Auction 107 Assignment Phase Bidding System User Guide

January 21, 2021

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1. Introduction

This guide describes the features of the web-based FCC auction bidding system that bidders will use to bid in the assignment phase of Auction 107. Additional information for this auction can be found on the FCC Auction 107 website: www.fcc.gov/auction/107.

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

1.1. Conventions

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

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

> ✍ *Care needed with this feature!*

Most of the examples are for "Reliable Access, Inc.", a bidder that does not have a bidding credit. Representative examples are also given for a bidder with a small business bidding credit and for a bidder with a rural service provider bidding credit.

In this guide, the term "bidder" refers to an applicant that was identified by the FCC as qualified to bid in Auction 107 and that won generic blocks in the clock phase. The terms "user," "you," and "authorized bidder" refer interchangeably to an individual authorized bidder identified on a qualified bidder's Form 175 as an individual authorized to access the bidding system and to submit bids on behalf of the qualified bidder.

1.2. Guide Structure

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

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

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

There are also four appendices:

- Appendix 1: System Troubleshooting - provides troubleshooting tips for a number of different scenarios.
- Appendix 2: RSA SecurID® Token Information - provides additional information about RSA SecurID® tokens.
- Appendix 3: Two Users submitting bids on behalf of a bidder at the same time - provides information of what to expect if more than one user submits a bid on behalf of a bidder at the same time.
- Appendix 4: Bid Upload Errors - provides a list of possible Bid Upload errors.

2. Overview of the Assignment Phase

In Auction 107, bidders will bid for new flexible-use overlay licenses in the 3.7–3.98 GHz band. The auction includes 406 PEAs. For each of the PEAs, 14 frequency blocks are available (A1 – C4). 360 PEAs comprise only blocks subject to the Phase II accelerated relocation deadline. For those, there will be a single category in the clock phase (ABC), and thus also a single assignment category (for all 14 blocks A1 – C4). For the 46 PEAs with blocks subject to the Phase I deadline, there will be two categories in the clock phase (A and BC), and two categories in the assignment phase (interim and final). A winner of a Category A block will be assigned one of the five blocks subject to the Phase I deadline (A1 – A5) as an interim assignment, and any one of the blocks in the band (A1 – C4) as a final assignment. A winner of a Category BC block will be assigned any one of the blocks in the band (A1 – C4) as a final assignment and will not be assigned any block as an interim assignment.

During the assignment phase of Auction 107, winners from the clock phase will be able to bid for frequency-specific license assignments corresponding to the number of generic blocks they won in the clock phase for a category and PEA. Bidding in the assignment phase is voluntary. All clock phase winners will be assigned contiguous licenses within each assignment category in each PEA, regardless of their assignment phase bid amounts and of whether they bid in the assignment phase.

The assignment phase progresses through a sequence of assignment rounds. In each round, each clock phase winner of one or more blocks in a PEA will have the opportunity to bid for specific blocks in that PEA. If in the clock phase, all of the same bidders win the same number of blocks in more than one PEA, those PEAs will be grouped for bidding under certain conditions, and the same winning assignment will be made for all the PEAs in the group; a PEA group is also referred to as an assignment phase market. For PEAs 1–20, assignment rounds will be conducted separately for each PEA. Assignment rounds for other PEAs will be conducted simultaneously for one PEA or PEA group in each of the six defined REAGs.[1] A PEA will be "pre-assigned" if either all 14 blocks were won by a single bidder or all 14 PEAs remain FCC-held.

Once the assignment phase bidding system becomes available, a bidder can download a file that contains all its bidding options for the PEAs in which it has clock phase winnings. A bidder's bidding options for an assignment category in a PEA will consist of all the contiguous options that are consistent with the bidder's clock phase winnings. A bidder can specify a bid amount for each bidding option for which it wishes to express a preference by indicating the amount, in addition to the clock phase payment, that it is willing to pay for that option.

Once an assignment round closes, the bidding system will process the bids to determine the winning assignment and the assignment payment for each bidder. A bidder's assignment payment is in addition to the sum of the clock phase prices for the licenses. To determine the assignment for each assignment category in a PEA (or PEA group), the bidding system utilizes mathematical optimization. The objective

[1] The six Regional Economic Area Groupings (REAG) are Northeast, Southeast, Great Lakes, Mississippi Valley, Central, and West. For PEAs 1–20, the region is listed as "Top 20."

of the optimization is to maximize the sum of bid amounts for the various options while ensuring that each bidder is assigned one of its bidding options, and that any unsold blocks are assigned contiguous frequencies. The system uses a "nearest Vickrey" approach to calculate a bidder's assignment payment. A bidder's Vickrey price is the lowest bid amount that would have resulted in the same winning assignment. The assignment payments may be higher than the Vickrey prices to ensure that no bidder or group of bidders is willing to pay more for an alternative feasible assignment. The bidder's final auction payment takes into account the final clock phase prices of the licenses it won and any assignment payments, and is adjusted for any bidding credit discounts.

The framework adopted in the 3.7 GHz Report and Order requires new overlay licensees to pay a share of accelerated relocation expenses to reimburse incumbents for the reasonable costs of transitioning out of the lower 300 megahertz of the band in the contiguous United States. For more information, please refer to the 3.7 GHz Report and Order.

3. System Requirements and Access

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

3.1. Minimum System Requirements

At the minimum, the following is required to access the bidding system:

- Microsoft Windows® 10, or Apple® Mac® OS X® 10.13 with at least 8 GB of memory
- A recent version of Google Chrome™ [2] or Microsoft Edge (Chromium).[3] The browser must be configured to accept cookies.[4]
- Access to the internet
- Excel 2013 or newer
- 1920 x 1080 screen resolution or higher[5]

Smartphones and tablets are not supported. The bidding system may run on different computer configurations, including browsers not listed above. It is the responsibility of the user to test any alternative configurations with the bidding system 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 the bidding system with a computer configuration or device that does not meet the requirements listed above is solely responsible for any resulting failure to access the bidding system, 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 should not use web browsers containing third-party toolbars or other extensions. Third-party browser extensions potentially may cause problems for users of interactive websites, including the

[2] Google and the Google logo are registered trademarks of Google Inc.

[3] Microsoft Edge (Chromium) is available for Windows and can be downloaded from the Microsoft website. Its logo looks like this: . Older versions of Edge (known as Microsoft Edge Legacy) use a different logo: . All Edge versions at release 79 or later are Microsoft Edge (Chromium). To determine which version of Edge you have installed, you can inspect the version number by clicking on the three dots in the upper right corner, , then click on "Settings" and "About Chrome". For example, Version 81.0.4044.138 is Microsoft Edge (Chromium), as it is at release 81. Versions older than 44.18362 can cause some unexpected formatting, like rendering decimal values in numerical columns when there should be a whole number, or cutting off flash messages.

[4] Appendix 1: System Troubleshooting - explains how to check and/or reset these settings.

[5] The system has been optimized to display all the information without horizontal scrolling on 1920 x 1080 screens with medium font size. If all the information from the bidding system cannot fit on your display when your browser is maximized (taking up the entire screen), 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.

auction bidding system, and may make users' computers more vulnerable to hacker attacks. If in doubt, you should consult your internal information technology department in order to disable third-party browser extensions or, if necessary, obtain a clean installation of a supported web browser.

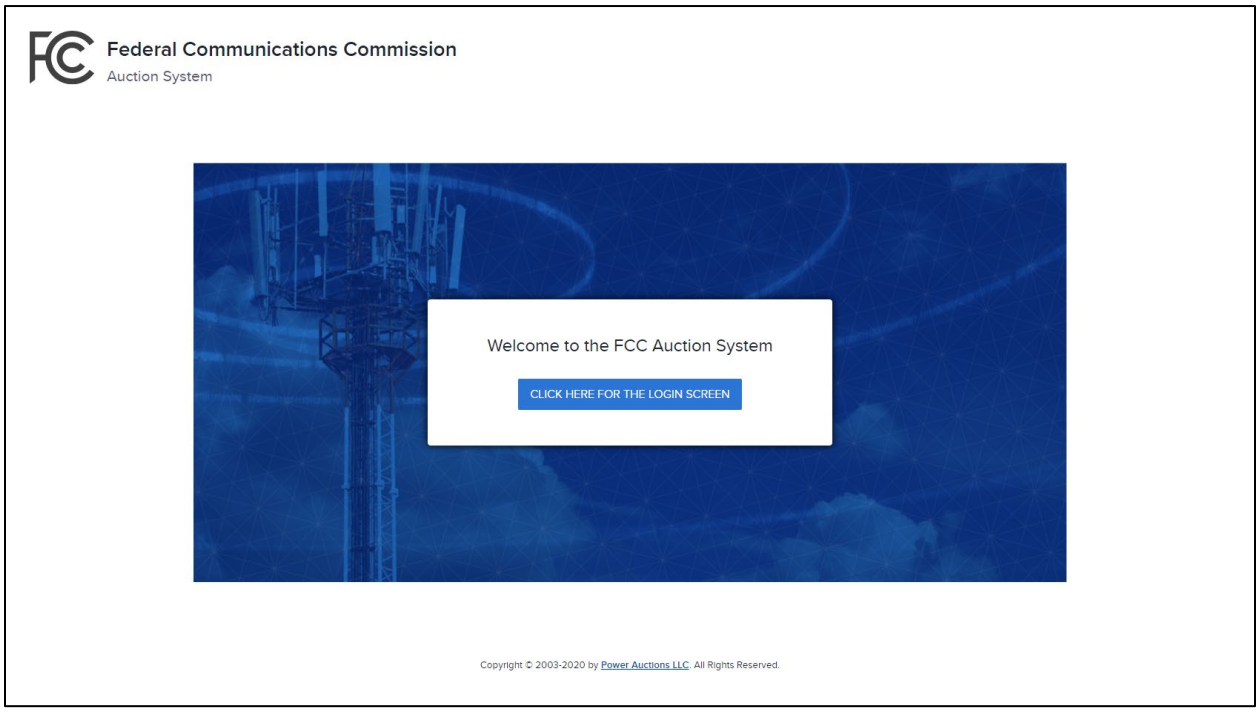
Users are discouraged from adding toolbars to their browsers, such as a toolbar for bookmarked pages. Additional toolbars may increase the likelihood that vertical scrolling is needed to see all fields on the screen.

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

3.2. Logging In

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

Figure 1: Bidding system homepage



Click on the CLICK HERE FOR THE LOGIN SCREEN button to get to the Login screen shown in Figure 6.

This guide provides two sets of login instructions: Section 3.2.1 describes initial login procedures where an authorized bidder creates a personal identification number ("PIN") and logs in for the first time; and Section 3.2.2 describes the standard login procedure used after the PIN is created.

Each authorized bidder listed on the qualified bidder's Form 175 will be provided with a unique bidding system username (user ID) for use in the auction bidding system. 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 password may be either the password directly associated with the FRN in CORES or the password associated with a username that is linked to the FRN within CORES.

Each bidding system username will be associated with a specific RSA SecurID® token (RSA token) assigned to the authorized bidder for the auction. This RSA token generates a time-sensitive 6-digit tokencode that changes every 60 seconds. The username and RSA token should only be used by the authorized bidder to whom it was assigned. The bidding system logs all actions taken by a user based on the username entered when logging in.

RSA tokens will be sent by overnight delivery to the contact person identified in the FCC Form 175 for each qualified bidder, and the contact person must distribute an RSA token to each of the specified authorized bidders. Each authorized bidder will need to set a private PIN for his or her token.

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.

After the conclusion of bidding in Auction 107, the Commission will send each bidder a pre-addressed, stamped envelope in which to return its RSA tokens.

> ✍ *Take care not to lose your RSA token! Replacing or reassigning an RSA token can be time-consuming, which in some cases could result in missing a bidding round.*

3.2.1. First Time Login Procedures

The first time you log in to the bidding system, you must create an RSA PIN. Each authorized bidder for a qualified bidder will create an RSA PIN once—unless the authorized bidder gets a replacement RSA token (e.g., because an RSA token has been lost or broken). After the RSA PIN has been created, you must follow the standard login procedures.

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

- Username: FCC assigned

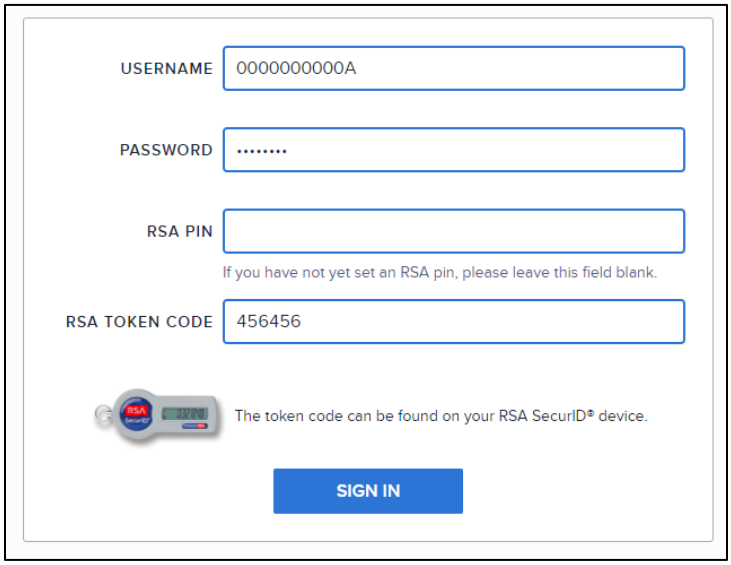
- Password: FRN password or associated Username password
- RSA tokencode: A six-digit code generated by the RSA SecurID® token

In the bidding system login area, type in the username, password and the current tokencode on the individually assigned RSA token as shown in Figure 3. Leave the PIN field blank and click SIGN IN.

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)).

> ✍ *Tokencodes change every 60 seconds. Avoid using a code that is about to expire, as indicated on the token screen, by waiting for a new code to appear.*

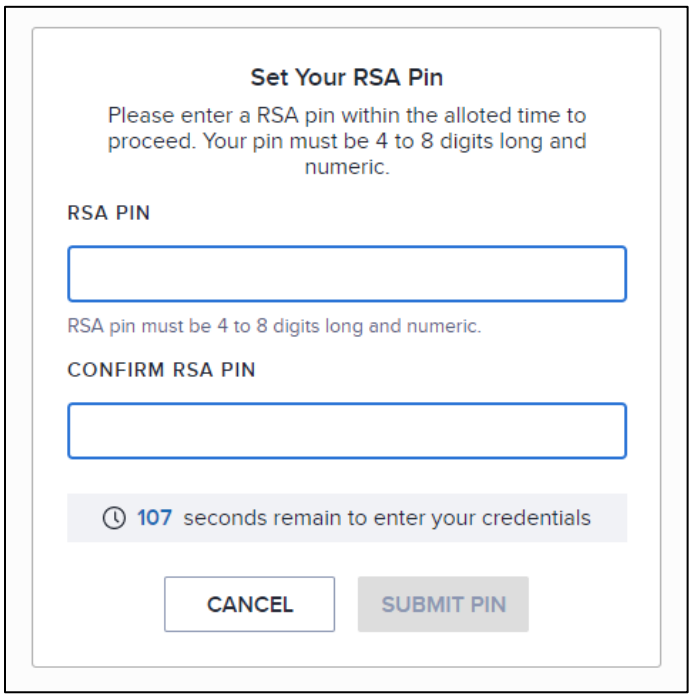
Figure 3: First time login procedure



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

After you click SIGN IN, the system displays a screen to create a private PIN, as shown in Figure 4.

Figure 4: Set PIN screen

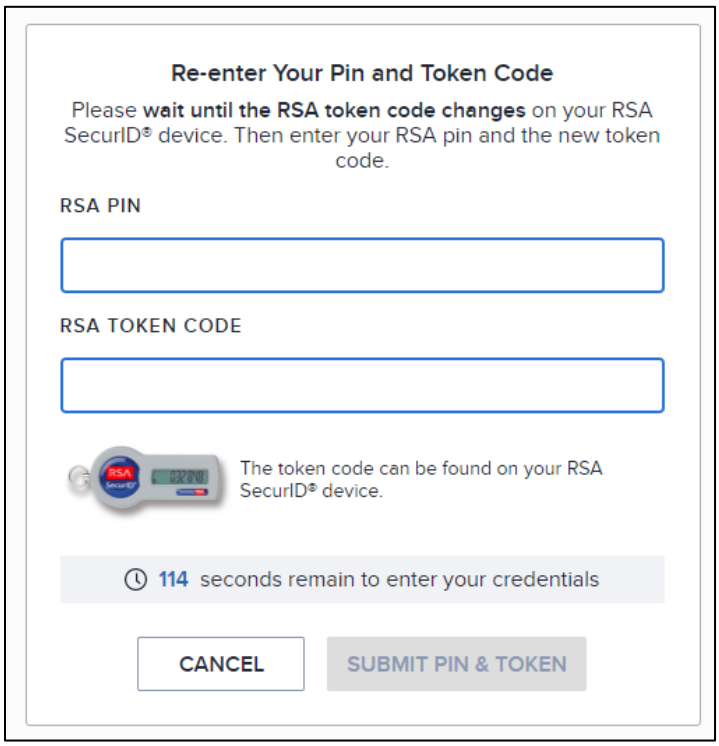


Type a 4 to 8-digit numeric PIN of your choice in the RSA PIN field. Enter it twice as requested to ensure accuracy. Then click SUBMIT PIN. Memorize this PIN! Note that you have a limited amount of time to set a new PIN and confirm your credentials, as shown by the expiration time on the screen.

You will then be asked to enter your PIN and tokencode, 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, then click SUBMIT PIN & TOKEN.

Figure 5: Confirm RSA credentials screen



After completing the setup procedure, you will be able to log in to the bidding system and see the navigation bar on the left-hand side. Thereafter, the standard login procedure applies.

