

# FCC Incentive Auction Reverse Auction Bidding System

**USER GUIDE** 

Last updated: May 5, 2016

## **DISCLAIMER**

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

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

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

# **COPYRIGHT NOTICE**



Copyright © 2005–2016 by Power Auctions LLC. Permission is granted to duplicate and use this user guide solely for purposes of participation in the Commission's incentive auction. All other rights are reserved.

# **Contents**

1.	Introduc	ction	1
1.1	Coı	nventions	1
1.2	. Mo	ock Auction	1
1.3	. Gui	ide Structure	1
2.	The Rev	erse Auction Clock Phase Process	3
3. !	System	Requirements and Access	5
3.1	Miı	nimum System Requirements	5
3.2	. Log	gging In	6
:	3.2.1.	First Time Login Procedure	7
:	3.2.2.	Standard Login Procedure	9
3.3	. Mu	Iltiple Users for the Same Qualified Bidder	10
3.4	. Aut	tomatic Logout	10
3.5	. Loc	ck Screen and Closing User Access	11
3.6	i. Ado	ditional Information	11
4.	Navigati	ion Bar and Summary of Screens	12
4.1	Na	vigation Bar and Features Common to All Screens	12
4.2	. Sur	mmary of Auction System Screens	13
5	Adminis	trative Screens	15
5.1	Aud	ction Schedule	15
5.2	. Me	ssages	16
į	5.2.1.	Receiving and Reviewing Announcements	17
į	5.2.2.	Sending a Message to the FCC	17
5.3	. Sta	tion Info	20
6.	Bidding	in the Reverse Auction	22
6.1	Vie	wing Initial Relinquishment Option and Bidding Status	22
6.2	Pla	cing Bids, Verifying Submitted Bids, and Changing Bids	24
(	6.2.1.	Placing Bids	25
(	6.2.2.	Verifying Bids in the Bid Summary	30
(	6.2.3.	Changing Bids	30
6.3	s. Pro	oxy Bidding	31

	6.3.2	L. Submitting Proxy Instructions	32
	6.3.2	2. Changing or Deleting Proxy Instructions	36
	6.3.3	3. Submitting a Different Bid than the Bid Placed by Proxy	37
	6.3.4	1. Proxy Bid Instructions for Frozen Stations	37
	6.4.	Viewing the Results of a Round	38
	6.5.	When Bidding Has Concluded for a Stage	42
7.	Dow	nloads	44
8.	Feat	ures of Stage 2 and Any Subsequent Stages	46
Αŗ	pendix	1: System Troubleshooting	A1 – 1
	Situatio	on 1 – "This page can't be displayed" screen on first access	A1 – 1
	Situatio	on 2 – "Cookies must be enabled" displayed	A1 – 3
	Situatio	on 3 – "JavaScript must be enabled" displayed	A1 – 5
	Situatio	on 4 – "page cannot be displayed" shown when moving to a different screen	A1 – 6
	Situatio	on 5 – "This page has expired" displayed when you press the back button	A1 – 7
	Situatio	on 6 – Your security settings do not allow you to download a file in Internet Explor	er A1 – 7
	Situatio	on 7 – Your computer crashes	A1 – 8
	Situatio	on 8 – Certificate error message	A1 – 8
Αŗ	pendix	2: RSA SecurID® Token Information	A2 – 1
	Numbe	er of RSA Tokens Issued and Extra RSA Tokens	A2 – 1
	Replaci	ng Lost or Damaged RSA Tokens	A2 – 1
	Change	e of User (Authorized Bidder)	A2 – 1
Αŗ	pendix	3: Bidding Status Definitions	A3 – 1
Αŗ	pendix	4: Bid Options as a Function of Pre-Auction Band	A4 – 1
Αı	pendix	5: One-Way Bidding Hierarchy	A5 – 1

# 1. Introduction

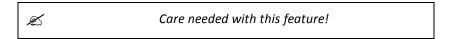
This guide describes the features of the web-based Auction System that will be used to bid in the clock phase of the reverse auction.

During the reverse auction clock phase, broadcasters that have been qualified by the FCC to participate may bid to accept price offers for relinquishment options at prices which decrease in each round. Alternatively, they may choose to drop out of bidding and remain on air.

#### 1.1. Conventions

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

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



Most of the examples shown are for "AAA Broadcasting," a bidder with a single station. Where it would be helpful, examples are also shown for "ALL Broadcasting," a broadcasting company with four stations.

In this guide, the term "bidder" refers to an applicant that has been identified by the FCC as qualified to bid in the clock rounds of the reverse auction based on review of its FCC Form 177 application and the processing of initial commitments by the Auction System. The term "user" refers to an individual authorized bidder identified on a qualified bidder's Form 177 as an individual authorized to access the Auction System to place bids for the qualified bidder's station(s).

All station data, bidding data, prices, and times shown in this user guide are for illustrative purposes only.

#### 1.2. Mock Auction

To gain experience in bidding in the clock phase of the reverse auction, each bidder will be able to participate in a mock auction. While participation in a mock auction is not mandatory, we recommend that bidders use this opportunity to practice using the Auction System and to verify the suitability of their computer equipment and browsers.

#### 1.3. Guide Structure

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

- Section 2 provides an overview of the reverse auction process;
- Section 3 describes the system requirements for accessing the system and how to log in;

- Section 4 explains the navigation bar and provides a summary of the screens available to bidders;
- Section 5 describes the information that is available through the Auction System for the reverse auction;
- Section 6 describes how to view the currently held option (including the initial options for Round 1 of a stage) and view the bidding status of each station and how to bid in the reverse auction, including proxy bidding;
- Section 7 describes the downloads that are available; and
- Section 8 discusses features specific to Stage 2 and subsequent stages, if these are required.

## There are also five appendices:

- Appendix 1 provides troubleshooting tips for a number of different scenarios;
- Appendix 2 provides additional information about RSA SecurID® tokens;
- Appendix 3 provides definitions of the statuses that a station may have during the auction;
- Appendix 4 contains tables of bid options for stations with UHF, High-VHF and Low-VHF preauction bands; and
- Appendix 5 provides an illustration of the one-way bidding hierarchy.

## 2. The Reverse Auction Clock Phase Process

At the start of the clock phase of the reverse auction for Stage 1 and before the first bidding round opens, bidders will be able to access the results of the initial clearing target determination to find out the initial relinquishment option assigned by the Auction System to each of their stations, based on the initial commitments. Bidders will also see a bidding status for each of their stations qualified to participate in the clock phase.

The reverse auction clock phase will proceed in a series of rounds according to an announced schedule that will identify starting and ending times for each round. In each round, stations with the status of "BIDDING" will be offered prices for their available relinquishment options. Each bidder may choose to bid to accept one of these options (and, if appropriate, a fallback option) or, alternatively, may choose to drop out of bidding.

After a round closes, the Auction System will process the bids from all the bidders and posts the results of the bid processing (the "round results"). A bidder will be able to view round results only for its own stations. Round results will indicate, for each of a bidder's stations, the station's bidding status and, for all stations that have not exited, the relinquishment option to which the station is assigned, that is, its "currently held" option.<sup>2</sup> Round results will also show, where applicable, the options for which the station is eligible to bid for in the next round, the corresponding price offers (clock prices), and the vacancy ranges for the station's pre-auction band and for the station's available options excluding its currently held option.<sup>3</sup>

The bidding status of a station may change from one round to the next. For example, a station that had the status "BIDDING" in one round may have the status of "FROZEN – Currently Infeasible" or "FROZEN – Provisionally Winning" after the round's results have been posted. Stations that have dropped out of

<sup>&</sup>lt;sup>1</sup>The possible bidding statuses are discussed in Section 6 and are defined in Appendix 3. The Auction System must be able to find a feasible channel for a station in its pre-auction band for a station to have the status "BIDDING" since the station must have the option of dropping out of the auction if offered a price it is not willing to accept. The availability of relinquishment options available to a particular station depends upon the relinquishment options selected for the station on the FCC Form 177, its currently held relinquishment option, and the bidding hierarchy. For more information about relinquishment options, see Appendix 4.

<sup>&</sup>lt;sup>2</sup> In order for a station to hold a particular relinquishment option, bid processing must determine that the station can be accommodated in that option. While it is always possible to accommodate bidding to Go off-air, bidding to move to a VHF band requires that the Auction System be able to find a feasible channel for the station in the VHF band to which the station wishes to move. Therefore, if a station holds a relinquishment option in a band, the Auction System has determined that the station is feasible in that band. The Auction System will ensure that the station remains feasible in that band unless the station chooses to bid to move to another band or drop out of the auction to remain in its pre-auction band.

<sup>&</sup>lt;sup>3</sup> Bidders will be provided with "vacancy" information regarding the relative availability of channels in bands relevant to each of their stations given its bid options. Vacancy information may help reverse auction bidders assess the likelihood that the price offers for a bid option will continue to decrease, as well as gauge the likelihood that any bid to move to another band will be accepted in the next round. For more information, see Section 6.1 Viewing Initial Relinquishment Option and Bidding Status

bidding will have the status "EXITED – Voluntarily." If the Auction System determines that a feasible channel can always be found in a station's pre-auction band, the station will be designated to remain in its pre-auction band and be given the status "EXITED – Not Needed." As the auction progresses and prices are lowered, fewer and fewer stations will have the status "BIDDING." The reverse auction of Stage 1 will finish when every station has been assigned to one of the following three statuses: "FROZEN – Provisionally Winning," "EXITED – Voluntarily," or "EXITED – Not Needed."

The reverse auction of Stage 1 will be followed by the forward auction of Stage 1. If the final stage rule is met during the forward auction in Stage 1, then provisionally winning stations at the end of Stage 1 of the reverse auction will be declared winning stations. If the final stage rule is not met in Stage 1, then the incentive auction will proceed to Stage 2 with a lower clearing target.<sup>4</sup> In any stage, the reverse auction will occur first, to be followed by the forward auction.

In any stage, reverse auction bidding will generally follow the process described above. If the auction proceeds to a subsequent stage, a bidder that had at least one station with status "FROZEN — Provisionally Winning" at the end of the previous stage will be able to log in to the Auction System for Stage 2 and see, for each of its station(s), the station's bidding status at the beginning of the new stage and where applicable the station's initial option. At the beginning of a subsequent stage a station could have the new status "FROZEN — Pending Catch Up." Stations that exited the auction in the prior stage, either because they were found to be not needed or because they dropped out, will not be able to bid in the subsequent stage.

Page 4

<sup>&</sup>lt;sup>4</sup> See Section 8.

# 3. System Requirements and Access

This section explains the system requirements for accessing the Auction 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 Auction System:

- Microsoft® Windows® 7 or Apple® Mac® OS X® 10.7
- Microsoft® Internet Explorer® 11 or a recent version of Google Chrome™ (the browser must be configured to accept cookies and JavaScript) with a minimum of TLS 1.1⁵ security.6
- Access to the internet
- 1600 x 900 screen resolution or higher.<sup>7</sup>

Smartphones, and tablets are not supported. The Auction 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 Auction 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.

Users are discouraged from using web browsers containing third-party toolbars or other extensions. Third-party browser extensions may potentially cause problems for users of interactive websites, including the Auction 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.

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

<sup>&</sup>lt;sup>5</sup> These are the default settings for most modern browsers. Appendix 1 explains how to check the settings and/or reset them, in case this is necessary.

<sup>&</sup>lt;sup>6</sup> Microsoft Internet Explorer 11 is referred to elsewhere in this document as "Internet Explorer." Google Chrome is referred to elsewhere in this document as "Chrome." Google and the Google logo are registered trademarks of Google Inc.

<sup>&</sup>lt;sup>7</sup> If all of the information from the Auction System cannot fit on your display, you can either zoom out using your Internet browser or scroll right and left using the scroll bars. To adjust the zoom, hold down the control ("ctrl") key and use the "+" and "-" keys to zoom in and out.

# 3.2. Logging In

Users can log in to the Auction System only during periods of availability set by the FCC. Therefore, the link to the Login screen, as shown in Figure 1, will only be visible during those times. When users cannot log in there will be a message on the screen and the link to access the Login screen will not be visible.

