New Bids*, All Withdrawn Bids*). In the following table and in the tables for other downloads, multiple examples are provided for some fields (e.g., the bidder field in all files, and the new_bids and tied_bids fields in the My Item Status file). Notes about a field are italicized.

---

[5] For auctions conducted under limited information disclosure procedures, the files will contain the identity of other bidders once the FCC publishes the results of the auction.

File name: My-Bids-r###.csv
(### = round number – e.g., My-Bids-r003.csv)

Field	Description	Data Type	Examples/*Notes*
auction_id	FCC identifier for this auction	String {1..20}	109
round	Round number	Integer	11
bidder	Name of qualified bidder	String {1..50}	Company XYZ "Bidding Company, Inc."
frn	FCC Registration Number (FRN) of this bidder	String [0..9] {10}	"0123456789"
item	Unique ID for the item	String {9}	MM-FM598A
item_description	Description of the item	String {1..50}	"Freer, TX"
bidding_units	Unit of measure associated with the item being auctioned, related to activity and eligibility	Integer	10000
bid_type	Type of bid	String [bid|stay|withdraw]	bid = a new bid stay = no new bid on your PWB (*i.e., not raising your own bid*) withdraw = withdrawal a PWB (*only if permitted in the auction*)*
bid_amount	The dollar amount entered for the item	Dollar	55000 *If withdrawal, gross amount of withdrawn bid**

Field	Description	Data Type	Examples/*Notes*
bidding_credit	Bidding credit percentage	Integer	0 (no credit), 15 (15%), 25 (25%), 35 (35%) *Not all of these example percentages are available in all auctions*
net_bid_amount	Net Price of Bid (applying bidding credit)	Dollar	800000 *If withdrawal, net price of withdrawn bid**
increments_of_bid	Option number for the bid	Integer	1 = Minimum Acceptable Bid for a round 2-9 = Additional bid amounts (higher than Minimum Acceptable Bid) *Null for bid_type = stay or withdraw**
bid_round	Round number that the bid was entered	Integer	12 *Will be the original round that the bid was entered for bid_type = stay or withdraw**
selection_number	Random number for tie-breaking purposes. A number between 0 and 1 with 15 digits accuracy, represented as a string in the downloads to preserve trailing 0s	String {17}	0.123456789012345 *Null for bid_type = stay or withdraw** *Selection number is not available for bids pertaining to an active round*
The rest of the fields vary by auction.			
channel	Identifies the channel of the item	String {1..2}	284

Field	Description	Data Type	Examples/*Notes*
city	Identifies the city of the item.	String {1..20}	Freer
state	Identifies the state	String {1..20}	TX
service	Identifies the service code.	String	MM

*if withdrawals are allowed in the auction

11.1.2. My New Bids

This is a subset of the My Bids file displaying only the new bids placed by the bidder each round. The fields are the same as for the My Bids file.

File name: My-New-Bids-r###.csv
(### = round number – e.g., My-New-Bids-r003.csv)

11.1.3. My Withdrawn Bids

This is a subset of the My Bids file displaying only the withdrawn bids placed by the bidder during the round. The fields are the same as for the My Bids file. Not available in all auctions.

File name: My-Withdrawn-Bids-r###.csv
(### = round number – e.g., My-Withdrawn-Bids-r003.csv)

11.1.4. My Bid Results

This download lists the results of all your bids from a given round (including stay bids and withdrawals (if allowed)). This report is available after round results have been processed and posted. Note that not all examples in the specifications below are relevant for the My Bid Results file, as the specifications also apply to other files (My Provisionally Winning Bid, All Provisionally Winning Bids).

File name: My-Bid-Results-r###.csv
(### = round number – e.g., My-Bid-Results-r003.csv)

Field	Description	Data Type	Examples/*Notes*
auction_id	FCC identifier for this auction	String {1..20}	109
round	Round number for which this file was generated	Integer	11
item	Unique ID for the item	String {1..20}	MM-FM598A
item_description	Description of the item	String {1..50}	"Freer, TX"
bidding_units	Unit of measure associated with the item being auctioned, related to activity and eligibility	Integer	10000
bidder	Name of qualified bidder	String {1..50}	Company XYZ "Bidding Company, Inc."
frn	FCC Registration Number (FRN) of this bidder	String [0,9] {10}	"0123456789"
bid_round	Round number that the bid was entered	Integer	12 *The original round that the bid was entered for bid_type = stay or withdraw**

Field	Description	Data Type	Examples/*Notes*
bid_result	Result of the bid	String [PWB|outbid |withdrawn]	PWB = new or stay bid was the provisionally winning bid outbid = for a new or stay bid, another bidder became the PW bidder withdrawn = the PWB was withdrawn *
bid_amount	The dollar amount entered for the item	Dollar	55000 *If withdrawal, gross amount of withdrawn bid**
bidding_credit	Bidding credit percentage	Integer	0 (no credit), 15 (15%), 25 (25%), 35 (35%) *Not all of these example percentages are available in all auctions*
net_bid_amount	Net price of bid (applying bidding credit)	Dollar	800000 0 *if FCC Held* *If withdrawal, net price of withdrawn bid**
The rest of the fields vary by auction. There will be at least 4 fields.			
channel	Identifies the channel of the item	String {1..2}	284
city	Identifies the city of the item.	String {1..20}	Freer

Field	Description	Data Type	Examples/*Notes*
state	Identifies the state	String {1..20}	TX
service	Identifies the service code.	String	MM

*if withdrawals are allowed in the auction

11.1.5. My Provisionally Winning Bids

This is a subset of the My Bid Results file, showing only your provisionally winning bids. The fields are the same as for the My Bid Results file.

