

Auction 105 Bidding System User Guide

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DISCLAIMER

The Federal Communications Commission (the "Commission") will make available a web-based bidding system for Auction 105, an auction of Priority Access Licenses (PALs) in the Citizens Broadband Radio Service in the 3550-3650 MHz band (3.5 GHz band). This document is the user guide for the bidding system.

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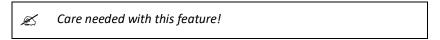
1. Introduction

This guide describes the features of the web-based FCC auction bidding system that bidders will use to bid in Auction 105. Additional information for this auction can be found on the FCC Auction 105 website: www.fcc.gov/auction/105

1.1. Conventions

In this guide screen names are Capitalized, internet addresses are highlighted in blue, links in the bidding system are <u>underlined</u>, and the following text represents a Button.

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



In this guide, the term "bidder" refers to an applicant that has been identified by the FCC as qualified to bid in Auction 105 based on review of its FCC Form 175 application and receipt of a timely upfront payment. The terms "user," "you," and "authorized bidder" refer interchangeably to an individual authorized bidder identified on a qualified bidder's Form 175 as authorized to access the bidding system and to submit bids on behalf of the qualified bidder.

Most of the examples in this guide are for "Reliable Access, Inc.", a bidder that has not claimed a bidding credit. Representative examples are also given for a bidder that has claimed a rural service provider bidding credit and for a bidder that has claimed a small business bidding credit.

In this guide, the terms "county" and "market" are used interchangeably.

1.2. Guide Structure

This guide is set out as follows:

- Section 2 provides an overview of Auction 105
- 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 states where basic information about the auction can be found
- Section 6 describes the auction schedule and communications between the bidder and the FCC
- Section 7 describes bidding in the auction
- Section 8 describes how to verify bids submitted in the round
- Section 9 describes how to access results of the auction
- Section 10 describes the downloads available in the bidding system

There are also four appendices:

- Appendix 1 provides troubleshooting tips for several different scenarios
- Appendix 2 provides additional information about RSA SecurID® tokens
- Appendix 3 provides a list of bid upload error codes
- Appendix 4 contains a glossary of terms

2. Overview of Auction 105

In Auction 105, bidders will bid for Priority Access Licenses (PALs) in the 3550 – 3700 MHz band. Each PAL consists of a 10 MHz channel and is also referred to as a "block". Up to 7 PALs may be licensed in a given county.

Auction 105 will be conducted in a series of rounds. During the round, users can place bids for counties. Each bid will specify a requested quantity of blocks and a price. In every round, a bidder may only bid for a quantity that is greater than or equal to 0 and less than or equal to 4 for a given county.

After the round ends, the bidding system processes the bids and posts the results. For each county, users can see their "processed demand" — the number of blocks the bidder holds after bid processing — and the aggregate demand for each county as well as the price for each county after bid processing (the "posted price"). If, after the bids are processed, there is no excess demand for blocks in any county, then the auction ends and the final price for a block in each county is equal to the posted price for that county for the last round. Otherwise, the auction continues with a new round, and users can see the clock prices for the next round.

In Round 1, a user indicates the number of blocks that it demands at the minimum opening bids (the opening prices) by uploading a file with its bids. For Round 1, the processed demands of a bidder are simply the quantities that it bid for in the round, and the posted price of a county is the minimum opening bid price for that county.

In each round after Round 1, a range of per-block prices is associated with each county. The start-of-round price is the lowest price in the range, and the clock price is the highest price in the range. The start-of-round price for a county is equal to the posted price of the previous round for that county. For a given county, a user can either bid to maintain its demand from the previous round at the current round's clock price or bid to change its demand at a price associated with the round.

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^{™ 1} or Microsoft Edge (Chromium).² The browser must be configured to accept cookies.³
- Access to the internet
- Excel 2013 or newer
- 1920 x 1080 screen resolution or higher⁴

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

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.

¹ Google and the Google logo are registered trademarks of Google Inc.

² Microsoft Edge (Chromium) is available for Windows and can be downloaded from the Microsoft website. Its logo looks like this: C. Older versions of Edge (known as Microsoft Edge Legacy) use a different logo: C. 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.

³ Appendix 1 explains how to check and/or reset these settings.

⁴ 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 departments in order to disable third-party browser extensions or, if necessary, obtain a clean installation of a supported web browser.

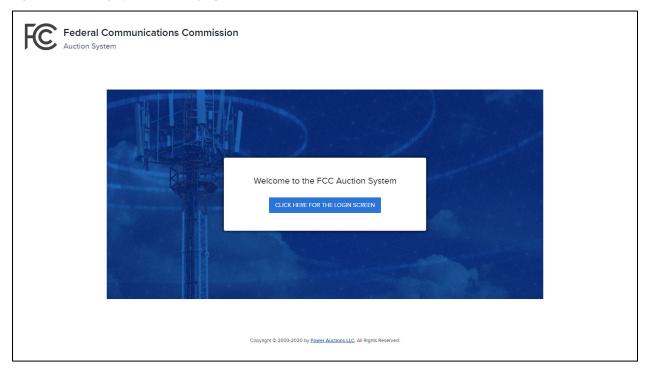
Users are discouraged from adding additional toolbars to their browsers, such as a toolbar for bookmarked pages. Additional toolbars may increase the likelihood that vertical scrolling is needed to see all fields on the screen.

To maximize protection against potential security vulnerabilities, users are advised to ensure 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: Bidding system homepage, 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 105, 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 and losing bidding eligibility.

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)).

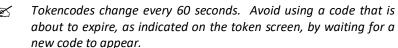
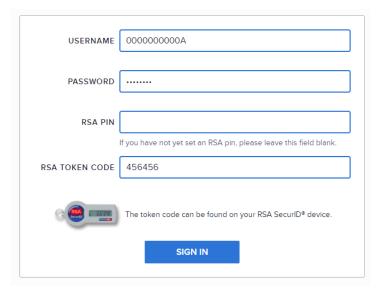


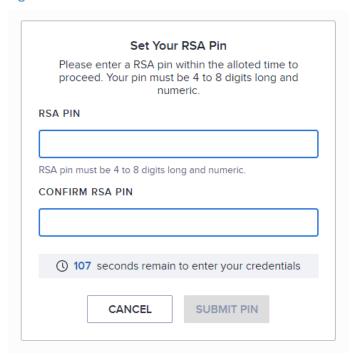
Figure 3: First time login procedure



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

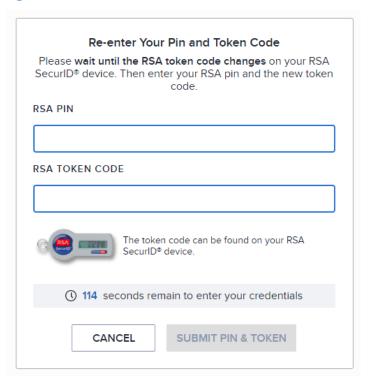


Type a 4 to 8-digit numeric PIN of your choice in the RSA PIN field. Enter it twice as requested to ensure accuracy. Then click SUBMIT PIN. Memorize this PIN! Note that you have a limited amount of time to set a new PIN and confirm your credentials, as shown by the expiration time on the screen.

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

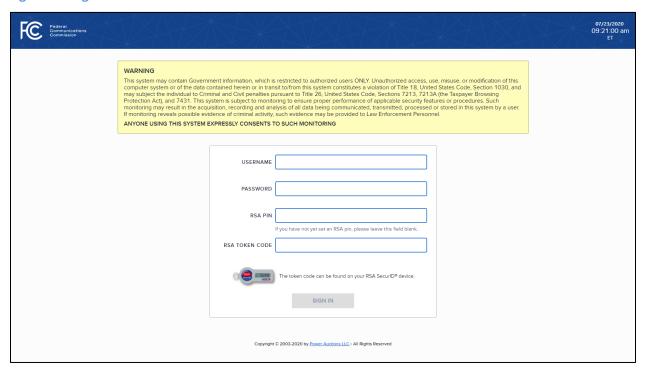
PIN: Numeric PIN created during the initial login (see Section 3.2.1)

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 for a given county at any given time to avoid a potential conflict in data that may produce a bid, or set of bids, that was not intended.

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 not be available for Auction 105 because it would not be feasible given the number of county-based licenses and the requirement to upload a file to submit bids. However, a telephonic bid assistant will be able to submit bids to maintain the bidder's previous processed demands at the round's clock prices—that is, submit "default bids". 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.

4. System Navigation and Overview

The bidding system provides bidding information on screens, accessed through the navigation bar; and through downloadable files.

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 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 3.4.⁵

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. An illustration of the navigation bar and common screen features is shown in Figure 7.

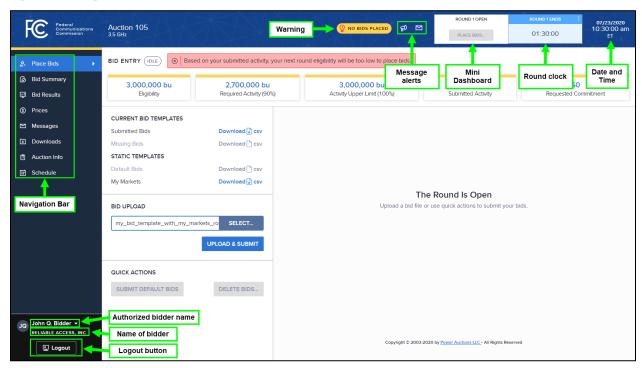


Figure 7: Navigation bar and features common to all screens

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⁵ Users are advised to use the navigation features of the bidding system rather than using a browser's forward and back navigation functions, which may produce unpredictable results.