3.2.2. Standard Login Procedure

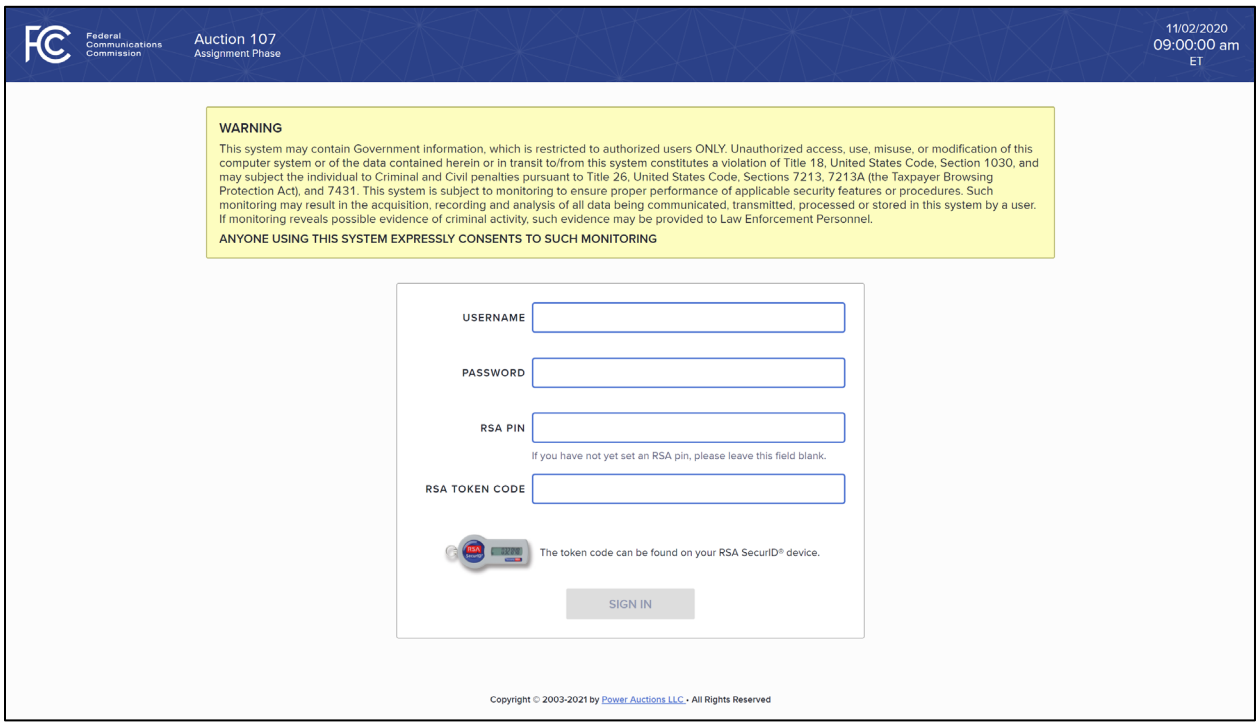
To log in to the bidding system, you will need the following login credentials:

- Username: FCC assigned
- Password: FRN password or associated Username password
- PIN: Numeric PIN created during the initial login (see Section 3.2.1)
- RSA tokencode: A six-digit code generated by the RSA SecurID® token

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

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).

Figure 6: Login screen



3.2.3. 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.

3.3. Multiple Users for the Same Qualified 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 his or her assigned username and credentials. Any updates made by one authorized bidder will be displayed on the screen of any other user for the same bidder after the screen is refreshed.

However, only one 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. If this occurs, it is recommended that you use the 'Bid Summary' screen (Figure 26) to check your bids, as described in Section 8.1. For more information see Appendix 3: Two Users submitting bids on behalf of a bidder at the same time.

3.4. Automatic and Manual Logout

A single user cannot be logged in to the bidding system using two computers (or two browser sessions on the same computer) at the same time.

If a user tries to use the same username to access the bidding system from multiple computers or browser sessions, the bidding system will automatically log the user out from the first session and will display a logout notification. This is a protective feature for users because it allows a user to log in to the bidding system using a second computer if the first computer crashes before the user could log out of the system.

A user that is inactive for more than 30 minutes will be automatically logged out of the system and will need to log in again to access the site.

You may manually log out of the bidding system at any time using the Logout button, located at the bottom of the navigation bar on every screen, as shown in Figure 7. Logging out of the bidding system will not cause bids that were uploaded successfully to be lost.

3.5. Auction Bidder Line

The Auction Bidder Line is available to assist bidders with first time login procedures, review of round results and announcements, and auction-related questions. In general, telephonic bidding will be available for Auction 107. A telephonic bid assistant will be able answer questions and, if necessary, to place bids on behalf of the bidder on the Place Bids screen, but not by bid upload. The telephone number for the Auction Bidder Line is provided with your registration materials.

Bidders will need to provide the telephonic bid assistant with the appropriate login information (Username, RSA PIN and RSA tokencode) to access the bidding system.

3.6. Additional Information

Appendix 1: System Troubleshooting provides additional information about common errors that you may encounter when accessing the bidding system.

Appendix 2: RSA SecurID® Token Information provides additional information about RSA tokens. It explains what to do if a bidder wishes to change or replace an authorized bidder/user and what to do in the event of lost or damaged RSA tokens.

Appendix 3: Two Users submitting bids on behalf of a bidder at the same time provides additional information about situations in which two users end up submitting bids on behalf of the same bidder at the same time.

Appendix 4: Bid Upload Errors provides a list of possible Bid Upload errors.

4. System Navigation and Overview

The bidding system provides bidding information in two ways: on screens, accessed through the navigation bar; and through downloadable files, generally accessed via the Downloads screen. In addition, the My Bid Options sample bids upload file is available on the Upload Bids screen once the bidding system becomes available.

This section provides an overview of the bidding system and describes how to navigate through these screens.

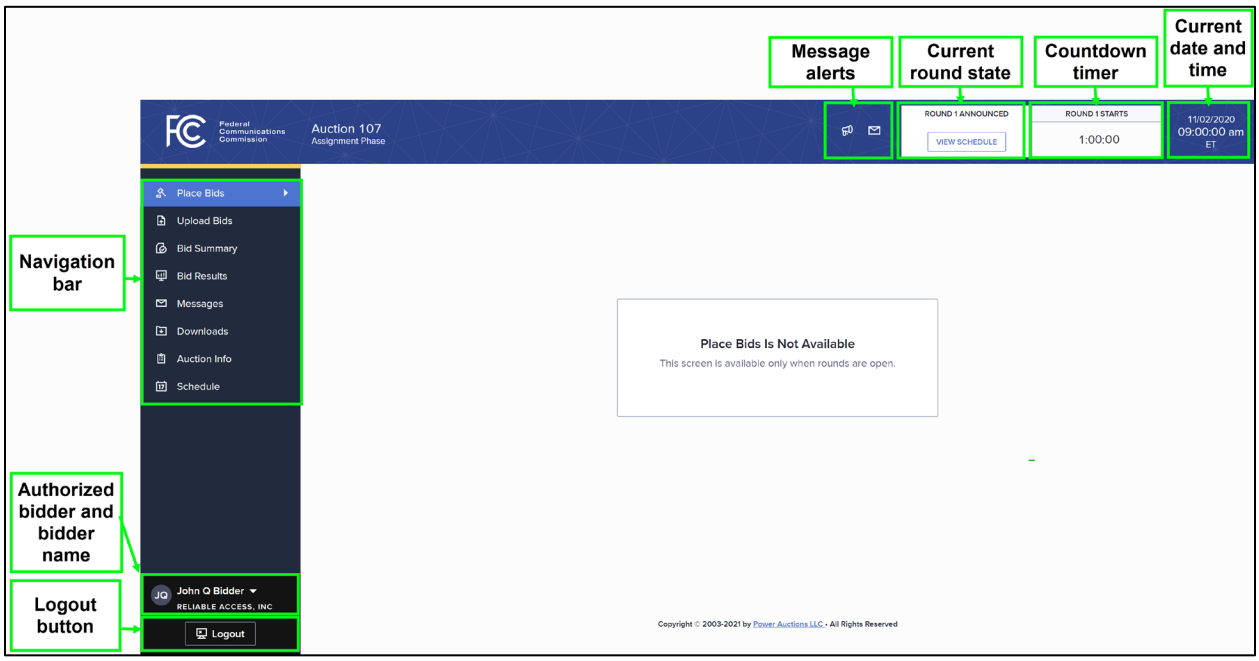
4.1. Navigation Bar and Features Common to All Screens

All screens in the bidding system have a navigation bar[6] on the left side, which provides links to the other available screens. Beneath the navigation bar is the name of the bidder and the authorized bidder who has logged in and the Logout button, as described in Section 3.4.[7]

The blue bar at the top of each screen is also common to all screens. It displays status and timing information. It shows Message alerts, a Mini Dashboard with the round number and round status, and links to the most useful screen(s) to be accessed at any given state, 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.

[6] The system has been optimized to display all the information without horizontal scrolling on 1920 x 1080 screens at 100% scale (in Windows settings) and 100% zoom with medium font size (in browser settings).
[7] Users are advised to use the navigation features of the bidding system rather a browser's forward and back navigation functions, which may produce unpredictable results.

Figure 7: Navigation bar and features common to all screens



4.2. Summary of Bidding System Screens

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

Table 1: Summary of screens reached from the navigation bar

Screen	Description
Place Bids	Allows the user to submit bids for the current round by entering bids on a screen
Upload Bids	Allows the user to submit bids during a round, for the current round and for future rounds, by uploading a bid file
Bid Summary	Displays a summary of all bids submitted on behalf of the bidder for a particular round
Bid Results	Displays the results of bid processing for the bidder for all rounds in which the bidder has assignments
Messages	Allows the user to view announcements and messages from the FCC, and to send messages to the FCC
Downloads	Allows the user to download files about the bidder's bidding options, bids, and results
Auction Info	Displays static information about the assignment phase markets and blocks in the auction, details about the assignment rounds, and a summary of the bidder's winnings and final clock phase prices for each clock category

Screen	Description
Schedule	Displays the schedule for upcoming assignment rounds and contains information about rounds in which the bidder can bid

4.3. Features Common to Several Screens

This section describes some features that are common to several screens.

4.3.1. Filter

Several screens include a filter dropdown, which allows the user to see a subset of the relevant data on the screen (see Figure 8 for an example).

4.3.2. Search

Several screens include a search box, which can be used to search for a specific market by typing the market ID or the market name (see Figure 8 for an example). You can search for all assignment phase markets that include PEAs in a given state by typing a comma followed by a space and then the two-letter abbreviation for the state (e.g., ", AL" for Alabama). This will bring up any assignment phase market with PEA names that are followed by "AL".

4.3.3. Pagination

When the number of relevant assignment phase markets exceeds 25, the information is split into multiple pages ("paginated") with up to 25 assignment phase markets per page, and a page selector is provided at the bottom of the screen.

4.3.4. Print

Several screens include a print icon, which can be used to print the content of the screen. The information from all pages of the screen gets printed. You can use the filters provided on the screen to reduce the number of assignment phase markets that are included in the print out. It is also possible to print using your browser's print functionality, but the result may not be formatted appropriately. For some browsers it might be necessary to choose the "Landscape" format or to edit the scale, in order to fit all the data on the page.

4.3.5. Round Selector

Several screens include a round selector which allows you to access the data for a previous round or all rounds. A blue dot next to the round number indicates that the current round.

4.4. Downloads

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

Table 2: Summary of downloads available in the bidding system

Download File	Where to access	Description	Availability
My Bid Options	Upload Bids	This file is a template for placing bids via uploads and contains the bidder's bidding options.	Available after a round is announced and during a round
My Bids	Downloads – General Tab	This file contains all submitted bids for all of the bidder's bidding options, including for future rounds.	Updates every time bids are submitted
My Results	Downloads – General Tab	This file contains the results of bid processing for each of the assignment rounds, including pre-assignments.	Updates when the results of the round are posted
My Bidder Status	Downloads – General Tab	This file contains the cumulative payment information for the bidder after every assignment round.	Updates when the results of the round are posted
My Bidder Assignment Rounds	Downloads – Configuration Tab	This file contains all the assignment rounds that include PEAs where the bidder has winnings.	The information in the file is static
My Bidder Audit Log	Downloads – Audit Tab	This file contains an audit log of the bidder's bidding activity.	Updates every time a bidding action is performed for the bidder

5. Viewing Auction Information

The Auction Info screen provides information about the frequency blocks available for bidding in each assignment round, as well as the bidder's clock phase winnings, if any, in that round. The screen has two tabs: Assignment Rounds and Blocks, which are explained in further detail below. You may access the Auction Info screen at all times when the bidding system is available. The information on the Auction Info screen does not change throughout the assignment phase.

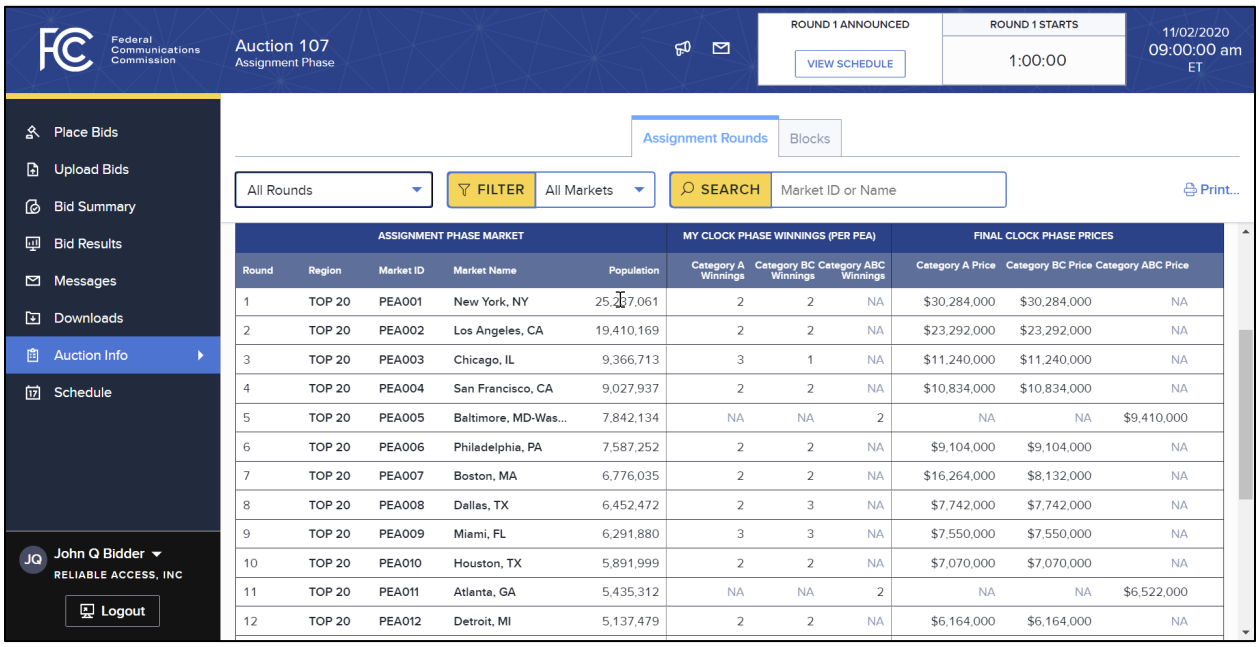
5.1. Assignment Rounds

The Assignment Rounds tab of the Auction Info screen displays information that is available to all bidders about each round of the assignment phase as well as bidder-specific information about clock phase winnings. For each round and each assignment phase market that will be assigned in that round, the screen displays the round number, the region, the market number(s) and name(s) of the PEA(s), the population of the assignment phase market, the bidder's clock phase winnings, and the final clock phase prices. The Region column indicates whether the PEA is in the Top 20 PEAs, and if not, provides its REAG number. The columns Category A Winnings, Category BC Winnings, and Category ABC Winnings provide the number of blocks the bidder won in the clock phase. The columns Category A Price, Category BC Price, and Category ABC Price provide the final clock phase prices for each PEA or PEA group in these categories.

After a round is announced, the screen is filtered by default to list the current round information. The user can view data for "All Rounds" or for a particular round by selecting the appropriate option in the round dropdown on the top left corner of the screen. The filter dropdown includes the options "All Markets" and "Only My Markets". "All Markets" lists all assignment phase markets in the auction. "Only My Markets" lists only the assignment phase markets in which the bidder has clock phase winnings. Additionally, the data can be searched by the market number (by typing "PEAyyy" where "yyy" is the 3-digit PEA number), or the market name using the search box. The screen is paginated.

Figure 8 below, shows the Assignment Rounds tab, displaying information for "All Rounds" and "All Markets".