File name: My-Provisionally-Winning-Bids-r###.csv
(### = round number – e.g., My-Provisionally_Winning-Bids-r003.csv)

11.1.6. My Item Status

The My Item Status download provides details about item status, including minimum acceptable bid, provisionally winning bid, provisionally winning bidder, and number of bids. Note that not all examples in the specifications below are relevant for the My Item Status file, as the specifications also apply to another file (All Item Status).

File name: My-Item-Status-r###.csv
(### = round number – e.g., My-Item-Status-r003.csv)

Field	Description	Data Type	Examples/*Notes*
auction_id	FCC identifier for this auction	String {1..20}	109
round	Auction round number	Integer	33
item	Unique ID for the item	String {9}	MM-FM598A
item_description	Description of the item	String {1..50}	"Freer, TX"
bidding_units	Unit of measure associated with the item being auctioned, related to activity and eligibility	Integer	10000
new_bids	Number of new bids submitted by the bidder in the current round	Integer	1

Field	Description	Data Type	Examples/*Notes*
tied_bids	Number of tied bids at the highest price	Integer	2, *0 if only one bid at the highest price. Null if no bids or FCC Held*
pw_bidder	Provisional Winning Bidder Name	String {1..50}	"Bidding Company, Inc." bidder name or FCC if there is no PW Bidder
pw_bidder_frn	FCC Registration Number (FRN) of the provisionally winning bidder	String [0,9] {10}	0123456789 *bidder FRN or 9999999999 for FCC*
pwb_amount	Amount of the PWB before any bidding credit is applied	Dollar	878000 0 *if FCC Held*
bidding_credit	Bidding credit percentage	Integer	0 (no credit), 15 (15%), 25 (25%), 35 (35%) *Not all of these example percentages are available in all auctions*
net_pwb_amount	Amount of the PWB after applying the bidding credit, if any	Dollar	800000 0 *if FCC Held* *Null when bid_result is outbid, withdrawn*, tied-not PWB*
round_of_pwb	Round in which the PWB was placed	Integer	2 (this includes rounds in which item was FCC Held) *Displays 0 when item has never received a bid* *Displays the round of the withdrawal, while item was FCC Held because of the withdrawal**

Field	Description	Data Type	Examples/*Notes*
increments_of_pwb	Number of bid increments selected by the bidder	Integer	1 = Minimum Acceptable Bid for a round 2-9 = Additional bid amount *(higher than Minimum Acceptable Bid)*
date_of_pwb	Date the PWB was placed	Date	*yyyy-mm-dd*
previous_pw_bidder	Bidder name of previous provisional winning bidder	String {1..50}	Bidding Company "Bidder name" or "FCC"
previous_pw_bidder_frn	FRN of previous provisionally winning bidder	String [0.9] {10}	0123456789 *bidder FRN or 9999999999 for FCC*
previous_pwb_amount	Amount of the previous PWB before any credit is applied	Dollar	878000 0 *if it was FCC Held (not due to withdrawal)* *Null until another bid is placed to supersede the first PWB or the initial PWB is withdrawn**
previous_pwb_bidding_credit	Previous provisionally winning bidder's bidding credit percentage for this item	Decimal [0 - 0.99]	0 (no credit), 15 (15%), 25 (25%), 30 (30%) *if you were the PW bidder and you increased your bid and are still the PW bidder* *Null =FCC*
previous_net_pwb_amount	Amount of previous PWB after applying the bidding credit, if any	Dollar	800000 0 *(FCC)*

Field	Description	Data Type	Examples/*Notes*
round_of _previous_pwb	Round number that the PWB was placed as a new bid (does not include stay bids)	Integer	2 *Null until another bid is placed to supersede the first PWB, or the initial PWB is withdrawn.*
item_closed	Indicates whether bidding has closed for the item	String {Y|N}	Y = *item has closed* *Items can close by group in some auctions* *At end of auction all items will be "Y" even if FCC held.*
The rest of the fields vary by auction. There will be at least 4 fields			
channel	Identifies the channel of the item	String {1..2}	284
city	Identifies the city of the item.	String {1..20}	Freer
state	Identifies the state	String {1..20}	TX
service	Identifies the service code.	String	MM

*if withdrawals are allowed in the auction

11.1.7.   My Bidder Status

This download provides details about your current status, including activity, waiver and withdrawal counts (if allowed), and total bid amounts.

File name: My-Bidder-Status-r###.csv
(### = round number – e.g., My-Bidder-Status-r003.csv)

Field	Description	Data Type	Examples/Notes
auction_id	FCC identifier for this auction	String {1..20}	109
round	Auction round number	Integer	11
bidder	Name of qualified bidder	String {1..20}	Company XYZ "Bidding Company, Inc."