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 during a round by uploading a bid file							
Bid Summary	Displays a summary of all bids submitted on behalf of the bidder during a particular round							
Bid Results	Displays the results of bid processing for the bidder in a given round for all counties in which the bidder bid or had missing bids in the round							
Prices	Allow you to view the prices in a given round for all counties which the bidder selected on its Form 175							
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 bids and results							
Auction Info	Displays static information about the available items in the auction							
Schedule	Displays the schedule for upcoming rounds							

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 county by typing the county ID or the county name (see Figure 8 for an example). You can search for all counties 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 county names that are followed by "AL".

If you are searching for a county by typing the county name and the county name contains special characters such as "ñ" (e.g., Doña Ana), it is important to type those special characters correctly.

4.3.3. Pagination

When the number of relevant counties exceeds 25, the information is split into multiple pages ("paginated") with up to 25 counties per page, and a page selector is provided at the bottom of the screen (see Figure 8 for an example).

4.3.4. Print

Several screens include a print icon, which can be used to print the content of the screen. Multi-page printing is restricted to 500 counties. You can use the filters provided on the screen to reduce the number of counties. 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 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.

5. Viewing County Information

The Auction Info screen provides a summary of the counties in the auction, including the opening price and supply of blocks for each county, as shown in Figure 8 below. Note that, because there is no CMA-level bidding in this auction, the CMA ID column on the screen is empty for all counties.

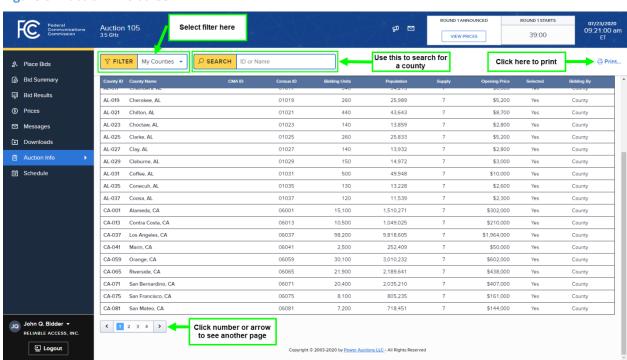


Figure 8: Auction Info screen

There are two filter options on this screen: "All Counties" and "My Counties". "All Counties" lists all available counties in the auction. "My Counties" lists only the counties that the bidder selected on Form 175.

The information on the Auction Info screen does not change throughout the auction. The screen is paginated.

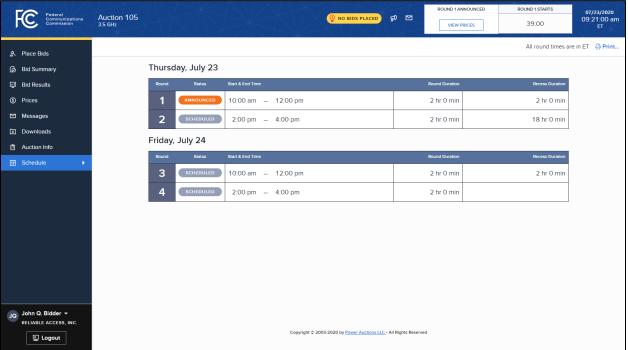
6. Schedule and Messages

6.1. Schedule screen

The Schedule screen shows the current schedule for upcoming rounds in Eastern Time (ET), as illustrated in Figure 9. The schedule shows the date, duration, start time and end time for each round, the duration of the recess, and the status for each round.

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 screen will show the next several rounds assuming the auction continues for that duration or longer.





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 <u>Messages</u> 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 10 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 10 below.

To read announcements, click on the <u>Messages</u> 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 <u>Messages</u> link in the navigation bar and then choose the Conversations tab, or click on the Conversation icon in the blue bar. Once the Announcement 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 <u>Read</u> link or the <u>Read/Reply</u> link to open and read an announcement or message in its entirety.

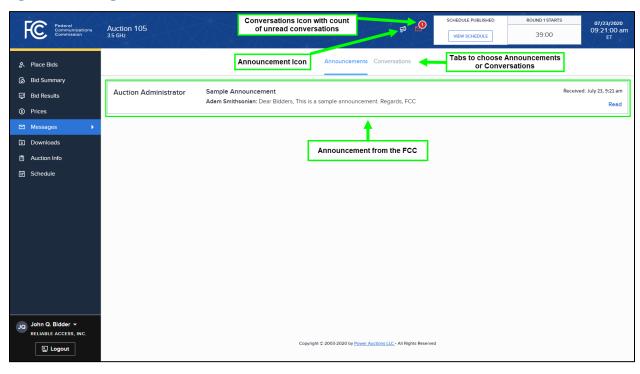


Figure 10: Messages screen

As shown in Figure 10 and Figure 14, 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.



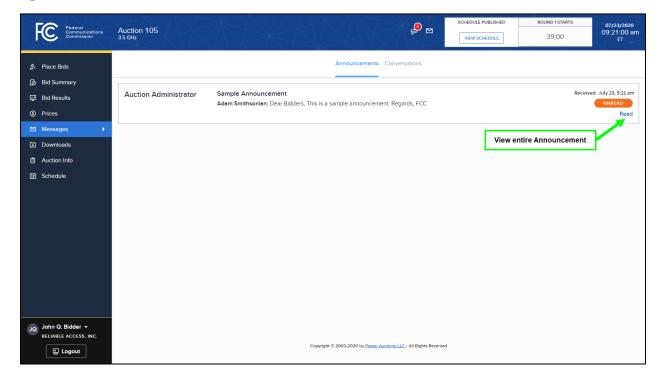
Whenever you see an indication that a message is unread, you should go to the Messages screen to open and read the entire message.

Announcements and conversations can be printed by clicking on the <u>Print...</u> icon located in the top right-hand corner of the screen.

6.2.1. Receiving and Reviewing Announcements

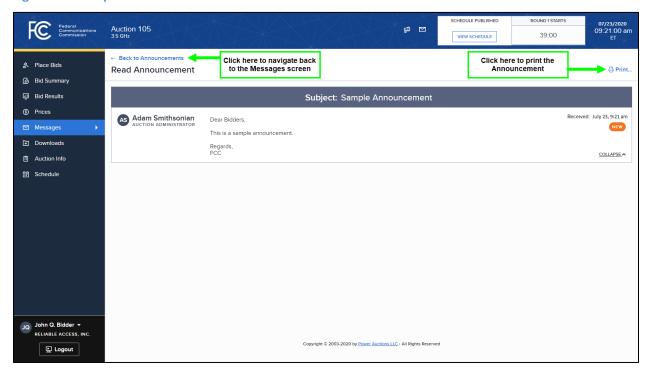
The FCC will send announcements to all bidders containing important bidder information such as changes in the number of rounds per day or the suspension of bidding due to unforeseen circumstances. The Messages screen will only show the first line or part of the first line of an announcement. As noted 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 11.

Figure 11: View entire announcement link



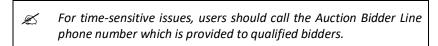
Clicking on the Read link loads the full text of the announcement as shown in Figure 12. To close the text of the announcement and return to the default Announcements tab on the Messages screen, click the \leftarrow Back to Announcements link

Figure 12: An open announcement



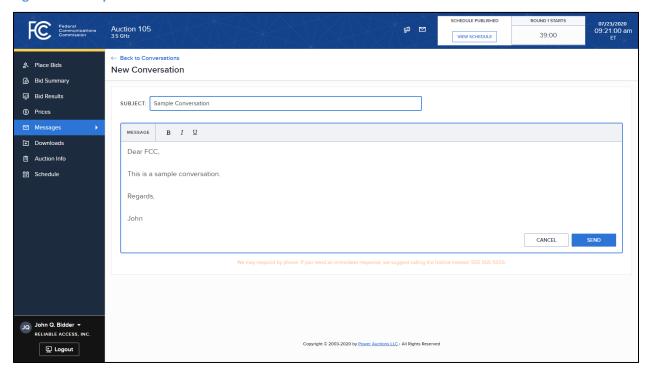
6.2.2. Conversations with the FCC

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.



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 14) to open a new message text box. Next, enter the subject and content of the message in the relevant fields as shown in Figure 13 below. Click SEND to send the message. To cancel an unsent message, click on the CANCEL button.

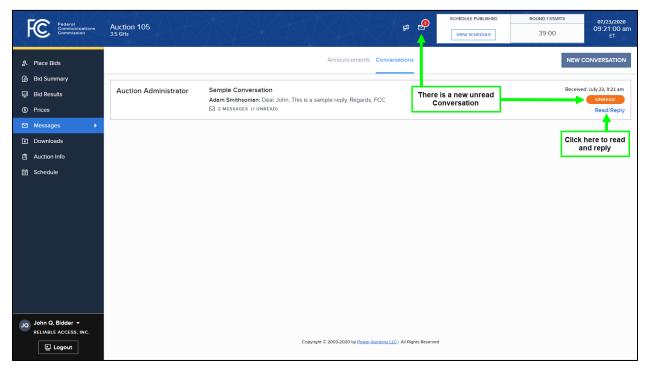
Figure 13: Compose a new conversation



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 14. 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.

