

# FCC Incentive Auction Public Reporting System

## **USER GUIDE**

Last updated: May 27, 2016

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The Federal Communications Commission (the “FCC” or “Commission”) will make available a web-based Public Reporting System for the FCC Incentive auction.

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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.

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## 1. Overview and Navigation of the Public Reporting System

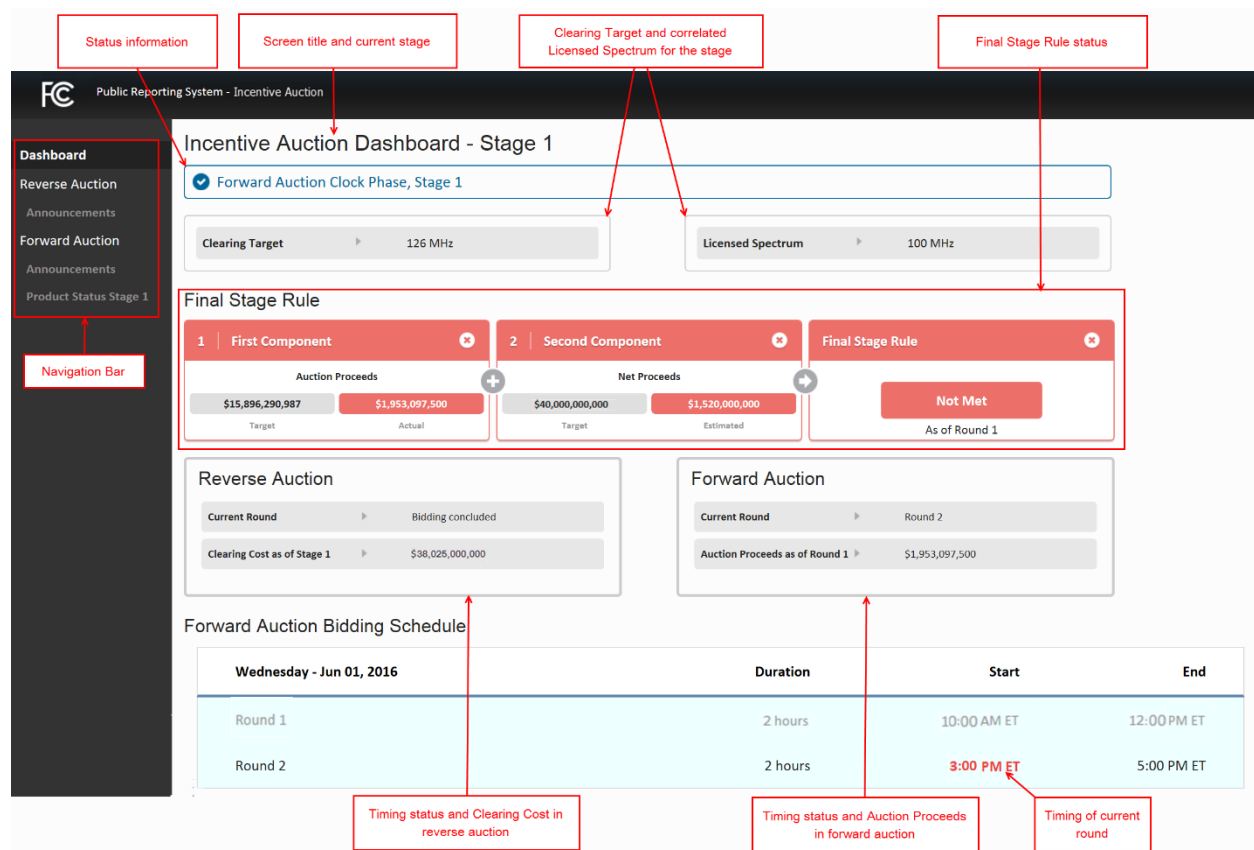
The Public Reporting System (PRS) provides the most current publicly available information about the status of the incentive auction. The public can access the PRS directly at [auctiondata.fcc.gov](https://auctiondata.fcc.gov) and from a link in the Results section of the FCC's Auction 1001 website ([www.fcc.gov/auctions/1001](https://www.fcc.gov/auctions/1001)) and Auction 1002 website ([www.fcc.gov/auctions/1002](https://www.fcc.gov/auctions/1002)). It will remain accessible until shortly after the auction concludes.