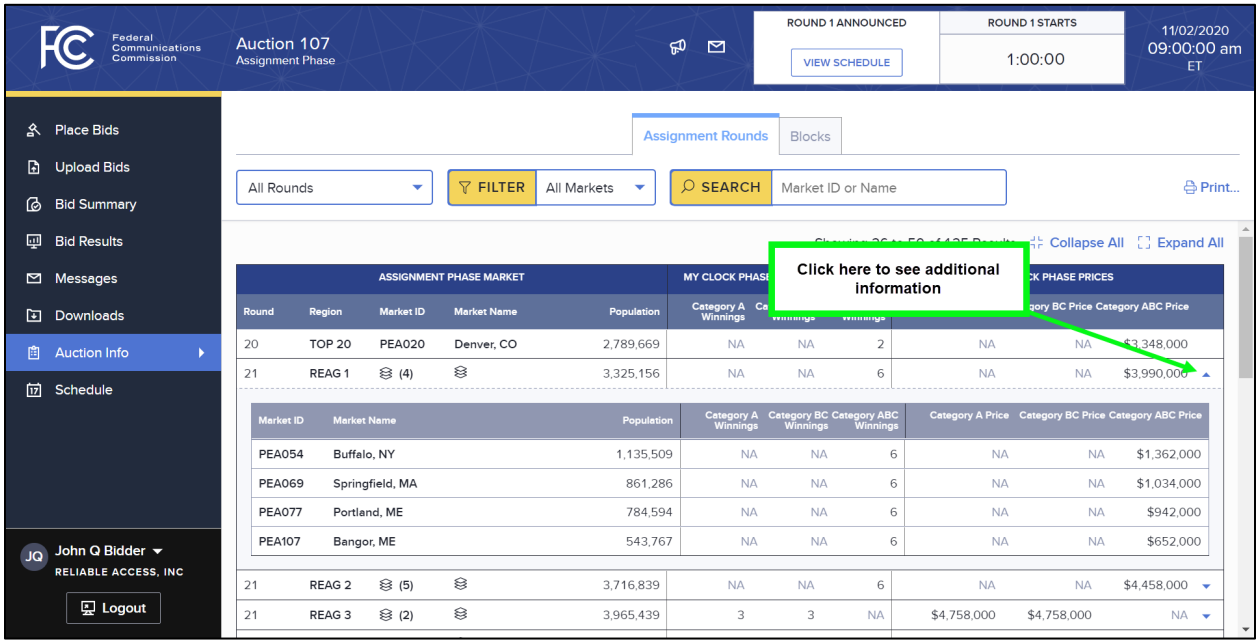
Figure 8: Auction Info screen – Assignment Rounds tab



There is one row per round and REAG (or Top 20) combination. If the assignment phase market includes at least two PEAs, the stack icon will be shown in the Market ID and Market Name fields for that PEA group (see Figure 9). The number in parentheses in the Market ID field indicates the number of PEAs in the group. The Population and Price columns show the sum across all PEAs in the group, whereas the Winnings columns show the bidder's winnings per PEA in the group. By clicking on the downward arrow to the right of the stack icon or anywhere else in that row, the row expands to show all PEAs in that assignment phase market along with each PEA's population and clock phase prices and the bidder's clock phase winnings in the PEA.

Figure 9 provides an example of the screen for a round where some PEAs are grouped and where multiple REAGs are being assigned in the same round.

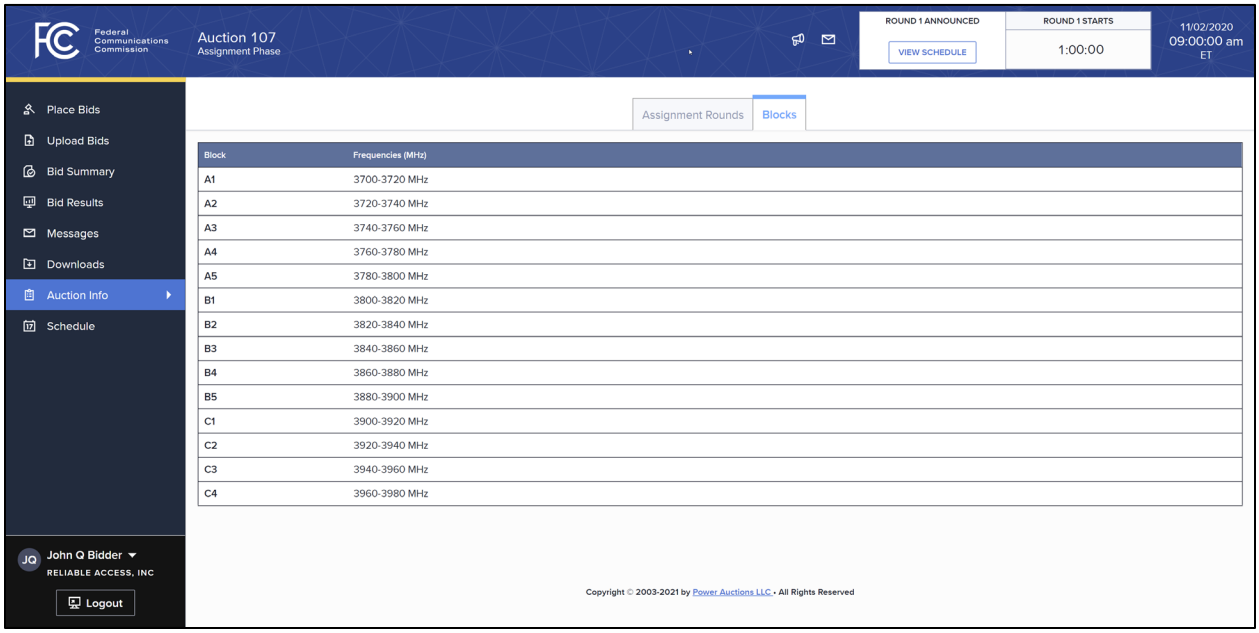
Figure 9: Auction Info screen – Assignment Rounds tab – Round with multiple REAGs



5.2. Blocks

The Blocks tab of the Auction Info screen, shown in Figure 10, displays the specific frequencies corresponding to each block in the auction.

Figure 10: Auction Info screen – Blocks tab

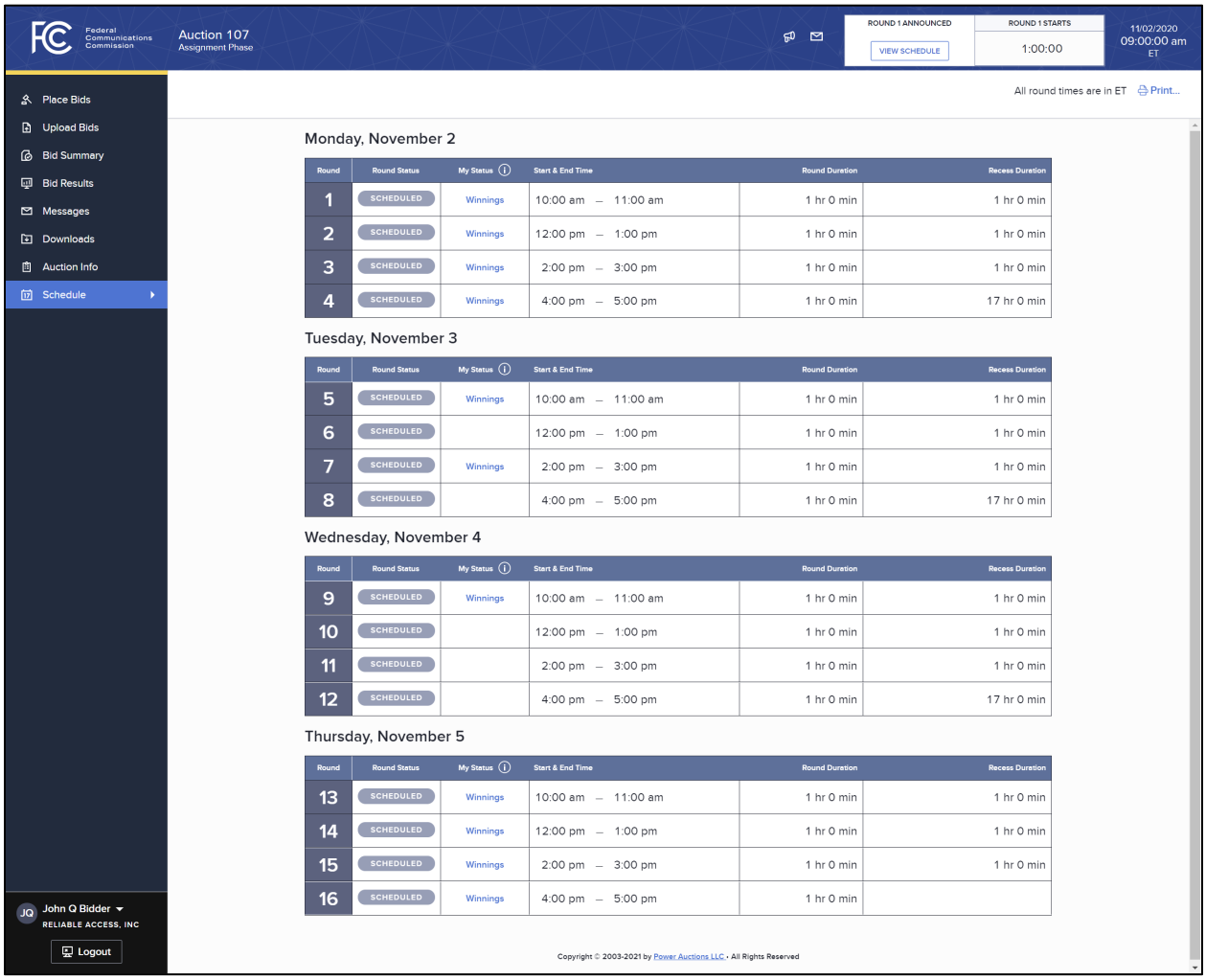


6. Schedule and Messages

6.1. Schedule

The Schedule screen shows the current schedule for upcoming rounds in Eastern Time (ET), as illustrated in Figure 11. The schedule shows the date, duration, start time and end time for each round, the duration of the recess, the status for each round, and whether the bidder has clock phase winnings in the round. You will be able to bid in rounds for which "Winnings" is displayed in the My Status column; these are the rounds where you have clock phase winnings.

Figure 11: Schedule screen



The FCC may adjust the number of rounds per day as the auction proceeds. The schedule displayed in the example does not indicate the expected number of rounds in the auction.

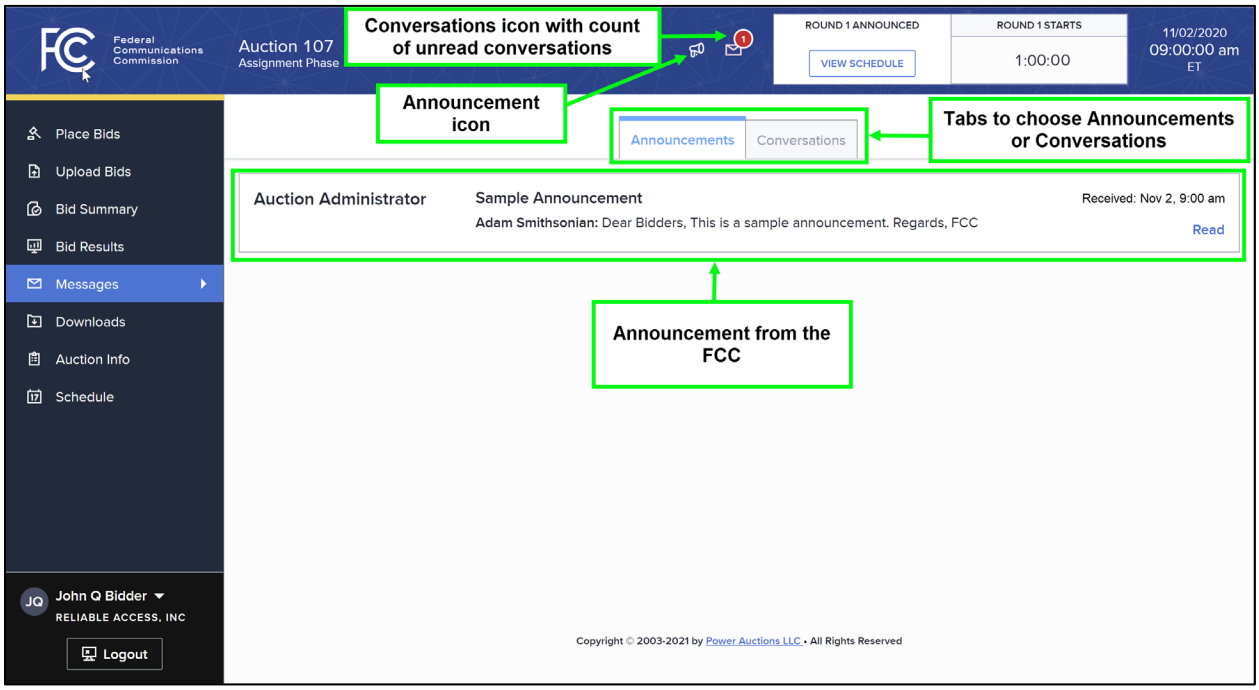
6.2. Messages: Announcements and Conversations

On the Messages screen you can see announcements made by the FCC. You can also communicate with the FCC through "conversations" by sending messages to and receiving responses from the FCC that are visible only to you and the other authorized bidders for the same qualified bidder. The Messages screen contains two tabs: Announcements and Conversations. Access this screen by clicking the Messages link on the navigation bar or by clicking on the respective icon in the blue bar (for announcements or for conversations). The Announcements screen is shown by default when you click on the Messages link, as in Figure 12 below.

If you have any unread announcements or conversations, a count with the number of unread messages will appear in a red circle next to the announcement or conversation icon in the blue bar at the top of the screen, as shown in Figure 12 below.

To read announcements, click on the Messages link in the navigation bar or click on the Announcement icon in the blue bar. To send a message to the FCC or read a response from the FCC, click on the Messages link in the navigation bar and then choose the Conversations tab, or click on the Conversation icon in the blue bar. Once the Announcements or Conversations tab has opened, it will display the appropriate messages in reverse chronological order, showing the first line (or part of the first line) of each announcement or message. You must click on the Read link or the Read/Reply link to open and read an announcement or message in its entirety.

Figure 12: Messages screen



As shown in Figure 12 and Figure 16, if any message on the screen has not been read, the Announcements or Conversations icon displayed at the top of the Messages screen will indicate the number of unread announcements or messages. Any unread message has an orange "UNREAD" badge. After an unread announcement or conversation has been opened by clicking on the Read or Read/Reply link, the number next to the relevant icon will decrease accordingly. The number will not decrease until the Read or Read/Reply link has been clicked for the unread announcement or message.

> *Whenever you see an indication that a message is unread, you should go to the Messages screen to open and read the entire message.*

Announcements and conversations can be printed by clicking on the Print… icon located in the top right-hand corner of the screen (see Figure 14).

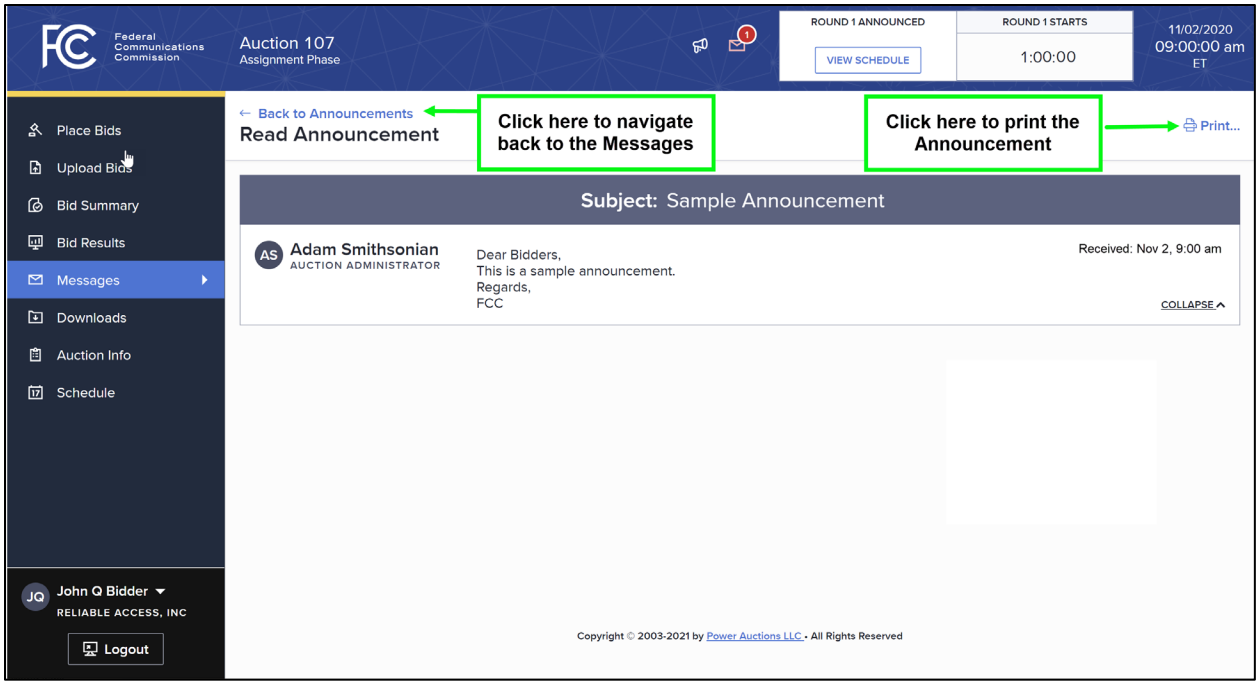
6.2.1. Receiving and Reviewing Announcements

The FCC will send announcements to all bidders containing important bidder information such as changes in the number of rounds per day or the suspension of bidding due to unforeseen circumstances. The Messages screen will only show the first line or part of the first line of an announcement. As noted above, to view the entire text of an announcement, you must click on the Read link for the announcement you wish to read, as shown in Figure 13.

Figure 13: View entire announcement link

Clicking on the Read link loads the full text of the announcement as shown in Figure 14. To close the text of the announcement and return to the default Announcements tab on the Messages screen, click the ← Back to Announcements link.