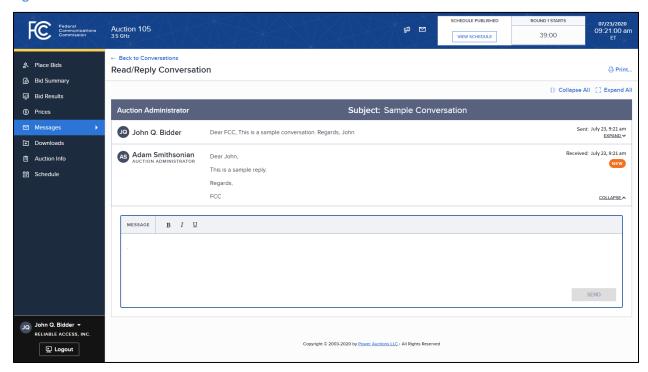
As with announcements, new conversations are indicated by a count next to the Conversations icon, and there is an orange "UNREAD" badge on the right side of the conversation box. All conversations are listed on the Conversations tab. For a given conversation, only the most recent message is shown, as illustrated in Figure 14. To view the complete message and all messages in a conversation, click on the Read/Reply link for that conversation.

Figure 14: 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 15. 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 <u>— Back to Conversations</u> link to return to the Conversations tab of the Messages screen.

Figure 15: View entire conversation



7. Bidding

Users conduct all bidding activities through the Place Bids screen, which is accessed through a link on the navigation bar on the left.

This section describes the layout of the Place Bids screen and provides instructions for preparing a bid file, uploading it, and resolving any upload errors. It also describes how to submit bids to maintain the bidder's demand from the previous round at the current round's clock prices, an option that is available for rounds after Round 1.

7.1. Layout of the Place Bids Screen

The layout of the Place Bids screen is illustrated in Figure 16 below.

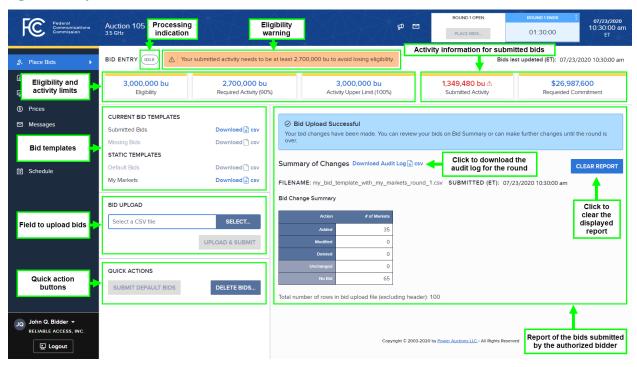


Figure 16: Layout of the Place Bids screen

The left side of the screen provides access to bid templates that the user can download to prepare its bid files. Below the templates box is a field to upload bid files. Below the bid upload field are two "quick auction" buttons to submit default bids (discussed in Section 7.4.2) and to delete bids. The SUBMIT DEFAULT BIDS button is active only for rounds after Round 1. The DELETE BIDS... button is active only if there are submitted bids for the bidder in the round.

The right side of the screen provides a report after each successful or unsuccessful bid upload and after each "quick action" that is performed by the user. The report that appears on the right side of the screen provides the status of the last action by this authorized bidder and does not reflect information

about the bid-related actions of other authorized bidders for the same company. If the user successfully submits bids (either via an upload or using the SUBMIT DEFAULT BIDS button) or deletes bids using the DELETE BIDS... button, then the screen shows a summary of changes and a link to a downloadable audit log file. The screen also shows a report if a user's upload is unsuccessful due to errors in the bid file and provides a link to a downloadable file indicating the bidding errors.

The Bid Entry badge at the top left of the screen reads "IN PROGRESS" if the system is processing a bid upload or a "quick action," entered either by this user or by another authorized bidder of the same company. The button reads "IDLE" if the system is not currently processing any bid-related actions by any of the bidder's authorized users.

The top of the screen shows the bidder's eligibility, required activity, and activity upper limit for the round along with the bidder's submitted activity and requested commitment for the bids submitted so far in the round by any of the bidder's authorized users. Before any bids have been submitted for the round, the submitted activity will be 0 bidding units (bu) and the requested commitment will be \$0. The submitted activity and the requested commitment are updated every time that bids are successfully submitted or deleted. If the submitted activity is less than the required activity, a warning is displayed and the submitted activity is shown in red with a caution icon (a triangle containing an exclamation mark), as shown in Figure 16.



All authorized bidders for the same company will see the same submitted activity and requested commitment values on the Place Bids screen. This information will be updated every time bids are submitted on behalf of the company.

If the bidder has claimed eligibility for a bidding credit discount, the bidder's requested net commitment is shown on the screen instead of the requested commitment. See Section 7.5 for more information.

7.2. Available Bid Templates

A bidder's bid templates for a round are available as soon as the clock prices for the round have been announced (shortly after the results of the previous round have been posted) and remain available during the round. Although bids cannot be submitted before the round starts, the bid templates are available so that users have more time to prepare their bids.

The first three columns of a bid template are MARKET, QUANTITY, and PRICE. The headings for these columns are in ALL CAPS to remind you that they are mandatory columns that need to be included within the file. A bid template also includes other columns with information related to the counties and/or your bids and results, but these are provided for convenience only, are not used by the bidding system, and can be excluded. The headings for these additional, information-only columns are in lower case.

Bid templates can be found on the Place Bids screen under the headers "CURRENT BID TEMPLATES" and "STATIC TEMPLATES" (see Figure 16). The following table summarizes the available bid templates.

Table 3: Summary of available bid templates

Bid Template	Description	Available for
Submitted Bids	Includes all counties that a bidder selected on its Form 175 with the quantities and prices bid, if any.	All Rounds
Missing Bids	Includes all counties for which the bidder has processed demand and for which no bids have been submitted in this round.	Rounds after Round 1
Default Bids	Includes all counties for which the bidder has processed demand. The QUANTITY and PRICE columns are filled in so that, if the user uploads this template, the bids will maintain the bidder's previous round processed demands at this round's clock prices.	Rounds after Round 1
My Markets	Includes all counties that the bidder selected on its Form 175.	All Rounds

Full details about the specifications of the bid templates and the requirements can be found in the Auction 105 file formats document located on the Auction 105 website in the Education section (available at www.fcc.gov/auction/105).

7.3. Bidding in Round 1

7.3.1. Preparing a Bid File for Round 1

In Round 1 of Auction 105, you or another authorized user for the bidder must upload at least one bid file indicating, for each county in which you wish to bid, how many blocks you demand at the opening price. You will only be able to bid for counties that were selected on the bidder's Form 175. A bidder that fails to have any bids placed on its behalf in Round 1 will have its eligibility reduced to zero and will not be able to bid for the reminder of the auction.

You can prepare your bid file by using one of the templates that are available on the Place Bids screen or by creating a .csv file that is formatted according to the file requirements. The bidding system treats bids prepared using a custom file the same way as it treats bids prepared using one of the available bid templates.

Be sure to save your prepared bid file using a .csv format.

Make sure you save your bid upload file in a known place on your computer before you upload it. *The most common user mistake is not to save your file before you upload it.*

⁶ The bid file must be a comma-separated value file and must contain ".csv" as its extension (e.g.

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[&]quot;myuploadfile.csv"). This csv file must be encoded as ASCII, UTF-8, or UTF-8 BOM. The bid template files use UTF-8 BOM encoding. Contact your IT department if you have any questions on encoding.



In some older browsers, including the older Microsoft Edge Legacy, the browser may use a temporary folder to store your downloaded file. This is especially true if you click "Open" when the file is first downloaded instead of "Save". Files stored in temporary folders are difficult to find on the computer. If you are using an older browser, make sure to save the file in a known location before you modify it, and then resave it before you upload it.

If you are using an older version of Excel (e.g. Office 2010), you should save your template using "Save as" instead of "Save". You may need to select "CSV (Coma Delimited (*.csv))" as the "Save as type". Otherwise, this older version of Excel may end up saving the file as a ".txt" file.

It is best to use one of the supported browsers and versions of Excel.

The bid file must contain a header row and the first three headers must be: MARKET, QUANTITY, PRICE. These first three columns must be in the specified order. Any additional columns will be ignored by the bidding system.

For each county for which you wish to bid, the county ID must be in the MARKET column, and you must include valid entries for the QUANTITY column (i.e., the number of blocks you are requesting) and the PRICE column (i.e., the price of your bid). For Round 1, the quantity can be 1, 2, 3, or 4, and the price has to be the opening price. In Round 1, you can only include one bid per county in the file. The bid indicates the number of blocks that the bidder demands for the county at the opening price.

If you do not want to bid for a county that is included in your template, either leave the QUANTITY and PRICE fields empty (as illustrated in Figure 17 below), or delete the entire row from the file. Once you have submitted a bid for a county, you can delete it following the instructions in Section 7.3.3.

⁷ Commas are not allowed in PRICE field.