Figure 1: Auction System home page



Click on the <u>Click here for the login screen</u> link in order to access the Login screen shown in Figure 6 on page 10.

This guide provides two sets of login instructions: Section 3.2.1 – initial login where the user creates a personal identification number ("PIN") and logs in for the first time, and Section 3.2.2 – the standard login used after the PIN is created. The majority of users will already have set their PIN when making initial commitments and will continue to use the same PIN. New users and users logging in with a new (e.g., replacement) token should follow the instructions for the initial login.

Each authorized bidder listed on the bidder's Form 177 will have a unique username (user ID) provided by the Commission. All authorized bidders for a qualified bidder will use the same password, which is the password associated with the FRN (FCC Registration Number) on the bidder's Form 177.

Each authorized bidder is assigned a specific RSA SecurID® token ("RSA token") for the auction as shown in Figure 2. The RSA token generates a time-sensitive 6-digit tokencode that changes every 60 seconds. This tokencode is required as part of the login process. The FCC mailed RSA tokens, for distribution to

authorized bidders, with the Second Confidential Status Letter sent to the contact person identified in the FCC Form 177. Each user will need to set a PIN for its RSA token.

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

Figure 2: An RSA SecurID® token



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

RSA tokens should be returned to the FCC when no longer needed.

# 3.2.1. First Time Login Procedure

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

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

Username (user ID): FCC assigned

• Password: FRN password associated with the qualified bidder's FRN

• RSA tokencode: a six-digit code generated by the RSA SecurID® token

In the Auction 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 Login ».



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

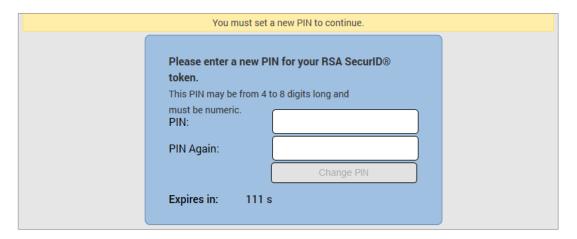
Figure 3: First time login procedure



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

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

Figure 4: Set PIN screen

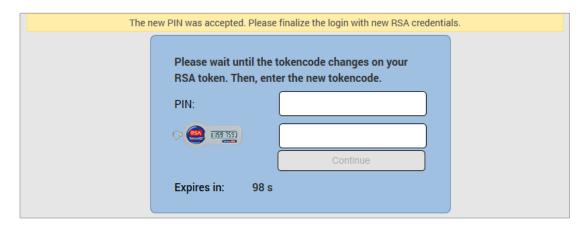


Type in a 4 to 8 digit numeric PIN of your choice in the PIN field. Enter it twice as requested to ensure accuracy. Then click on Change PIN. Memorize this PIN! Note that you have a limited amount of time to set a new PIN and confirm your credentials, as shown by the expiration time on the screen.

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

Type in the PIN you just created and a new tokencode. **Do not use the tokencode from the previous login page.** Make sure that the number on the RSA token's display has changed, type this new number into the tokencode field, then click Continue.

**Figure 5: Confirm RSA credentials** 



After completing the set-up procedure, the user will be able to access the 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 Auction System, a user will need the following login credentials:

• Username (user ID): FCC assigned

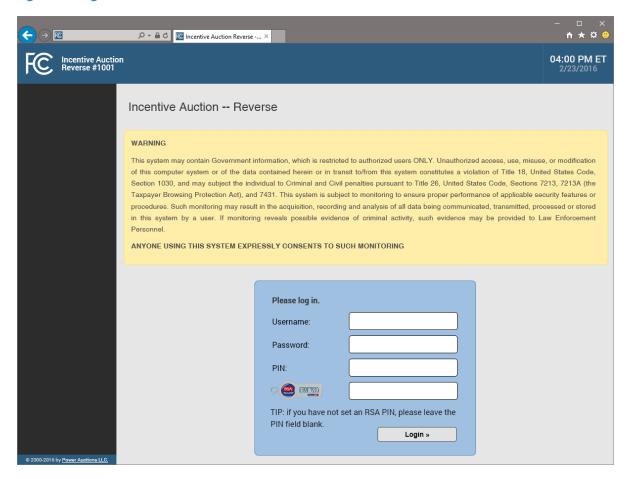
Password: FRN password associated with the qualified bidder's FRN

PIN: numeric PIN created during the initial login

• RSA tokencode: a six-digit code generated by the RSA SecurID® token

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

Figure 6: Login screen



# 3.3. Multiple Users for the Same Qualified Bidder

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

However, **only one such user should modify bids 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 Logout

A single user cannot be logged in to the Auction System using two computers at the same time.

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

## 3.5. Lock Screen and Closing User Access

A user may manually lock their screen by clicking on the Lock Screen button, located at the bottom of the navigation bar on every screen as shown on Figure 7 in the next section. Unlocking the screen again requires the password followed by clicking Unlock.

If a user is inactive for more than 30 minutes, the Auction System will log the user out. The user will need to log in again to access the site. The user may manually log out of the system at any time using the Logout button located at the bottom of the navigation bar on every screen as shown in Figure 7 in the next section. Logging out of the system will not cause submitted bids to be lost.

### 3.6. Additional Information

Appendix 2 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. Navigation Bar and Summary of Screens

This section explains features common to all screens for the clock phase of the reverse auction and provides a summary of the content of the different screens available from the navigation bar.

#### 4.1. Navigation Bar and Features Common to All Screens

An example of a screen is shown in Figure 7. This is the Place Bids screen shown before the first round opens.

All screens have a navigation bar with links to the screens that are available to users. The navigation bar is located on the left hand side of the screen and has a black background. Beneath the navigation bar is the name of the currently logged-in user, the Lock Screen button, and the Log out button as described in Section 3.5.



Users are advised to use the navigation features of the Auction System once they are logged in. Using the browser's forward and back navigation functions may produce unpredictable results.

All screens have a top bar containing the same information. The top bar shows:

- The name of the qualified bidder and its FRN;
- The stage of the reverse auction in the example screen, Stage 1;
- The round in the stage in the example screen, Round 1;
- A countdown timer showing the time until a round opens or closes in the example screen, the
  time until Round 1 opens. Once the round opens this will show the time until the round closes.
   Please note that the countdown timer changes to red text on a white background when there
  are less than 5 minutes remaining in a round; and
- The current date and time, always displayed in Eastern Time ("ET").

Bidder and Countdown Stage FRN timer Round 1 begins 45:02 Incentive Auction Reverse #1001 AAA Broadcasting 1004013012 09:14 AM ET S Place Bids ♣ Bid Summary Round 1 has not yet started. Current Round date & time ◆ Downloads **▼** Messages \* Station Info **Navigation** Logged in as: Alan Smithee

Figure 7: Features common to all screens (example before Round 1 starts)

# 4.2. Summary of Auction System Screens

The navigation bar gives access to seven screens. Their functions are summarized in Table 1 in the order in which they appear in the navigation bar. Functionality can depend on the bidding status, which is described briefly in Section 6.1; possible bidding statuses are defined in Appendix 3.

Table 1: Summary of screens reached from navigation bar

Screen	Function	
Place Bids	Allows the user to place bids for the round, including fallback options and proxy instructions where applicable.	
Bid Summary	Allows the user to view a summary of all bids and proxy instructions submitted during a particular round, including bids placed according to proxy instructions.	
My Results	<ul> <li>Allows the user to view round results for a particular round, including for each station</li> <li>its status and where applicable its currently held option and associated price,</li> <li>proxy instructions in effect,</li> <li>available bid options in the next round,</li> <li>each option's clock price offer for the next round, and</li> <li>vacancy ranges for the station's pre-auction band and for the station's available options excluding its currently held option.</li> </ul>	

Screen	Function
Downloads	Allows the user to download information pertaining to their stations, their bids, and their results.
Auction Schedule	Allows the user to view the bidding schedule for upcoming rounds.
Messages	Allows the user to view announcements from the FCC. Users may also use this screen to send messages to the FCC.
Station Info	Allows the user to view data about the bidder's stations including the relinquishment options selected on Form 177. The data displayed on the screen does not change during the auction.

# 5. Administrative Screens

This section describes the following screens:

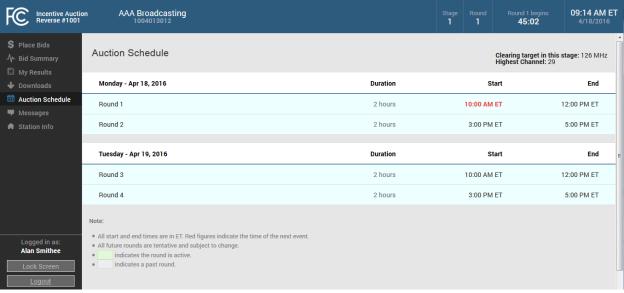
- Auction bidding schedule (Auction Schedule);
- Messages and Announcements (Messages); and
- Information about each bidder's stations (Station Info).

#### 5.1. Auction Schedule

The auction schedule shows the current schedule for upcoming bidding rounds in Eastern Time ("ET"). The FCC may adjust the number of rounds per day as necessary as the auction proceeds. An example is shown in Figure 8 — note that the schedule shown, including the start date of 4/18/2016, is provided for illustrative purposes only and does not reflect an expected number of rounds in the auction. The screen shows:

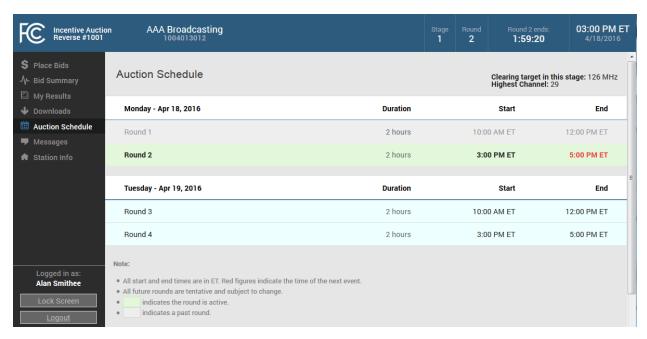
- The date, duration, start time and end time for all scheduled rounds;
- The clearing target for the current stage and highest physical channel in the post-auction TV band on the right hand side above the schedule times; and
- The time of the next event, shown in red bold text—in this case, the start of Round 1.

Figure 8: A schedule of upcoming rounds – in this example, showing the first 4 rounds



A currently open round is shown with a green background and past rounds held that day are shown with a grey background. Rounds held on previous days are not displayed. An example is shown in Figure 9. This shows that Round 1, that was held that day, has already closed; Round 2 has just opened; and, the next event is the close of Round 2 at 5pm ET.

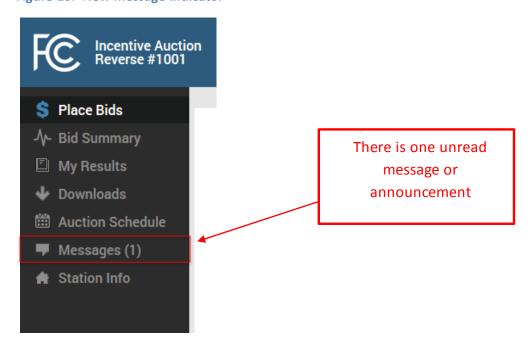
Figure 9: Auction schedule as it will appear during Round 2



## 5.2. Messages

If the user has any unread announcements or messages from the FCC, the number of unread announcements/messages is indicated in parentheses next to the <u>Messages</u> link in the navigation bar, as shown in Figure 10, which is enlarged for greater readability.

Figure 10: New message indicator

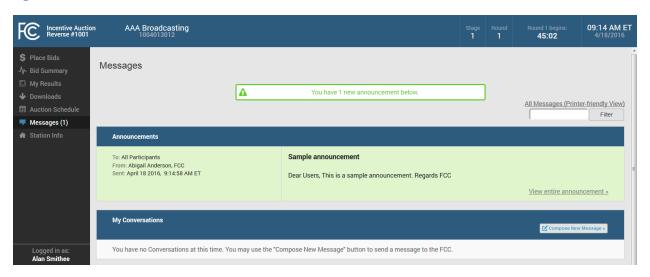


## **5.2.1.** Receiving and Reviewing Announcements

The FCC may send announcements to all bidders from time to time to provide information.