The PRS is divided into several sections: the Dashboard, which contains overall information on the timing and status of the incentive auction and which charts progress toward meeting the final stage rule; a Reverse Auction section which contains announcements relevant to the reverse auction clock phase; a Forward Auction section, which contains announcements relevant to the forward auction clock phase and a Product Status screen, which gives round-by-round information about prices and demand for all of the categories of blocks in each PEA during the clock phase at each stage; and an Assignment Phase section containing assignment phase announcements. These sections can be accessed through the Navigation Bar, which is located on the left side of each PRS screen.

## 2. Dashboard

Upon accessing the public reporting system, the Dashboard screen will appear, summarizing the current status of the auction. To illustrate the layout of the Dashboard screen, an example is shown in Figure 1 below. The Navigation Bar is at the left; general information about the stage and clearing target is shown at the top. The Final Stage Rule graphic is not shown until the results of bidding in the first round of the Stage 1 forward auction are posted. In the example, the clock phase of the forward auction is underway, so the screen shows the current bidding schedule.

Figure 1: Layout of the Dashboard during the auction



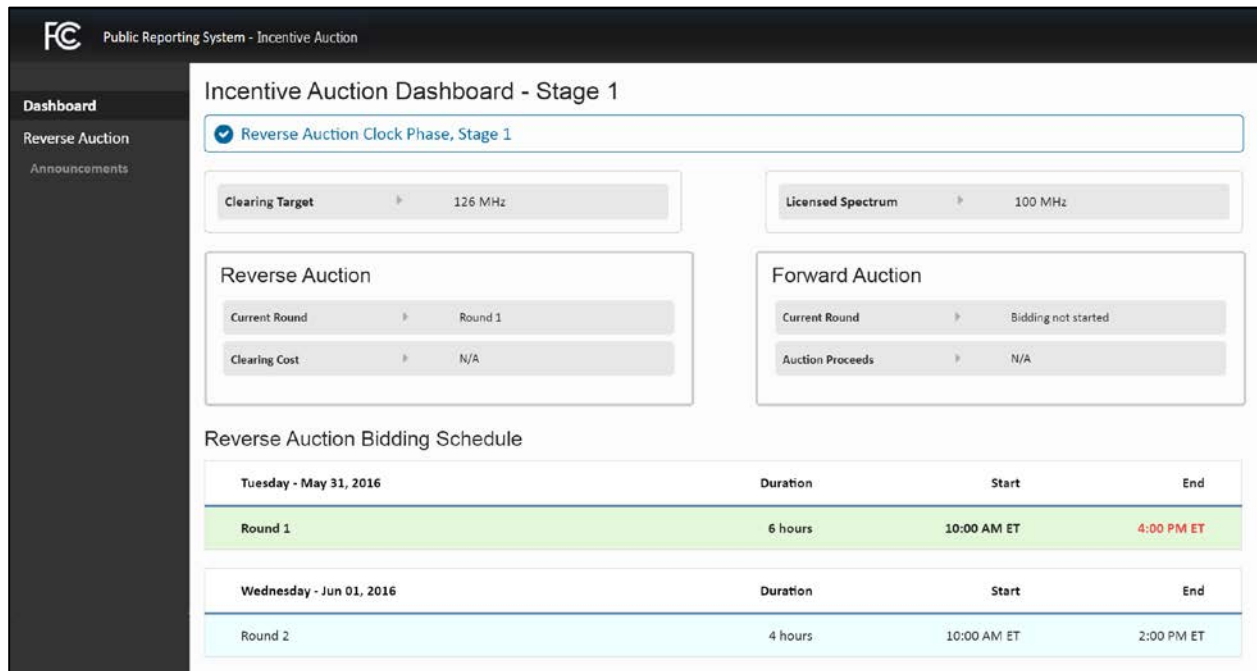
The contents of the Dashboard screen differ depending on which phase of the incentive auction is underway or most recently completed. This section of the user guide addresses the information available on the Dashboard at the following points in the auction:

- During the clock phase of the reverse auction
- During the clock phase of the forward auction
- During the assignment phase of the forward auction

### 2.1. During the Clock Phase of the Reverse Auction

The first part of the incentive auction for which information is publically available is the clock phase of the reverse auction. Figure 2 shows an example of the Dashboard during Stage 1 of the reverse auction.

Figure 2: Dashboard after Round 1 of the reverse auction



The first line of the Dashboard indicates the stage of the incentive auction. The second line shows the current auction status in a box, accentuated by a check mark. In the above example it is “Reverse Auction Clock Phase, Stage 1” but the information shown in the blue status box may change during a phase.

The next box shows the spectrum clearing target for the reverse auction and the corresponding amount of licensed spectrum for the forward auction in the current stage. This is the amount of spectrum that the current stage of the incentive auction will attempt to clear and repurpose for wireless uses. The numbers will change if there is a new stage.