D Е F G K L M N 1 MARKET QUANTITY PRICE price_poir missing_b market_n; populatio bidding_u supply round previous_previous_start_of_r clock_price 2 AL-005 Barbour, A 3 AL-007 Bibb, AL 4 AL-009 Blount, Al 5 AL-011 Bullock, A AL-013 Butler, AL AL-015 Calhoun, 8 AL-017 Chambers **Bids** 9 AL-019 Cherokee 10 AL-021 Chilton, A AL-023 Choctaw, 12 AL-025 Clarke, AL 13 AL-027 Clay, AL 14 AL-029 Cleburne, 15 AL-031 Coffee, Al 16 AL-035 Conecuh, AL-037 Coosa, AL 18 CA-001 Alameda, 1510271 19 CA-013 Contra Co 1049025 No bids CA-037 Los Angel for these CA-041 Marin, CA markets 22 CA-059 Orange, C. 3010232 23 CA-065 Riverside, 2189641 San Berna 2035210

Figure 17: The My Markets template for Round 1 with bids

7.3.2. Uploading a Bid File

You can upload a bid file while the bidding round is open via the Bid Upload box on the Place Bids screen. To upload a bid file, click the SELECT... button in the bid upload box. This will allow you to search your directories for the appropriate file. Once you have selected the appropriate bid file, click the UPLOAD & SUBMIT button to upload your bids. This is illustrated in Figure 18 below.

07/23/2020 10:30:00 a Federal Communications Commission Auction 105 **₽** □ 01:30:00 Bids last updated (ET): 07/23/2020 10:30:00 an 3,000,000 bu 2,700,000 bu 3,000,000 bu 0 bu △ CURRENT BID TEMPLATES Submitted Bids Download ♣ csv Download Csv STATIC TEMPLATES Download Csv Schedule My Markets Download 🖟 csv Select your bid file The Round Is Open BID UPLOAD my_bid_template_with_my_markets_i UPLOAD & SUBMIT Click to submit your QUICK ACTIONS SUBMIT DEFAULT BIDS DELETE BIDS... John Q. Bidder ▼ Copyright © 2003-2020 by Power Auctions LLC · All Rights Reserved Logout

Figure 18: Using the Place Bids screen to upload a bid file

When bids are successfully uploaded, the Place Bids screen will show a message at the top of the report section indicating that your bid upload was successful, and a summary of the bids will be provided below the message (see Figure 16. This summary, labeled "Bid Change Summary", shows the number of bids that were added, modified, deleted, and unchanged. As shown on Figure 16, the report field also provides a downloadable audit log file that includes all bidding actions for the bidder in the round.

In Round 1, until at least one bid is successfully placed for Round 1, the system will display a "No Bids Placed" badge. This badge is removed as soon as a bid has been successfully placed.

7.3.2.1. Bid Upload Errors

If a bid upload file contains errors that prevent the bids from being submitted successfully, the Place 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 19. The bidding system will list up to ten errors in the report field, with the associated error codes. In addition, there is a <u>Download Report Details</u> link to a file containing the list of errors, capped at 50, along with explanations. See Appendix 3: Bid Upload Errors for a full list of the possible error codes and an explanation for each.

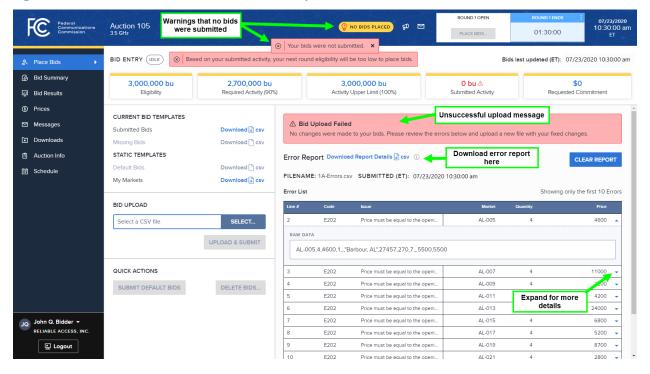
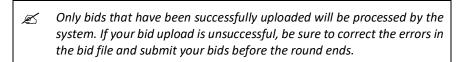


Figure 19: Place Bids screen after unsuccessful upload

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 three 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.

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.



7.3.3. Adding, Changing, and Deleting Bids for Round 1

As long as Round 1 is open, you can add further bids, change the bids that have been submitted, or delete the submitted bids by uploading an additional bid file. You can prepare your bid file using the Submitted Bids template (which includes all submitted bids for the bidder) or by creating a correctly formatted .csv file.

To change a bid that has already been submitted, you need to include that county in the bid file and enter the desired amount in the QUANTITY column and ensure the PRICE is kept at the opening price.

To add a bid for a county for which there is no submitted bid, you need to include the county in your bid file, specify the desired number of blocks in the QUANTITY column and enter the opening price in the PRICE column.

If you wish to delete an existing bid of the bidder for a given county without replacing it with a new bid for that county, you need to specify "Delete", "delete" or "DELETE" in the PRICE column to delete the bid for a county. For example, if you have already submitted bids for counties AL-005, AL-007, and AL-009, you can delete those bids by uploading the file illustrated in Figure 20 below.

Figure 20: Deleting existing bids for some counties

	Α	В	С	D	E	F	G	Н	T.	J	K	L	M	N	0
1	MARKET	QUANTITY	PRICE	round	price_poir	missing_b	market_n	populatio	bidding_u	supply	previous_	previous_	start_of_r	clock_price	غ
2	AL-005		delete	1			Barbour,	27457	270	7			5500	5500	
3	AL-007		delete	1			Bibb, AL	22915	230	7			4600	4600	
4	AL-009		delete	1			Blount, Al	57322	570	7			11000	11000	

Another way to change the bids is to delete all the bids that have already been submitted for the bidder in the round by clicking on the DELETE BIDS... button and then upload a new bid file.



The Delete Bids button will delete ALL bids for the round for your qualified bidder, including bids placed by other authorized bidders for your bidder.

Your upload file does not need to include all your bids, because uploads are incremental. For example, suppose that you (or another authorized bidder for the company) has already submitted bids for counties A, B, and C in this round, and subsequently you successfully upload bids for counties C, D, and E. Then, your bid(s) for county C will replace the previous bid(s) for county C, but the previous bids for counties A and B will remain. Thus, after your upload, the bidder will have submitted bids for counties A, B, C, D, and E. This means, for example, that you can upload separate bids for different sets of counties (e.g., one upload for counties in one state and another upload for counties in another state).

7.4. Bidding in a Round after Round 1

In a round after Round 1, you can *either* bid to maintain the bidder's processed demand for a county (i.e., the demand after processing the previous round's bids) at the new round's clock price *or* bid to change demand at a price associated with the round. You can also bid for additional items, provided you have eligibility to do so.

For a round after Round 1, you can submit your bids by uploading a bid file, similarly to Round 1. If you wish to maintain the bidder's processed demand for all counties at the round's clock price, you also have the option to submit these bids (the bidder's "default bids") by clicking a button on the Place Bids screen.

For rounds after Round 1, the system will display a "Missing Bids" badge if bids have not yet been placed for at least one county for which the bidder has processed demand. This badge is removed as soon as bids are placed for all counties with processed demand.

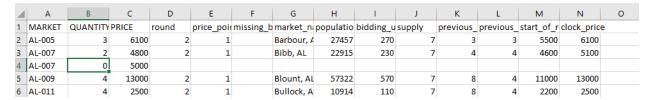
7.4.1. Preparing and Uploading a Bid File for a Round after Round 1

You can prepare your bid file by using any of the templates available on the Place Bids screen or by creating a .csv file formatted according to the file requirements. The bidding system treats bids prepared using a custom file the same way as it treats bids prepared using one of the available bid templates.

As for Round 1 bids, the bid file must contain a header row and the first three headers must be: MARKET, QUANTITY, PRICE. For each county for which you wish to bid, the county ID must be in the MARKET column, and you must include valid entries for the QUANTITY column and the PRICE column. For a round after Round 1, the quantity can be 0, 1, 2, 3, or 4. A bid for the same quantity as the bidder's processed demand must be at the clock price. A bid for a quantity different than the bidder's processed demand can be at any price greater than or equal to the start-of-round price and less than or equal to the clock price.

If you want to increase or reduce demand for a county at multiple price points in the round, you can submit multiple bids for the county, each on a separate line in the bid file, and each indicating a different quantity and price. All bids for the same county must be submitted in the same bid upload file and must be one-directional in terms of price. That is, if all of the bids in a bid file for a county are put in ascending order by price, the corresponding quantities must all either increase or decrease starting from the bidder's processed demand. Figure 21 provides an example of a bid file with two bids for county AL-007. In this example, the bidder's processed demand for this county is 4 blocks. The bid file of Figure 21 contains one bid to reduce demand to 2 blocks at price \$4,800 and another bid to reduce demand to 0 blocks at price \$5,000.

Figure 21: Bid file with multiple bids for a county



If you list a county with processed demand in your upload file, you must specify a QUANTITY and a PRICE. That is, you must specify your intentions for this county for this round. If you leave out a county with processed demand from your upload file, your file will be uploaded if it is otherwise valid. However, until you or another authorized bidder places a bid for this county, the system will remind you that you have a missing bid. If a bid is not placed for a county with processed demand by the time the round ends, the system will place a bid on your behalf at the start-of-round price for a quantity of zero when it processes the bids. (See Section 4.1 of the Auction 105 Technical Guide for details).

Z

If you do not enter values for the second and third columns (QUANTITY and PRICE) for a county that does not have processed demand, the system assumes that you do not want to bid for this county.

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⁸ If bids for a single county are submitted in different bid files, the bidding system will replace the earlier bids with the bids in the last file that is submitted. See Section 7.3.3.

The process to upload a bid file for a round after Round 1 is the same as for Round 1 (see Section 7.3.2). After you have successfully uploaded bids, the system will include those bids in the Submitted Bids template for the round and will update the Missing Bids template appropriately.