Figure 14: An open announcement



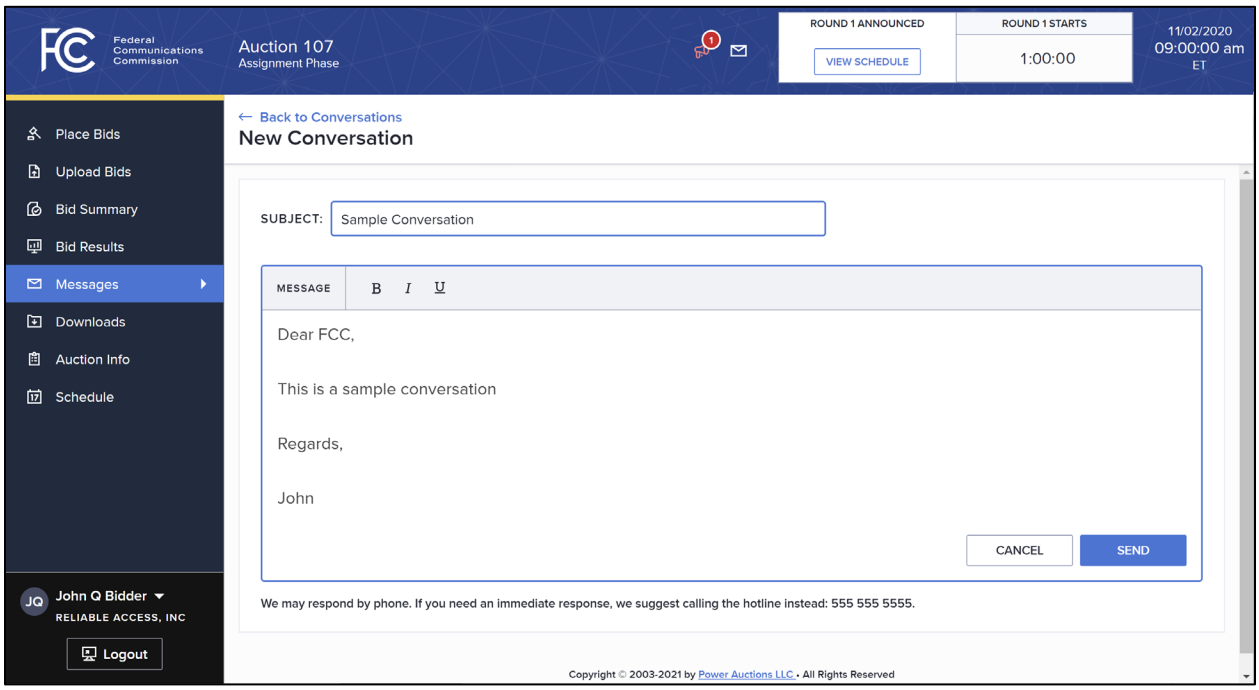
6.2.2. Conversations with the FCC

You can communicate with the FCC through the bidding system. 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 phone number which is provided to qualified bidders.*

To compose a new message to the FCC, choose the Conversations tab and click on the NEW CONVERSATION button in the upper right corner of the Conversations screen (shown in Figure 16) to open a new message text box. Next, enter the subject and content of the message in the relevant fields as shown in Figure 15 below. Click SEND to send the message. To cancel an unsent message, click on the CANCEL button.

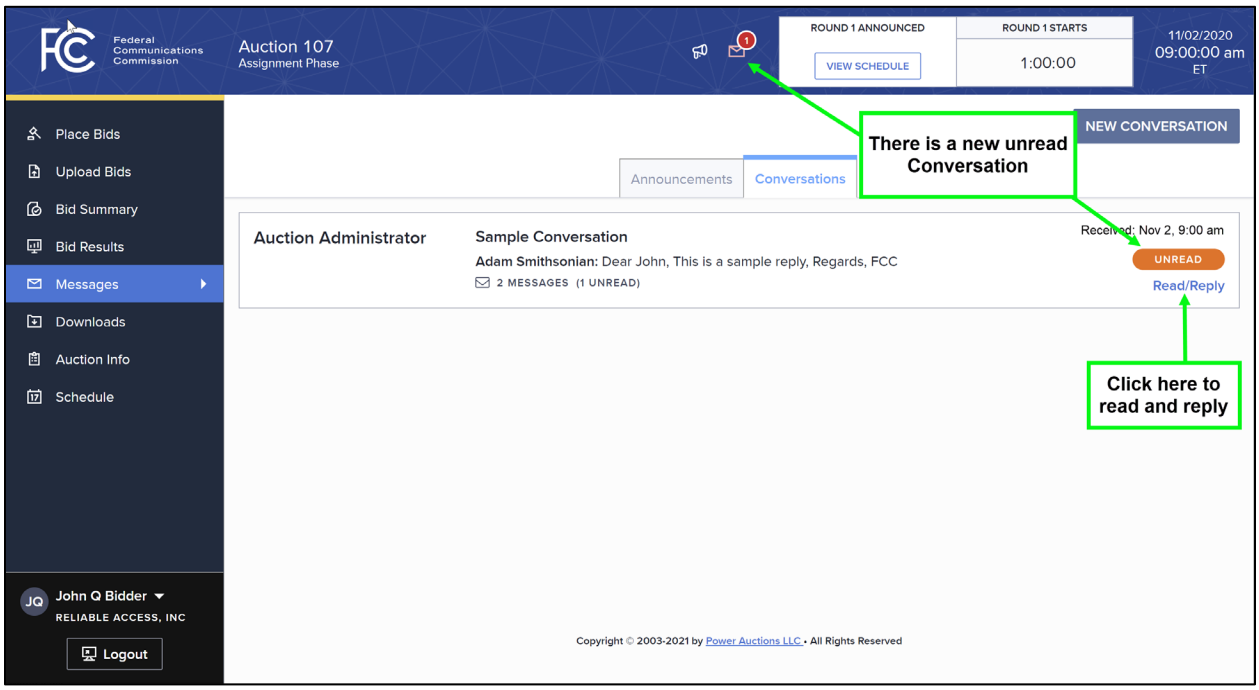
Figure 15: Compose a new conversation



A sent conversation will appear as a new conversation in a box on the main screen of the Conversations tab of the Messages screen, as seen in Figure 16. 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.

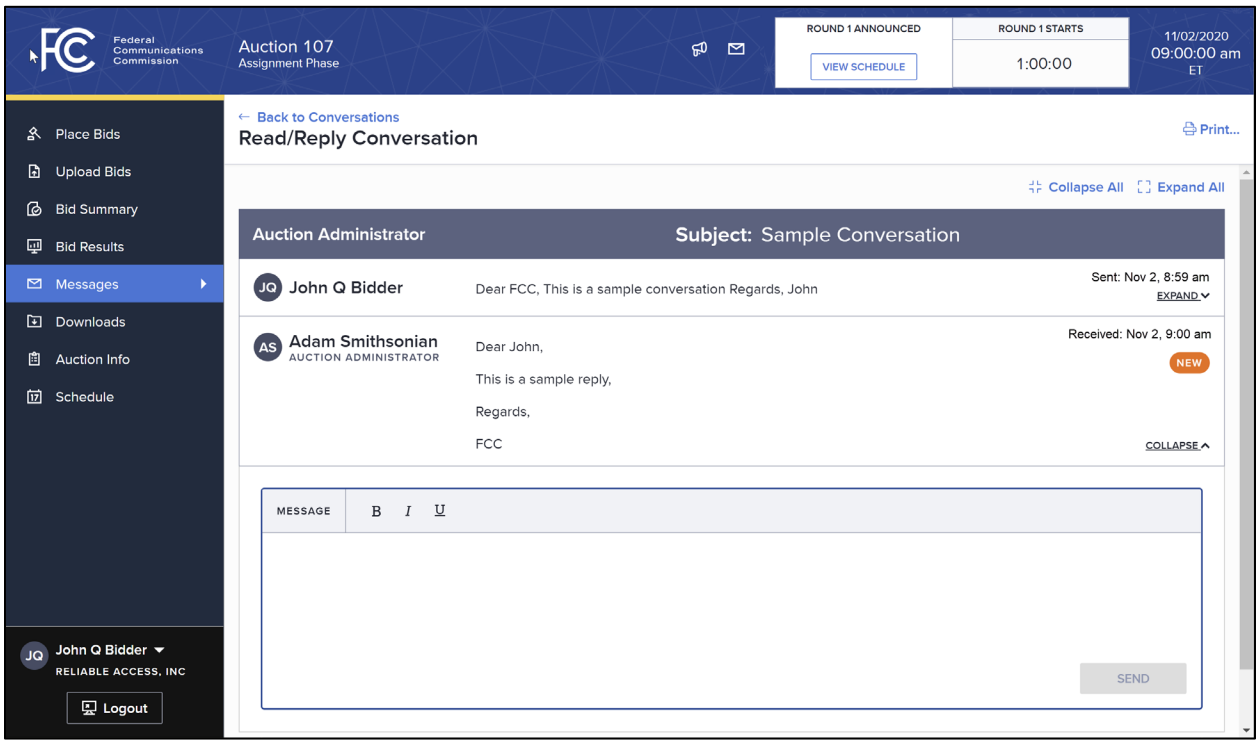
As with announcements, new conversations are indicated by a count next to the Conversations icon, and there is an orange "UNREAD" badge on the right side of the conversation box. All conversations are listed on the Conversations tab. For a given conversation, only the most recent message is shown, as illustrated in Figure 16. To view the complete message and all messages in a conversation, click on the Read/Reply link for that conversation.

Figure 16: View response to a conversation



Clicking on the link to view an entire conversation opens the full conversation on the screen, as shown in Figure 17. If you want to send a reply, type the message in the open box and click SEND to send it to the FCC. Click on the ← Back to Conversations link to return to the Conversations tab of the Messages screen.

Figure 17: View entire conversation



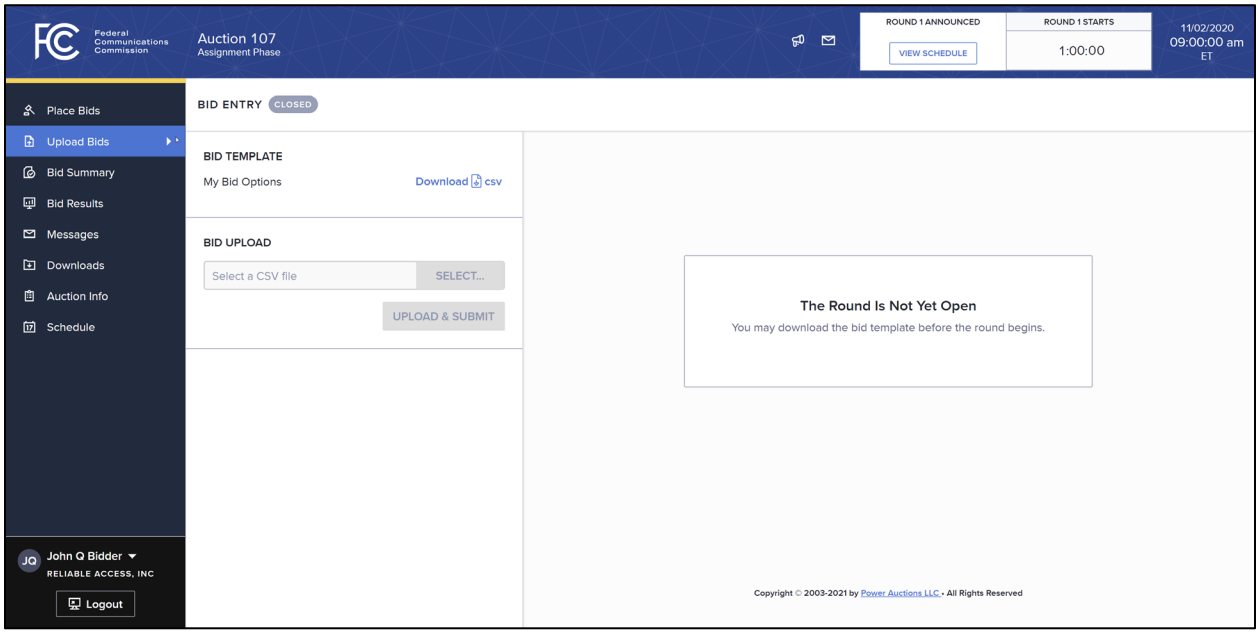
7. Bidding

7.1. Viewing Available Bidding Options

As soon as the bidding system becomes available, you can download the full list of bidding options for the bidder. This information is provided in the My Bid Options file, which is available on the Upload Bids screen, illustrated in Figure 18. This file provides information about all of the bidding options available to the bidder for all assignment rounds in which it can bid, based on its clock phase winnings. This file can be used to upload bids for the current and future rounds, as described in Section 7.3.

Details about the specification for this file may be found in the "Auction 107 Assignment Phase Bidding System File Formats" document located on the Auction 107 website in the Education section (available at www.fcc.gov/auction/107).

Figure 18: Bid template



7.2. Placing Bids via the User Interface

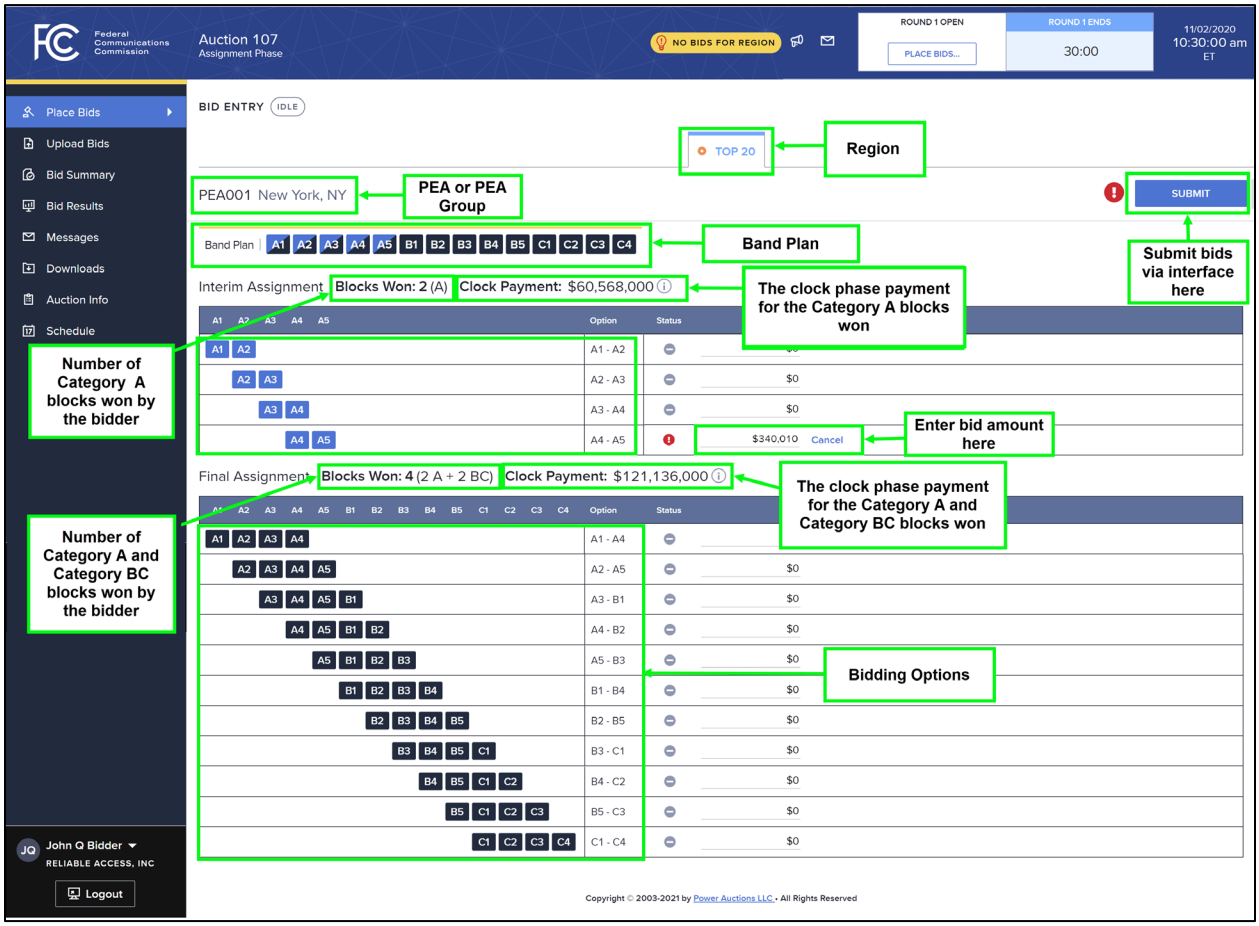
When a round is open for bidding and you have clock phase winnings for that round, you can enter bids through the Place Bids screen.

7.2.1. Layout and Actions of the Place Bids Screen

The Place Bids screen is accessed through a link on the navigation bar on the left. Figure 19 illustrates the layout of the Place Bids screen before any bids have been submitted for the round. The bidder in this example has won two Category A blocks and two Category BC blocks in PEA001 (New York, NY) in the clock phase. Thus, this bidder will be assigned two blocks in the interim assignment and four blocks in

the final assignment. The clock payment information on the screen includes the Category A prices for blocks won by the bidder in the clock phase for both the interim and final assignments. There are messages to that effect when hovering over the ⓘ symbol next to the clock payment amounts.

Figure 19: Place Bids screen



At the top of the Place Bids screen is a list of the PEA(s) being assigned in the current round. The Band Plan shows the blocks of the PEA(s) that are assigned in the round (see Table 3).

Table 3: Band plan shown on Place Bids and Bid Summary screens

Band Plan	Bidder's Clock Winnings	Relevant Assignments
(for 46 PEAs with two categories)	N Category A blocks M Category BC blocks	Interim: N frequency blocks in A1 – A5 Final: N+M frequency blocks in A1 – C4
	N Category A blocks	Interim: N frequency blocks in A1 – A5 Final: N frequency blocks in A1 – C4
	N Category BC blocks	Final: N frequency blocks in A1 – C4
(for 360 PEAs with single category)	N Category ABC	N frequency blocks in A1 – C4

The lower portion of the screen shows all of the bidder's bidding options for each category. Next to each bidding option, the screen displays the bid status of that option and provides a field where you can enter a bid amount. The Submit button allows you to submit the bids you have entered on the user interface.

