JUNE 23, 2017

VPS Consulting Memo

CAF II Auction

Summary

- ### Overview

  On March 2, 2017, the FCC released an order taking another step towards implementing the CAF II Auction. The FCC finalized the performance tier weightings, latency weightings, and how to calculate a bid score based on them. In the order the FCC clearly stated they want the auction process to be simple in order to increase interest and competition.

- ### Background

  Nationwide, more than 315,000 price cap census blocks will be auctioned off in the CAF II auction. These are areas the price cap carriers were not allowed to claim in their "right of first refusal" as well as areas rejected by the price cap carriers.

Performance Tiers

- ### CAF II Performance Tiers

  The FCC has designed a system allowing bids at different speeds to compete against one another. The "minimum performance tier" will require 10 Mbps downstream and 1 Mbps upstream and offer a minimum usage allowance of 150 GB per month. The "baseline performance tier" is 25Mbps/3Mbps and 150 GB per month of usage allowance. For the "above baseline tier," the FCC will accept bids committing to offer 100 Mbps/20 Mbps. The "gigabit performance tier" will be at least 1 Gbps downstream and 500 Mbps upstream.[1] For each of these four performance tiers, bidders will select one of the two latency performance levels: low latency or high latency. For each of these latency tiers bidders must meet a minimum latency standard of 95 percent or more of all peak period measurements of network round tip latency at or below 100 milliseconds.[2]

[1] ¶10.
[2] ¶11.

VANTAGEPNT.com 605-995-1777
2211 N Minnesota Street Mitchell SD 57301

- 2 Terabyte Usage

  Instead of requiring bidders in the above-baseline and gigabit performance tiers to offer unlimited data allowance, they FCC will require bidders in those two tiers to offer a monthly usage allowance of at least 2 terabytes (TB) per month.[3]

FCC CAF II Performance Tiers	
Performance Tier	**Upload/Download**
Minimum Performance Tier	10/1 Mbps
Baseline Performance Tier	25/3 Mbps
Above Baseline Performance Tier	100/20 Mbps
Gigabit Performance Tier	1 Gbps/500 Mbps

FCC CAF II Latency	
Latency	**Requirement**
Low Latency	≤ 100 ms
High Latency	≤ 750 ms

Bid Ranking

- Bid Ranking

  The FCC decided the scores in the Phase II auction would begin by dividing the bid by the reserve price for the area. Adjustments for speed tier and latency would then be added. The commission found this approach is more likely to ensure winning bidders are selected across a wide range of states.4 The bid-to-reserve price ratio methodology was made in order to prevent support from disproportionately flowing to those states where the cost to serve per location is, relatively speaking, lower than other states.[5]

[3] ¶73.
[4] ¶60.
[5] ¶63.

- ## Weighting

The Commission has clarified the weights are positive values which will be added to a particular bid-price-to-reserve price ratio to arrive at a score.[6] The FCC wanted the weighting approach to be a straightforward representation of the fact they value higher speeds and usage allowances and lower latency. This method should be easier for bidders to understand and simpler for the FCC to implement.[7]

$$S=100 \times B/R + T + L$$

*S=Bid's score
*B=current bid price
*R=reserve price
*T=weight assigned to bid's associated tier
*L=weight assigned to bid's associated latency

FCC CAF II Weighting	
Performance Tier	**Weighting Factor**
Minimum: 10/1 Mbps	65
Baseline: 25/3 Mbps	45
Above Baseline: 100/20 Mbps	15
Gigabit: 1 Gbps/500 Mbps	0
High-Latency (regardless of speed)	25
Low-Latency	0

- ## Weighting Example

Consider bidders in an area with a reserve price of $160. The first bidder asks for $120 (a score of 100 x $120/$160= 75) to offer baseline service (=45) with high latency (+25). The bid's score would be 75+45+25=145. A second bidder asks for $140 (100 x $140/$160=87.5) to offer baseline service (+45) with low latency (+0). The bid's score would be 87.5+45+0=132.5. In this round of the auction, the second bidder would be declared to have the primary winning bid.[8]