Field	Description	Data Type	Examples/Notes
frn	FCC Registration Number (FRN) of the bidder	String [0,9] {10}	0123456789
bidding_credit_type	Indicates the type of bidding credit the bidder claimed eligibility for, if any.	String [Rural|SmallBusiness|New Entrant] {0,14}	*Null if bidder has no bidding credit*
eligibility	The bidder's eligibility in bidding units, which is the maximum number of bidding units on which a bidder may submit bids.	Integer	8000000
required_activity	Minimum number of bidding units the bidder must be active on in the current round to meet its activity requirement	Integer	95000
activity	The sum of the bidding units associated with items covered by the bidder's new bids in the round plus its provisionally winning bids from the previous round.	Integer	3434000
below_required_activity	If activity is < required_activity, then below_required_activity = required_activity minus activity; otherwise zero.	Integer	1566000
new_bids	Number of new bids submitted by the bidder in the round	Integer	1
stay_bids	Number of stay bids submitted by bidder in the current round	Integer	7
withdrawn_bids*	Number of PWBs withdrawn by the bidder in the round	Integer	0 *Null if withdrawals are not allowed in the auction*

Field	Description	Data Type	Examples/Notes
commitment	Total dollar amount of new bids and PWBs, less any PWBs that are withdrawn* in the round	Dollar	40983539
net_commitment	Net dollar amount of new bids that are not withdrawals and stay bids, regardless of whether bids are PWBs after the round is posted	Dollar	40983539
eligibility_result	Indicates whether the bidder met the activity requirement or what type of waiver or eligibility reduction was used	String [auto waiver|proactive waiver|requirement met|reduce eligibility|auto reduce]	auto waiver proactive waiver requirement met reduce eligibility auto reduce
eligibility_reduction	Calculated as eligibility_next_round - eligibility	Integer	0
eligibility_next_round	Eligibility next round	Integer	80000000
number_pwbs	Number of items for which bidder has PWBs	Integer	23 *Null during round; updated after posting*
total_pwb_amount	Total dollar amount of the bidder's PWBs, not taking into account any bidding credit		23456000 *Null during round; updated after posting*
total_net_pwb_amount	Total net dollar amount of the bidder's PWBs taking into account any bidding credit.	Dollar	21567800 *Null during round; updated after posting*

Field	Description	Data Type	Examples/Notes
effective_pwb_bidding_credit	The actual bidding credit discount percentage Calculated as (1 - (total_net_pwb_amount / total_pwb_amount)) * 100	Decimal	21.05 *0 if bidder has no bidding credit* *Calculated to 2 decimal places*
pwb_bidding_units	Total number of bidding units associated with the bidder's PWBs	Integer	13400 *Null during round; updated after posting*
waivers_remaining	Number of waivers remaining for the bidder	Integer	3
withdrawals_remaining*	Number of withdrawal rounds remaining for the bidder	Integer	1 *Null if withdrawals are not permitted in the auction*

*if withdrawals are allowed in the auction

11.1.8. My Actions

This is a detailed account of the bidder's auction activity.

File name: My-Actions-r###.csv
(### = round number – e.g., My-Actions-r003.csv)

Field	Description	Data Type	Examples/*Notes*
auction_id	FCC identifier for this auction	String	109
round	Round number	Integer	11
bidder	Name of qualified bidder	String	Company XYZ "Bidding Company, Inc."
frn	FCC Registration Number (FRN) of the bidder	String [0,9] {10}	"0123456789"

Field	Description	Data Type	Examples/*Notes*
item	Unique ID for the item	String {1..20}	MM-FM598A
item_description	Description of item	String {1..50}	"Freer, TX"
bidding_units	Unit of measure associated with the item being auctioned, related to activity and eligibility	Integer	10000
bid_amount	The dollar amount entered for the item	Dollar	55000 *If withdrawal, gross amount of withdrawn bid**
net_bid_amount	Amount of bid after applying the bidding credit, if any	Dollar	800000
action	Descriptive text of bidding-related action	String	"Place a new bid for $5,000" Changed waiver count to 3 from 2
placed_by	Name of the user performing the action	String	Joe Smith
timestamp	Date and time the action was taken	Date/Time	2014-10-27 2:16:53 PM

*if withdrawals are allowed in the auction

11.2. Current Prices Tab

11.2.1. Current Minimum Acceptable Bids

This file shows the minimum acceptable bid amounts for all items for a round. It is available from when round is announced until the round is posted.

File name: Current-Minimum Acceptable Bids.csv

Field	Description	Data Type	Example/notes
auction_id	FCC identifier for this auction	String {1..20}	109
round	Auction round number	Integer	33
item	Unique ID for the item	String {1..20}	MM-FM598A
item_description	Description of item	String {1..50}	"Freer, TX"

Field	Description	Data Type	Example/notes
bidding_units	Unit of measure associated with the item being auctioned, related to activity and eligibility	Integer	10000
previous_round_pwb_amount	Previous round's PWB amount	Dollar	12000 *For Round 1, this is null, as there was no previous PWB.* *If no bids have been entered for the item to-date, this null.*
previous_round_new_bids	Number of new bids for the item from previous round	Integer	2 *Does not include stays.* *For Round 1, this is null, as there was no previous round*
mab	Minimum acceptable bid for this round	Dollar	50000 *For Round 1 this is the minimum opening bid (MOB).*
mab_increment	Dollar increase over last round's PWB Calculated as *MAB* (this round) – PWB (last round)	Dollar	1500 *MAB (this round) – PWB (last round)* *0 if there is no previous PWB.*
mab_increment_percentage	Percentage increase over last round's PWB Calculated as MAB (this round) – PWB (last round)/PWB (last round)	Decimal	12.34
mab_source	Source of MAB	String [F|O|C]	F = Calculated using formula O = Auction-Administrator override for MAB *(overrides trump capped)* C = capped
mab_rule	Type of price formula	String [S|P]	S= *Smoothing formula* P = *Constant percentage increase*