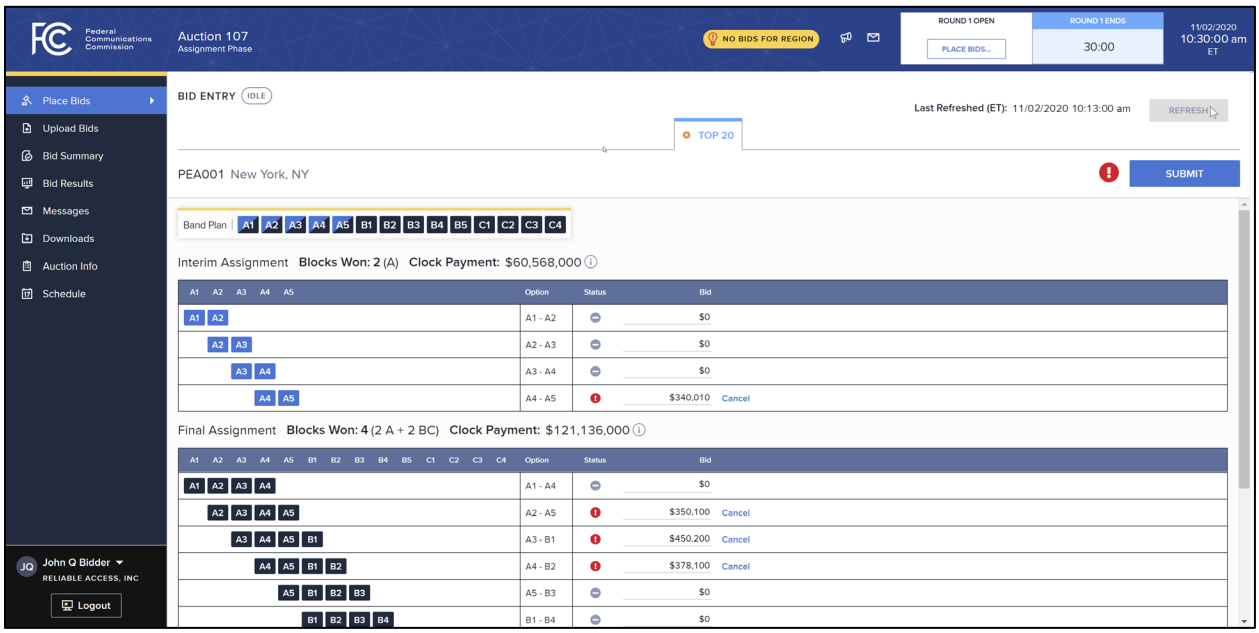
If no bids have been submitted for a region, a yellow badge "NO BIDS FOR REGION" in the blue bar at the top and a yellow circle with a hover "No bids for region" in the region tab alert the user that there may be outstanding bids.

A bidder who has no clock phase winnings for the current round but has clock phase winnings for some future rounds will not be able to submit bids using the Place Bids screen during this round but can submit bids for future rounds using the Upload Bids screen. If a bidder does not have any clock phase winnings for the remaining assignment rounds of the auction, the Place Bids and Upload Bids screens will not be available.

7.2.2. Entering and Submitting Bids

To enter a bid on the Place Bids screen, enter a bid amount in the Bid column field corresponding to the desired bidding option (see Figure 20). Once you enter a bid amount for an option, the status for this bidding option under the Status column will change from a white dash in a grey circle ⊖ to a white exclamation mark in a red circle ❗ indicating that you have entered a bid but you have not yet submitted it. You can then repeat this for all options for which you wish to place bids. If you change your mind and decide that you do not wish to enter a bid for that option, you can click on Cancel next to the bid amount.

Figure 20: Place Bids screen – Bids have been entered but have not been submitted



For each bidding option with an entered bid, the bidding system displays a white exclamation mark in a red circle in the Status column to indicate that a bid has been entered but has not been submitted yet. For each bidding option for which no bid is entered, the bidding system displays a white dash in a grey circle in the status column. If you have any unsubmitted bids on the screen, there is also an exclamation mark shown next to the Submit button (see Figure 20 above).

Each bid amount must be non-negative, must be a multiple of $10, and cannot exceed $999,999,990. If you enter an invalid bid amount, the system will display an error message to the right of the Cancel link, and the Submit button will be disabled until you enter a valid bid amount or click Cancel to discard your changes.

For your convenience, the bidding system provides two shortcuts for entering bid amounts. First, entering a "k" after a bid amount multiplies your bid by 1,000 (e.g., 75k becomes 75,000). Second, entering "m" after a bid amount multiplies your bid by 1,000,000 (e.g., 2m becomes 2,000,000).

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

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

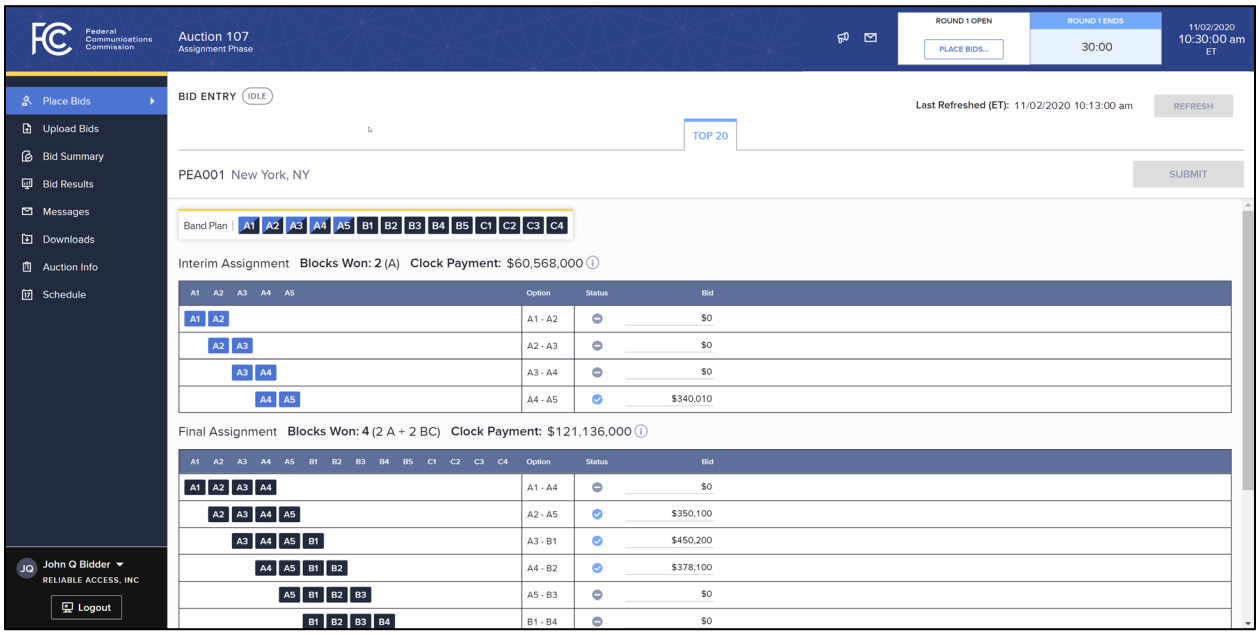
Only bids that have been submitted will be processed by the bidding system. Once you have entered the bids for all options on which you wish to bid, you must click Submit to submit all of the bids. The Status column will show a white check mark in a blue circle to indicate the bids that have been successfully

submitted to the bidding system, as seen in Figure 21. For each bidding option for which you have a zero bid amount, the bidding system displays a white dash in a grey circle in the status column.

The Bid Entry badge at the top left of the screen reads "IN PROGRESS" if the system is processing a bid submission either by you or by another authorized bidder of the same company or by a Telephonic Bid Assistant submitting bids for your company. You will not be able to edit or submit bids at this time. For more information about what to expect when more than one user is submitting bids on behalf of the same bidder see Appendix 3**:** Two Users submitting bids on behalf of a bidder at the same time. During a round, the bidding system will display a warning popup message if you try to navigate away from the Place Bids screen after entering a bid amount for a bidding option without submitting the bid. If you then choose to leave the screen, any bids that you entered but did not submit will be lost.

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

Figure 21: Place Bids screen – Bids have been submitted



7.2.3. Changing Bids

As long as the round remains open, you may modify any submitted bids by clicking on the bid input field and entering a new bid for a bidding option. The bidding system will replace the checkmark for the bidding option with the red exclamation mark to indicate that any modified bid amount has not yet been submitted. If you would like to delete a bid, change the bid amount to $0.

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

7.2.4. Bidding in Rounds with REAGs

After the Top 20 PEAs are assigned, groups of PEAs will be assigned simultaneously in multiple REAGs. In these rounds, the Place Bids screen will have a separate tab for each REAG where the bidder has clock phase winnings.[8] Figure 22 provides an example of the Place Bids screen in a round in which bidding is occurring for PEAs in six different REAGs.

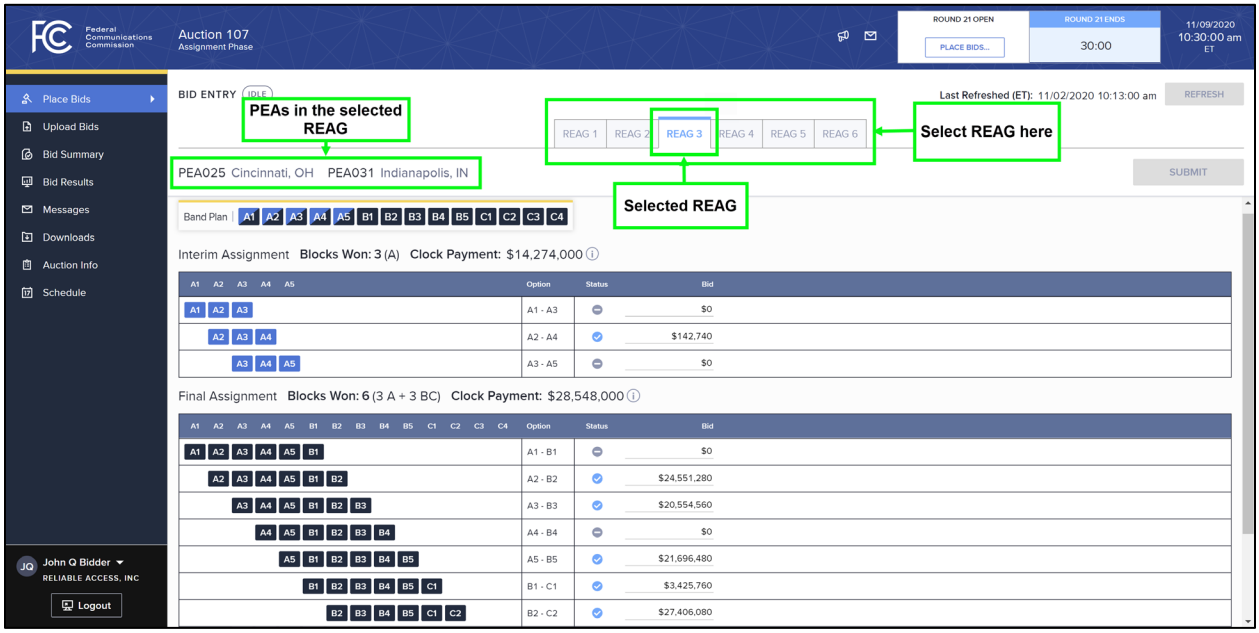
To place a bid for a PEA or PEA group in a particular REAG, click on the tab for that REAG on the Place Bids screen to display the bidding screen for the PEA(s) being assigned in that REAG in that round.

As long as the round remains open, you may modify your bids for any of the PEAs or PEA groups being assigned during that round, as described in Section 7.2.3. However, you must submit your bids for options in one REAG before moving to a different REAG; otherwise any bids that you entered but did not submit in a REAG will be lost.

> ✍ *Bids in one REAG must be submitted before moving to another REAG; otherwise they will be lost.*

[8] If the bidder did not win any blocks in a particular REAG for the round, then that REAG is not shown in the region tab.

Figure 22: Place Bids screen – Round with REAGs

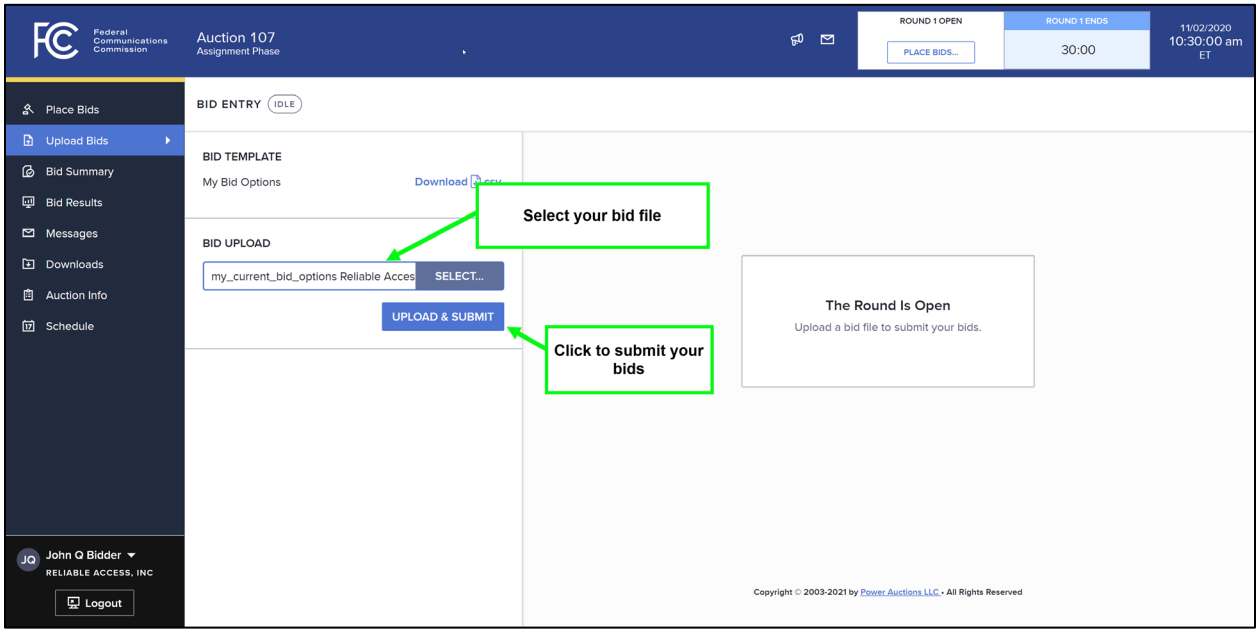


7.3. Placing Bids via File Upload

The Upload Bids screen allows you to upload and submit bids for all rounds in which the bidder is permitted to bid. You may download the bid template as soon as a round has been announced, starting with round 1. You may upload bids at one time for every round in which you are eligible to bid, or you can upload bids in separate rounds. Uploading bids is only possible during an open round. Any bid upload file must include all bidding options for the current and future rounds. The system will not accept a bid upload file that includes bidding options for past rounds. New bids uploaded for the current or future rounds replace previous bids entered via a bid upload or via the Place Bids screen. Full details on the specification of the bid upload file are available in the "Auction 107 Assignment Phase Bidding System File Formats" document located on the Auction 107 website in the Education section (available at www.fcc.gov/auction/107).

An example of the Upload Bids screen is shown in Figure 23 below.

Figure 23: Upload Bids screen

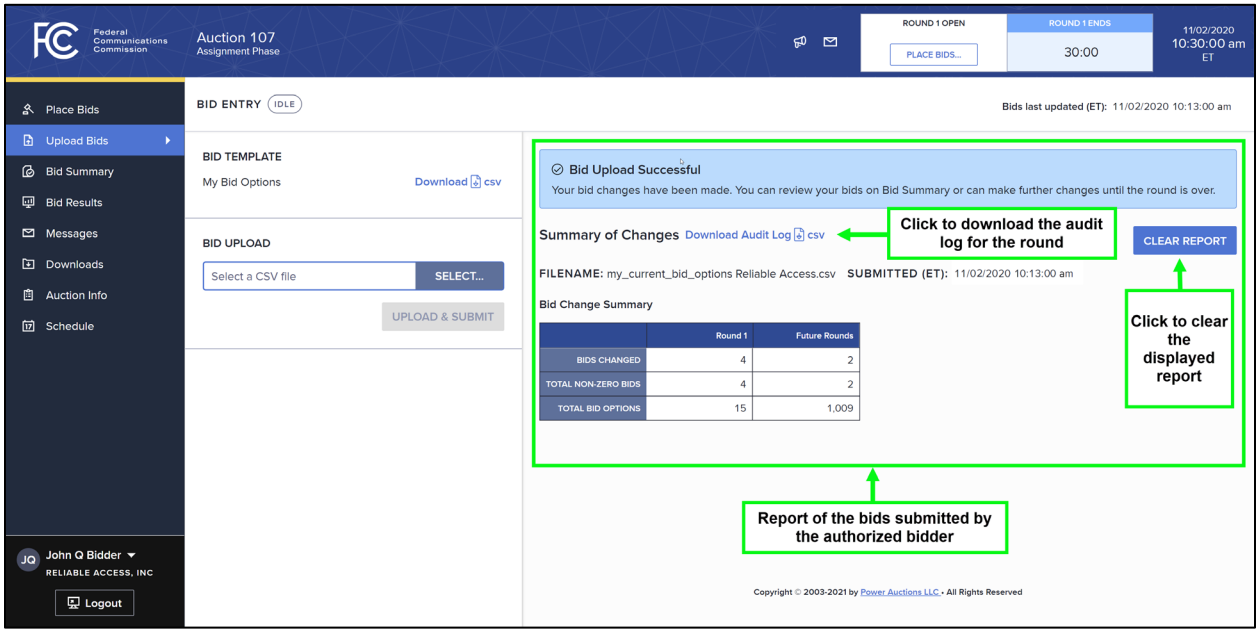


In order to upload bids, you can follow these steps:

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

When bids are successfully uploaded, the Upload Bids screen will display a message indicating that the bid upload was successful, and a summary of the bids will be provided below the message (see Figure 24). This summary, labeled "Bid Change Summary", lists the number of bids that changed as a result of the upload, the total number of non-zero bids submitted and total number of bidding options for the current and for future rounds. The report field also provides a downloadable audit log file that includes all bidding actions for the bidder in the round.