To read an announcement, click on the <u>Messages</u> link in the navigation bar on the left side. The Messages screen will open displaying all announcements and conversations, abbreviated where necessary, in reverse chronological order. Figure 11 below shows that screen with a notice that the user has a new announcement.

Figure 11: Details of announcements and conversations



If any of the announcements or messages shown on the screen have not been read, a green notification box will be displayed at the top of the screen indicating the number of unread announcements or messages. New announcements and messages are highlighted in green until they are read by clicking on the relevant View entire announcement » or View entire conversation / Respond » link.

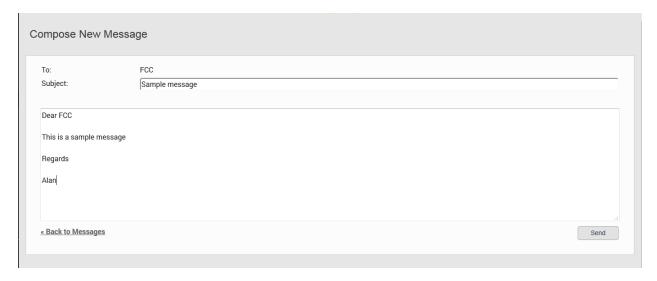
# 5.2.2. Sending a Message to the FCC

Users can send private messages to the FCC using the Auction System. A private message is associated with a bidder's FRN and the user who sent the message. Only users for that bidder can see the private message.

To compose a new message to the FCC, click on the Compose New Message button on the Messages screen.

Enter the subject and content of the message in the relevant fields as shown in Figure 12 below. Click Send to send the message. To cancel an unsent message, click on the <u>« Back to Messages</u> link and return to the Messages screen.

Figure 12: Compose a new message



The message is added as a new conversation in the 'My Conversations' section of the Messages screen. The FCC may reply by sending an electronic message or by calling the contact person on the phone. If there is an electronic reply from the FCC, the reply will be added to that conversation.

As with announcements, receiving a new message will be indicated by the number of new messages shown in parentheses next to the <u>Messages</u> link on the navigation bar on every screen.

Only the most recent message of a conversation is shown on the Messages screen, as illustrated in Figure 13. To view the complete message, if it is abbreviated, and all messages in a conversation, click on the <u>View entire conversation / Respond »</u> link for that conversation.

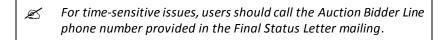
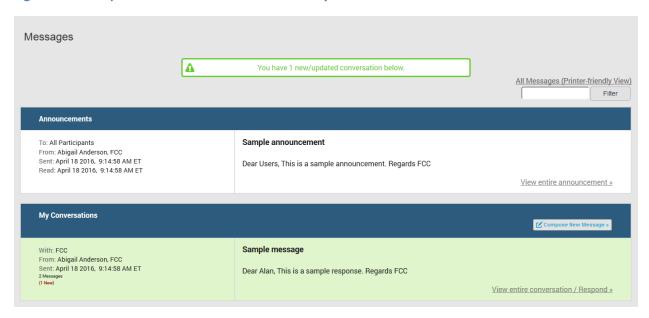
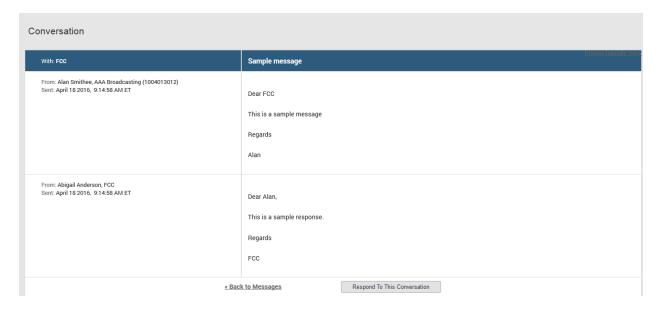


Figure 13: A response to a conversation initiated by a user



After clicking on the link to view an entire conversation, click on the <u>« Back to Messages</u> link to return to the messages, or click Respond To This Conversation as shown in Figure 14 to add a further message to the same conversation. Type the message in the box that opens and click Send to send it to the FCC.

Figure 14 Responding to a conversation



Users can view all messages for the bidder for which they are logged in as well as announcements by clicking on the <u>All Messages</u> link at the top right-hand side as shown below circled in red in Figure 15. This page can then be printed using the browser's print function. There is also a filter to show messages containing particular words.

Messages You have 1 new/updated conversation below. All Messages (Printer-friendly View) **Announcements** To: All Participants Sample announcement From: Abigail Anderson, FCC Sent: April 18 2016, 9:14:58 AM ET Dear Users, This is a sample announcement. Regards FCC Read: April 18 2016, 9:14:58 AM ET View entire announcement » My Conversations Sample message With: FCC From: Abigail Anderson, FCC Sent: April 18 2016, 9:14:58 AM ET Dear Alan, This is a sample response. Regards FCC View entire conversation / Respond »

Figure 15: Use the All Messages link to see all announcements and conversations

#### 5.3. Station Info

The Station Info screen contains information about a bidder's stations. There is a row for each station. This information does not change during the auction.

Figure 16 shows the Station Info screen for a bidder that has multiple stations. The first four columns show basic information about the station (call sign, facility ID, state and volume). The screen then shows the relinquishment options selected on FCC Form 177. The final column shows the station's preauction band.

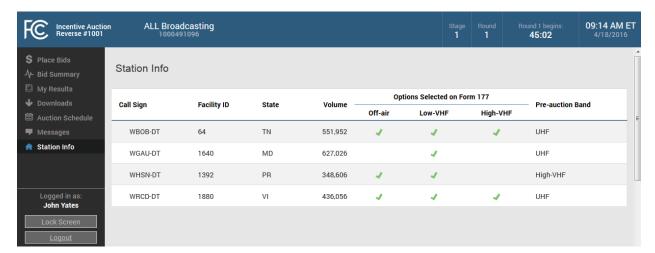


Figure 16: Station Info screen for bidder with multiple stations

The green checkmarks indicate the options that the bidder selected for the station on its FCC Form 177. Note in this example, the bidder selected only the Low-VHF relinquishment option for station WGAU-DT on FCC Form 177, and the High-VHF bidding option was not available for WSHN-DT because it was

Administrative Screens

already on a High-VHF channel prior to the auction. If the bidder has more than four stations, the screen also includes a filter that enables the user to quickly find specific stations. The screen automatically filters the list of stations containing the text entered by the user in the "filter" box. The system filters on call sign, facility ID, state, and pre-auction band.

# 6. Bidding in the Reverse Auction

This section of the User Guide addresses the following topics and screens:

- Viewing the initial relinquishment option, initial bidding status, and price offers for available relinquishment options in Round 1 (My Results);
- Placing bids including bidding for relinquishment options with fallback options (Place Bids);
- Verifying submitted bids and proxy instructions (Bid Summary);
- Changing bids (Place Bids);
- Viewing round results (My Results);
- Entering and editing proxy instructions (Place Bids); and
- When bidding concludes in a stage.

The bidding process is the same for all rounds in every stage. This section primarily uses rounds in Stage 1 to describe how to place bids.

# 6.1. Viewing Initial Relinquishment Option and Bidding Status

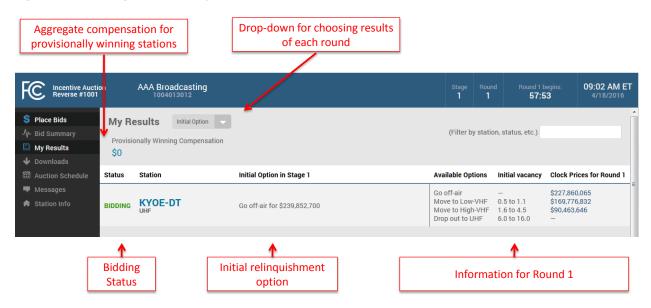
Before Round 1 starts in any stage, users should go to the My Results screen to see the bidding status for each station and, where applicable, the station's initial option.

Figure 17 shows the My Results screen for a user with a single station before Round 1 of Stage 1 begins. The first column shows the bidding status. Typically, stations will have the status "BIDDING" for Round 1 of Stage 1, but it is possible for a station to be "FROZEN – Currently Infeasible" or "FROZEN – Provisionally Winning" at the outset of Stage 1. At the start of a stage subsequent to Stage 1, a station may also have the status "EXITED – In a Previous Stage," "EXITED – Not Needed," or "FROZEN – Pending Catch Up."

For a full definition of each possible status, see Appendix 3.

The second column shows the station's call sign and pre-auction band. The third column shows the station's initial relinquishment option for the stage. Columns four, five and six (those to the right of the gray vertical bar) show the available relinquishment options for the first round, the initial vacancy index range for each applicable band (for the station's pre-auction band and for any bands to which the station may bid to switch in the first round), and the clock prices associated with each option.

Figure 17: Viewing the Initial Option and Status



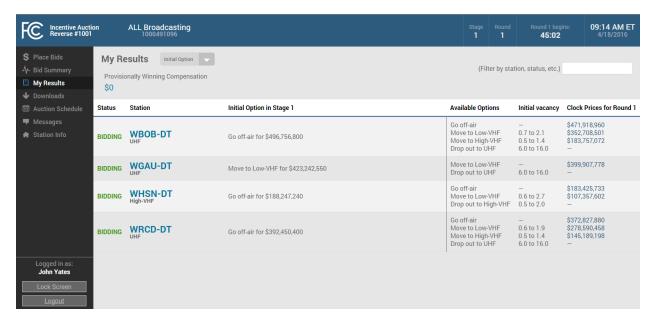
The top of the screen includes a drop-down menu to display the results of past rounds—available as the auction progresses from round to round—as well as the initial relinquishment option. This screen also displays the aggregate value of compensation for all of the bidder's stations that have the status of "FROZEN – Provisionally Winning," which is zero in this example.

By default, the My Results screen always shows the most recent results that have been posted.

Users acting for bidders with multiple stations will find the same screen with a row for each station. An example is shown in Figure 18. Note that the available options reflect the choices made on FCC Form 177 as well as, in Round 1, the station's initial option for the stage—for example, the only relinquishment option available for Station WGAU-DT is to Move to Low-VHF.

The screen also includes a filter box that enables the user to filter the stations by the text entered by the user.

Figure 18: Initial options for a bidder with multiple stations



# 6.2. Placing Bids, Verifying Submitted Bids, and Changing Bids

Once a round is open, bidders will be able to see stations on the Place Bids screen for which they are able to bid and/or enter a proxy instruction, as described in Section 6.3.

Users already logged in to the system when the round opens will see a yellow pop-up indicating that the round has opened and with the instruction to refresh the screen. Click on Update to refresh the screen.

# 6.2.1. Placing Bids

For each station with a status of "BIDDING," the Place Bids screen allows a user to select a relinquishment option to be a station's "current round bid" and submit the bid, thereby indicating a bidder's commitment to accept the current clock price offer for that option<sup>8</sup> at that price. Bids can only be selected and submitted while a round is open.

Figure 19 shows an example for a bidder with a single station. The screen shows the station's currently held option. It also shows the drop-down menu where the user may select one of its available relinquishment options at the given price offer as his current bid and submit the bid to the Auction System using the Submit button.

The availability of relinquishment options in the drop-down menu takes into account the one-way hierarchy of bid options (see Appendix 5), as well as the options selected in the applicant's FCC Form 177. The tables in Appendix 4 set out the bid options that are available for stations as a function of their pre-auction band and their currently held option.

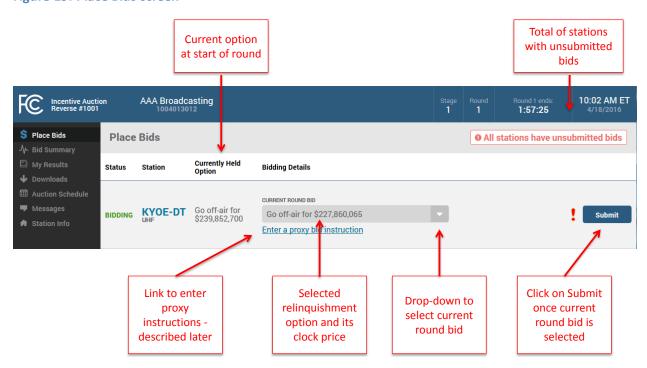
The red exclamation mark indicates that no bid has been submitted for the station in the round. A red alert at the top right of the screen indicates whether all or some stations with status "BIDDING" have unsubmitted bids, that is, the user has not submitted a bid for a given station or stations in the current round. If no bid has been submitted for a station (by a user or the proxy agent as described in Section 6.3) when a round ends, the Auction System will interpret this as a bid to drop out of the auction.