Field	Description	Data Type	Example/notes
mab_floor	Minimum percentage increment when computing MAB (Floor)	Decimal	15, 15.25 *Used with Smoothing price formulas;* *Null when using constant price formula*
mab_ceiling	Maximum percentage increment when computing MAB (Ceiling)	Decimal	35, 35.25 *Used with Smoothing price formulas;* *Null when using constant price formula*
activity_weight	Weighting factor for activity used when computing MAB	Decimal [0..1]	0.55 *Used with Smoothing price formulas;* *Null when using constant*
mab_percentage_without_ceiling	Uncapped percentage that was used during calculation of this round's MAB using the following portion of the smoothing price formula: $(1 + A_i) * N$	Decimal	12.34 *Null when using constant* *Does not include FCC rounding*
mab_formula_constant_percentage	Percentage used with constant percentage MAB	Decimal	10.56 *Used with Constant percentage increase* *Null when using smoothing*
mab_cap	A dollar cap on the amount by which the MAB may increase over PWB amount	Dollar	500000 *Null if not used*
additional_increment_amount	Additional increment amount used to determine the additional bid amounts.	Dollar	5000
additional_increment_formula_percentage	Percentage adopted by the FCC for calculating additional increments	Decimal	5, 5.53
additional_increment_source	Source of the additional bid increment amount	String [F|C}	F = *Calculated using formula* C = *capped*
additional_increment_cap	A dollar cap on the result of the formula for calculating the additional increment amount	Dollar	*500000* *Null if not used*

Field	Description	Data Type	Example/notes
number_additional_incre ments	Number of additional bid amounts	Integer	8 *does not include the MAB*

11.2.2.   My Bids Upload (with current prices)

This file has the same format as the My Bids Template file (Section 7.5.2).

File name: My-Bids-Upload.csv

11.3. All Posted Bids/Status

11.3.1.   All New Bids

The file structure is the same as for the New Bids file described in Section 11.1.2. The file contains all new bids placed during the round for all bidders in the auction, subject to the information disclosure policy in place for the auction.

File name: All-New-Bids-r###.csv
(### = round number – e.g., All-New-Bids-r003.csv)

11.3.2.   All Withdrawn Bids (if withdrawals are allowed)

The file structure is the same as for the Withdrawn Bids file described in Section 11.1.3. The file contains all withdrawn bids placed during the round for all bidders in the auction, subject to the information disclosure policy in place for the auction.

File name: All-Withdrawn-Bids-r###.csv
(### = round number – e.g., All-Withdrawn-Bids-r003.csv)

11.3.3.   All Provisionally Winning Bids

The file structure is the same as for the Provisionally Winning Bids file described in Section 11.1.5. The file contains all provisionally winning bids placed during the round for all bidders in the auction, subject to the information disclosure policy in place for the auction.

File name: All-Provisionally-Winning-Bids-r###.csv
(### = round number – e.g., All-Provisionally-Winning-Bids-r003.csv)

11.3.4.   All Item Status

The file structure is the same as for the Item Status file described in Section 11.1.6.

File name: All-Item-Status-r###.csv
(### = round number – e.g., All-Item-Status-r003.csv)

11.3.5.   All Bidder Status

The file structure is the same as for My Bidder Status in Section 11.1.7.

File name: All-Bidder-Status-r###.csv
(### = round number – e.g., All-Bidder-Status-r003.csv)

11.4.   Other Tab

11.4.1.   Auction Summary

This report offers high-level summary of the auction

File name: Auction-Summary.csv

Field	Description	Data Type	Examples/*Notes*
auction_id	FCC identifier for this auction	String {1..20}	109
auction_description	Name of the auction	String {1..30}	FM broadcast
rounds	Number of rounds completed	Integer	363
date_opened	Date the auction commenced	Date	*yyyy-mm-dd*
date_closed	Date the auction concluded	Date	*yyyy-mm-dd; if the auction is closed Null if the auction is open*
bidding_days	Number of days with bidding rounds to date	Integer	63 days

Field	Description	Data Type	Examples/*Notes*
total_pwb_amount	Total dollar amount of PWBs, not taking into account any bidding credits	Dollar	2063000000
total_net_pwb_amount	Total of net provisionally winning bid amounts, taking into account bidding credits	Dollar	1998000000
pw_bidders	Total of winning bidders	Integer	45; *If the auction is closed*
qualified_bidders	Number of bidders that qualified to participate in the auction	Integer	100
items_with_pwbs	Number of items with provisionally winning bids	Integer	405
fcc_held_items	Number of items without provisionally winning bids	Integer	3
total_items	Number of items in the auction	Integer	16
item_type	Type of items offered for bid during the auction	String {1..30}	Permit

11.4.2. Round Summary

The Round Summary file offers a high-level summary of each round, and it is only available after the round has been posted.