The Reverse Auction box indicates the overall timing status of the reverse auction and, if the reverse auction has ended, the clearing cost as determined by reverse auction bidding for that stage. The round number updates to the next round as soon as the bids in the round have been processed. The clearing cost for a stage is shown as soon as reverse auction bidding in that stage has concluded and the bids have been processed. No clearing cost information for the current stage is available during the reverse auction for that stage.

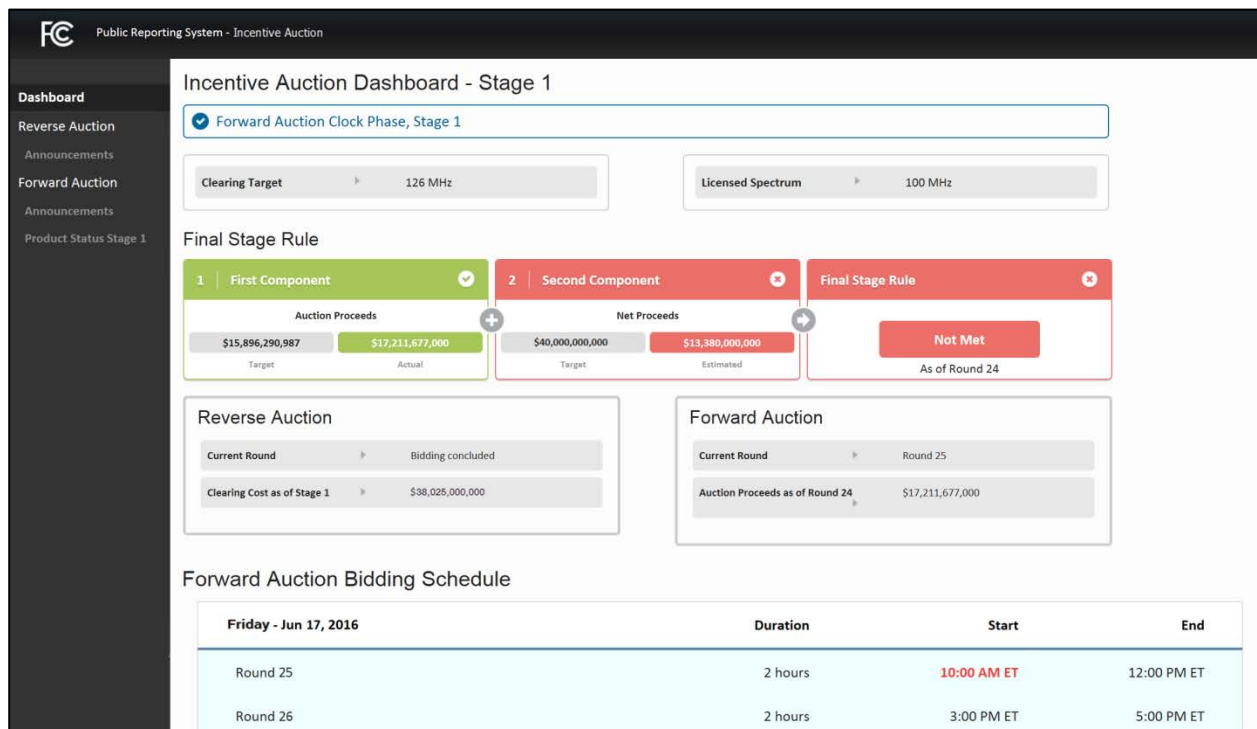
The Forward Auction box indicates the timing status for the forward auction. During the reverse auction in Stage 1, the Forward Auction box will note that bidding has not started for the forward auction and will not show any forward auction proceeds, as in the example. During reverse auction bidding in any stage after Stage 1, the Forward Auction box shows the auction proceeds as of the previous stage and indicates that bidding in the previous stage is concluded (e.g., “Stage 1 concluded”).

While the reverse auction is active, the auction schedule for upcoming rounds of the reverse auction is shown at the bottom of the Dashboard. It indicates whether a round is about to start (start time is red) or active (end time is in red). When the clock phase of the reverse auction concludes for the stage, the auction schedule is no longer shown.

## 2.2. During the Clock Phase of the Forward Auction

The Dashboard example in Figure 3 below is for Stage 1 clock phase forward auction bidding. This is indicated at the top of the Dashboard screen: Incentive Auction Dashboard - Stage 1, and by the additional status information in the box with the check mark. The Clearing Target and Licensed Spectrum information remains the same as during the reverse auction for that stage. Because the forward auction is now underway, the Forward Auction box now shows the current round of the forward auction and the forward auction proceeds as of the close of the last processed round. Current forward auction proceeds will continue to be updated in the Forward Auction box. The Reverse Auction status information does not change during the forward auction.