For a station with a status of "Bidding," failure to submit a bid will be interpreted as a bid for the station to drop out of the auction.

<sup>&</sup>lt;sup>8</sup> For each station with a status of "FROZEN – Currently Infeasible" and, from Stage 2 onwards, "FROZEN – Pending Catch Up," the Place Bids Screen allows a user to place proxy instructions. Proxy Instructions are discussed below in Section 6.3.

Figure 19: Place Bids screen



As shown in Figure 19, by default, the relinquishment option displayed in the bid drop-down menu at the start of a round is the bidder's currently held option. A user may continue to bid for its currently held option by submitting a bid for that option as its current round bid. The user must click the Submit button before the round ends.

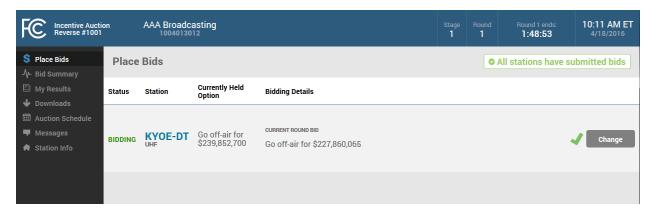
If the user has additional available options and would like to bid to switch to a different option from the currently held option, the user may click on the drop-down menu to select a different available option, including the option to "Drop out of bidding," as shown in Figure 20 (see Appendix 4 for a list of available options). The user must submit this option by clicking the Submit button before the round ends.

Figure 20: Place bids screen with the bid drop-down menu open



Once an option has been selected and the Submit button clicked, a green check mark appears, and the screen displays a Change button for the station, as shown in Figure 21. This button is used to change the bid, if desired, as described later in this section. In this example, given the bidder only has one station, the alert at the top right of the screen indicates that all stations have submitted bids and is displayed in green.

Figure 21: After submitting a bid



For bidders with multiple stations, the Place Bids screen displays a row for each station. The form and bidding functionality is as described above for a bidder with a single station, except that users have the ability to submit all of their stations' bids at once.

Figure 22 shows an example of a bidder with four stations. The red exclamation marks next to the Submit buttons mean that the user has not yet submitted a bid for any of its stations. The user can click on the Submit button for each station individually or click on Submit All at the top right of the screen before the round ends, after first checking that its selected option is displayed for each station, to submit all bids and any proxy instructions entered for those stations.

Figure 22: Place Bids screen for a user with multiple stations

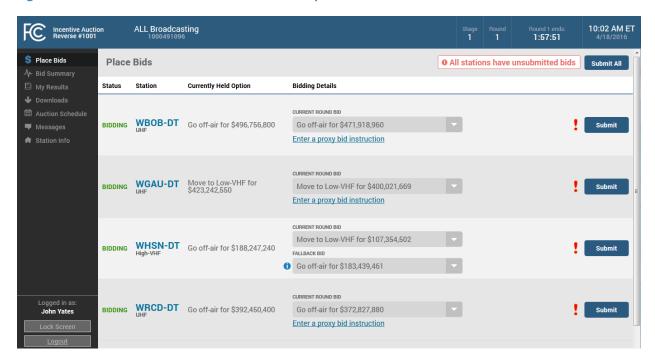
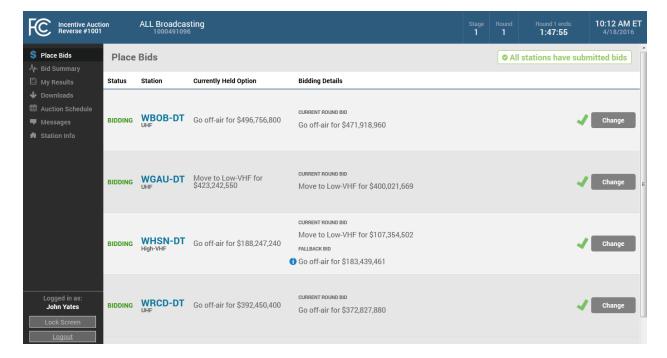


Figure 23 shows the screen after the Submit All button (or the Submit button for each individual station) has been clicked. Green check marks appear next to all stations. The bid with a fallback option shown for station WHSN-DT is explained in Section 6.2.1.1.

Figure 23: Place Bids screen with multiple stations and all bids submitted



# 6.2.1.1. Placing a Bid with Fallback Options

Bidders that selected more than one option on the FCC Form 177 may have more than one available option in the drop-down bid menu (see Figure 20). If a bidder bids to move to a VHF band when the station's currently held option is Go off-air, or to a different VHF band than its currently held VHF option, during the bid processing following the round, the Auction System will check to see if the station can feasibly be accommodated in the selected band. To address the possibility that the station cannot be accommodated in that band, the user is asked at the time it selects its bid to also select a fallback option, which will be processed in the event that the current round bid cannot be accommodated.

A user will select a fallback option using the drop-down menu, which is displayed, when applicable, underneath the "FALLBACK BID," shown in Figure 24 below. A user will always have two options for its fallback bid, (1) accept the current round's price offer (clock price) for the station's currently held option, or (2) "Drop out of bidding." In Figure 24 the bidder's currently held option is "Go off-air."

The user must submit the current round bid and the fallback bid using the Submit button before the round ends. Hovering the cursor over the 1 to the left of the fallback bid options provides information about the purpose of the fallback bid.

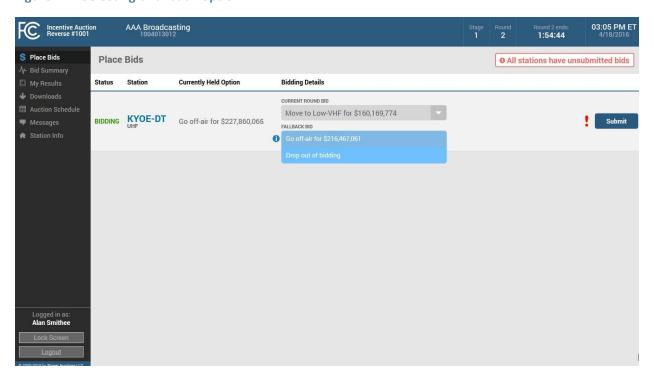


Figure 24: Selecting a fallback option

<sup>&</sup>lt;sup>9</sup> If the station's currently held option is to move to one of the VHF bands, then the Auction System has already determined that the station can feasibly be accommodated in that band. This determination happened at the time when the Auction System first assigned the station to this currently held option, and the station will remain feasible in the band as long as the band is its currently held option. Thus, if the user bids for that option in this round (i.e. to remain in the same band), the user will not need to select a fallback option.

# 6.2.2. Verifying Bids in the Bid Summary

To verify that a bid submitted in a round has been saved by the system, click on <u>Bid Summary</u> in the navigation bar to be taken to the Bid Summary screen. For all stations for which a bid was submitted, the Bid Summary screen displays the bid that was submitted, the name of the user who submitted the bid, and the date and time the bid was submitted.<sup>10</sup>

An example of the Bid Summary screen is shown in Figure 25. Note that the drop-down list to the right of the "Bid Summary" title enables the user to view his bids from previous rounds.

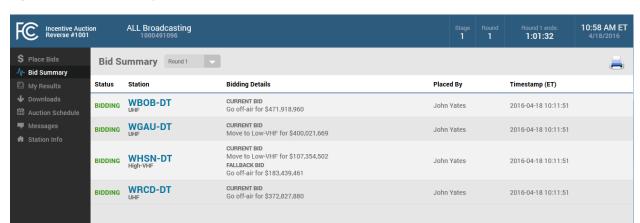
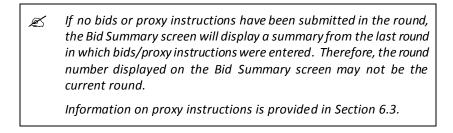


Figure 25: Bid Summary screen

The print icon at the top right can be used to print the page. It is also possible to download a file containing details of all bids submitted (see Section 7).



## 6.2.3. Changing Bids

As long as the round remains open, it is possible to change a bid that was submitted. To do so, click on the Change button on the Place Bids screen and make the changes. It is essential to click again on Submit before the round ends to submit the change to the Auction System. Changes that are not submitted will be ignored and the original bid will be processed. As a reminder, an alert message

Page 30

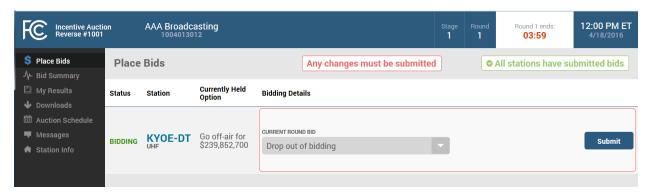
<sup>&</sup>lt;sup>10</sup> The Bid Summary screen also displays proxy instructions that were submitted in the round.

appears at the top of the screen saying that any change must be submitted and the border of the bid selection area turns red as shown in Figure 26. In this example, this user has decided, with less than 4 minutes of the round remaining, to change his bid and drop out of bidding. Until a changed bid has been submitted, the screen will show an alert message and red border. However, because the original bid is saved by the system until the changed bid is submitted, the message in green text at the top right of the screen will continue to say that all stations have submitted bids.



Bids must be submitted before the round ends after making any change in order to save the change on the system. Check that there are no red warning messages at the top of the screen before you leave the page. The Auction System ignores changes that are not submitted and the original bid will be processed.

Figure 26: A changed bid not yet submitted



#### 6.3. Proxy Bidding

The Auction System gives users the option to place bid instructions for future rounds ("proxy instructions") for a station's currently held relinquishment option. For users who elect to place proxy instructions, the Auction System submits bids on behalf of the user in all rounds in which the clock price is greater than or equal to the amount specified in the proxy instruction — i.e., when the proxy instruction is in effect — unless the user deletes or changes those instructions.

In rounds where a bidder has a proxy instruction in effect for a station, the bidder need not utilize the procedures described in Section 6.2 above to submit a bid. As explained below, a user may delete or change proxy instructions at any time during a round. Further, a user may submit bids round-by-round for some of its stations and proxy instructions for other stations.

Proxy instructions may only be entered to continue to accept price offers for a station's currently held relinquishment option (i.e., the option that the station holds after bid processing of the previous round). The proxy instruction amount must be greater than or equal to a certain percentage of the price offer (clock price) in the round in which the proxy instruction is given or the catch-up price<sup>11</sup> for "FROZEN –

<sup>&</sup>lt;sup>11</sup> For a discussion of "catch-up prices," see Section 6.3.1.

Pending Catch Up." At the start of the auction this will be 75% but this limit may be adjusted, up or down, by the FCC at any point in the auction. Any change will be announced.

Users should check regularly that their proxy instruction remains in effect if the bidder wishes to continue bidding for a station after the proxy instruction is no longer in effect. Note that the change in price offers for UHF stations that are bidding to move to a VHF band and for all VHF stations may vary greatly from round to round based on the vacancies in the bands.



It is the responsibility of the bidder to monitor changes in price offers from round to round to ensure that their proxy instructions are still in effect (i.e., greater than or equal to the current price offer). When proxy instructions are no longer in effect, the system will not submit a bid for the station.