7.4.2. Submitting Default Bids

For a round after Round 1, if you wish to maintain demand at the current round's clock prices for all counties for which the bidder has processed demand, you can submit those bids simply by clicking on the SUBMIT DEFAULT BIDS button.

Alternatively, you can download the "Default Bids" bid template and upload those bids to the system. In the "Default Bids" bid template, the MARKET column contains all counties for which the bidder has processed demand, the QUANTITY column contains the bidder's processed demand, and the PRICE column contains the clock price of the current round. Thus, by uploading the "Default Bids" bid template, you are submitting bids to maintain the bidder's processed demands at this round's clock prices.

7.4.3. Modifying Bids for a Round after Round 1

While the round is still open, you can add, change, and delete bids that have been submitted for the bidder, using the "Submitted Bids" template or by creating a correctly formatted .csv file, as described for Round 1.

To change a bid that has already been submitted, you need to include that county in the bid file and enter the desired amounts in the QUANTITY and PRICE columns. If the QUANTITY is equal to the bidder's processed demand, then the PRICE needs to be equal to the clock price.

To add a bid for a county for which there is no submitted bid, you need to include the county in your bid file, specify the desired number of blocks in the QUANTITY column and the desired price in the PRICE column. Note that you can use the "Submitted Bids" template to add a bid, because this template includes all counties that a bidder selected on its Form 175.

If you wish to delete an existing bid of the bidder for a given county without replacing it with a new bid for that county, you need to specify "Delete", "delete" or "DELETE" in the PRICE column to delete the bid for a county.

As with Round 1, all uploads in rounds after Round 1 are incremental, as described in Section 7.3.3. This means, for example, that you can upload separate bids for different sets of counties (e.g., one upload for counties in one state and another upload for counties in another state).



Note that it is not possible for you to make changes to the bids submitted on behalf of the bidder after the round ends. Therefore, we strongly recommend that authorized bidders place their bids and verify these bids using the Bid Summary screen (and/or My Bids Download) early in the round to allow time to make any necessary changes before the round ends.

7.5. Monitoring Commitment and Activity

For each round, the bidding system calculates a bidder's eligibility, required activity, and activity upper limit based upon its processed activity from the previous round (i.e., the activity associated with the bidder's processed demand) or, for the first round, based upon its upfront payments. The top of the Place Bids screen displays these values in addition to the financial commitment and activity associated with the bidder's submitted bids.

Every time you submit bids, the bidding system updates the bidder's requested commitment and submitted activity. The bidding system calculates these values under the assumption that your submitted bids will be applied during bid processing after the round. However, your processed activity for the round may be less or more than your submitted activity if the bidding system cannot apply all of your bids to change demand in full.

If a bidder has claimed eligibility for a bidding credit, the bidding system, by default, displays the requested net commitment (the requested commitment less any bidding credit discount) associated with the bidder's submitted bids instead of the requested commitment on the screen. You can click on the triangle at the bottom right of the box to see the requested commitment and the corresponding discount (see Figure 22).

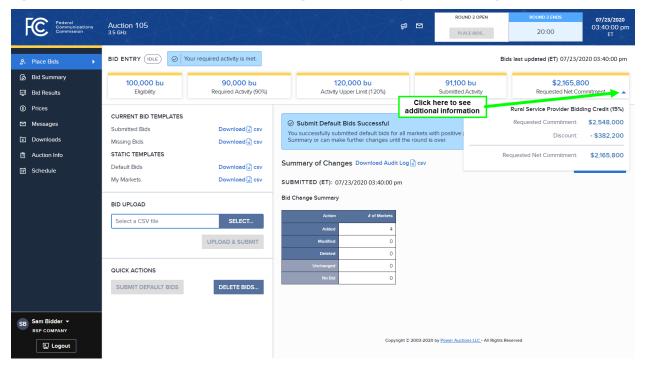


Figure 22: Place Bids screen for a bidder claiming a rural service provider bidding credit

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 23 below. In that case, you can click on the triangle on the left of the discount to see uncapped discount information. Figure 23 illustrates this for a bidder that has claimed eligibility for the small business bidding credit discount.

QUICK ACTIONS

SUBMIT DEFAULT BIDS

Jane Bidder ▼
WIRELESS CONNECTIONS

🖳 Logout

07/24/2020 03:40:00 pn ET FC Federal Communications Commission Auction 105 FD ☑ Bids last updated (ET): 07/24/2020 03:40:00 pm Bid Summary 300,000 bu 270,000 bu 300,000 bu 286,840 bu \$831,452,000 ⊞ Bid Results Click here to see additional information Small Business Bidding Credit (25%) CURRENT BID TEMPLATES Messages Submit Default Bids Successful Requested Commitment: \$856,452,000 Download 🌡 csv Submitted Bids You successfully submitted default bids for all markets with positiv Summary or can make further changes until the round is over. ▲ Discount (capped): - \$25,000,000 Downloads Missing Bids Download 🖟 csv Auction Info STATIC TEMPLATES All Markets Discount (uncapped): \$214,113,000 Summary of Changes Download Audit Log 🖟 csv Default Bids Download 🖟 csv of which, Small Markets Discount (uncapped): \$31,666,000 Schedule My Markets Download 🖟 csv SUBMITTED (ET): 07/24/2020 03:40:00 pm Requested Net Commitment: \$831,452,000 Bid Change Summary BID UPLOAD Select a CSV file UPLOAD & SUBMIT

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Figure 23: Place Bids screen for a bidder claiming a small business bidding credit

DELETE BIDS...

8. Verifying Bids

Only submitted bids are processed by the bidding system. The bidding system provides bidders with several ways to verify that their bids were submitted properly. You can view a summary of your submitted bids on the Bid Summary screen. You can download the My Bids file for the round from the Downloads screen to have a record of the bids submitted for the bidder in the round. You can also download the My Audit Log file to have a historical record of all bidding actions for the bidder in the round.

You should verify your bids in each round of the auction before the round ends.



It is strongly recommended that, before the round ends, you print or save the Bid Summary screen and/or download the My Bids file for a record of the bids submitted on behalf of the bidder in the round.

8.1. Bid Summary Screen

Throughout the auction, you may verify on the Bid Summary screen the bids that have been submitted in a round (and in past rounds) on behalf of the bidder. This screen displays all bids submitted for a round and the associated submitted activity and requested commitment. A bid may have been submitted by you, by another authorized bidder for the bidder, or by the system when the round closes if the bidder had missing bids. If bids change while you are viewing the Bid Summary screen, a message will be displayed indicating this, and you can refresh the screen using the REFRESH button to view the updated information.

Note that this screen displays the bids that (assuming no further changes are made) will be processed when the round ends. This screen does not contain bids that were submitted earlier in the round but were subsequently changed.

The layout of the Bid Summary screen is shown in Figure 24. The first three columns display county information. For rounds after Round 1 of the auction, the next two columns show information about the results of the previous round (the aggregate demand, the bidder's processed demand, and the posted price). The next column displays the clock price for the selected round, and the last six columns display information about the bids in the selected round — specifically, the quantity, bid price, price point percentage, ¹⁰ requested commitment, the name of the authorized bidder that submitted the bid, and the time of bid submission.

⁹ Missing bids are treated by the auction bidding system as requests to reduce to a quantity of zero blocks for the county.

¹⁰ On this screen, the price point percentages are rounded to two decimal places. The full 10 digits of the price point are provided in the My Bids download.

Auction 105 3.5 GHz Round selector Federal Communicati Commission 05/18/2020 12:03:47 pr 4 days 12:32:26 Round 4 🔻 🛕 You have missing bids. Your submitted activity needs to be at least 2,683,390 bu to avoid losing eligibility. Last Refreshed (ET): 05/18/2020 12:03:43 pm REF 2,981,545 bu 2,683,390 bu 2.981.545 bu 2,652,680 bu A \$59,149,800 ⊞ Bid Results ▼ FILTER Markets With Bids SEARCH ID or Name Print. County information Selected round clock price Selected round bid information Showing 1 to 25 of 76 Markets Auction Info
 ■ Auct Schedule \$6,100 100.00% 05/18/2020 11:15:14 am 4 @ \$5.20 AL-015 4 @ \$8,30 AL-019 3 @ \$5,20 4 @ \$11,00 \$13.00 \$13,000 ΔΙ-023 4 @ \$3.50 \$3.90 AL-025 Clarke, AL 4 @ \$6.400 \$7.10 \$7,100 100.00% \$21,300 John Q. Bidder 05/18/2020 11:15:14 an AL-027 4 @ \$3,50 \$3,90 \$3,900 \$11,700 John Q. Bidder 05/18/2020 11:15:14 an AL-029 Cleburne, AL 4 @ \$3.700 \$4.10 \$4,100 100,00% \$12,300 John Q. Bidder 05/18/2020 11:15:14 am JQ John Q. Bidder ▼ AL-031 Coffee, AL \$15,000 \$45,000 John Q. Bidder 05/18/2020 11:15:14 an Logout AL-035 Conecuh, AL 4 @ \$3,200 \$3,60 \$3,600 \$10,800 John Q. Bidder 05/18/2020 11:15:14 an

Figure 24: Layout of the Bid Summary screen

The table on the Bid Summary screen only includes counties for which one or more bids have been submitted on behalf of the bidder in the round. The table includes one row of data for each of the bids. If the bidder has missing bids, this is indicated with a message and a banner at the top of the screen.