File name: Round-Summary.csv

Field	Description	Data Type	Examples/*Notes*
auction_id	FCC identifier for this auction	String {1..20}	109
round	Auction round number	Integer	11
round_start_time	Date and time the round started	Date/Time	2014-10-27 14:16:53 yyyy-mm-dd hh:mm:ss
round_stop_time	Date and time the round ended	Date/Time	2014-10-27 14:16:53 yyyy-mm-dd hh:mm:ss
total_pwb_amount	Total dollar amount of PWBs, not taking into account any bidding credits	Dollar	2063000000

Field	Description	Data Type	Examples/*Notes*
dollar_change_in_total_pwb_amount	total_pwb_amount minus total_pwb_amount of previous round	Dollar	2063000
percent_change_in_total_pwb_amount	dollar_change_in_total_pwb_amount divided by total_pwb_amount of previous round	Decimal	12.34 (12.34%); -12.34 (-12.34%) *Null for Round 1*
total_net_pwb_amount	Total of net provisionally winning bid amounts taking into account bidding credits	Dollar	1998000000
dollar_change_in_total_net_pwb_amount	total_net_pwb_amount minus total_net_pwb_amount of previous round	Dollar	1953000
percent_change_in_total_net_pwb_amount	dollar_change_in_total_net_pwb_amount divided by total_net_pwb_amount of previous round	Decimal	12.34 -12.4 0 *if there is no previous PWB*
pw_bidders	Number of provisionally winning bidders	Integer	45
eligible_bidders	Number of bidders with eligibility > 0 at the start of the round	Integer	3
eligibility_ratio	(sum of current eligibility of all bidders) / (sum of all the bidding units of the items)	Decimal	2.12
eligibility_ratio_less_fcc_held	(sum of current eligibility of all bidders) / (sum of all the bidding units of items with PWBs)	Decimal	3.12
proactive_waiver_flag	Displays "Y" if at least one bidder submitted a proactive waiver.	String [Y|N]	Y N
proactive_waiver_bidders	Count of bidders where eligibility_result = proactive waiver	Integer	1
auto_waiver_bidders	Count of bidders where eligibility_result = auto waiver	Integer	3

Field	Description	Data Type	Examples/*Notes*
requirement_met_bidders	Count of bidders where eligibility_result = requirement met	Integer	20
reduced_eligibility_bidders	Count of bidders where eligibility_result = reduce eligibility	Integer	1
auto_reduced_bidders	Count of bidders where eligibility_result = auto reduce	Integer	0
withdraw_bidders	The number of bidders that withdrew PWBs in a round; count of bidders where withdrawn_bids > 0	Integer	1*
withdraw_status	Indicates if any withdrawals took place during a round.	String [Y|N]	Y = yes N = no*
withdrawn_bids	The number of bids withdrawn in a round	Integer	2*
items_with_pwbs	Number of items with provisionally winning bids	Integer	405
fcc_held_items	Number of items held by the FCC after the round is posted.	Integer	3
stage	Identifies the stage of the auction	String {1..20}	1, 2, 3
stage_transition_percentage	(sum of bidding units of items with new bids) / (sum of bidding units of all items)	Decimal	12.34
stage_transition_percentage_less_fcc_held	(sum of bidding units of items with new bids) / (sum of bidding units of all items with PWBs)	Decimal	15.99

*if withdrawals are allowed in the auction

11.4.3. Items Info

The contents of the file reflect the way the auction was configured

File name: Items-Info.csv

Field	Description	Data Type	Examples/*Notes*
auction_id	FCC identifier for this auction	String {1..20}	109
item	Unique ID for the item	String {1..20}	MM-FM598A
item_description	Description of item	String {1..50}	"Freer, TX"
bidding_units	Unit of measure associated with the item being auctioned, related to activity and eligibility	Integer	10000
mob	Minimum amount required to place the first bid on the item	Dollar	567000
channel	Identifies the channel of the item	String {1..2}	284
city	Identifies the city of the item.	String {1..20}	Freer
state	Identifies the state	String {1..20}	TX
service	Identifies the service code.	String	MM

11.4.4. Pricing Formulas

This file defines the pricing formulas for the minimum acceptable bid (MAB) amounts and the increment for the additional bid amounts.

File name: Pricing-Formulas.csv

Field	Description	DataType	Examples/*Notes*
auction_id	FCC identifier for this auction	String {1..20}	109
effective_round	The round where the pricing formula will take effect.	Integer	1
mab_rule	Type of formula	String [S|P]	S= *Smoothing formula* P= *Constant percentage increase*

Field	Description	DataType	Examples/*Notes*
mab_floor	Minimum percentage increment when computing MAB (Floor)	Decimal	15 15.35 *Used with Smoothing price formulas;* *Null when using constant*
mab_ceiling	Maximum percentage increment when computing MAB (Ceiling)	Decimal	35 35.35 *Used with Smoothing price formulas;* *Null when using constant*
activity_weight	Weighting factor for activity used when computing MAB	Decimal [0,1]	0.55 *Used with Smoothing price formulas;* *Null when using constant*
mab_formula_constant_percentage	Percentage used with constant percentage MAB	Decimal	10 10.35 *Used with Constant percentage increase* *Null for Smoothing*
mab_cap	A dollar cap on the amount by which the MAB may increase over PWB amount	Dollar	500000 *Null if not used*
additional_increment_formula_percentage	Percentage for calculating additional increments	Decimal	5 5.35
additional_increment_cap	A dollar cap on the result of the formula for calculating the additional increment amount	Dollar	500000 *Null if not used*
number_additional_increments	Number of additional Bid amounts	Integer [0,9]	8 *(does not include the MAB)*

11.4.5. All Bidder Items

This file lists the items the bidder selected on its FCC Form 175 and the bidding credit for which the bidder claimed eligibility, if any.