- ## Bid-to-Reserve Price Ratio

The bid-to-reserve price ratio appropriately applies the weights uniformly across all area thereby increasing competition and giving providers in all eligible areas opportunities to win.[9] Every bidder

[6] ¶15.
[7] ¶18.
[8] ¶15. See footnote 28 in the order.
[9] ¶18. See also ACA Jan. 30 2017 Ex Parte letter at 2 n.3

– no matter the service tier or latency – must have the opportunity to exert competitive pricing pressure on every other bidder. In other words, the total band of weights must be less than 100. This will maximize the competitive pressure all bidders bring to bear, ensuring even the highest-tier services take into account the bang-for-the-buck they are delivering to consumers nationwide. This also ensures the FCC examines the weights holistically, so the accumulation of weights does not lead to troublesome and unexpected consequences.[10]

- ### Latency Weighting

  A weight of 25 is appropriate because a bidder placing a low latency bid in the Gigabit performance tier will not necessarily win, which will add pressure on such bidders to make more cost effective bids. A minimum performance high latency bidder will have cumulative weight of 90 (65 for the minimum performance tier; 25 for the high latency bid), which will provide a reasonable opportunity for high latency bidders to make competitive bids in the lower performance tiers.[11]

Extremely High-Cost Locations

- ### Extremely High-Cost Locations

  The FCC rejected calls for them to fund extremely high-cost location only after they have funded all bids for high-cost locations. When they decided to include the extremely high-cost census blocks in the Phase II Auction, the commission explicitly recognized in some areas a service provider might be able to make a business case to serve extremely high-cost efficiently even though the Connect America Cost Model has determined an area to be extremely high-cost. Because extremely high-cost areas are interspersed among high-cost areas, including extremely high-cost census blocks in the Phase II auction enable parties to build integrated networks that span both types of areas as appropriate. The FCC believes this approach gives bidders the flexibility to decide how to most efficiently upgrade or extend their networks.[12]

Re-Auctioning High Latency Areas

- ### Re-Auctioning

  The FCC reconsidered the Commission's decision with regard to re-auctioning areas served by high latency bidders where there is low subscribership. Instead, all authorized Phase II auction recipients will have a full 10-year term of support if they comply with the terms and conditions of Phase II support.[13]

[10] ¶22.
[11] ¶33.
[12] ¶30.
[13] ¶66.

CAF II Timeline

- ### Timeline

  The FCC released a notice in the Federal Register on March 21, 2017, announcing April 20, 2017, as the effective date for the CAF II Auction Order. The FCC has already stated the final CAF II census block list will be released 90 days prior to the CAF II auction. As to when the CAF II auction will take place is still unsure. VPS is estimating the earliest the CAF II auction could take place is December 2017, with the most realistic estimate of auction timing to be in the first quarter of 2018.

Next Steps

- ### Planning

  Companies who are interested in the CAF II auction should start looking at the opportunities in their area, determining the network Cap Ex to serve, and generating a business plan with the anticipated CAF II Funding.

- ### VPS Can Help

  1. VPS will work with you to create a network design and OSP layout to determine network Cap Ex to serve the target areas.
  2. VPS will generate a business plan with anticipated CAF II funding. The plan will determine viable bid strategy and the lowest funding acceptable.
  3. VPS will jointly strategize the best way to bid in the upcoming CAF Phase II auction.
  4. VPS will bid in the auction on your behalf.
  5. VPS will:
     a. Submit winning application to accept funding
     b. Apply for ETC status
     c. Implement previously developed engineering plan including fiber, wireless or both

Additional Information

For information on this issue or if you would like VPS guidance, please contact these members of the Vantage Point Solutions consulting team:

Doug Eidahl at (605) 995-1750, Doug.Eidahl@vantagepnt.com

Dusty Johnson at (605) 995-1746, Dusty.Johnson@vantagepnt.com

Jesse Taylor at (605) 995-1819, Jesse.Taylor@vantagepnt.com