Figure 3: Dashboard during the forward auction



*Final Stage Rule.* Starting after the results of Round 1 of Stage 1 of the clock phase of the forward auction are posted, the Dashboard also shows information indicating progress toward meeting the final stage rule. The Final Stage Rule graphic is composed of three boxes:

The First Component box indicates progress toward meeting the first component of the final stage rule, which requires that the auction results reflect competitive prices. For an auction with an overall clearing target greater than 84 megahertz (meaning that more than 70 megahertz are offered in the forward auction), the first component box shows Auction Proceeds. At these clearing targets, the Target for Auction Proceeds is a constant, approximately \$15.9 billion, calculated based on procedures adopted by the Commission.<sup>1</sup> At overall clearing targets of 84 megahertz or less, the first component is expressed in terms of Average Price (in \$ per MHz/Pop, with a Target set by the Commission at \$1.25 per MHz/Pop). Actual Auction Proceeds or Average Price, depending upon the clearing target, is calculated based on current posted prices. Actual Auction Proceeds or Average Price is updated after each round of the forward auction until the final stage rule has been met.

The Second Component box in the Final Stage Rule graphic indicates progress toward meeting the second component of the final stage rule, which requires that forward auction proceeds net of bidding credits and impairment discounts be sufficient to cover incentive auction costs.<sup>2</sup> The Target for Net Proceeds at the bottom of the box shows the aggregate of broadcaster clearing costs and other costs mandated by statute, a sum which is known at the completion of the reverse auction when broadcaster clearing costs for the stage (which appear in the Reverse Auction box as addressed above) are determined. The Estimated Net Proceeds take into account current forward auction proceeds and potential bidding credit and impairment discounts, rounded down to the nearest \$10 million.<sup>3</sup> Estimated Net Proceeds are updated after each round until the final stage rule has been met.

The Final Stage Rule box in the Final Stage Rule graphic indicates whether the final stage rule has been met, and when met, the round in which it was met.<sup>4</sup> The final stage rule is met when both components

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<sup>1</sup> See *Broadcast Auction Scheduled to Begin March 29, 2016; Procedures for Competitive Bidding in Auction 1000, Including Initial Clearing Target Determination, Qualifying to Bid, and Bidding in Auctions 1001 (Reverse) and 1002 (Forward)*, Public Notice, 30 FCC Rcd 8975, 9078-80, paras. 216-20 (2015) (*Auction 1000 Bidding Procedures Public Notice*). The formula for calculating the target for Auction Proceeds is addressed more precisely in the *Auction 1000 Application Procedures Public Notice*. See *Application Procedures for Broadcast Incentive Auction Scheduled to Begin on March 29, 2016; Technical Formulas for Competitive Bidding*, Public Notice, 30 FCC Rcd 11034, 11181-214, Appendix G (WTB 2015) (*Auction 1000 Application Procedures Public Notice*)

<sup>2</sup> Net proceeds cannot be calculated exactly until the auction is concluded. The estimated net proceeds are defined in the *Auction 1000 Application Procedures Public Notice*, 30 FCC Rcd at 11181-214, Appendix G.

<sup>3</sup> See *id.*

<sup>4</sup> While there is a "+" between the two boxes showing the components of the Final Stage Rule, the first and second components are complementary and not cumulative. The auction must satisfy both components, but it need not



have been satisfied. For all Final Stage Rule boxes, the color of the box indicates whether a component has been satisfied: red for not satisfied, green for satisfied. In Figure 3 above, the first component is met and therefore shown in green, but the second component has not been met. Once both component boxes turn green, the third box will change to green as well. Until the final stage rule is met, both the targets and the actual or estimated amounts are shown for both components. For subsequent rounds, only target amounts show.

During the clock phase of the forward auction, the Forward Auction Bidding Schedule section at the bottom of the Dashboard shows the forward clock bidding round schedule for upcoming rounds. It indicates whether a round is about to start (start time is red) or active (end time is in red). When the clock phase of the forward auction concludes for the stage, the schedule disappears.