File name: All-Bidder-Items.csv

Field	Description	Data Type	Examples/Notes
auction_id	FCC identifier for this auction	String {1..20}	109
bidder	Name of qualified bidder	String {1..50}	Company XYZ "Bidding Company, Inc."
frn	FCC Registration Number (FRN) of this bidder	String [0,9] {10}	"0123456789"
item	Unique ID for the item	String {9}	MM-FM598A
bidding_credit	Bidding credit percentage	Integer	0 (no credit), 15 (15%), 25 (25%), 35 (35%) *Not all of these example percentages are available in all auctions*

12. Final Results

After the final round of the auction has been posted, the timer on all screens will be replaced by Auction Concluded as shown in Figure 53.

The final auction results are available on the Final Results screen (Figure 53). The Final Results screen replaces the Place Bids screen, and the screen title Final Results is located where Place Bids was while the auction was active.

Figure 53: Final Results screen

This screen shows all items for which the bidder is the PW Bidder. All results are subject to verification by the Commission.

12.1. Posted Results

A more comprehensive summary of the bidder's results and general auction results is shown on the Posted Results Screen (Figure 54). Information about the final auction status can be obtained on the public sites.

The top part of this screen displays discount information for bidders with bidding credits.

Figure 54: Final Results shown on Posted Results screen

Appendix 1: System Troubleshooting

If you continue to experience problems after following the troubleshooting instructions, please call Technical Support at (877) 480-3201, option 9; (202) 414-1250; or (202) 414-1255 (TTY) (8:00 a.m. – 6:00 p.m. ET on business days).

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

Figure 55: Google Chrome connection error message
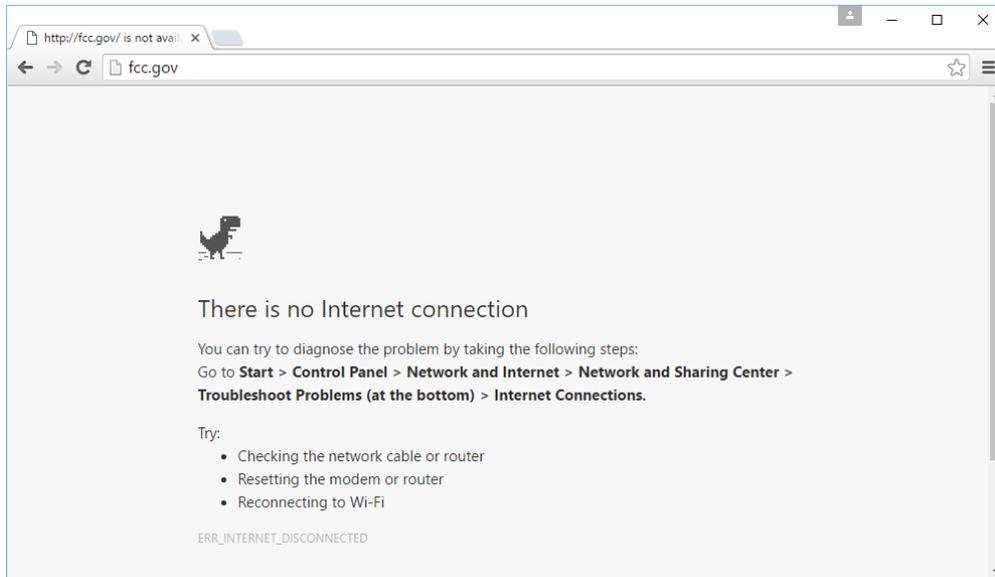
If any of the screens shown above appear, complete the following steps:

- Confirm that the computer has external internet access. Try to access a common site on the internet such as www.google.com. If this is unsuccessful, the computer does not have external internet access.
- Confirm that the URL for ABS is correct.
- Confirm that your organization has not blocked access to the site. Your organization may only allow you to access certain external web sites. Check with your IT department.
- You may not have selected the "OK" button when the message appeared stating that you are about to enter a secure site. Re-start the browser and try again ensuring you click on the "OK" button.
  Confirm that you are using the correct browser version (see system requirements in Section 2.1) by performing the following steps:
    - Chrome: First, click on the ⋮ icon (which can be found in the top right-hand corner of your browser). Then click "Help" followed by "About Google Chrome."
- Confirm that TLS has been enabled on your browser.
    - Chrome support TLS 1.2 by default. No changes are required.
- Confirm that your corporate firewall accepts TLS.

80

Situation 2: Cookies must be enabled error message

ABS requires that cookies are enabled on your browser. If cookies are disabled, you will see a message stating that cookies should be enabled.

To enable cookies in Chrome, complete the following steps:

- Click on the tools icon ⸽ in the top right-hand corner of your browser
    - Click on "Settings". At the bottom of the page, click on "Advanced".
    - In the "Privacy and security" section, click on the "Content Settings" area, and then click on the "Cookies" area to display a screen similar to that shown in Figure 59.
    - Slide the circle to the right next to the words "Allow sites to save and read cookie data (recommended)".
    - Then close the "Settings" tab.