Figure 24: Upload Bids screen – Successful upload



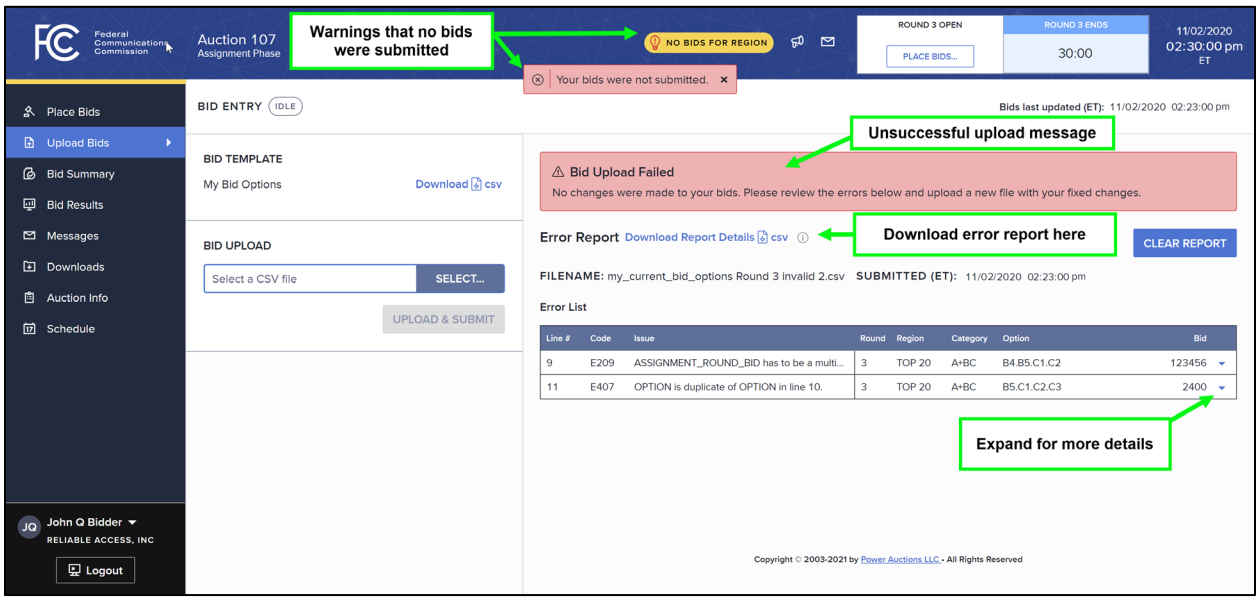
You can review the bids you have uploaded by downloading the My Bid Options file or by accessing the bidder's audit log file. You can also view the bids you have uploaded for the current and future rounds by viewing the Bid Summary screen, described in Section 8.1.

If a bid upload file contains errors that prevent the bids from being submitted successfully, the system will reject the entire upload and the Upload Bids screen will notify the user that the upload was not successful and will display one or more error messages in the report field, as illustrated in Figure 25. The bidding system will list up to ten errors in the report field, with the associated error codes. You can click on the downward arrow in the Bid column (or anywhere else in the row) to see the raw data that was uploaded. In addition, there is a Download Report Details link to a file containing the list of errors, capped at 50, along with explanations. See Appendix 4: Bid Upload Errors for a full list of the possible error codes and an explanation for each.

The bidding system may not report all errors in a given upload attempt. This can occur if something basic is wrong (e.g., one of five mandatory columns is missing), or if there are more than 50 errors. Once the reported errors are fixed and the file is uploaded again, the system will check the new file and report any further errors.

If an upload is unsuccessful, the system does not delete, change, or add any bids. The bids that were present prior to the unsuccessful upload remain.

Figure 25: Upload Bids screen – Unsuccessful upload



To remove the error status from a screen, you can either fix the errors in the upload file and resubmit the file or click on the CLEAR REPORT button. Clicking on CLEAR REPORT removes the error report from the screen, but does not have any effect on the bidder's submitted bids.

> *Only bids that have been successfully uploaded will be processed by the system. If your bid upload is unsuccessful, be sure to correct the errors in the bid file and submit your bids before the round ends.*

8. Verifying Bids

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

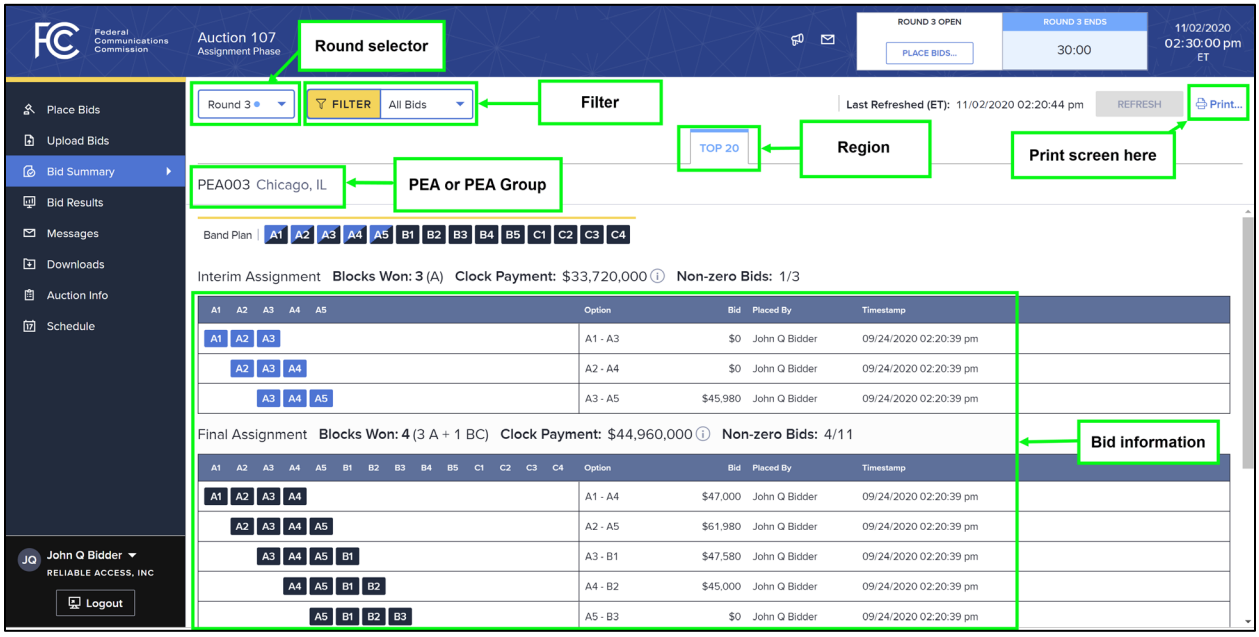
8.1. Bid Summary

After the first round opens and throughout the assignment phase, you may verify the bids that have been submitted on behalf of the bidder in the current round and for all past rounds, on the Bid Summary screen.[9] If you select a future round from the round dropdown menu, the Bid Summary screen will display the bids that have been submitted via the bid upload feature for that future round. Confirmation of bids submitted for future rounds can also be found in the My Bid Options download (see Section 8.2).

The layout of the Bid Summary screen is shown in Figure 26 below. At the top of the Bid Summary screen is a round selector, a filter, tabs for each region that the bidder can bid for in a selected round, and a printer icon. The lower portion of the screen shows the bidder's bidding options for each PEA or PEA group assigned in the selected round. Next to each bidding option, the screen displays the bid amount for that option, the name of the authorized bidder that submitted the bid, and the time of bid submission. In addition, the count for non-zero bids indicates how many options have bids with positive bid amounts. You may also filter the data to show either "All Bids" or only "Non-zero Bids".

[9] A bid may have been submitted by you, by another authorized bidder for the bidder, or by a telephonic bid assistant entering bids on the bidder's behalf. This will be indicated in the Placed By column for the bid.

Figure 26: Bid Summary screen



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

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

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

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

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

8.2. Downloads

You may also verify the bids that have been submitted via several downloadable files.

The My Bids file is available from the General tab on the Downloads screen. It can be accessed as soon as round 1 has been announced, and it shows up-to-date information of all bids the bidder has submitted for all rounds, including past and future. The My Bids file contains the same information as

the Bid Summary screen for all rounds (see Section 8.1). The My Bids file does not contain bids that were submitted earlier in a round but were subsequently changed.

The My Bid Options file is available from the Upload Bids screen as soon as a round has been announced. While the main purpose of the file is to provide a template for bid uploads, the file also provides up-to-date information about the status of bids submitted during the current round and bids submitted by upload for future rounds. This file does not contain information about previous rounds.

The My Bidder Audit Log file is available from the Audit tab on the Downloads screen. It provides information about bids submitted in a particular round, including bids uploaded in that round for future rounds. Note that the My Bidder Audit Log file will not show those bids that were uploaded in a round different than the selected round.

9. Viewing Results

You can view your assignment results on the Bid Results screen, which can be accessed from the navigation bar. Information displayed on this screen is also downloadable from the Downloads screen. Note that, unlike during the clock phase, the Public Reporting System does not display the schedule or round-by-round results for the assignment phase.

9.1. Bid Results Screen

The layout of the Bid Results screen is provided in Figure 27. The top portion of the screen displays the bidder's aggregate payment information, specifically the clock phase payment for all PEAs, the assignment payment to date (which updates after each round), and the total (which is the sum of the clock phase payment and the assignment payment). If a bidder has claimed a bidding credit, the bidding system will display net payments, taking into account any bidding credit discounts and bidding credit discount caps, as shown in Section 9.2.

The lower part of the Bid Results screen lists the bidder's round-by-round assignment results. The assignment round number is displayed in the first column. The next four columns provide information about the assignment phase market and category, specifically, the region number, market ID(s) and name(s), and assignment category. The next column provides the bidder's clock phase payment for the assignment phase market and assignment category. The last four columns provide information about the assignment, assignment bid and payment, and total payment, which is the sum of the clock phase payment and the assignment payment for each assignment phase market and assignment category.

Note that for assignment phase markets with interim and final assignments, the clock payment for Category A blocks is included in both the interim assignment and the final assignment in the Clock Payment and Clock + Assignment Payment columns. There is a message to that effect when hovering over the ⓘ symbol next to the Clock Payment and Clock + Assignment Payment column headers. As a result, for a bidder that won Category A blocks in the clock phase, the sum of the entries in the Clock + Assignment Payment column will not be equal to the bidder's total payment.

Figure 27: Bid Results screen

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

9.2. Aggregate Payment Information

The top portion of the Bid Results screen shows the bidder a running total of its payment obligations, equal to the sum of the bidder's clock phase payment across all PEAs and the assignment phase payments, if any, for all PEAs that have been assigned to date. The screen shows additional information if the bidder has claimed a bidding credit.

9.2.1. Total Payment Information

The Bid Results screen shown in Figure 27 provides an example of the aggregate payment information that is displayed in the top portion of the screen. This information includes:

- **Total Clock Payment (All PEAs):** The first box shows the bidder's total commitment for all winnings in the clock phase. It includes all PEAs, that is, both the PEAs that have already been assigned and the PEAs that will be assigned in future assignment rounds.
- **Total Assignment Payment:** The second box shows the bidder's total assignment payment for all assignment phase markets that have been assigned so far in the assignment phase. This is the total of the "Assignment Payment" column displayed in the round-by-round table below (see Section 9.3).

- **Total Payment (Clock + Assignment):** The third box provides the total of the first two boxes which represents the aggregate payment amount for the bidder as known at that point in the assignment phase.

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

A bidder with a bidding credit will see additional information related to its discounts as well as its net payments, as described in the following section.

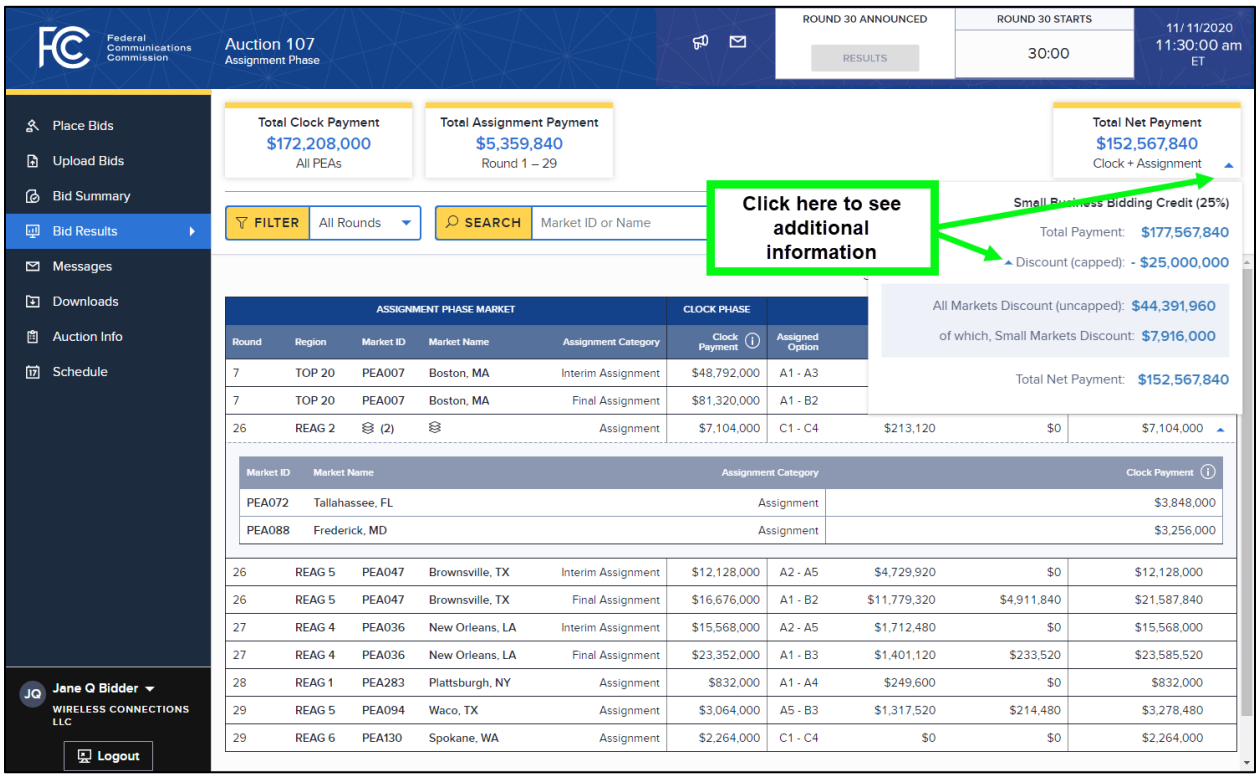
9.2.2. Total Net Payment Information

For a bidder that has claimed a bidding credit, in addition to gross aggregate payment information, the Bid Results screen shows the bidder's total net payment and bidding credit discount.

An example of the aggregate payment information for a bidder with a small business bidding credit is provided in Figure 28 below. The bidding system, by default, displays the total net payment (the total payment less any bidding credit discount) instead of the gross total payment on the screen. You can click on the triangle at the bottom right of the box to see the gross total payment and the corresponding discount (see Figure 28).

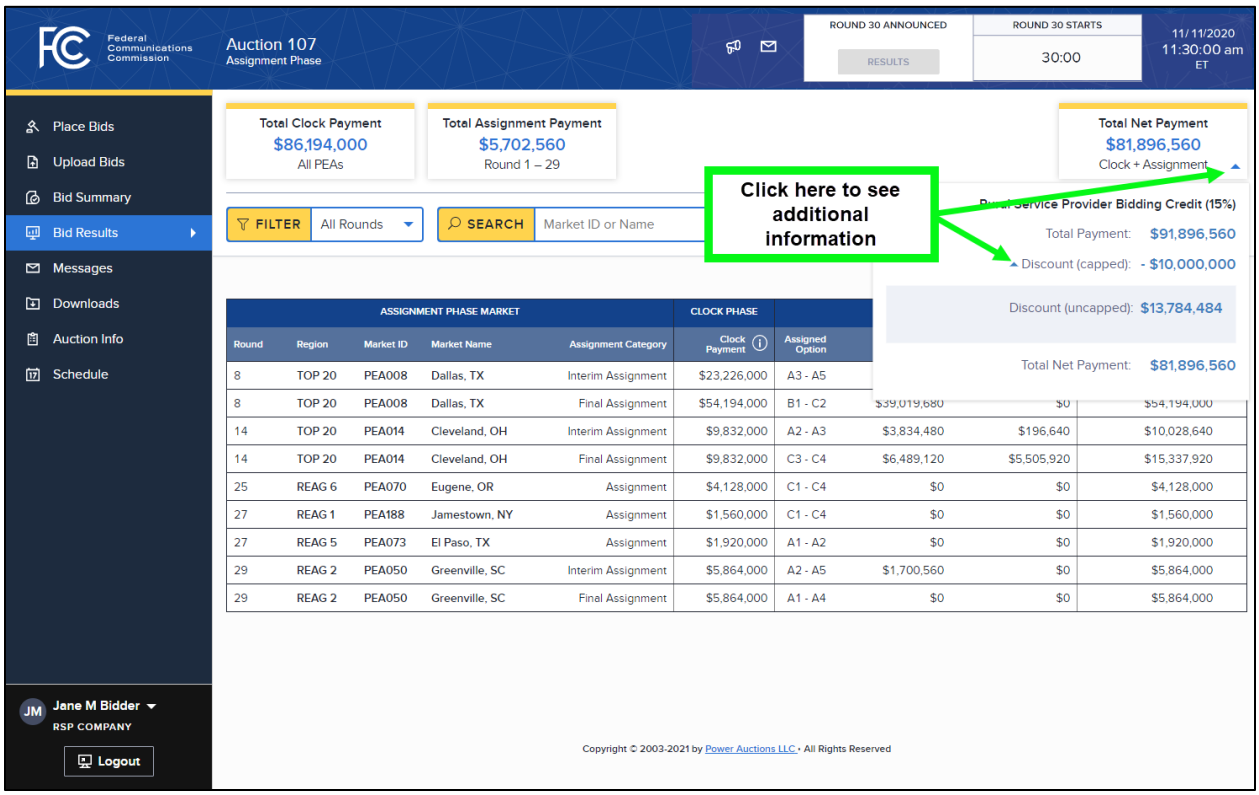
If the bidder's discount has been capped, the system will indicate that by including the text "(capped)" next to the discount, as shown in Figure 28 below. In that case, you can click on the triangle on the left of the discount to see uncapped discount information.

