Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C.

In the Matter of	)	
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Connect America Fund Phase II Auction (Auction 903)	)	AU Docket No. 17-182
	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	

COMMENTS OF
THE USTELECOM ASSOCIATION

The USTelecom Association (USTelecom) submits these comments with the goal of helping the Federal Communications Commission (Commission) design a CAF Phase II auction that will bring broadband to as many rural and high-cost areas as possible, thereby connecting more Americans and more communities to all the Internet has to offer. As the Commission recognizes, this auction "will be the first auction to award ongoing high-cost universal service support through competitive bidding."[1] Because this is the first such auction, the Commission must carefully consider how it can "maximize the value the American people receive for the universal service dollars" that the Commission is investing.[2] Below, we detail particular areas of the Commission's Public Notice that require adjustment – the financial qualifications review process and certain auction procedures – so the auction will best address the Commission's goals.

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[1] Public Notice, *Comment Sought on Competitive Bidding Procedures and Certain Program Requirements for the Connect America Fund Phase Ii Auction*, FCC 17-101, 32 FCC Rcd. 6238, ¶ 2 (released August 4, 2017) (*Notice*).

[2] *Id.*

I. Financial Qualifications

USTelecom is supportive of the Commission's intention to focus, early in the CAF Phase II Auction process, on the financial capabilities of applicants to fulfill the program requirements. As the Commission learned through the rural broadband experiments—in which there was no financial prequalification regime – a serious examination of the financial qualifications of applicants prior to the auction is likely to prevent situations in which winning bidders default during the long-form application process or, worse, after they have already received universal service support. Therefore, USTelecom agrees with the financial qualification regime set forth in the 2016 CAF Phase II Auction Order, which required a more rigorous showing from applicants that do not have an established history of providing voice, broadband, and/or electric service, as well as applicants that do not obtain financial audits in the ordinary course of business.[3]

In the present Public Notice, the Commission proposes additional financial qualification requirements and a five-point scale intended to "quickly and efficiently" establish applicants' financial bona fides by targeting specific metrics.[4] It is unclear from the Public Notice whether this five-point scale evaluation will be used for all applicants or just those who lack audited financial statements,[5] and USTelecom believes that a scoring methodology may not be necessary to establish the qualifications of applicants that have a two-year history of providing voice, broadband, and/or electric service and can provide, in addition, audited financial statements for

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[3] *See*, Report and Order and Further Notice of Proposed Rulemaking, *Connect America Fund*, FCC 16-64, 31 FCC Rcd 5949, ¶¶ 96 – 104 (released May 26, 2016).

[4] *Notice* at ¶ 58.

[5] *See*, *Id.* at ¶ 58 (citing "those applications," which appears to refer to the applications cited in the preceding paragraph, which discusses applicants that are not audited in the ordinary course of business).

review from the prior fiscal year. For example, in lieu of meeting the five-point scale, if a company already qualified for CAF Phase II model-based support and is substantially meeting the requirements of that program, it should be deemed to have satisfied the short form financial requirements.

However, if the Commission intends to apply a scoring methodology to all applicants, it should eliminate the last three prongs of the proposed five-prong test in favor of the following question: "Does the applicant certify that it will not bid for annual support exceeding 50 percent of its average annual GAAP operating cash flow from the prior two fiscal years?"

The Commission intends that the final two prongs in the proposed test, current ratio and ratio of total equity to total capital, "measure the applicant's short- and long-term financial condition, respectively," and the third prong, Times Earned Interest Ratio (TIER), is apparently intended to capture applicants' "ability to pay the interest on outstanding debt."[6] However, at least for larger companies with vast experience providing service in this capital-intensive industry, these metrics do not capture the companies' financial wherewithal to fulfill their CAF Phase II requirements. Of all the price cap companies who were offered model-based CAF Phase II support, *none even comes close* to a current ratio of greater than or equal to 2 or a total equity/total capital ratio of 0.5. The current ratios of all of these companies are below 1; the highest ratio of total equity to total capital among these companies is 0.31, and a majority of these companies are at or below 0.1. Similarly, several price cap companies receiving model-based support do not achieve the proposed TIER threshold. Clearly, for the wireline broadband providers who are currently receiving many millions of dollars in CAF Phase II model-based support and are fulfilling the requirements of that program, these metrics miss the mark.