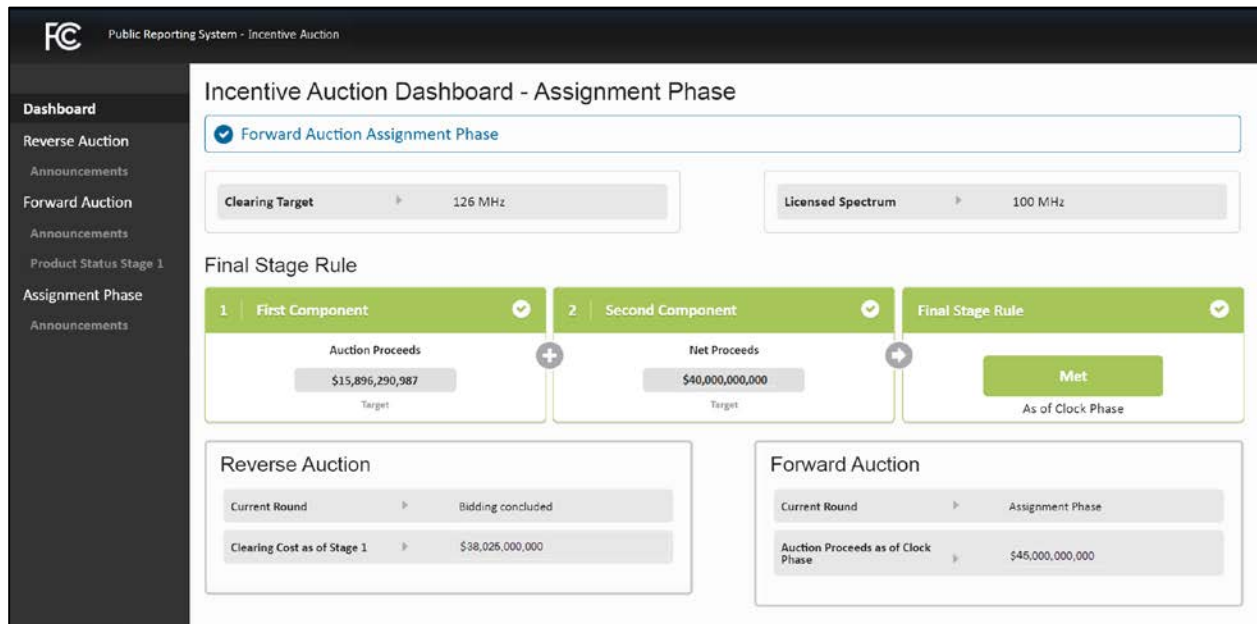
### **2.3. During the Assignment Phase of the Forward Auction**

After the conclusion the clock phase of the incentive auction, the Dashboard indicates that the auction has progressed to the assignment phase. This is indicated at the top of the Dashboard screen in figure 4: Incentive Auction Dashboard - Assignment Phase. Additional information about the status is displayed in a box under the status line, marked by a check.

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raise sufficient proceeds to satisfy the first in addition to the second. Rather, the same bids and proceeds can be considered when satisfying each component. *See Comment Sought on Competitive Bidding Procedures for Broadcast Incentive Auction 1000, Including Auctions 1001 and 1002*, Public Notice, 29 FCC Rcd 15750, 15769, para. 46 n.111 (2014).

Figure 4: Start of assignment phase



The Clearing Target and Licensed Spectrum information remain unchanged.

The final stage rule is shown as having been met “As of Clock Phase.”

The Reverse Auction and Forward Auction boxes continue to display the overall bidding status of the incentive auction. The Reverse Auction box indicates that bidding has concluded and shows the clearing cost for the stage. The Current Round indicator in the Forward Auction box shows only that the forward auction is in the Assignment Phase; it does not show an assignment round number. Auction Proceeds is current as of the conclusion of the clock phase. Once the assignment phase has concluded, the timing status updates to “Bidding Concluded,” and the Auction Proceeds updates to display the Auction Proceeds after the Assignment Phase.

The auction round schedule for the assignment phase is not displayed on the Dashboard.

### 3. Announcements

To view public announcements for the reverse auction or the clock or assignment phases of the forward auction, click on the relevant link on the Navigation Bar. The screen will show all public announcements, in reverse chronological order, as in the example in Figure 5. (At points in the auction when there are announcements relevant to the forward auction clock or assignment phases, additional links will appear in the Navigation Bar, as seen in Figure 4, above.)