Figure 56: Enabling cookies and JavaScript in Chrome
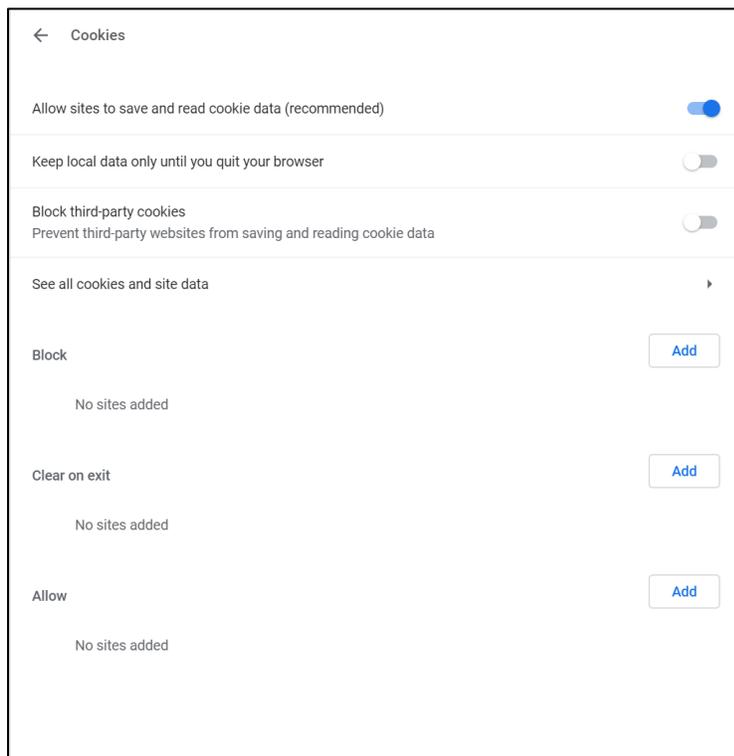
Situation 3: JavaScript must be enabled error message

The auction bidding system requires that JavaScript is enabled on the browser used. If JavaScript is disabled, there will be a message stating that "JavaScript in this browser is not enabled or is not working."

Troubleshooting instructions are given below only for Chrome because JavaScript is enabled by default in Edge and cannot be changed.

To enable JavaScript in Chrome, carry out the following steps:

- Click on the tools icon ⋮ in the top right-hand corner of your browser, then "Settings," then at the bottom of the page, click on "Advanced".
- In the "Privacy and security" section, click on the "Content settings" area, and then click on the "JavaScript" area to display a screen similar to that shown in Figure 57.
- Slide the circle to the right next to the words "Allowed (recommended)".
- Then close the "Settings" tab.

Figure 57: Enabling JavaScript in Chrome

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

If you have been using ABS successfully and "page cannot be displayed" appears when you click on a link or a button, then complete the following steps:

- Click on the Refresh/Reload button to reload the page.
    - If that is successful, please verify any actions that you were taking when the message was displayed. If you were in the middle of placing a bid, those changes will have been lost, and you will need to select and resubmit that bid. All submitted bids that had the green check mark will remain unaffected.
- Re-navigate to the ABS URL and, if prompted, log in again.
- If that is successful, please verify any actions that you were taking, as discussed above.
- Your internet connection may have gone down. Confirm that your computer has external Internet access. Try to access a common site on the internet such as www.google.com. If this is unsuccessful, the computer does not have external internet access.
- ABS may be down. To confirm whether ABS is down, first, confirm that you have internet access and then attempt to access the home page (see Section 2.2). If you are unable to view this page, or the page states that ABS is unavailable, then ABS may be down. Check to see whether you have received an email from the FCC indicating that the system is unavailable. The FCC will inform you when ABS is expected to be available again.

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

Do not use the browser's back button to access a previous screen. To move between screens, use the links and buttons in ABS.

Situation 7: Computer or web browser crashes

If the browser crashes or the computer freezes, it is recommended that you reboot the machine (or use a different machine) to access ABS.

Please review any actions that you were taking when the computer crashed. If you were in the middle of submitting a bid, those changes will have been lost, and you will need to select and resubmit that bid. All submitted bids that had the green check mark will remain unaffected.

If the computer crashes while you are using ABS, you may access ABS using a different computer. When a user logs in to a second computer, whether the user has logged out of the first computer or not, the second login will automatically cause the user to be logged out of the first computer.

Situation 8: Certificate error message

If you access ABS and see a security message similar to that shown in Figure 58 (for Google Chrome), you should not proceed. Please call Technical Support.

Figure 58: Certificate security error message in Google Chrome
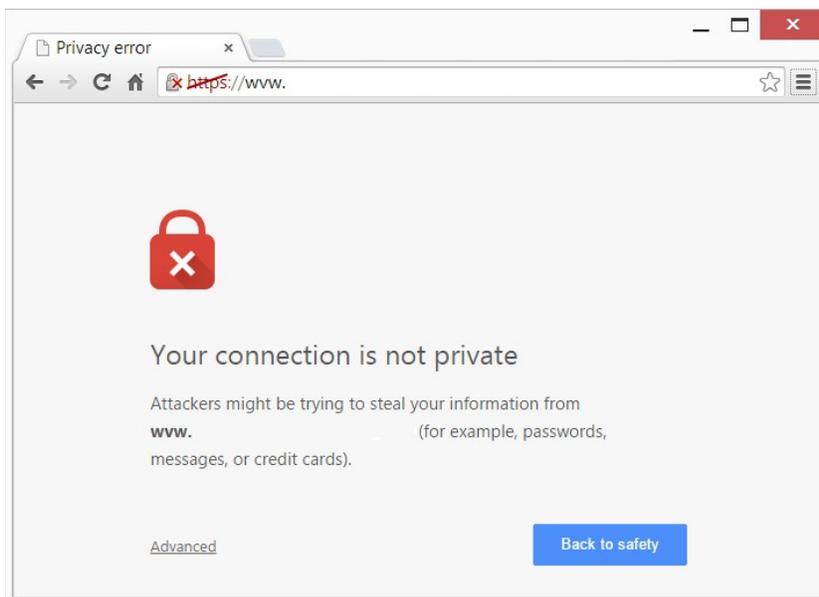
Appendix 2: Data Type Definitions

The following is a guide to interpreting data types defined in this document. This guide is based on regular expressions used in XML standards.