Users may submit proxy instructions for stations that have any of the following statuses in Stage 1:

- BIDDING: The proxy instruction, once submitted, will place a bid to accept the price offer for the currently held option in all subsequent rounds in which the offer is greater than or equal to the amount specified in the proxy instruction; and
- FROZEN Currently Infeasible (applicable only for VHF stations): A currently infeasible VHF station may become unfrozen and asked to resume bidding in later rounds of the stage if the system is then able to find a feasible channel assignment for the station in its pre-auction band. A user may submit a proxy instruction, which will only apply if the station becomes unfrozen. The Auction System will place a bid to accept the price offer for the currently held option in each successive round in which the price offer is greater than or equal to the amount specified in the proxy instruction and the station's status is "BIDDING."
- FROZEN Pending Catch Up (for Stage 2 and any later Stages): In a new stage, a station that is pending catch up may become unfrozen and asked to resume bidding in later rounds of the stage if the base clock drops below the station's "catch-up point," or the base clock price at the time that the station became provisionally winning in the previous stage and the station has a feasible channel in its pre-auction band. Users will be able to submit proxy bid instructions for these stations that will apply in the event that the status changes to "BIDDING." The Auction System will place a bid to accept the price offer for the currently held option in each successive round in which the price offer is greater than or equal to the proxy instruction amount and the station's status is "BIDDING."

# **6.3.1. Submitting Proxy Instructions**

To submit a proxy bid instruction, users should click on the link <u>Enter Proxy Bid Instruction</u> shown in Figure 19 on page 26. The screen will then present a box beginning with a \$ sign where the proxy amount may be entered, as in Figure 27. The proxy amount must be lower than the station's clock price, or for stations that are "FROZEN – Pending Catch Up," lower than the station's "catch-up price." A station's catch-up price is the clock price for its currently held option in the round that the station

became provisionally winning in the previous stage. This is the last clock price that the station was shown in a previous stage for its currently held option. A red pop-up message informs the user if the price is too low (below the amount determined by the percentage set by the FCC of the clock price/catch-up price) or too high (above the clock price/catch-up price). The user must click the Submit button before the round ends to save the proxy instructions.

Figure 27: Entering a proxy bid instruction

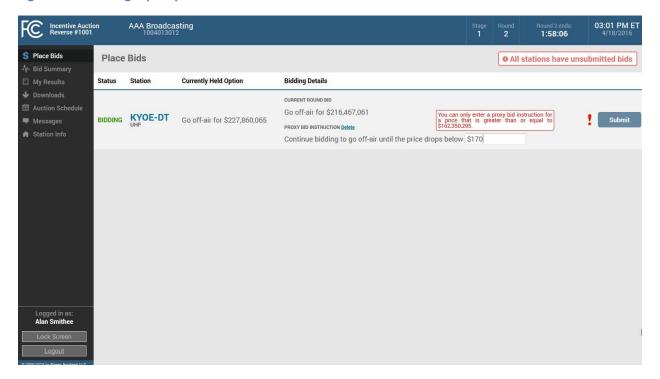
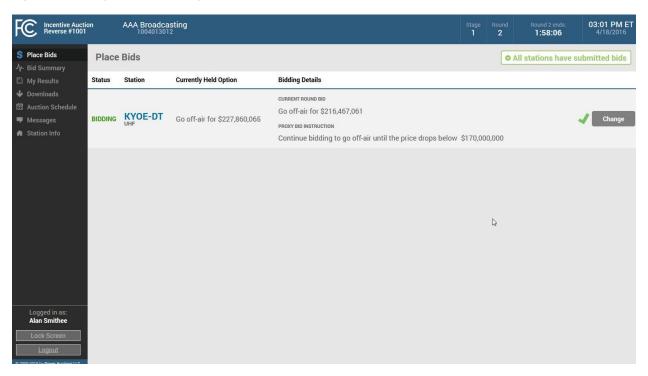


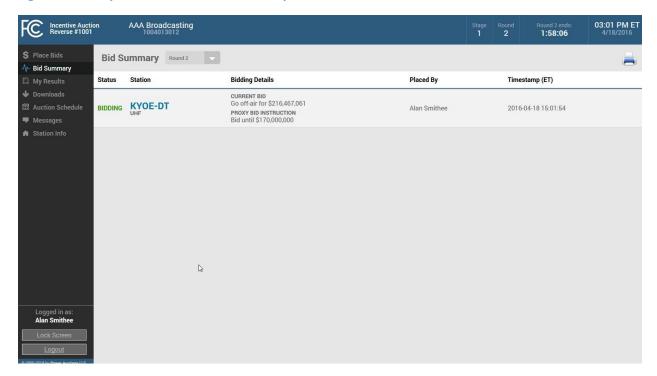
Figure 28 shows the proxy bid instruction on the Place Bids screen after it has been submitted.

Figure 28: Proxy instruction in place



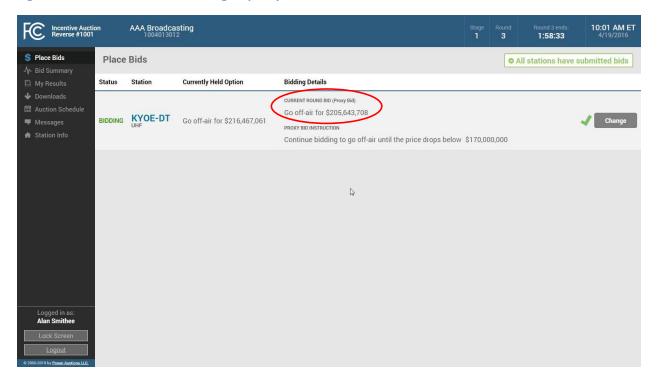
The Bid Summary screen in Figure 29 also shows the bid to accept the current price offer and the proxy bid instruction.

Figure 29: Proxy instruction on Bid Summary screen



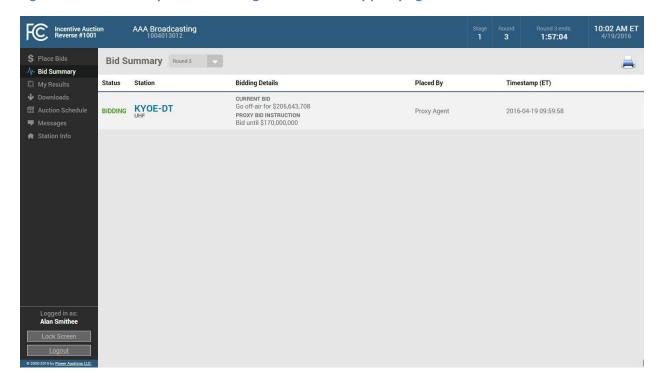
In the subsequent round, Round 3, the Auction System accepts the price to Go off-air as indicated in the screen, shown in Figure 30 by the text to the right of the "CURRENT ROUND BID" header. The screen also shows that the proxy instruction will remain in effect until the price falls below \$170,000,000.

Figure 30: Bid submitted according to proxy instructions



In Round 3 if the bidder views the Bid Summary screen, the "Placed By" column displays the term "Proxy Agent" to show that the system submitted a bid according to the proxy instructions for that station. This is shown in Figure 31.

Figure 31: Bid summary screen showing bid submitted by proxy agent



## 6.3.2. Changing or Deleting Proxy Instructions

At any time during a round, a user may change or delete proxy instructions that have been submitted. To do so, first click on the Change button to the right of the bidding details on the Place Bids screen. A user may change the price in the proxy instruction or delete the proxy instruction entirely by clicking on Delete. The user must click on the Submit button to submit the changes. This is shown in Figure 32.

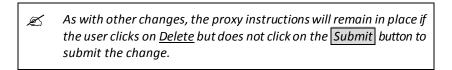
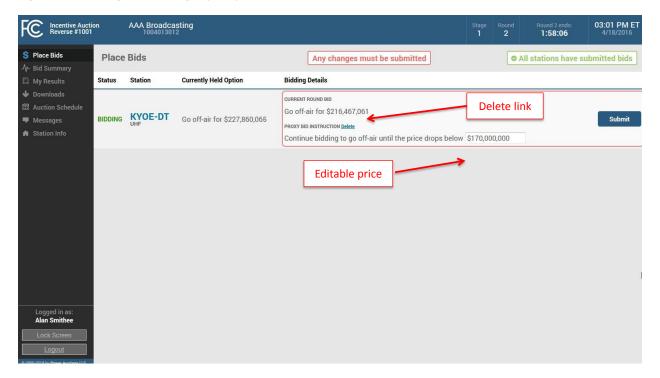


Figure 32: Editing or deleting a proxy instruction



### 6.3.3. Submitting a Different Bid than the Bid Placed by Proxy

If the user decides at any point while a round is open that the user wishes to change the current round bid placed by the system according to proxy instructions, the user can do so by clicking on the Change button on the Place Bids screen. First the user must delete the proxy instruction by clicking on Delete, as described in Section 6.3.2. Then the user will be permitted to click on the drop-down menu to select a current round bid of his choice. The changes must be submitted.

The user must first click on the <u>Delete</u> link in order to be able to change the bid placed by proxy.

#### 6.3.4. Proxy Bid Instructions for Frozen Stations

Users cannot submit bids in the round for stations with the status "FROZEN – Currently Infeasible" or "FROZEN – Pending Catch Up." However, they can submit proxy instructions for these stations, and such proxy instructions will be in effect in future rounds if the status of the station changes to BIDDING at a price which is above the price of the proxy instruction. The procedure for submitting or changing proxy bid instructions is described in Sections 6.3.1 and 6.3.2. Figure 33 shows an example of a station that is "FROZEN – Currently Infeasible" that has a link for entering a proxy instruction.

ALL Broadcasting Incentive Auction Reverse #1001 1:55:40 S Place Bids **Place Bids** @ 2 stations have unsubmitted bids Submit All ال Bid Summary **Currently Held Option Bidding Details** Status Station **♣** Downloads Auction Schedule **WBOB-DT** Go off-air for \$471,918,960 **■** Messages BIDDING Go off-air for \$448,323,012 \* Station Info Enter a proxy bid instruction WGAU-DT Move to Low-VHF for \$401,877,822 Move to Low-VHF for \$384,561,696 Submit Enter a proxy bid instruction CURRENT BOUND BID (Provy Rid) Go off-air for \$354,186,486 WRCD-DT Go off-air for \$372,827,880 BIDDING PROXY BID INSTRUCTION Continue bidding to go off-air until the price drops below \$280,000,000 FROZEN WHSN-DT Go off-air for \$188,247,240 Enter a proxy bid instruction

Figure 33: Enter a proxy bid instruction for a frozen station

Figure 33 shows a Submit All button at the top, which can be used to submit all bids and proxy instructions for all stations instead of clicking on the Submit button for each station. 12

Details of new or changed proxy bid instructions for frozen stations appear on the Bid Summary screen only in the round in which the instructions were submitted. Proxy instructions for frozen stations entered in a previous round that are still in effect can be seen on the Place Bids screen during an open round. The My Results screen also displays proxy instructions that are still in effect as of the displayed round.

#### 6.4. Viewing the Results of a Round

Users will be able to see round results on the My Results screen. Users will be able to see their stations' bidding statuses and, for stations that have not exited the auction the user will see the currently held option for each station. Where applicable, the user will also see for each station the available bid options and clock prices for the next round, and vacancy index ranges as of the close of the displayed round for the relevant bands. Users will not see other bidders' results. Users logged in to the system when processing is complete will see a yellow pop-up indicating that the results have been posted with the instruction to refresh the screen. Click on Update to refresh the screen.

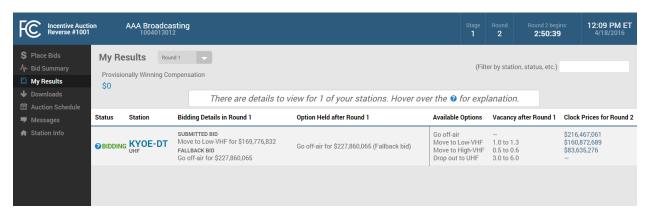
An example of the My Results screen for a bidder with a single station is shown in Figure 34 below. It shows a potential result of processing a bid to Move to Low-VHF with a bid to Go off-air as the selected fallback bid. The first column shows the station's status, which, in the example, remains "BIDDING."

<sup>&</sup>lt;sup>12</sup> The Submit All button can only be used once in a round. If a proxy instruction is entered for a frozen station after Submit All has been clicked, it must be submitted individually.

The third column shows the bid placed in the previous round and the fourth column shows the result of the Auction System processing that bid, in this case also indicating that the option held after Round 1 is the fallback option of Go off-air that the user selected. Information about each of the station's available options in the next round is displayed in the three columns to the right of the vertical gray bar.