At the top of the Bid Summary screen is information regarding the eligibility, required activity, activity upper limit, submitted activity, and requested commitment for the bidder in that round, identical to the information on the Place Bids screen. Unlike the Place Bids screen, however, you may select a previous round to display values relating to that round.

If a bidder has claimed eligibility for a bidding credit, the bidding system will display by default the requested net commitment, taking into account the bidding credit discount and bidding credit discount caps. As on the Place Bids screen, you may also view the requested commitment and the bidding credit discount by clicking on the triangle at the bottom right of the box (for more information see Section 7.5).

Like other screens that show the counties, the Bid Summary screen is paginated. The screen can be printed using the <u>Print...</u> icon located in the top right-hand corner of the screen.

8.2. My Bids Download

You may also verify the bids that have been submitted for the bidder via the My Bids download file, which can be accessed from the Downloads screen (see Section 10 for information on the Downloads screen). Like the Bid Summary screen, the My Bids download provides up-to-date information about the bids submitted during the round. During the round, the file is updated to include the bids from the latest updates that were performed on behalf of the bidder. After the round ends, the file is updated to include bids for a quantity of zero for any missing bids.

Like the Bid Summary screen (see Section 8.1), the My Bids file provides the bidder's submitted bids that will be processed when the round ends. It does not contain bids that were submitted earlier in the round but were subsequently changed.

8.3. My Audit Log

The audit log (for a given round) provides a history of all the bid actions that were performed on behalf of the bidder during the round. It can be download from the Downloads screen. The log includes all the bid upload attempts for a given county, including whether the upload attempt was successful, the name of the authorized bidder that uploaded the file, and the time of the upload. The audit log also contains a record of authorized bidders clicking on "quick actions" such as default bids or deleting bids, and the system placing missing bids when the round ends. You can download the audit log to have a record of that information.

8.4. Missing Bids Template

The Missing Bids template lists the counties for which the bidder has processed demand and for which no bids have been submitted in the current round. You can download this template from the Place Bids screen to verify that the bidder has no missing bids.

9. Viewing Results

You can view information about results in several places: overall auction results are available in the Public Reporting System (PRS), and results specific to a bidder are available on the bidder's Bid Results screen. Only counties for which a bid was submitted during the round or had missing bids are displayed on the Bid Results screen. You may view aggregate demand and price information on the Prices screen for all counties which the bidder selected in Form 175. You may also download information about these results from the Downloads screen.

9.1. Auction Results

Information about the overall results of Auction 105 are available to bidders and to the general public on the PRS. The PRS can be accessed by the public at <u>auctiondata.fcc.gov</u> or from a link on the Auction 105 website (www.fcc.gov/auction/105) in the Results section.

9.2. Bid Results Screen

After results for a round have been posted, you may view the results of bid processing for bids that were submitted in the round on the Bid Results screen. You may also view the results of bid processing for past rounds.

The layout of this screen is shown in Figure 25 below. The first four columns provide information about each county – specifically, the market ID and name, the number of bidding units, and the supply. The next five columns provide the results of bid processing – specifically, the aggregate demand, the excess demand, the bidder's processed demand, the posted price, and the bidder's commitment for the county. ¹¹

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¹¹ The bidder's commitment for a county is calculated as the product of the posted price and the bidder's processed demand.

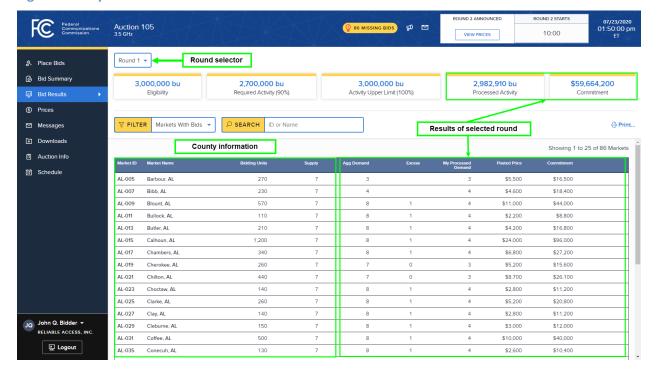


Figure 25: Layout of the Bid Results screen

The top of the Bid Results screen shows the bidder's eligibility, required activity, and activity upper limit for the round as well as the bidder's processed activity and commitment after the bid processing for that round. The bidder's processed activity and commitment are calculated based on the bidder's processed demands.

If a bidder has claimed eligibility for a bidding credit, the bidding system will display by default the net commitment, taking into account the bidding credit discount and bidding credit discount caps. You may also view the commitment and the corresponding bidding credit discount by clicking on the triangle at the bottom right of the net commitment box. This is analogous to requested net commitment on the Place Bids screen (for more information see Section 7.5).

You may view the results from previous rounds on the Bid Results screen by selecting the round number from the round selector, located at the top of the screen.

You may print a record of the bid results for a round by clicking on the <u>Print...</u> icon on the Bid Results screen. Like other screens that show the counties, the Bid Results screen is paginated.

You can filter the counties using one of the following options: "Markets with Bids", "Markets With Bids Not Applied in Full" (not available for Round 1), and "Markets with Processed Demand".

If the bidder has one or more bids that were not fully applied, the Bids Results screen contains a message at the top of the page, and links to <u>Result Details</u> are provided for the corresponding counties at the right of the table (see Figure 26). You may click on those links to obtain more information about any bid for a county that was not applied in full. You may also use the "Markets With Bids Not Applied in Full" filter.

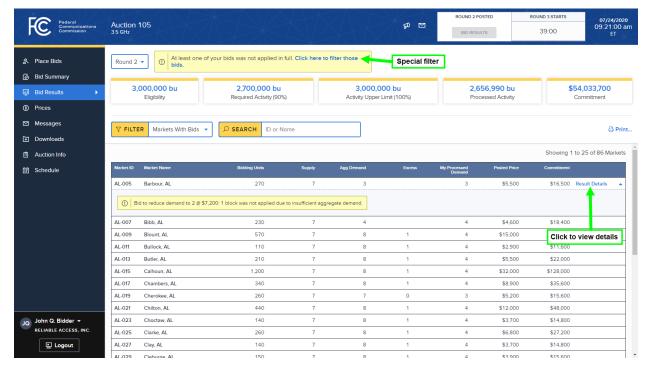


Figure 26: Bid Results screen when some bids were not fully applied

At the end of the auction, you can use the "Markets With Processed Demand" filter on the Bid Results screen to view all counties where you have won blocks (as illustrated in Figure 27 below). For a given county, the My Processed Demand column shows the number of blocks that the bidder won and the Posted Price column shows the price per block. The bidder's overall commitment (or net commitment) is displayed at the top right of the screen.

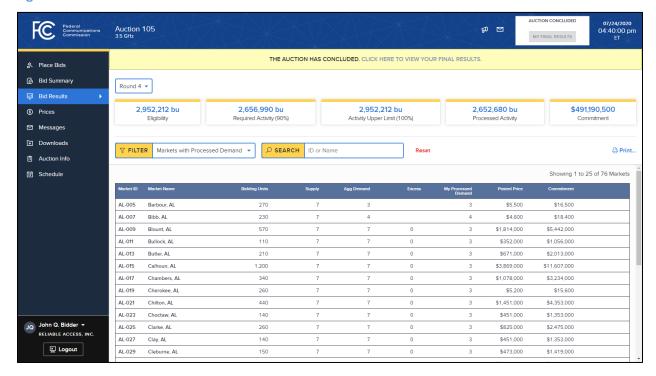


Figure 27: Bid Results screen after the auction has concluded

9.3. Prices Screen

The Prices screen shows the prices for a round for all counties that were selected on the bidder's Form 175 along with information about bidding units and supply. For Round 1, the Prices screen shows the opening price for each county.

For a round after Round 1, as soon as the prices for the round have been announced, the Prices screen shows the price range for each county: the start-of-round price is the lowest price in the range, and the clock price is the highest price in the range. The % Increase column indicates the percentage by which the clock price exceeds the start-of-round price. Note that, because clock prices are rounded up, the % increase for a given county may exceed the increment percentage for the round. 13

For a round after Round 1, the Prices screen also provides information about the results of the previous round: the Agg Demand column indicates the aggregate demand for the county and the Excess column indicates the excess demand. Note that, because there is no CMA-level bidding in this auction, the CMA ID column on the Price screen is empty for all counties.

An example of the Prices screen is provided in Figure 28 below. The screen has a round selector to view the data for a past round and is paginated. You may print the prices for a round by clicking on the <u>Print...</u> icon.

¹² Price information is also available in a number of downloads, including the bid templates and the county status download.

¹³ For more information on rounding, see Auction 105 Technical Guide, Section 6.2.