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[6] *Id.* at ¶ 60.

The problem with the last three metrics in the Commission's proposed test is that they are merely financial ratios of an applicant company and provide no insight into the applicant's size and scale of operations and whether it has the financial resources to take on CAF Phase II obligations. A smaller, less diverse company could have favorable results according to these metrics and then go on to assume an obligation under the CAF Phase II auction that is many times its ongoing operating capacity. However, because telecom is such a capital-intensive industry requiring substantial fixed assets, each of the larger telecom companies incurs sizeable current and total liabilities, which significantly impacts its TIER, current ratio and the ratio of total equity to total capital (with total capital encompassing total equity plus total liabilities). A focus on these metrics ignores the fact that these companies have more than sufficient operating resources to safely assume obligations under CAF Phase II.

Therefore, if the Commission deems it necessary to apply a multi-prong test to long-standing voice and broadband providers, including those who already are collectively receiving hundreds of millions of dollars in annual CAF Phase II support, the Commission should replace the last three metrics of the proposed test with one metric based on the applicants' GAAP operating cash flow, as shown in the table below.

If the applicant has audited financial statements, did it receive an un-modified (non-qualified) opinion?	Yes	+1
Operating margin	>0	+1
~~Times Interest Earned Ratio (TIER)~~	~~>=1.25~~	~~+1~~
~~Ratio current assets/current liabilities~~	~~>=2~~	~~+1~~
~~Total equity/total capital (total equity plus total liabilities)~~	~~>=0.5~~	~~+1~~
Is the applicant certifying that it will not bid for annual funding exceeding 50 percent of its average annual GAAP operating cash flow from the previous two fiscal years?	Yes	+1

Operating cash flow is a pertinent metric because it captures "whether a company is able to generate sufficient positive cash flow to maintain and grow its operations."[7] If an applicant has annual operating cash flow that is at least twice the annual amount of CAF Phase II auction support for which the applicant is bidding, the Commission can be assured that the applicant has more than enough operating cash flow to fulfill the deployment obligations it will undertake. Moreover, operating cash flow is a figure derived from generally accepted accounting principles and thus is uniformly presented by all companies and is unsusceptible to misinterpretation. Thus, USTelecom proposes that in lieu of the last three proposed metrics, the Commission ask whether the applicant is certifying that it will not bid for annual support exceeding 50 percent of its average annual GAAP operating cash flow from the previous two fiscal years. If the applicant so certifies, it would receive one point out of a required three in the three-point scale.

II. Auction Procedures

It is important that this first auction of ongoing CAF support recognizes the complexity for bidders of assembling bids based on engineering assessments of how a network would be constructed and operated in the particular geographical locations involved. In addition, encouraging bidders to cover a wide swath of rural geographies rather than potentially distributing funding only for the easiest to serve areas should be an important consideration. With that in mind, we point to two particular aspects of the PN that may raise obstacles to bidding at the most efficient levels and with the greatest geographical reach.

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[7] *See*, Investopedia website, definition of "Operating Cash Flow – OCF" (available at: http://www.investopedia.com/terms/o/operatingcashflow.asp) (visited September 17, 2017).

A. Package Bidding and Minimum Scale Percentage

The Public Notice proposes to allow a type of package bidding that differs from the common form. In the Commission's proposal, a package bid must follow three rules:

1) **State-Limited** – all Census Block Groups (CBGs) must be within the same state;
2) **No-Overlap** – no CBG can appear in more than one of a bidder's bids, whether it is for a single CBG or a package; and
3) **Minimum Scale Percentage** – the bidder may be assigned any subset of the package, as long as the implied funding for the assigned subset exceeds some Minimum Scale Percentage (MSP) of the implied funding for the package as a whole.