If there are additional details to be viewed about a station, an alert message at the top of the screen will appear saying "There are details to view for X of your stations. Hover over the of for an explanation." In the example shown in Figure 34, the message that would be displayed is "The system could not accommodate your request to move to Low-VHF due to insufficient vacancy. Your fallback bid to Go offair has been processed." Such alert messages are available with the results for a round in which the status of a station changes or when the system cannot meet a request to accommodate the station within the band that the user selected for the station in the previous round, as shown in the figure below. An alert message is also provided when proxy instructions for a station are no longer in effect, but only for a station that had the status of "BIDDING" for the previous round and will have the status of "BIDDING" for the next round. An alert message does not appear for all instances when proxy instructions are no longer in effect. For example, it is not provided for stations that were frozen in the previous round or are frozen in the next round. Therefore, users should check regularly to ensure that their proxy instructions are still in effect.

Figure 34: My Results



As the auction continues, the status of stations will change and fewer will have the status "BIDDING." Some users will decide that a price offer has fallen to a level that they are no longer willing to accept and therefore they will drop out of bidding for that station. The station will then have the status "EXITED – Voluntarily." Other stations will be given the status "FROZEN – Provisionally Winning" if bid processing finds that the station can never in the current stage be assigned a feasible channel in its pre-auction band.<sup>13</sup>

Page 39

<sup>&</sup>lt;sup>13</sup> See Appendix 3 for full definitions of the bidding statuses.

Figure 35 provides an example of a bidder with a station that has become "FROZEN – Provisionally Winning" in Round 18. Now that station KYOE-DT is "FROZEN - Provisionally Winning," the price listed next to its currently held option represents its provisionally winning compensation.

Since the status of station KYOE-DT shown in Figure 35 has changed from the previous round, further information about the station's status can be viewed by hovering the cursor over the next to the status information. When the status of a station is "FROZEN – Provisionally Winning," bidding is over for this station in the current stage (as indicated by the gray color of the status), and so, no bidding information is presented for the next round.

Note that, in the example in Figure 35, the bid was placed by proxy (see the bidding details column) – proxy bidding is addressed in Section 6.3.



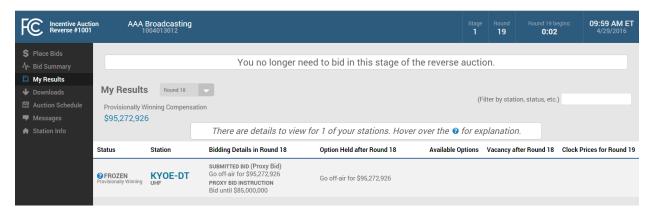
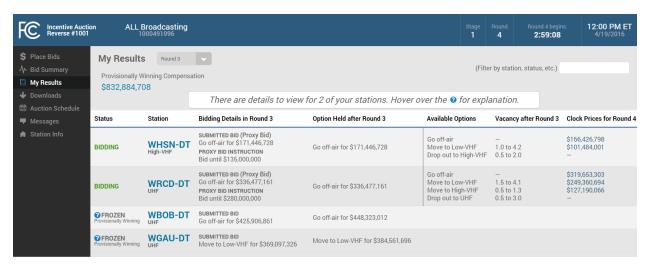


Figure 36 shows results for the bidder with four stations at the end of Round 1. In this case, the status of two stations has changed. Both have become "FROZEN – Provisionally Winning." Each of these stations has a next to the status, which enables the user to view further information about the status of the station by hovering over the symbol. The Provisionally Winning Compensation displayed at the top of the screen is the sum of the compensations for the two stations that are "FROZEN – Provisionally Winning."

Figure 36: My Results for a bidder with four stations



The My Results screen also shows stations that have the status of "EXITED," either because a bid to drop out of bidding was processed ("EXITED – Voluntarily") or because, during bid processing, it was found that the station was not needed to meet the clearing target for the stage or any subsequent possible clearing target ("EXITED – Not Needed"). A station is deemed to be "not needed" when the Auction System determines that the station would remain feasible in its pre-auction band for all possible bidding behaviors of stations that are still active in the auction. In both cases, the station will no longer be able to bid. Bidding information and results for previous rounds will remain available.

Figure 37 and Figure 38 below show the My Results screen for two bidders: one bidder's station has exited because it was not needed (in Round 5); and the other bidder's station exited voluntarily (in Round 2). The top bar and navigation have been omitted to make the Status column more legible. Note that in the second case the status for station KASX-DT is "EXITED – Voluntarily" because its fallback bid to drop out of bidding was processed.

Figure 37: Example of My Results for a station with status of EXITED - Not Needed

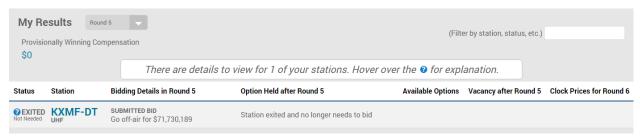
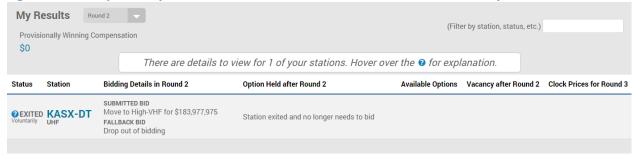


Figure 38: Example of My Results for a station with status of EXITED - Voluntarily



 $\mathbb{Z}$ 

Stations that have become "FROZEN – Provisionally Winning," "EXITED – voluntarily" or "EXITED – Not Needed," do not appear in the Place Bids screen for subsequent rounds because bids or proxy instructions can no longer be submitted for those stations.

#### 6.5. When Bidding Has Concluded for a Stage

Bidding rounds in any stage of the reverse auction will continue until all participating stations have the status "FROZEN – Provisionally Winning," "EXITED – Voluntary," or "EXITED – Not Needed." Note that a specific bidder may no longer have any stations to bid on many rounds before this point, (i.e., if its stations have either become provisionally winning or have exited the auction).

When bidding for all stations has concluded, the countdown timer in the top bar will be replaced with the statement "Bidding Concluded" and the Place Bids screen will state that the "The Reverse Auction for Stage 1 has concluded," as seen in Figure 39.

Figure 39: Bidding has concluded for a stage

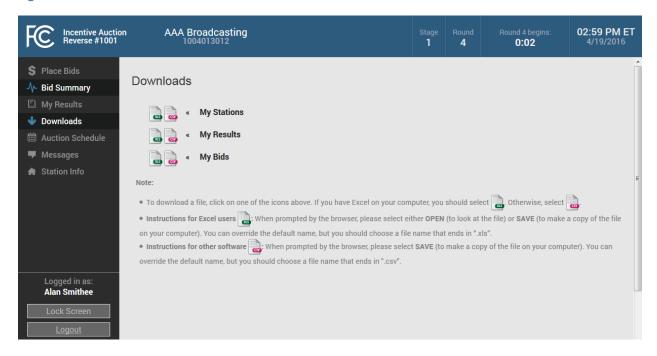


#### 7. Downloads

The download screen enables users to download information about their stations, their bids and their results. Downloads are available in Excel (.xls) format or as comma separated values (.csv) files.

The files may be downloaded by clicking on the relevant icons shown in Figure 40, below. Clicking on the icon generates a download with the most recent information.

Figure 40: Downloads screen



The My Stations file contains the data shown on the Station Info screen. It is accessible as soon as the Auction System is available to users. It also includes the opening price offers for each of the relinquishment options chosen on Form 177. This information does not change during the course of the auction.

The My Bids file is available as soon as Round 1 opens. The My Bids file will contain details of any clock rounds bids and proxy instructions that have been submitted to the Auction System at the time the file is generated, and reflects the information shown on the Bid Summary screen. The file shows cumulative data for all past rounds as well as the current round. For previous rounds, the file shows bids and proxy instructions saved as of the end of the round.

The My Results file is accessible as soon as the Auction System is available to users. Before the results of the first round are posted, the file contains the initial option for each of the bidder's station(s). Updated information is available as soon as the round results are posted. As with My Bids, the My Results file contains data from all past rounds. For example, if the file is generated when Round 10 results are posted, it will contain details about the initial option and results for rounds 1–10.

For details concerning the file formats and sample files, please see the Public Notice "Reverse Clock Phase File Formats" and sample data located in the Data section of the Auction 1001 website (<a href="https://www.fcc.gov/auctions/1001">www.fcc.gov/auctions/1001</a>).

# 8. Features of Stage 2 and Any Subsequent Stages

If there is a second or subsequent stage of the reverse auction, with a lower clearing target, the Auction System will carry over from the previous stage the provisionally winning price of each station that had a status of "FROZEN – Provisionally Winning" at the end of the previous stage. If a station had proxy instructions in place when it became "FROZEN – Provisionally Winning" in the previous stage, those proxy instructions do not carry over into the new stage.

Only bidders that have at least one station with status "FROZEN – Provisionally Winning" at the end of one stage will be able to participate in the next stage. Bidders whose stations have all exited (either voluntarily or because they were not needed) by the end of a stage will not be able to participate in the next stage and they will not be able to log in to the Auction System for the new stage.

There are two additional station statuses that are applicable for stages after Stage 1:

- FROZEN Pending Catch Up: the station is feasible in its pre-auction band, but may not bid because the base clock price has not dropped below the station's "catch-up point," or the base clock price at the time that the station became provisionally winning in the previous stage, and the station has a feasible channel in its pre-auction band. Once the base clock price drops below the station's catch-up point, the station's status will change to "BIDDING" if the station is still feasible in its pre-auction band.
- EXITED In a Previous Stage: the station became "EXITED Voluntarily" or "EXITED Not Needed" in a previous stage. Such a station can no longer bid in the auction in this or any subsequent stage.

Bidding statuses are described in more detail in Appendix 3.

Unless a station is deemed to be "EXITED – Not Needed" by the clearing target optimization, then its initial option at the beginning of the new stage will be the same option that it held after the last round of the previous stage.

Figure 41 shows an example of a bidder that has three stations at the start of Stage 2 with the status of "FROZEN – Pending Catch Up" and one station that exited in a previous stage. Note that when a station has the status of "FROZEN – Pending Catch Up," the system will not display next round clock prices.

ALL Broadcasting 10:00 AM ET Incentive Auction Reverse #1001 0:00 My Results Initial Option (Filter by station, status, etc.) Provisionally Winning Compensation My Results \$0 There are details to view for 3 of your stations. Hover over the **②** for explanation. Auction Schedule Status Station Initial Option in Stage 2 Available Options Initial vacancy Clock Prices for Round 1 ■ Messages Move to Low-VHF Move to High-VHF Drop out to UHF ?FROZEN 1 3 to 3 7 **WBOB-DT** Go off-air for \$448,323,012 WGAU-DT Move to Low-VHF **PROZEN** Move to Low-VHF for \$384.561.696 Go off-air Move to Low-VHF Move to High-VHF Drop out to UHF WRCD-DT 1.6 to 4.0 **PROZEN** Go off-air for \$274,062,751 EXITED WHSN-DT Station exited and no longer needs to bid

Figure 41: Initial option and status of stations at start of Stage 2

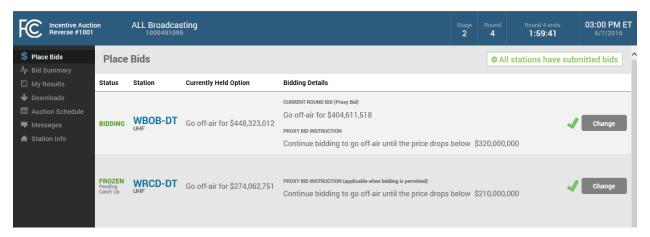
When Round 1 of Stage 2 opens, users may place bids for all stations that have the status "BIDDING" and can place proxy instructions for those stations, as described in Section 6. As explained there, a failure to enter a bid will be treated as a bid to drop out of the auction. For those stations that are "FROZEN – Pending Catch Up," users may place proxy bid instructions if they wish to continue bidding to accept price offers for their current option once the price has caught up. Similarly, users may place proxy bid instructions for those stations with the status "FROZEN – Currently Infeasible" if they wish to continue bidding to accept price offers for their current option in case the station becomes feasible again, as in the first stage of the auction. Users may log in to the system in each round to check the status of their stations and bid if and when required. See Section 6.4 for information about the circumstances in which alerts are provided regarding proxy instructions that are no longer in effect.