Figure 5: Announcements

The screenshot shows the 'Incentive Auction: Reverse Auction - Announcements' page. It features a search bar and a 'Download CSV (2 rows)' link. Below the search bar, there is a table with the following data:

Auction ID	Announcement Time	Subject	Announcement
1001	2016-05-04 13:02:42	Bidding Schedule	Bidding in the clock phase of Auction 1001 will begin on Tuesday, May 31, 2016, using the following bidding schedule. May 31, 2016 Bidding Round 10:00 a.m. - 4:00 p.m. Eastern Time (ET) June 1, 2016 Bidding Round 10:00 a.m. - 2:00 p.m. ET Starting on June 2, 2016, and continuing until further notice, the following two-round bidding schedule will be used. Bidding Round 10:00 a.m. - 12:00 p.m. ET Bidding Round 3:00 p.m. - 5:00 p.m. ET Round results will be available after each round closes and the Auction System processes the bids. The FCC will set the pace of the auction based upon its monitoring of the bidding activity and its assessment of the auction's progress. Bidders are reminded to monitor auction announcements for bidding schedule changes and other important information.
1001	2016-05-04 13:02:42	Contacting the FCC	All applicants should have immediate access to the following telephone numbers: Auction Bidder Line: This telephone number was supplied to all qualified bidders in the registration materials mailing. Software/Hardware Technical Support: (877) 480-3201, option nine; or (202) 414-1250. Legal Questions: (202) 418-0660. Identify yourself as an Auction 1001 participant and ask to speak with an auction attorney. If you have a question during the auction, contact the FCC using one of the above phone numbers. Do not ask any time-sensitive questions via the auction system's messaging function.

The Announcements screens can be customized for viewing and downloading. Clicking on the Search box will show available filters under each column heading, which can be typed into the filter boxes and applied. Sort the data in columns by clicking on the column heading and then on the arrow that appears. Select or hide columns by clicking the X next to the column heading. Download the resulting report by clicking the Download CVS link, to the right of the Search box. Customizing a report is addressed in more detail below in Section 4.1.

#### 4. Forward Auction Product Status

A Product Status screen provides round results for each product – that is, each category of generic blocks in each PEA -- available for the current stage and for any previous stages of the forward auction, beginning when the bidding results from Round 1 of Stage 1 are posted. It can be accessed through a link on the Navigation Bar (there are separate links for each stage). Information for the current stage is updated after every clock phase bidding round when round results are made available. (Note that the screen does not automatically refresh when round results are updated.)

The Product Status screen includes the following data:

- Auction Information: Auction ID, Stage, Round

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- Product Description: Market Number, Market Name, Category, Population, Bidding Units<sup>5</sup>
- Supply and Demand Information: Supply of blocks in the category, Aggregate Demand<sup>6</sup>
- Pricing Information: Round Opening Price, Clock Price, Posted Price, Next Round Clock Price<sup>7</sup>

As seen in the example in Figure 7 below, information about each product is shown on a separate line. After the final stage rule is met and the spectrum reserve split has taken place, the number of products will increase, as the Category 1 (C1) products will be divided into separate categories of unreserved (C1-U) and reserved (C1-R) products. The number of products may change from stage to stage as well, since the clearing target is reduced in subsequent stages.

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<sup>5</sup> The Market Number is the PEA number. A Category is a classification of generic blocks based on the level of impairment. The forward auction begins with two bidding categories: C1 (least impaired) and C2 (less impaired). After the final stage rule is met and the spectrum reserve is implemented, category C1 is divided into reserved (C1-R) and unreserved (C1-U) bidding categories. For further details, see *Auction 1000 Application Procedures Public Notice*, 30 FCC Rcd at 11181-214, Appendix G.

<sup>6</sup> Supply is the number of available blocks of the product. Aggregate Demand is the total number of blocks of the product demanded by all bidders after bid processing for the round.

<sup>7</sup> For a given round, the Round Opening Price is the Posted Price at the end of the prior round. The Clock Price for the round is announced by the Auction System before a round begins. The Round Opening Price and the Clock Price define the permissible bidding range for the product during a round. The Clock Price will become the Posted Price for the product if aggregate demand exceeds supply at the Clock Price. If demand falls to equal supply at an intermediate price within the bidding range for the round, that price will become the Posted Price. If demand equals supply at the Round Opening Price, that price will become the Posted Price. A bidding increment is added to the Posted Price to determine the Next Round Clock Price. Prices are per block. For further details on prices, see *Auction 1000 Application Procedures Public Notice*, 30 FCC Rcd at 11181-214, Appendix G.