The MSP rule is designed to allow the Commission to assign some uncontested portion of a bidder's package while the remainder is still contested. The Commission proposes to allow bidders to choose their own MSP for each package up to a maximum of 80 percent (in contrast to an all-or-nothing bid which would effectively allow an MSP of 100 percent)).[8]

As proposed, this form of package bidding creates substantial risk for bidders, which could ultimately lead to inefficient outcomes and a failed auction. The MSP rule with a proposed maximum of 80 percent is based on the erroneous assumption that being guaranteed a certain percentage of support is all that is needed to make a network provider comfortable with an ad hoc modification of their bid package. While support is important, the real risk arises due to the MSP rule's effect on the economics of network infrastructure for all terrestrial networks. Generally, average costs decrease as the size of a contiguous network service area increases.[9] Operators will be relying on this effect to make the business case for participation in the CAF

[8] *See*, *Notice*, at ¶¶ 91 – 92.
[9] At least up to some critical size, holding all else equal.

Phase II auction. However, even if package bidding were all-or-nothing, there would still be gaps in funding for any large-scale network due to the sparseness of the eligible Census Blocks (CBs) within and across CBGs. The gaps of ineligible areas generate network infrastructure costs for which a network builder will not receive support. The MSP rule exacerbates this problem by adding more gaps without support and introducing complete uncertainty about the number and location of those gaps. From an operator's perspective, the risk and uncertainty is not easily quantified, even with the most rigorous and exhaustive analysis.

For a package bid with 50 CBGs of equal funding, there are more than 1x10^10 subsets of 40 CBGs.[10] To bid with confidence on this package, the operator would have to determine a method of assessing the business case for each possible subset and assessing the likelihood of being assigned subsets with positive versus negative business cases. So, the MSP rule turns the already-complex problem of finding packages for which there is a positive business case into the more complex problem of finding packages for which there is a positive business case in expectation over MSP-allowed subsets, where the modeling and calculation of those expectations are likely intractable problems. The effect is that bidders will be driven by risk aversion to bid on only individual CBGs or very small packages that do not offer the same cost efficiencies of larger networks, and the CAF Phase II auction will ultimately support fewer CBGs at higher costs.

We propose that the Commission allow bidders to select an MSP of up to 100 percent (*i.e.*, to allow all-or-nothing package bids). This would best allow careful network engineering

[10] Naturally, if there is some variation in implied funding across the 50 CBGs, the number of subsets that meet or exceed the 80% threshold can be less than 1x10^10. However, given the small geographic size and enormous number of CBGs, the desirable package size might be much larger than 50, which would make the 1x10^10 number a massive underestimate.

to drive efficient bidding. In addition, allowing bidders flexibility to regroup CBGs in package bids to remove overlap CBGs at their discretion would further contribute to efficient bidding. This would allow engineering and cost considerations to dictate package design and provide the opportunity for bidders to maximize geographic coverage. (As discussed below, a revamped approach to the switching percentage would also facilitate rationale package design.) Failing allowing all-or-nothing, the Commission should cap the MSP significantly higher than the proposed 80 percent level. An 80 percent cap is simply too low to allow effective analysis of package bidding outcomes. Increasing the cap to 95 percent will correspondingly reduce the risk associated with package bidding by reducing the number of possible subsets, potentially by many orders of magnitude.[11]

USTelecom agrees with the Commission's proposal that even if a package bid's minimum scale percentage was not met during the clearing round, a bidder could continue bidding on all or portions of the package after the clearing round.[12] As the Commission explains, "bidding rounds continue after the clearing round . . . [in] areas for which the bidder had bid at the clearing round's base clock percentage but which could not be assigned in the clearing round. Such bids may be for . . . package bids that were not assigned because the bidder's minimum scale percentage for the package was not met."). We also note the importance of the Commission's proposal to provide bidder flexibility in the clearing round: "while bids for unassigned packages will carry over at the previous clock percentage, the bidder for such a

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[11] For 100 CBGs that all have the same implied funding, the number of possible subsets reduces from 5x10^20 with an 80% rule to just 7.5x10^7 with a 95% rule.