It is the responsibility of the bidder to monitor changes in price offers from round to round and ensure that their proxy instructions are still in effect (i.e., greater than or equal to the current price offer). When proxy instructions are no longer in effect, the system will not submit a bid for the station.

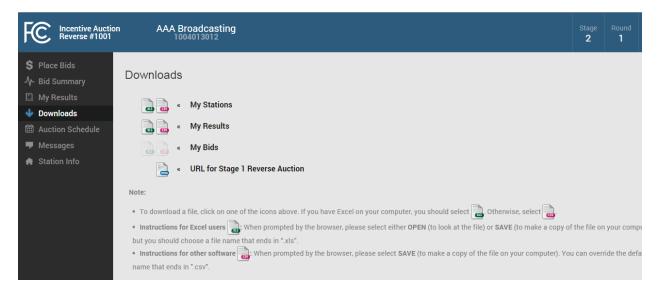
Figure 42 shows an example in which, in Round 4, WBOB-DT has been caught up and the station now has a status of "BIDDING." Therefore, the station is now able to bid. A proxy instruction was in place so a bid was placed by the proxy agent as soon as the round opened. The other station shown, WRCD-DT, remains "FROZEN – Pending Catch Up." WRCD-DT also has a proxy instruction in place which will be activated if it is again permitted to bid, provided the price is at least \$210,000,000, the station's proxy instruction amount.

Figure 42: A previously "Frozen - Pending Catch Up" station (WBOB-DT)



Messages, downloads and information about bids and round results from the previous stage are not available in the Auction System during the new stage. To view such information, the user will need to access the Auction System for the previous stage. The Downloads screen of the new stage will include a file containing the URL to a location where bidders can access the Auction System for the previous stage at the point in time when bidding was concluded in order to view information about that stage, to download data, or to view messages. This link is shown in Figure 43. If the auction continues to further stages, links to earlier stages will be provided in the same manner.

Figure 43: Download screen with file containing URL to access Stage 1 information

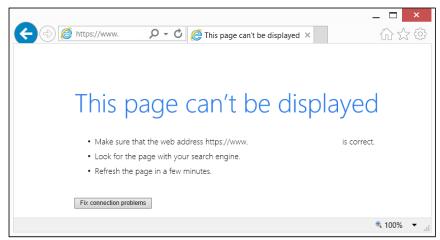


# **Appendix 1: System Troubleshooting**

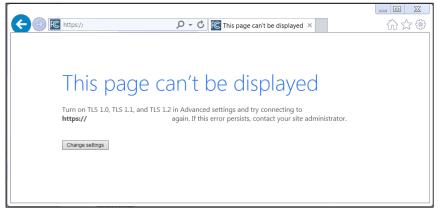
If you continue to experience problems after following the troubleshooting instructions, please call Technical Support at (877) 480-3201, option nine; (202) 414-1250; or (202) 414-1255 (TTY) (8:00 AM – 6:00 PM ET on business days).

### Situation 1 – "This page can't be displayed" screen on first access

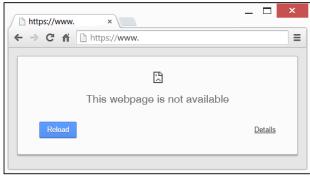
Figure 1: Page cannot be displayed messages



(Internet Explorer)



(Internet Explorer error message that may be displayed when TLS 1.1 is disabled)

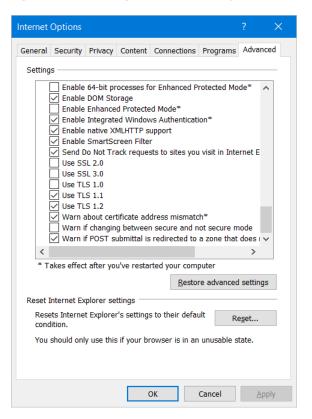


(Chrome)

If any of the screens shown in Figure 1 appear, complete the following steps:

- Confirm that the computer has external internet access. Try to access a common site on the
  internet such as <a href="http://www.google.com">http://www.google.com</a>. If this is unsuccessful, the computer does not have
  external internet access.
- Confirm that the URL for the Auction System is correct.
- Confirm that your organization has not blocked access to the site. Your organization may only allow you to access certain external web sites. Check with your IT department.
- You may not have selected the "OK" button when the message appeared stating that you are about to enter a secure site. Re-start the browser and try again ensuring you click on the "OK" button.
- Confirm that you are using the correct browser version (see system requirements in Section 3.1) by performing the following steps:
  - o Internet Explorer: First, click on the tools icon (which can be found in the top right-hand corner of your browser). Then click "About Internet Explorer."
  - O Chrome: First, click on the licon (which can be found in the top right-hand corner of your browser). Then click "Help" followed by "About Google Chrome."
- Confirm that TLS has been enabled on your browser.
  - Internet Explorer, this is done by clicking on the "Tools" menu and then "Internet Options" and then clicking on the "Advanced" tab. The following options must be ticked: "Use TLS 1.1" and "Use TLS 1.2." This is shown in Figure 2.
  - o Chrome supports TLS 1.1 and TLS 1.2 by default. No changes are required.
- Confirm that your corporate firewall accepts TLS.

Figure 2: TLS settings for Internet Explorer



## Situation 2 - "Cookies must be enabled" displayed

The Auction 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 Internet Explorer, complete the following steps:

- Click on the tools icon in the top right-hand corner of your browser, "Internet Options."
  - o Click on the "Privacy" tab of the "Internet Options" box that appears; and
  - Change privacy setting to "Medium High" or lower, as shown in Figure 3. Click on "OK."
  - o Restart your browser.

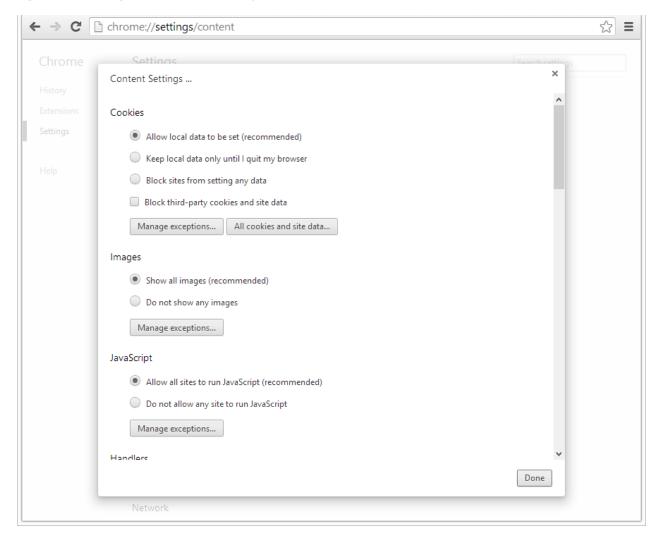
Figure 3: Enabling cookies in Internet Explorer



To enable cookies in Chrome, complete the following steps:

- Click on the tools icon in the top right-hand corner of your browser, click on "Settings" followed by the "Show advanced settings" link at the bottom of the "Settings" tab that appears.
- In the "Privacy" section, click on the "Content Settings..." button to display a screen similar to that shown in Figure 4.
- Select the radio box "Allow local data to be set (recommended)" as shown in Figure 4.
- Click on "Done" to save the settings, and close the "Settings" tab.

Figure 4: Enabling cookies and JavaScript in Chrome



### Situation 3 - "JavaScript must be enabled" displayed

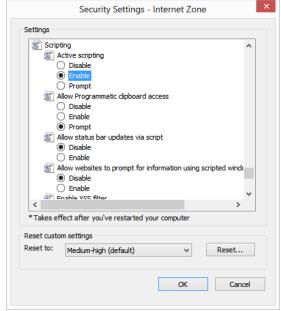
The Auction System requires that JavaScript is enabled on the browser used. If JavaScript is disabled, there will be a message stating that "JavaScript in this browser is not enabled or is not working."

To enable JavaScript in Internet Explorer, either set the computer security level to its default or manually enable "Active Scripting" as described below.

- Click on the tools icon in the top right-hand corner of your browser. Click on the "Security" tab of the "Internet Options" box that appears.
- Either click on the "Default Level" button (which will return your security settings to "Mediumhigh" as shown in Figure 5) or click on the "Custom Level ..." button and click on "Enable" for "Active Scripting' as shown in Figure 5.
- Click on "OK," and "OK" again if necessary.

Figure 5: Enabling JavaScript in Internet Explorer





(Figure 5a: Default security settings)

(Figure 5b: Enabling JavaScript)

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

- Click on the tools icon in the top right-hand corner of your browser, then "Settings," then "Show advanced settings" which appears as a link at the bottom of the "Settings" tab.
- In the "Privacy" section, click on the "Content Settings..." button.
- Select the radio-box "Allow all sites to run JavaScript (recommended)" (see Figure 4). Click on "Done" to save the settings, and close the "Settings" tab. Click "OK."

### Situation 4 – "page cannot be displayed" shown when moving to a different screen

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

- Click on the "Refresh"/"Reload" button, to reload the page.
  - If that is successful, please verify any actions that you were taking when the message
    was displayed. If you were in the middle of placing a bid, those changes will have been
    lost, and you will need to select and resubmit that bid. All submitted bids that had the
    green check mark will remain unaffected.
- 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 <a href="http://www.google.com">http://www.google.com</a>. If this is unsuccessful, the computer does not have external internet access.
- The Auction System may be down. To confirm whether the Auction System is down, first confirm that you have internet access and then attempt to access the home page (see

Section 3.2). If you are unable to view this page, or the page states that the Auction System is unavailable, then the Auction System may be down. Check to see whether you have received an email from the FCC indicating that the system is unavailable. The FCC will inform you when the Auction System is expected to be available again.

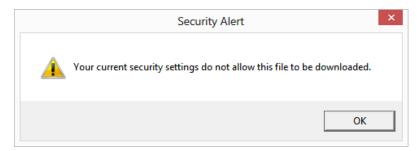
### Situation 5 – "This page has expired" displayed when you press the back button

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

### Situation 6 – Your security settings do not allow you to download a file in Internet Explorer

If Internet Explorer does not allow a file to be downloaded from the Auction System and displays the message shown in Figure 6, it is because downloads have been disabled in your browser.

Figure 6: Security message in Internet Explorer

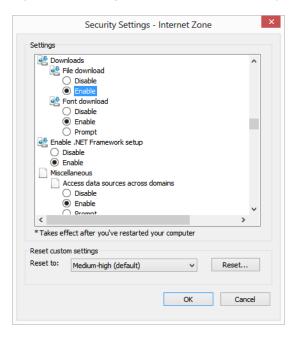


To re-enable downloads in Internet Explorer:

- Click on the tools icon in the top right-hand corner of your browser and click on the "Security" tab of the "Internet Options" box that appears.
- There are two ways to proceed:
  - Click on the "Default Level" button (which will return your security settings to "Medium-High" as shown in Figure 5 above, <u>OR</u>
  - O Click on the "Custom Level..." button and click on "Enable" for "File Download" as shown in Figure 7.
- Click on "OK," and "OK" again if necessary.
- If you cannot change these settings in your browser, please check with your IT department.

  They might have disabled user access to these settings for security purposes, in which case you will need them to change the settings for you.

Figure 7: Enabling downloads in Internet Explorer



#### Situation 7 – Your computer 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 Auction System.

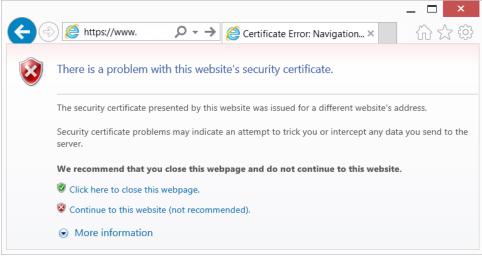
<u>Please review any actions that you were taking when the computer crashed.</u> If you were in the middle of submitting a bid or proxy instructions, those changes will have been lost, and you will need to select and resubmit that bid/proxy instruction. All submitted bids and proxy instructions that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

If the computer crashes while you are using the Auction System, you may access the Auction 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.