Valid Data Types used in this Document

Character: A character is a single standard ASCII character. The following list has examples of valid ASCII characters:

- a
- D
- 3
- %

String: A string contains one or more characters and can contain whitespace. The following list has examples of valid strings:

- BEA001
- 005
- 588.3-593.3 MHz + 628.3-633.3 MHz
- Huntsville-Decatur-Florence, AL

Quotation marks are required for strings containing a comma. In the above example, "Huntsville-Decatur-Florence, AL" would be the correct format for the string in a CSV file; Huntsville-Decatur-Florence, AL without the quotation marks would be incorrect. Filed produced by the bidding system will include quotation marks around string data elements where necessary. Additionally, FRN and selection number values will always have quotation marks around them.

Numeric: Numeric is a generic data type that covers a number of different underlying data types. As a result, anything defined as numeric could be any of the following:

- Decimal
- Integer
- Long

Integer: The integer data type is used to specify a numeric value without a fractional component.

- It's assumed that any Integers defined in this document are unsigned and never include a (+) plus or (-) minus sign. Any signed Integers containing a + or – are considered invalid.
- If the Integer is of defined length, then curly brackets should be used. E.g., {3} indicates the integer should be exactly 3 numbers long.

The following list has examples of valid Integers:

- 009
- 9
- 2147483647

The following list has examples of *invalid* Integers:

- -009
- +009

Dollar ($): Dollar values are integers that optionally contain a leading dollar sign ($) and comma formatting separators.

The following list has example of valid dollar amounts:

- 0
- $1
- $5,432
- 56565656
- 88,212

The following list has examples of invalid dollar amounts:

- -33,123
- $44.00
- $55,66,77
- 5675675.

Date/Time: Used for timestamps.

This data type is typically used in reports and the format can include one of the following:

- yyyy-mm-dd: 2014-10-12
  yyyy-mm-dd hh:mm:ss **(24-hour clock):** 2014-10-11 04:49:13

   Restricting values for a data type

Restrictions are used to define acceptable values for any given data type. The following lexicon is used when defining data types:

- Square brackets define the *pattern*.
  - o e.g., [A-L] means only the uppercase letters A through L are allowed.
  - o e.g., [U|D] means only the uppercase letters U or D are allowed.
  - o e.g., [0-9] means only the numbers 0 through 9 are allowed
- Curly brackets define the *length* including whitespace.
  - o e.g., {3} means the value has to be exactly 3 characters long.

o e.g., {1,3} or {1..3} means the value has to be a minimum of 1 character and a maximum of 3 characters.

o e.g., {0,50} or {0..50} means the value has to be a minimum of 0 characters and a maximum of 50 characters.

Examples for valid Data Types

Example 1:

The Data Type is defined as follows:

Integer
{3}

The curly brackets mean only a 3-digit integer is allowed.

Valid Values for example 1:

- 009
- 056
- 102

Invalid Values for example 1:

- 09
- 3502
- 1
- +12
- -35

Example 2:

The Data Type is defined as follows:

String
[A-L]{1}

The square brackets mean only the uppercase letters A through L are allowed and the curly brackets mean it must be exactly 1 character long.

Valid Values for example 2:

- B
- L

Invalid Values for example 2:

- a
- M
- 6

Example 3:

The Data Type is defined as follows:

> **String**
> **[0-9]{3}**

The square brackets mean only the numbers 0 through 9 are allowed and the curly brackets mean it must be 3 characters long.

Valid Values for example 3:

- 001
- 023
- 358

Invalid Values for example 3:

- 2
- 01
- 2026

Example 4:

The Data Type is defined as follows:

> **String**
> **[0-9]{1,2}**

The square brackets mean only the numbers 0 through 9 are allowed and the curly brackets mean it must be a minimum of 1 character long and a maximum of 2 characters long.

Valid Values for example 4:

- 4
- 04
- 41

Invalid Values for example 4:

- 123
- Blank or null value

Example 5:

The Data Type is defined as follows:

> **String**
> **[US|CA|MX]{2}**

The square brackets mean the pattern must be either US, CA or MX. The curly brackets mean it must be exactly 2 characters long.

Valid Values for example 5:

- US
- CA

Invalid Values for example 5:

- C
- USA

Example 6:

The Data Type is defined as follows:

> **String**
> **(["BEA"][0-9] [0-9] [0-9]){6}**

The square brackets inside the round brackets mean the pattern must be a concatenation of the text "BEA" followed by three single numbers, with each number ranging from 0 through 9. The curly brackets mean it must be exactly 6 characters long.

Valid Values for example 6:

- BEA002
- BEA356

Invalid Values for example 6:

- BEA0001
- BEA-005
- BEA-05

- BEA-0512
- BEA-2

Example 7:

The Data Type is defined as follows:

> **String**
> **{0,50}**

The absence of square brackets means there are no restrictions to the characters in this string. The curly brackets mean it must be a minimum of 0 characters long (i.e., can be blank/null) and a maximum of 50 characters long.

Valid Values for example 7:

- 588.3-593.3 MHz + 628.3-633.3 MHz
- Albuquerque-Santa Fe, NM

Invalid Values for example 7:

- Greenville-Spartanburg, SC-Asheville, NC-Anderson, SC

This is an invalid string which is longer than 50 characters including spaces.