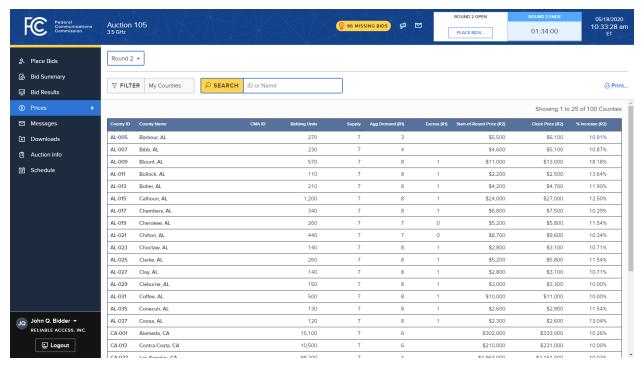


Figure 28: Layout of the Prices screen

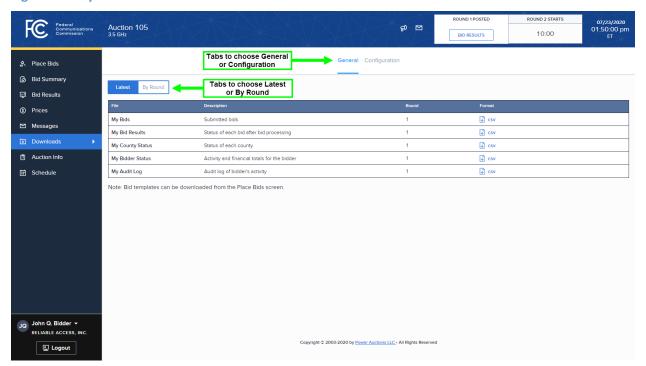
9.4. Downloadable Results

You can also download a number of different files containing results on the Downloads screen: My Bid Results, My County Status, and My Bidder Status. See Section 10 for information on the Downloads screen.

10. Downloadable Files

The bidding templates can be found on the Place Bids screen. Other downloads are found on the Downloads screen. The downloadable files on the Downloads screen are grouped into two tabs, General and Configuration, as shown in Figure 29 below.





The files on the General tab are round-specific and become available at different times depending on when the underlying data is generated. The General tab can be viewed in two ways: "Latest" and "By Round". By selecting "Latest", you can view each file for the most recent round for which it has been generated. Selecting by "By Round", allows you to pick a specific round from a dropdown list and view all files that have been generated for that round.

If a file is not yet available for the round, it will be grayed out and cannot be downloaded. This is the case for the My Bid Results download in Figure 30 below. The message to the right of the icon indicates when the file will be available for that round.

Federal Communications Commission Auction 105 01:30:00 General Configuration Bid Summary ⑤ Prices My Bids ☑ Messages Csv Available when the results of the round are posted Status of each bid after bid processing My Bid Results My County Status Status of each county **₽** csv Auction Info My Bidder Status Activity and financial totals for the bidder **₽** csv Schedule My Audit Log Audit log of bidder's activity **₽** csv Note: Bid templates can be downloaded from the Place Bids screen. Cannot be downloaded at this point - greyed out with empty download icon JQ John Q. Bidder ▼
RELIABLE ACCESS, INC. Copyright © 2003-2020 by Power Auctions LLC • All Rights Reserved . Logout

Figure 30: Downloads screen where My Bid Results is not yet available

Table 2 below describes the two tabs of the Downloads screen—General and Configuration—and the files on each tab along with when each file becomes available. Details about the specifications for downloadable files are available on the FCC website for Auction 105 (www.fcc.gov/auction/105) under the Education tab.

Table 2: Files available on the Downloads screen

Tab	Description and files	Availability for a given round
General (round-specific files)	My Bids – One record for each bid entered by the bidder and one record for each county for which the bidder had processed demand in the previous round but did not submit a bid in this round (missing bid).	Available when the prices for the round are announced Updated every time bids are submitted or deleted
	My Bid Results – One record for each county for which the bidder bid during the round or had a missing bid.	Available when the round is posted
	My County Status – Information about each county the bidder selected in its Form 175, including the aggregate demand, the posted price for the round, and the next round's clock prices.	For Round 1, available when the prices are announced For later rounds, available when the round is posted and updated when the next round's prices have been announced

Tab	Description and files	Availability for a given round
	My Bidder Status – Consists of a single record and provides overall information for the bidder for the round, including the bidder's eligibility, activity, requested commitment, and processed commitment as well as bidding credit information for bidders that have claimed eligibility for a bidding credit.	Available when the prices for the round are announced Updated every time bids are submitted or deleted, and when the round is posted
	My Bid Audit Log – Audit log of the bidder's bidding actions.	Available when the prices for the round are announced Updated every time a bidding action is performed for the bidder
Configuration	My Counties – A list of the counties the bidder selected in Form 175 with static information for each county.	Available throughout the auction (not specific to a 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 error message on first access

Figure 31: Microsoft Edge (Chromium) connection error message

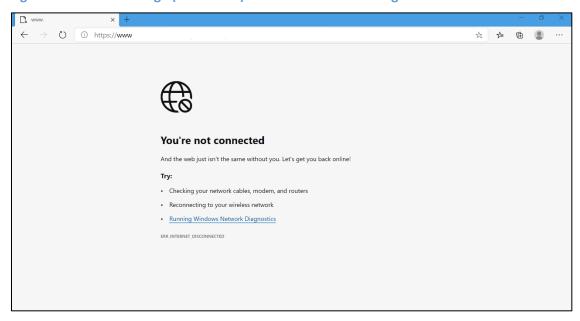
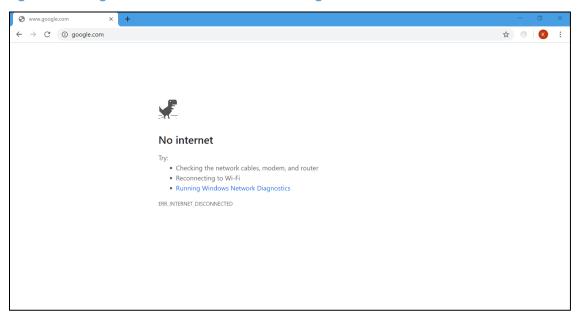


Figure 32: Google Chrome connection error message



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 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 bidding 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.

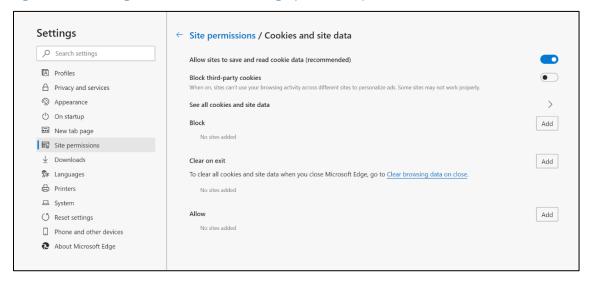
Situation 2: Cookies must be enabled error message

The bidding system 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 Microsoft Edge (Chromium), complete the following steps:

- Click on the tools icon ... in the top right-hand corner of your browser.
 - o Click on "Settings" 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 Figure 33: Enabling cookies in
 Microsoft Edge (Chromium).
 - o Then, close the "Settings" tab.

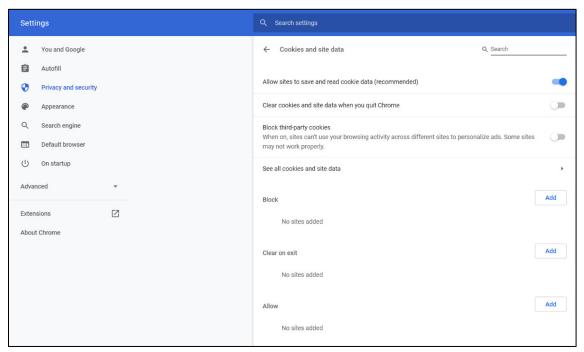
Figure 33: Enabling cookies in Microsoft Edge (Chromium)



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

- Click on the tools icon in the top right-hand corner of your browser.
 - o Click on "Settings" and "Privacy and Control".
 - O In the "Privacy and security" section, click on the "Site settings" area, and then click on "Cookies and site data" to display a screen similar to that shown in Figure 34.
 - Slide the circle to the right next to the words "Allow sites to save and read cookie data (recommended)".
 - o 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 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."

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.
 - o Click on "Settings" and "Site permissions".
 - Under "JavaScript" slide the circle to the right next to the words "Allowed (recommended) in Figure 35.
 - o Then, close the "Settings" tab.

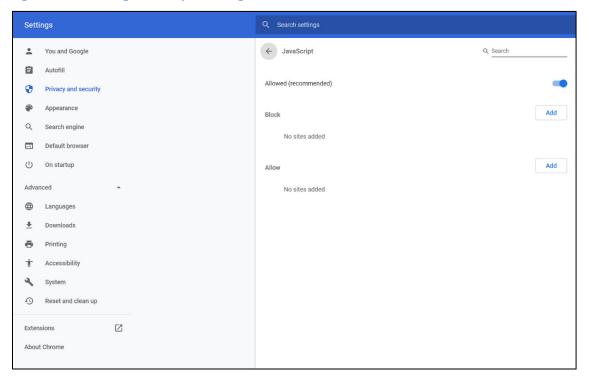
Figure 35: Enabling JavaScript in Microsoft Edge (Chromium)



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.
 - o Click on "Privacy and Security".
 - o 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.
 - o Slide the circle to the right next to the words "Allowed (recommended)".
 - o Then close the "Settings" tab.