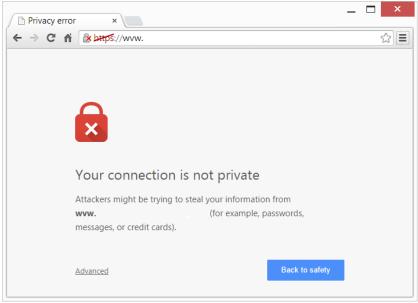
#### Situation 8 – Certificate error message

If you access the Auction System and see a security message similar to that shown in Figure 8 you should not proceed. Please call Technical Support (see the top of Appendix 1 for contact details).

Figure 8: Security messages for Internet Explorer and Chrome



(Internet Explorer)



(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. authorized bidder), the person who has been designated as the contact person, or the certifying official on the bidder's FCC Form 177 application (designated person), should call the Auction Bidder Line telephone number provided with the Final Confidential Status Letter.

#### Number of RSA Tokens Issued and Extra RSA Tokens

Each qualified bidder<sup>14</sup> is issued either two or three RSA tokens depending upon the number of authorized bidders it identified on its Form 177. A bidder with three authorized bidders is issued three RSA tokens. A bidder with two authorized bidders is issued two RSA tokens for its authorized bidders PLUS one extra RSA token. A bidder with one authorized bidder is issued one RSA token for its authorized bidder PLUS one extra RSA token. Each bidder is permitted to identify up to three authorized bidders on its Form 177.

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

Each RSA token is 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.

#### **Replacing Lost or Damaged RSA Tokens**

In the event that an RSA token is lost or damaged, a bidder's designated person should call the Auction Bidder Line telephone number provided with the Final Confidential Status Letter for assistance.

### **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, a qualified bidder's designated person should call the telephone number provided with the Final Confidential Status Letter.

<sup>&</sup>lt;sup>14</sup> RSA Token(s) were sent only to each applicant whose application and at least one selected station were deemed complete in the Second Confidential Status Letter. *See Wireless Telecommunications Bureau and Incentive Auction Task Force Send Notifications Regarding Status of Applications for the Reverse Auction (1001)*, AU Docket No. 14-252, GN Docket No 12-268, WT Docket No. 12-269, Public Notice, DA 16-284 (WTB Mar. 17, 2016).

# **Appendix 3: Bidding Status Definitions**

The Auction System will designate each station to an initial bidding status prior to the start of Round 1 based on the initial commitments and the clearing target determination procedure. After bids placed during a round have been processed, the Auction System will again assign a bidding status for the next round. The definitions of each bidding status are from the *Auction 1000 Bidding Procedures* Public Notice<sup>15</sup>.

**BIDDING**. If the Auction System determines that a station can be feasibly assigned a channel in its preauction band, its bidding status will be "BIDDING" and the system will offer a new reduced price offer for each of the options currently available to it, consistent with the bid option hierarchy and price determination procedures. A station will be offered lower prices and asked to submit a bid in each round so long as its status remains "BIDDING."

**FROZEN – Provisionally Winning**. If the Auction System determines that a station can never in the current stage be assigned a feasible channel in its pre-auction band, the station will be declared "FROZEN – Provisionally Winning." For the remainder of the stage, the current price and currently held option of a station with this bidding status will remain unchanged. If the final stage rule is met during that stage, such stations will become winning stations.

If the final stage rule is not met, prior to the beginning of the next stage, the Auction System will again evaluate the feasibility of assigning the station to a channel in its pre-auction band. Accordingly, the station's status may change to "FROZEN – Pending Catch Up," "FROZEN – Currently Infeasible," "BIDDING" or "EXITED – Not Needed." If at any point the system is unable to find a feasible assignment for a UHF station, its status will become "FROZEN – Provisionally Winning."

**FROZEN – Currently Infeasible**. <sup>16</sup> If the Auction System is currently unable to find a feasible channel assignment for a VHF station in its pre-auction band, but a feasible channel assignment could become available in a later round of the current stage, the station's bidding status will be "FROZEN – Currently Infeasible" and the system will freeze the station in its currently held option at its current price. A station with this status will not be asked to bid and will keep its currently held option and price for each round in which its status remains "FROZEN – Currently Infeasible."

A station that is "FROZEN – Currently Infeasible" may become unfrozen and resume bidding in later rounds if the system is able to find a feasible channel assignment for the station in its pre-auction band. Such a station will be able to monitor the price offers for its different options as clock prices are decremented, and may submit proxy bid instructions that will apply if and when it becomes unfrozen.

<sup>&</sup>lt;sup>15</sup> See Auction 1000 Bidding Procedures PN, 30 FCC at 9040–41, paras. 123–29.

<sup>&</sup>lt;sup>16</sup> Applies only to VHF stations.

Stations with this status may later become "FROZEN – Provisionally Winning" if the system determines that, for all possible future behavior of bidders in the current stage, a feasible assignment will never be found.

This bidding status is only possible for a VHF station because a feasible channel assignment in the VHF band may become available in a subsequent round if a UHF station currently designated to move to this VHF option drops out of the bidding or switches to a different VHF option.

FROZEN – Pending Catch Up (in subsequent stages only). At the start of a new stage, the Auction System may determine that a station that was "FROZEN – Provisionally Winning" at the end of the prior stage is now feasible in its pre-auction band and therefore no longer provisionally winning. If the base clock has not caught up to the station's "catch up point," or the base clock price at the time that the station became provisionally winning in the previous stage, the station's bidding status will change to "FROZEN – Pending Catch Up." Its currently held option and current price will remain unchanged as long as it is pending catch up. A station with this status will not be offered lower prices nor asked to bid in a round as long as the base clock price is greater than or equal to the station's catch up point.

A station with this status may become unfrozen and resume bidding in later rounds if the base clock price drops below the station's catch up point. As a result, such a station will be able to submit proxy bid instructions that will apply in case it later becomes unfrozen and its status reverts to "BIDDING."

A station with this status may later become "FROZEN – Provisionally Winning" if, prior to the base clock price dropping below the station's catch up point, the system determines that a feasible assignment will never be found for all possible future behavior of bidders in this stage.

**EXITED – Voluntary**. If a bidder places a bid for its station to drop out (or the system placed this bid because the bidder failed to submit a bid for a station that had the status of "BIDDING") and the bid is processed, the station's status will become "EXITED – Voluntary," and the station will no longer bid in the auction. Stations with this status will no longer be offered prices nor allowed to place bids. These stations will be designated for repacking in their pre-auction bands.

**EXITED – Not Needed**. If the Auction System determines at any point that a feasible channel assignment will always be available for a station in its pre-auction band, its status will change to "EXITED – Not Needed," and that station will no longer bid in the auction. Since the Auction System will never freeze a station that has a feasible assignment, such a station can never become provisionally winning.

**EXITED – In a Previous Stage**. If a station became "EXITED – Voluntarily" or "EXITED – Not Needed" in a previous stage, such a station can no longer bid in the auction. In any stage subsequent to the stage in which a station "EXITED," a station's status will become "EXITED – In a Previous Stage."

# Appendix 4: Bid Options as a Function of Pre-Auction Band

Table 1, Table 2, and Table 3 set out the bid options available for stations with a pre-auction band of UHF, High-VHF and Low-VHF, as a function of the currently held option. The tables assume that the bidder checked all available relinquishment options on its FCC Form 177. Note that the status "FROZEN – Pending Catch Up" can only occur in Stage 2 or later stages, as described in Section 8. The "\$" symbol in the tables below indicate that you can specify the price associated with that instruction. Other bids are at the prices shown by the system (except "Drop out of bidding" for which there is no associated price).

**Table 1: Bid options for UHF stations** 

		Currently Held Option			
		Go off-air	Move to Low-VHF	Move to High-VHF	
	BIDDING	Available Options:	Available Options:	Available Options:	
Status		1. Go off-air	1. Move to Low-VHF	1. Move to High-VHF	
		+ (Optional) Proxy Bid Instruction: Continue bidding to Go off-air until the price drops below \$	+ (Optional) Proxy Bid Instruction: Continue bidding to move to Low-VHF until the price drops below \$	+ (Optional) Proxy Bid Instruction: Continue bidding to move to High- VHF until the price drops below \$	
		2. Move to Low-VHF	2. Move to High-VHF	2. Drop out of bidding	
		+ Fallback bid: Go off-air; or Drop out of bidding	<b>+ Fallback Bid:</b> Move to Low-VHF; or Drop out of bidding		
		3. Move to High-VHF	3. Drop out of bidding		
		<b>+ Fallback Bid:</b> Go off-air; or Drop out of bidding			
		4. Drop out of bidding			
	FROZEN – Pending Catch Up	(Optional) Proxy Bid Instruction: Continue bidding to Go off-air until the price drops below \$	(Optional) Proxy Bid Instruction: Continue bidding to Move to Low-VHF until the price drops below \$	(Optional) Proxy Bid Instruction: Continue bidding to Move to High-VHF until the price drops below \$	

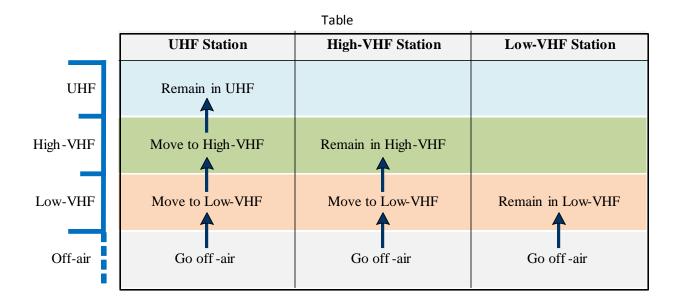
Table 2: Bid option for High-VHF stations

		Currently Held Option		
		Go off-air	Move to Low-VHF	
		Available Options:	Available Options:	
Status		1. Go off-air	1. Move to Low-VHF	
	BIDDING	<ul> <li>+ (Optional) Proxy Bid Instruction: Continue bidding to Go off-air until the price drops below \$</li> <li>2. Move to Low-VHF</li> <li>+ Fallback bid: Go off-air; or;</li></ul>	<ul> <li>+ (Optional) Proxy Bid Instruction: Continue bidding to Move to Low-VHF until the price drops below \$</li> <li>2. Drop out of bidding</li> </ul>	
	FROZEN – Currently Infeasible	(Optional) Proxy Bid Instruction: Continue bidding to Go off-air until the price drops below \$	(Optional) Proxy Bid Instruction: Continue bidding to Move to Low-VHF until the price drops below \$	
	FROZEN – Pending Catch Up	(Optional) Proxy Bid Instruction: Continue bidding to Go off-air until the price drops below \$	(Optional) Proxy Bid Instruction: Continue bidding to Move to Low-VHF until the price drops below \$	

**Table 3: Bid options for Low-VHF stations** 

			Currently Held Option	
		Go off-air		
Status		Available Options:		
	DIDDING	1. Go off-air		
	BIDDING	+ (Optional) Proxy Bid Instruction: Continue bidding to Go off-air until the price drops below \$  2. Drop out of bidding		
	FROZEN – Currently Infeasible	(Optional) Proxy Bid Instruction:	Continue bidding to Go off-air until the price drops below \$	
	FROZEN – Pending Catch Up	(Optional) Proxy Bid Instruction:	Continue bidding to Go off-air until the price drops below \$	

# Appendix 5: One-Way Bidding Hierarchy<sup>17</sup>



<sup>&</sup>lt;sup>17</sup> The one-way bidding hierarchy reflects the relative value of the relinquishment options to the auction system's ability to recover spectrum. Of greatest value in the hierarchy is a bid to go off-air, followed by a bid to move to the Low-VHF band, and then by a bid to move to the High-VHF band. A station's initial option in Stage 1 will represent the most spectrum rights it will be able to bid to relinquish in the auction. If the bidder subsequently decides to switch its bid option in accordance with the reverse auction bidding procedures, the only bid option(s) available to the bidder will be options that relinquish less spectrum usage rights. *See Auction 1000 Bidding Procedures PN*, 30 FCC at 9009–10, para. 51.