Figure 28: Bid Results screen – Bidder with a small business bidding credit



An example of the aggregate payment information for a bidder with a rural service provider bidding credit is provided in Figure 29 below. For this bidder, the screen also displays the total net payment by default. If you click on the triangle at the bottom right of the Total Net Payment box, you will see the gross total payment and the corresponding discount. If the bidder's discount has been capped, the system will indicate that by including the text "(capped)" next to the discount (see Figure 29). In that case, you can click on the triangle on the left of the discount to see uncapped discount information.

Figure 29: Bid Results screen – Bidder with a rural service provider bidding credit



The bidding credit caps apply to the sum of aggregate payments from both the clock phase and the assignment phase of Auction 107. A bidder with a bidding credit discount may reach its bidding credit cap(s) in the clock phase or the assignment phase.

9.3. Round-by-Round Bidder Results

The lower part of the Bid Results screen displays the bidder's assignment and payment results for all posted assignment rounds in which the bidder had clock phase winnings. You may customize the data shown in the table by selecting a single round or all rounds in the dropdown filter, and by typing a search parameter in the SEARCH field (see Figure 29).

For each of these rounds, the table lists the clock phase payment, the bidder's assignment, assignment bid and payment, and gross payment for each assignment phase market and assignment category.[10] If the assignment phase market includes at least two PEAs, the stack icon will be in the market ID and market name fields for that assignment phase market. The number next to the stack icon in the market ID shows the number of PEAs that are part of this assignment phase market. You can expand the information for an assignment phase market with multiple PEAs by clicking the downward arrow next to the dollar amount in the Clock + Assignment Payment column or anywhere else in that row. The

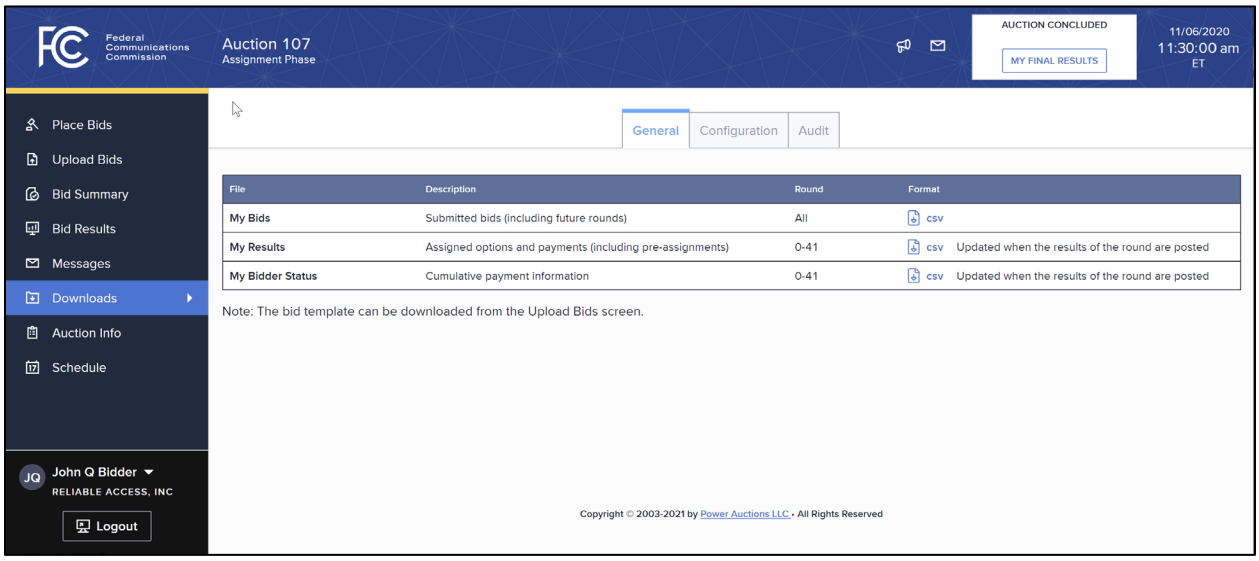
[10] Recall that for assignment phase markets with interim and final assignments, the clock payment for Category A blocks is included in both the interim assignment and the final assignment.

expanded information includes the market ID and name as well as assignment category and clock phase payment for each PEA that is part of the assignment phase market, as shown in Figure 28.

9.4. Downloadable Results

You can also download two files containing results on the Downloads screen (see Figure 30): My Results and My Bidder Status. Full details about the specifications for downloadable files may be found in the "Auction 107 Assignment Phase Bidding System File Formats" document located on the Auction 107 website in the Education section (available at www.fcc.gov/auction/107).

Figure 30: Downloads



9.4.1. My Results

The My Results file provides the bidder's assignment results, showing the winning assignments, including pre-assignments, and any associated assignment bid and payment for each assignment phase market (PEA or PEA group) and assignment category that has been assigned so far in the assignment phase. The file is updated when the round results are posted. The information contained in the My Results file mirrors the round-by-round information contained on the bottom portion of the Bid Results screen (described in Section 9.3). The file shows assignment and payment information for different assignment categories in separate rows. However, in the case of a PEA group, the file does not show the clock phase payment breakdown for each PEA as provided in the expandable table that can be viewed when clicking on downward arrow next to the dollar amount in the Clock + Assignment Payment column on the Bid Results screen.

9.4.2. My Bidder Status

The My Bidder Status file contains the cumulative payment amounts for the bidder as of the end of each assignment round (once the round has been posted), and reflects the information displayed in the top

portion of the Bid Results screen (described in Section 9.2). The file includes cumulative data for past rounds as well as for the most recently-posted round. When the results of a round are posted, an additional row of data is appended to the end of the file containing the new cumulative payment amounts. Therefore, it is possible to view cumulative results as of the point in time when a past round was posted by viewing the data corresponding to that round.

Appendix 1: System Troubleshooting

If you continue to experience problems after following the troubleshooting instructions, please call the FCC Auctions Technical Support at (877) 480-3201, option nine; (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 message on first access

Figure 31: Microsoft Edge (Chromium) connection error message

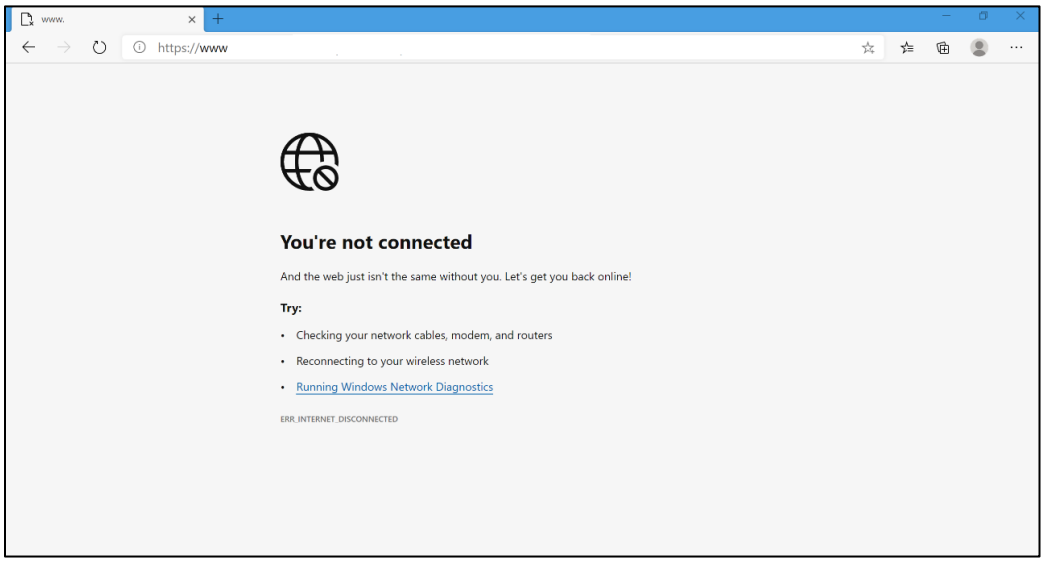
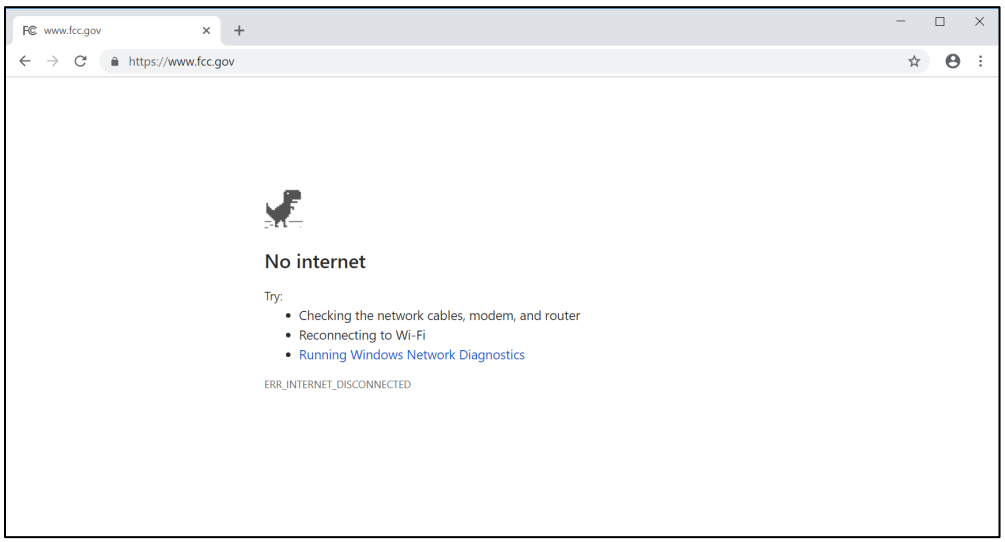


Figure 32: Google Chrome connection error message



If either 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 you are using the correct URL for the bidding system.
- 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 3.1) by performing the following steps:
    - Edge: First, click on the tools icon ··· (which can be found in the top right-hand corner of your browser). Then click "Settings" and scroll down to "About Microsoft Edge". Make note of the version number.
    - Chrome: First, click on the tools icon ⋮ (which can be found in the top right-hand corner of your browser). Then click "Help" followed by "About Google Chrome." Make note of the version number.

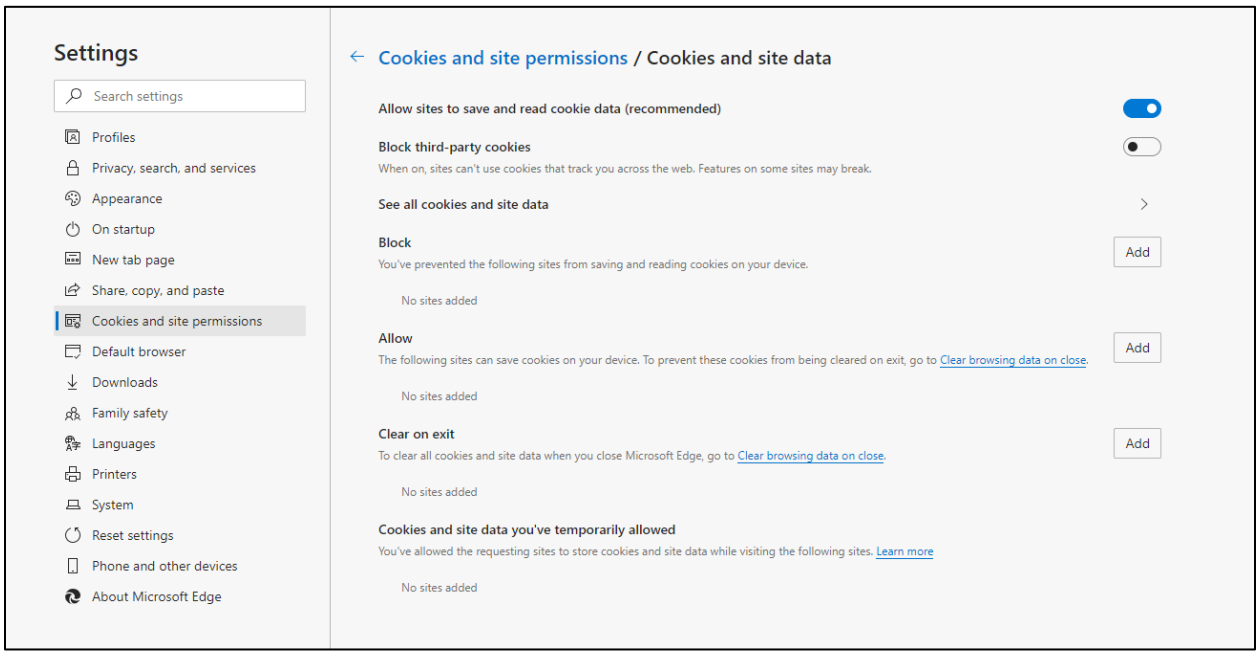
Situation 2: Cookies must be enabled message

The bidding system requires that cookies are enabled in your browser. If cookies are disabled, you will see a message stating that cookies should be enabled.

To enable cookies in Microsoft Edge (Chromium), complete the following steps:

- Click on the tools icon ··· in the top right-hand corner of your browser.
    - Click on "Settings" and "Cookies and site permissions".
    - Under "Cookies and site data" slide the circle to the right next to the words "Allow sites to save and read cookie data (recommended)" in as shown in Figure 33.
    - Then, close the "Settings" tab.

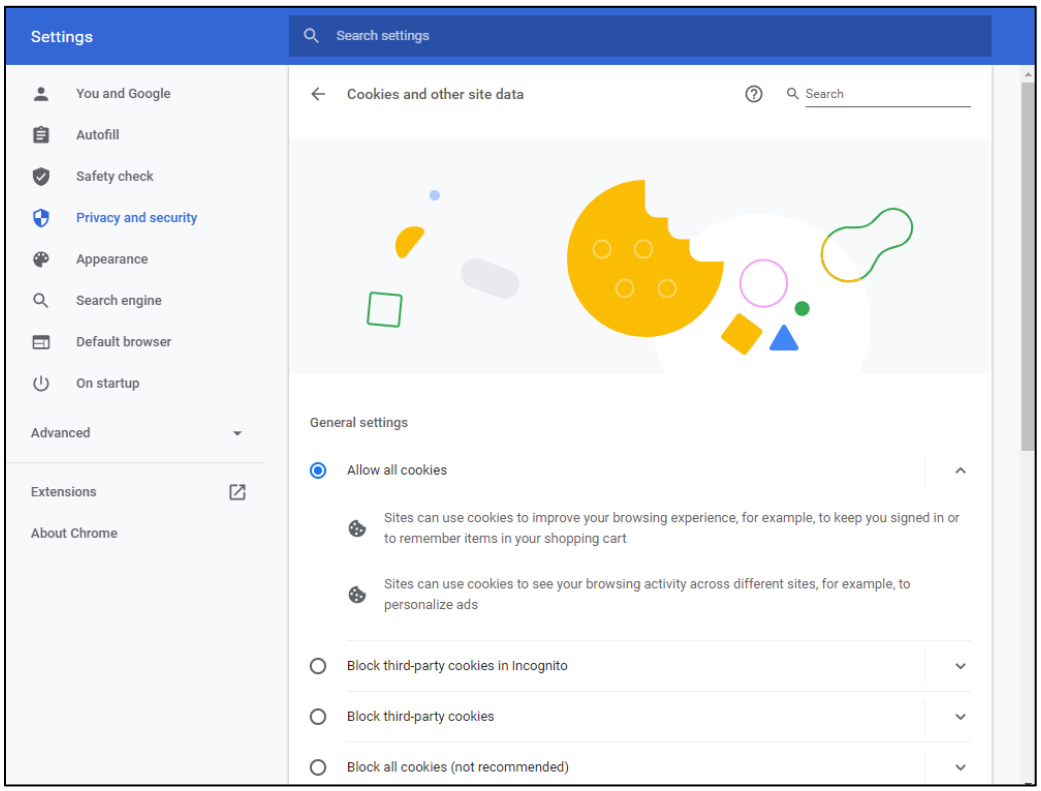
Figure 33: Enabling cookies in Microsoft Edge (Chromium)



To enable cookies in Google Chrome, complete the following steps:

- Click on the tools icon ⋮ in the top right-hand corner of your browser.
  - Click on “Settings”.
  - In the “Privacy and Security” section, click on the “Site Settings” area, and then click on “Cookies and site data” area to display a screen similar to that shown in Figure 34.
  - Click on “Allow all cookies”.
  - Then close the “Settings” tab.