Figure 6: Product status

Incentive Auction: Forward Auction - Product Status Stage 1

Search  Download CSV (1712 rows)

Add Column:  Auction ID  Stage  Round  Next Round Clock Price  Round Opening Price  Clock Price  Agg Demand  Posted Price  Bidding Units  Supply  Population

Market Number	Market Name	Category	Round Opening Price	Clock Price	Agg Demand	Posted Price	Bidding Units	Supply	Population
PEAD01	New York, NY	C1	\$168,350,000	\$179,685,000	28	\$179,685,000	27,000	10	25,237,061
PEAD02	Los Angeles, CA	C1	\$121,000,000	\$133,100,000	15	\$133,100,000	20,000	5	19,410,169
PEAD03	Chicago, IL	C1	\$59,895,000	\$65,885,000	20	\$65,885,000	9,900	10	9,366,713
PEAD04	San Francisco, CA	C1	\$57,475,000	\$63,223,000	12	\$63,223,000	9,500	10	9,027,937
PEAD05	Baltimore, MD- Washington, DC	C1	\$50,215,000	\$55,237,000	23	\$55,237,000	8,300	6	7,842,134
PEAD06	Philadelphia, PA	C1	\$48,400,000	\$53,240,000	15	\$53,240,000	8,000	9	7,587,252
PEAD07	Boston, MA	C1	\$42,955,000	\$47,251,000	17	\$47,251,000	7,100	10	6,776,035
PEAD08	Dallas, TX	C1	\$41,140,000	\$45,254,000	17	\$45,254,000	6,800	10	6,452,472
PEAD09	Miami, FL	C1	\$39,930,000	\$43,923,000	17	\$43,923,000	6,600	10	6,291,880
PEAD10	Houston, TX	C1	\$37,510,000	\$41,261,000	17	\$41,261,000	6,200	10	5,891,999
PEAD11	Atlanta, GA	C1	\$34,485,000	\$37,934,000	17	\$37,934,000	5,700	10	5,435,312
PEAD12	Detroit, MI	C1	\$32,670,000	\$35,937,000	17	\$35,937,000	5,400	10	5,137,479

#### 4.1. Customizing the Product Status Screen

When the Product Status screen is first accessed, all products and all possible columns are shown. The screen can be modified to display only selected products and parameters.

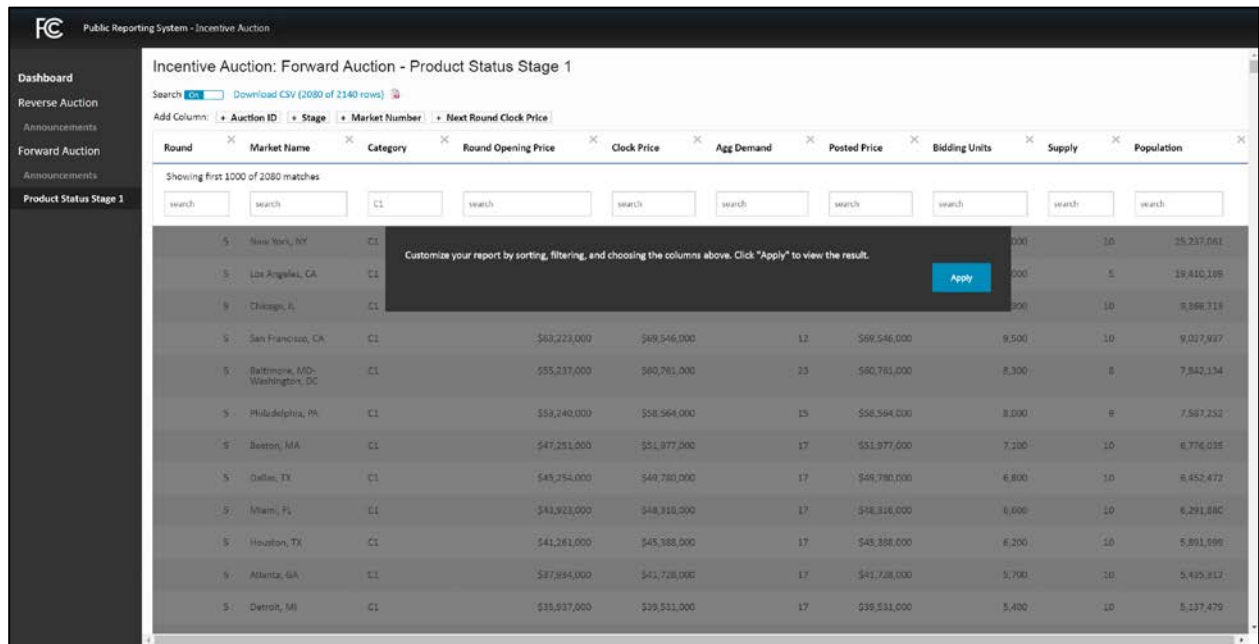
To hide a column, click on the X to the right of the column name. This hides the column and moves the column heading into the Add Column list (above the active columns). Columns may be enabled again by clicking on the box containing the + and the column name.