Figure 36: Enabling JavaScript in Google Chrome



Situation 4: Page cannot be displayed error 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.
 - o 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 Bid Summary. 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 placing bids, you should verify your bids using Bid Summary. 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 Auctions 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)

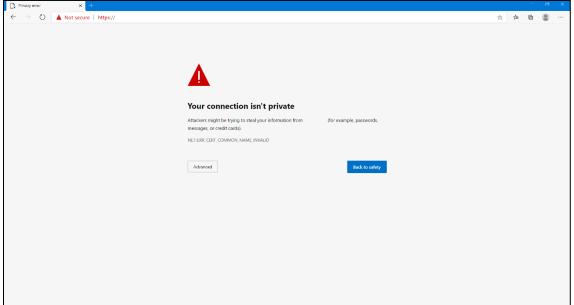
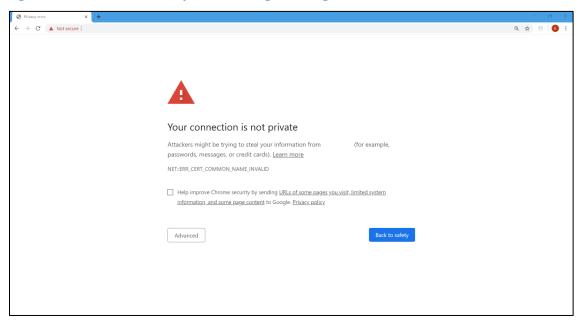


Figure 38: Certificate security error message in Google Chrome



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 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. 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 lose bidding eligibility. FCC Technical Support is generally available Monday through Friday from 8 a.m. to 6 p.m. ET.

Appendix 3: Bid Upload Errors

The table below lists all the bid upload error codes along with the corresponding error messages that are displayed. The text displayed after the colon and the numbers at the very end of a message are just examples, for purposes of this user guide, of what could actually be displayed and are shown below in *italics*.

Error Code	Error Message	
E001	Your file does not have enough data in it.	
E002	Your file exceeded 10 MB in size.	
E003	The bid upload file must be a standard CSV file, encoded as an ASCII or UTF-8 file.	
E004	Your file must be a csv file and must end in '.csv'.	
E005	The first three fields in the header must be in this order: MARKET, QUANTITY, PRICE.	
E006	Round is not open.	
E007	You are no longer eligible to bid.	
E008	Your eligibility is 3 bu. You do not have enough eligibility to bid for any of your markets.	
	You are no longer eligible to place bids in this auction.	
E009	Someone else from your company is currently bidding. Please try again later.	
E010	Error: file missing.	
E011	You must have submitted bids to delete.	
E012	You cannot submit default bids if bids have already been submitted.	
E013	You cannot create default bids in Round 1.	
E100	Market invalid or missing.	
E101	You did not select this market on your auction application.	
E200	Price not specified.	
E201	Invalid Price: -134.56 is not a positive integer.	
E202	Price must be equal to the opening price for this market, \$5555.	
E203	Price must be greater than or equal to last round's posted price for this market, \$6688	
E204	Price must be less than or equal to this round's clock price for the market, \$8034.	
E205	Duplicate Price: You cannot specify two bids at the same price for a market.	
E300	Quantity not specified.	
E301	Invalid Quantity: Must be an integer between 1 and 4.	
E302	Duplicate quantity: You cannot specify two bids with the same quantity for a market.	
E303	Starting with your processed demand, quantities for a market must either all be	
	increasing or decreasing as prices for that market increase.	
E304	To maintain the same quantity as your processed demand, you must enter a bid at this	
	round's clock price.	
E400	PRICE and QUANTITY cannot be null for a market with one or more submitted bids. You	
	must specify your intentions: a) specify a price and quantity for that market, b) specify a	
F401	delete request, or c) leave this market out of your upload file to leave it unchanged.	
E401	PRICE and QUANTITY cannot be null for a market with a missing bid. You must specify your intentions: a) specify a price and quantity for that market or b) leave this market	
	out of your upload file so that it remains a missing bid.	
E402	You specified a null bid request (PRICE and QUANTITY null) for a market that already has	
	a bid in the file.	

Error Code	Error Message
E403	You cannot place a bid with QUANTITY = 0 for a market with no processed demand from the previous round. You must specify your intentions: a) specify a price and quantity other than zero for that market, b) specify a delete request, or c) leave this market out of your upload file to leave it unchanged.
E404	You specified a bid for a market that already has a null bid request (PRICE and QUANTITY null) in the file.
E405	You cannot have two or more rows with PRICE and QUANTITY as null for the same market.
E500	You specified a delete request (PRICE = DELETE), but there is no bid to delete for this market.
E501	You specified a delete request (PRICE = DELETE) for a market that already has a bid in the file.
E502	You specified a bid for a market that already has a delete request (PRICE = DELETE) in the file.
E600	Your submitted activity (8000 bu) would exceed your activity upper limit (6000 bu).
E700	An upload by user Reliable Access, Inc. is currently being processed.

Appendix 4: Glossary of Terms

Term	Definition
Activity	Bidding activity is the total number of bidding units associated with a bidder's demands. During a round, and before the bids from the round are processed, the submitted activity shown on the Place Bids and Bid Summary screens is an estimate of activity that assumes that all the bids submitted so far in the round are applied during bid processing.
	After the bids of a round have been processed, the Bid Results screen shows the total number of bidding units associated with the bidder's processed demands for the round ("processed activity").
Activity Requirement Percentage	A percentage (expressed in terms of eligibility) that the processed activity must meet in order for a bidder's eligibility to remain unchanged in the next round. Initially, the activity requirement percentage will be set at 95%. The FCC retains the discretion to change the percentage during the auction within the range of 90% and 100%.
Activity Upper Limit	The maximum number of bidding units that the bidder can bid for in a round. In Round 1, the activity upper limit is equal to the bidder's eligibility for the round. Starting in Round 2, the activity upper limit is 120% of the bidder's eligibility for the round. The FCC retains the discretion to change the percentage during the auction within the range of 100% and 140%.
Aggregate Demand	The sum of processed demands by all bidders for a given county for a given round.
Auction ID	The FCC auction number for this auction, Auction 105.
Bid Templates	Four templates available on the Place Bids screen that can be used to prepare a bid file and to verify that bids have been properly submitted: • Submitted Bids • Missing Bids • Default Bids • My Markets
Bidding Credit	A discount on a bidder's total payment for the licenses it wins in the auction. Bidders that qualify for a rural service provider bidding credit receive a 15% discount. Bidders that qualify for a small business bidding credit receive either a 15% or 25% discount. The total amounts of bidding credit discounts on new licenses are capped as described below.

Term	Definition
Bidding Credit Discount Caps	The total amount of an eligible bidder's rural service provider bidding credit discount will be capped at \$10 million. The total amount of an eligible bidder's small business bidding credit discount will be capped at \$25 million. Of that, the small business bidding credit discount will be capped at \$10 million for bids on blocks in small markets.
Bidding Unit	Unit used for measuring activity and eligibility. Each county is assigned a number of bidding units. This number does not change during the auction.
Clock Price	The maximum price at which a bidder can submit a bid in the round for a given county.
Commitment	The sum, over all counties, of the bidder's processed demand for a county multiplied by the county's posted price, for the round.
Default Bids	Bids to maintain the bidder's processed demands at this round's clock prices.
Eligibility	The maximum number of bidding units for which the bidder can have processed demand after the round. For Round 1, this is also the maximum number of bidding units that the bidder may bid for in the round. For Round 1, the eligibility depends on a bidder's upfront payment. For every other round, a bidder's eligibility depends on its processed activity and the activity requirement percentage.
FRN	The FCC Registration Number, a unique identifier for each bidder.
Market ID	A unique identifier for each county in the auction.
Missing Bid	If a bidder fails to submit a bid for a county for which it has processed demand, the bidding system will consider that to be a missing bid, which will be processed as a bid request for a quantity of zero at the start-of-round price. A missing bid will not necessarily reduce the bidder's processed demand to zero after the round. The bidding system will apply as much of the missing bid request as it can, subject to the overall restriction that aggregate demand cannot fall below supply of a given county.
Opening Price	The Round 1 price for a county, also referred to as "minimum opening bid".
PAL	A Priority Access License consisting of a 10 MHz channel within the 3550 – 3700 MHz band. Up to seven PALs may be licensed in any given county, subject to a four PAL channel aggregation cap for any licensee.
Posted Price	The price for a county after the bids of the round are processed. The posted price for a round becomes the start-of-round price of the next round.

Posted Round A round status indicating that the bids from the round have been processed, and the results have been made available to the bidders through the bidding system. The price point indicates, as a percentage, the distance of the bid price between the start-of-round price and the clock price. For example, the 0% price point refers to the start-of-round price, the 100% price point refers to the clock price, and the 50% price point refers to the average of the start-of-round price and the clock price. For bid processing, the bidding system converts bid prices into price points in order to determine the order of processing across all counties. The total number of bidding units associated with the bidder's processed demand after processing the bids of the round. The bid processing algorithm ensures that processed activity does not exceed the bidder's eligibility for the round. Processed Demand The bidder's demand for the county after the bids for the round have been processed. The Public Reporting System The total gross bid amount calculated at the clock price given all bids that the bidder has submitted so far in the round, assuming that all bids are applied during bid processing. During the round, bids for the round have not yet been processed, so the requested commitment, which is updated as bids are submitted, is an estimate of a bidder's commitment. This number is calculated and shown to the bidder on the Place Bids and Bid Summary screens. The minimum total number of bidding units that the processed activity must meet in order for a bidder's eligibility to remain unchanged in the next round. The required activity is calculated by multiplying the activity requirement percentage by the bidder's eligibility for the round. Start-of-round Price The time period during which bids can be submitted. The minimum price at which a bidder can submit a bid in the round for a given county. The start-of-round price for a round for a county is equal to the posted price of the previous round for that county.	Term	Definition
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