[12] *Notice* at ¶ 125.

package may group the bids for the areas in the package into smaller packages and bid on those smaller packages at current round percentages."[13]

B. Switching Percentage

The Commission proposes to constrain a bidder's ability to switch between geographic areas by strictly limiting activity in areas that the bidder did not bid at the previous round's base clock percentage (BCP). The proposal is to limit a bidder's activity in areas where it did not bid at the previous round's BCP – the switching percentage – to no greater than 10 percent of the bidder's previous round activity at the BCP. The Commission's proposal is intended to promote price discovery and truthful bidding. However, efficiency gains arising from price discovery and truthful bidding are partially or fully offset by efficiency losses arising from a bidder's inability to substitute between areas in response to market conditions.

For example, a bidder may wish to bid in either one set of areas or another, but not both. The bidder's preference for which set largely depends on its expectations about market conditions, either because it is sensitive to the expected level of funding or because it is sensitive to the risk that contested areas will be omitted from a package assignment. However, the proposed limit on the switching percentage severely constrains a bidder's ability to respond to market conditions. This risks a situation in which the market begins in an inefficient equilibrium and cannot escape. The ultimate effect is twofold: 1) facing such uncertainty, bidders will reduce their overall participation from the start, and 2) areas will go unserved even though operators would choose to serve them at or below the budget clearing BCP if they were only allowed to make the switch.

[13] *Id.* at ¶ 127.

We propose that that the single, fixed switching percentage be replaced. The current proposal can be revised to capture the tradeoffs presented by switching – between price discovery, truthful bidding, and substitution – in a more sophisticated fashion. In particular, instead of choosing one percentage (e.g., 10 percent) that reflects a maximum switching percentage for all rounds, the Commission should adopt a switching schedule, whereby the maximum switching percentage starts high in early rounds and decreases as the auction progresses. This would allow bidders the flexibility to make large substitutions in the early rounds of the auction when they are receiving the largest incremental doses of market information. As the auction progresses, bidders are learning less about the market, and less substitution is required as bidders settle on the bidding strategies of a more efficient equilibrium.

	Schedule for Maximum Switching Percentage							
	Round 2	Round 3	Round 4	Round 5	Round 6	Round 7	Round 8	Round 9
Maximum Switching Percentage	100%	90%	75%	65%	50%	40%	25%	10%

Most Commission auction designs have resulted in a similar effect in practice. For example, the Incentive Forward Auction did not have a switching percentage rule, but it did have a "no-excess-supply" rule.[14] In the beginning of the auction, there was extraordinary excess demand for large markets. This excess demand made it easy for bidders to make major substitutions early as they gained the largest amount of new market information. As the auction progressed, demand spread into smaller markets, new market information decreased, and the no-excess-supply rule gradually became a more binding constraint on substitution. But crucially,

[14] The no-excess-supply rule stated that bidders could switch freely between markets as long as the switch did not result in excess supply in the "from" market.

this did not happen until the market had a chance to adjust to initial conditions and find an efficient equilibrium. The same thing happened in the AWS-3 auction, albeit due to the "standing high bid" construct rather than the no-excess-supply rule.[15] Excess demand in large markets in early rounds gave bidders confidence that they would likely be bid off of their positions, which made it possible to substitute to markets/products that were less competitive. However, as the auction progressed, bidders settled on equilibrium strategies, and the ability to make wholesale substitutions correspondingly diminished.

Finally, the Commission regularly uses an activity rule that increases through the course of the auction. This is done for precisely the same reasons as outlined above and has precisely the same effect as would a decreasing maximum switching percentage for this auction. This adjustment would allow bidders to react more fully to auction information and potentially lead the auction to produce greater geographic coverage.

Respectfully submitted,

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[15] The AWS-3 Auction (Auction 97) used a simultaneous multiple round ascending (SMRA) format, so the Commission awarded Standing High Bid Positions for each frequency block in each market after each round.