To sort columns, click on the column heading. This brings up an arrow. To reverse the sort order, click on the arrow.

To filter the data in each column, click the Search box to turn the filters on. The filter boxes will appear under the column headings. Type the desired parameters into the filter boxes. This will display only the products meeting the chosen criteria. For numeric fields, all data that is the same or less than the selected number will show.

Depending on the amount of product status information stored in the system, the screen may prompt the user to click “Apply”, once all filters have been set and sorting and column choices have been made (see Figure 7).

Figure 7: Customize a report by sorting, filtering and choosing columns



The screen will indicate (on the left side above the filter fields) how many records can be viewed on the screen and how many records match the selected criteria. In the example above there are 2140 total product status records in the file. The user filtered for C1 products in the Category field. The first 1000 of 2080 rows that were the result of filtering can be viewed. In order to see all records matching the selected criteria (2080 records), the user must download a file. The file will not contain the Auction ID, Stage, Market Number or Next Round Clock Price columns, as these columns were hidden. The file format for the Product Status download is shown in Section 4.2 below.

## 4.2. Downloading the Product Status File

Clicking on the Download CSV link will generate the Product Status file, a comma separated value (CSV) file that is ready to be saved on the computer. An example of a Product Status file download is shown below in Figure 8.

Figure 8: Example of product status CSV file

round	market_name	category	round_opening_price	clock_price	aggregate_demand	posted_price	bidding_units	supply	population
5	New York, NY	C1	179685000	197654000	28	197654000	27000	10	25237061
5	Los Angeles, CA	C1	133100000	146410000	15	146410000	20000	5	19410169
5	Chicago, IL	C1	65885000	72474000	20	72474000	9900	10	9366713
5	San Francisco, CA	C1	63223000	69546000	12	69546000	9500	10	9027937
5	Baltimore, MD-Washington, DC	C1	55237000	60761000	23	60761000	8300	8	7842134
5	Philadelphia, PA	C1	53240000	58564000	15	58564000	8000	9	7587252
5	Boston, MA	C1	47251000	51977000	17	51977000	7100	10	6776035
5	Dallas, TX	C1	45254000	49780000	17	49780000	6800	10	6452472
5	Miami, FL	C1	43923000	48316000	17	48316000	6600	10	6291880
5	Houston, TX	C1	41261000	45388000	17	45388000	6200	10	5891999
5	Atlanta, GA	C1	37934000	41728000	17	41728000	5700	10	5435312
5	Detroit, MI	C1	35937000	39531000	17	39531000	5400	10	5137479
5	Orlando, FL	C1	31944000	35139000	17	35139000	4800	10	4562642
5	Cleveland, OH	C1	12645000	13910000	17	13910000	1900	9	4096678
5	Phoenix, AZ	C1	26620000	29282000	17	29282000	4000	8	3817117
5	Seattle, WA	C1	26620000	29282000	17	29282000	4000	10	3792218
5	Minneapolis-St. Paul, MN	C1	23958000	26354000	18	26354000	3600	10	3390091
5	San Diego, CA	C1	21962000	24159000	15	24159000	3300	4	3095313

The file is structured as follows:

- CSV file (first row contains header).
- One record for each round and product (or based on the filter).
- If the next round will be an extended round, the next\_round\_clock price will be the same as the posted\_price for all products not biddable in the extended round.

Field Description	Type	Data	Example/Notes
auction_id	The FCC auction number for the forward auction	String	1002
stage	Stage number	Integer {1,3}	1
round	Round number	Integer	12
market_number	The PEA (Partial Economic Area)	ID String ([PEA][0-9] [0-9][0-9]){6}	PEA001
market_name	The PEA name	String	New York, NY
category	License category	String [C1 C1-R C1-U C2]{4}	C1
round_opening_price	The lowest price available for bidding on the product in the round.	Integer	11500000 <i>In Stage 1, Round 1 this is the opening price, for all other rounds it is the posted price from the previous round.</i>

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Field Description	Type	Data	Example/Notes
round_clock_price	The clock price (highest price) of the product in the round.	Integer	12650000
aggregate_demand	The aggregate demand for the product after processing.	Integer	15
posted_price	The posted price for the product after processing.	Integer	12650000
next_round_clock_price	The clock price (highest price) of the product in the next round.	Integer	13915000 <i>NULL if the next round has not yet been announced.</i>
bidding_units	Number of bidding units associated with the product	Integer	2300
supply	The supply of blocks for the product	Integer	8
population	The population in the PEA associated with the product.	Integer	25237061