Figure 34: Enabling cookies in Google Chrome



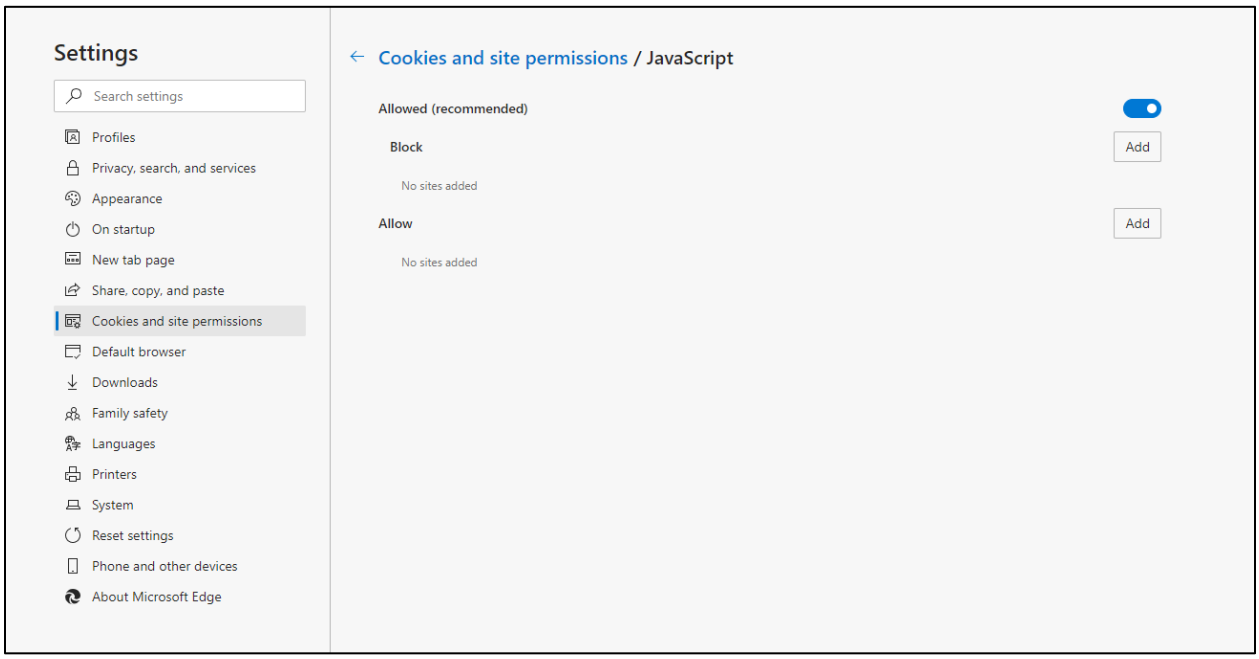
Situation 3: JavaScript must be enabled error message

The bidding system requires that JavaScript is enabled in 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."

To enable JavaScript in Microsoft Edge (Chromium), complete the following steps:

- Click on the tools icon ··· in the top right-hand corner of your browser.
  - Click on "Settings" and "Cookies and site permissions".
  - Under "JavaScript" slide the circle to the right next to the words "Allowed (recommended)" in Figure 35.
  - Then, close the "Settings" tab.

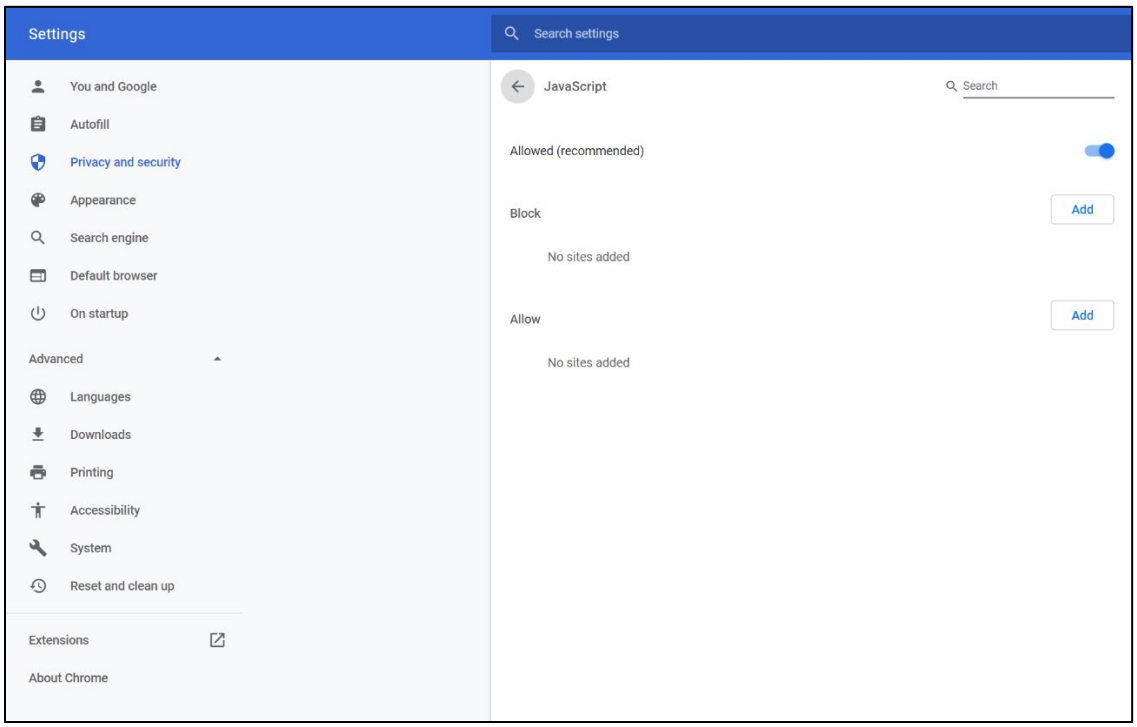
Figure 35: Enabling Java Script in Microsoft Edge (Chromium)



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

- Click on the tools icon ⋮ in the top-right hand corner of your browser.
  - Click on “Settings”.
  - In the “Privacy and security” section, click on the “Site settings” area, and then click on the “JavaScript” area to display a screen similar to that shown in Figure 36.
  - Slide the circle to the right next to the words “Allowed (recommended)”.
  - Then close the “Settings” tab.

Figure 36: Enabling JavaScript in Chrome



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

If you have been using the bidding system 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 bids, you should verify your bids using the Bid Summary screen. You may need to place your bids again.
- Re-navigate to the bidding system 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.
- The bidding system may be down. To confirm whether the bidding system is down, first confirm that you have internet access and then attempt to access the auction portal and the login screen (see Section 3.2). If you are unable to view either page, or the page states that the bidding system is unavailable, then the bidding system may be down and you should call the Auction Bidder Line telephone number provided with the registration materials.

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 the bidding system.

Situation 6: 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 the bidding system.

Please review any actions that you were taking when the computer crashed. If you were in the middle of submitting a bid, you should verify your bids using the Bid Summary screen. You may need to place your bids again.

If the computer crashes while you are using the bidding system, you may access the bidding system 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 7: Certificate error message

If you access the bidding system and see a security message similar to that shown in Figure 37 (for Microsoft Edge (Chromium)) or Figure 38 (for Google Chrome), you should not proceed. Please call FCC Technical Support at (877) 480-3201, option nine; (202) 414-1250; or (202) 414-1255 (TTY).

Figure 37: Certificate security error message in Microsoft Edge (Chromium)

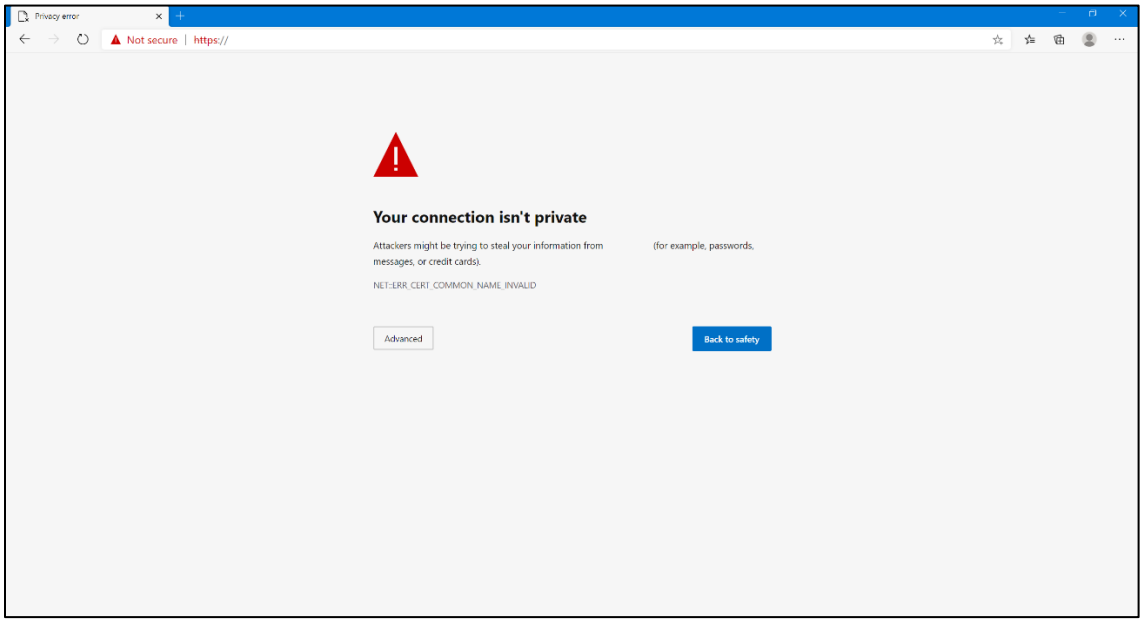
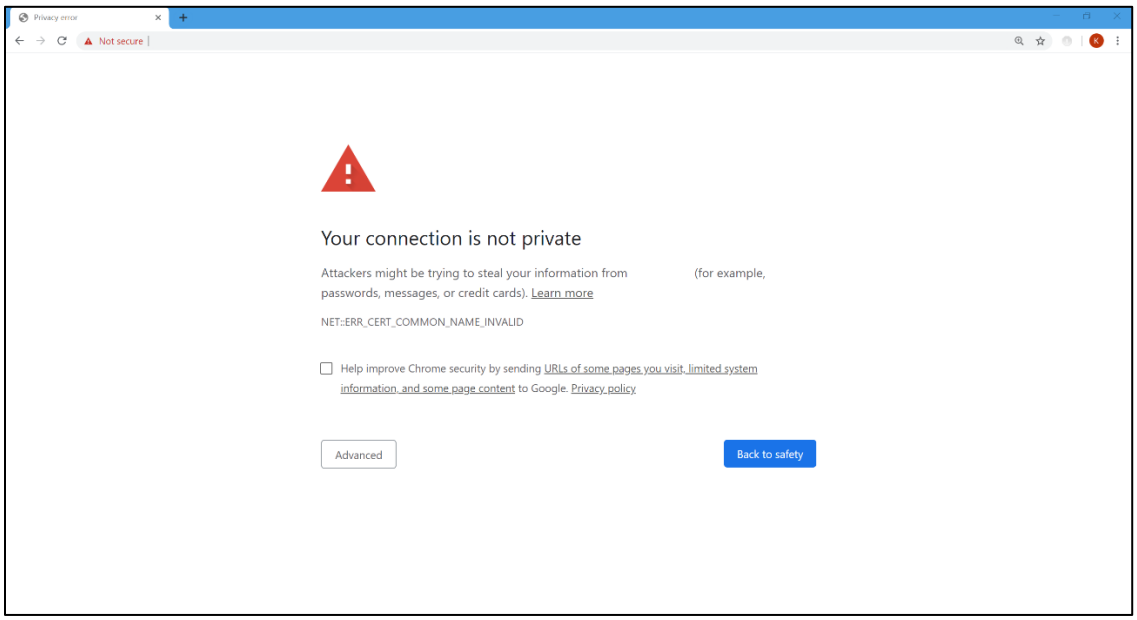


Figure 38: Certificate security error message in Google Chrome



Appendix 2: RSA SecurID® Token Information

For additional assistance with lost or damaged RSA tokens and for questions about changing a user (i.e., an authorized bidder), the person who has been designated as the contact person, or the certifying official on the bidder's FCC Form 175 application (designated person), should call the Auction Bidder Line telephone number provided with your registration materials.

1. Number of RSA Tokens Issued and Extra RSA Tokens

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

> ✍ *Bidders cannot use the 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. 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 the registration materials to request activation of a replacement token.

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 authorized bidder, contact person, or certifying official listed on the bidder's FCC Form 175 application should call the Auction Bidder Line telephone number provided with the registration materials.

4. Forgotten PIN

If an authorized bidder forgets his PIN, he should contact FCC Technical Support at (877) 480-3201, option nine; (202) 414-1250; or (202) 414-1255 (TTY) to have the PIN reset. Please note, however, that this process might not occur before a round ends. In this event, a bidder may not be able to place bids in the round. FCC Technical Support is generally available Monday through Friday from 8:00 a.m. to 6:00 p.m. ET.

Appendix 3: Two Users submitting bids on behalf of a bidder at the same time

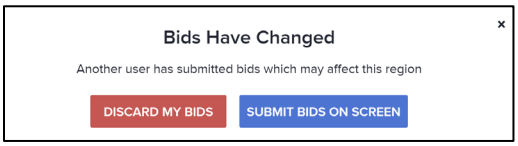
There are two situations in which more than one user could end up submitting bids at the same time on behalf of the same bidder:

- A Telephonic Bid Assistant submits bids at the same time as the authorized bidder he or she is assisting;
- Two authorized bidders of the same company upload or submit bids at the same time.

While you should make sure that you communicate with the Telephonic Bid Assistant or the other authorized bidders for your bidder during the bidding process, the system also gives feedback on the Place Bids or the Upload Bids screen when two users submit bids on behalf of the same bidder at the same time.

- After the submission of valid bids by the first user, the second user who has not entered bids will see an orange bid entry badge BID CHANGED, and the REFRESH button becomes active. Clicking the REFRESH button refreshes the screen to show the bids submitted by the first user.

- Both users enter bids for the round. The first user submits his bids. When the second user tries to submit his bids a little later (after the bids of the first user have been accepted), the second user sees a pop-up:



  When clicking the DISCARD MY BIDS button, the screen refreshes to show the bids submitted by the first user.
  When clicking the SUBMIT BIDS ON SCREEN button, the bids of the second user are submitted.

- If two users submit bids for the same bidder at the exact same time or if there is an internet problem, you will get a yellow banner asking to refresh your screen: “THE INFORMATION ON YOUR SCREEN MAY BE OUT-OF-DATE. PLEASE ‘HARD REFRESH’ YOUR BROWSER.” In this case, you need to use a browser refresh located on the left side of the URL field to refresh your screen.

- If you and another user are submitting bids within a split second of each other, the user whose bid submission did not go through will get a red error message: “Bid update failed for *Region*. E700 Bids submitted by user *Authorized Bidder 1* are currently being processed.”, where *Region* is “Top 20” or one of the REAGs that you are submitting bids for, and *Authorized Bidder 1* is the name of a user whose bids are being processed at this time. You need to click the “x” for this error message to go away.

- The error message will not be displayed if two authorized bidders submit their bids in the last second of the round, as the Place Bids screen becomes unavailable.

If you and another authorized bidder submit bids via bids upload at the same time, you may see the following on the Upload Bids screen:

- When a bid upload takes place, the BID ENTRY badge shows “IN PROGRESS”. If the bid upload from one authorized bidder is successful, another authorized bidder gets a red error message: “Bid update failed for Region. E700 Bids submitted by user Authorized Bidder 1 are currently being processed.”, where Region is “Top 20” or one of the REAGs that you are submitting bids for, and Authorized Bidder 1 is the name of a user whose bids are being processed at this time. You need to click the “x” for this error message to go away.

Appendix 4: Bid Upload Errors

The table below lists all the bid upload error codes along with the corresponding error messages that are displayed. The text shown in *italics* provides examples, for purposes of this user guide, of what could actually be displayed.

Error Code	Error Message
E004	Your file must be a csv file and must end in '.csv'.
E005	The first five fields in the header must be in this order: ROUND, REGION, ASSIGNMENT_CATEGORY, OPTION and ASSIGNMENT_ROUND_BID.
E014	Row is blank.
E015	Number of columns in row does not match number of columns in header.
E110	ROUND cannot be blank.
E111	Invalid ROUND format: *1.2*
E112	You cannot upload bids for a closed (past) assignment round.
E113	Invalid ROUND number. You can only upload bids for current and future rounds.
E120	REGION cannot be blank.
E121	Invalid REGION *REAG7* for ROUND *23*.
E130	ASSIGNMENT_CATEGORY cannot be blank.
E131	Invalid ASSIGNMENT_CATEGORY *Temporary Assignment* for ROUND *3 REAG4*.
E140	OPTION cannot be blank.
E141	OPTION (*B2.B3.B4.B5.B6*) is invalid.
E207	ASSIGNMENT_ROUND_BID cannot be blank.
E208	ASSIGNMENT_ROUND_BID has to be below maximum allowed price of $999,999,990.
E209	ASSIGNMENT_ROUND_BID has to be a multiple of 10.
E210	ASSIGNMENT_ROUND_BID *$15,000.50* is invalid.
E406	Missing bid for assignment phase market and option.
E407	OPTION is duplicate of OPTION in line *18*.
E408	You are not eligible to bid for this assignment phase market and option.
E409	Round *7 REAG3* Category *Interim Assignment* has been auto-assigned to you and cannot be specified in the file.