

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In The Matter of)	
)	AU Docket No. 17-182
Connect America Fund)	WC Docket No. 10-90
)	

REPLY COMMENTS OF THE RURAL COALITION

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The Association of Missouri Electric Cooperatives, Midwest Energy Cooperative, Great Lakes Energy, HomeWorks Tri-County Electric Cooperative, Indiana Electric Cooperatives, Alger Delta Cooperative Electric Association, the Arkansas Electric Cooperatives, Inc., National Rural Electric Cooperative Association (“NRECA”), NTCA—The Rural Broadband Association (“NTCA”), and the Utilities Technology Council (“UTC”) (collectively, the “Rural Coalition”) hereby submit these reply comments in response to other submissions following the Federal Communications Commission’s Public Notice¹ (the “*Public Notice*”) concerning the Connect America Fund Phase II Auction (“CAF Phase II Auction” or the “Auction”) procedures.

The record in response to the Commission’s *Public Notice* indicates that the CAF Phase II Auction has generated significant interest among a variety of diverse stakeholders. Although such interest is a positive sign that the CAF Phase II Auction could be a success, the record also indicates that the complexity of the Auction may ultimately deter many providers from participating. In addition, the record underscores the need for clear upfront screens that will ensure a fair CAF Phase II Auction and protect the integrity of the Universal Service Fund

¹ *Comment Sought on Competitive Bidding Procedures and Certain Program Requirements for the Connect America Fund Phase II Auction*, Public Notice, 32 FCC Rcd 6238 (2017) (“PN”).

(“USF”). The Rural Coalition urges the Commission to take the following actions to address these concerns.

First, the Rural Coalition shares the concern raised by a variety of providers that the complexity of the Auction may discourage the robust participation that is necessary for a successful Auction. The Commission should simplify the Auction by eliminating or substantially modifying its proposal to allow package bidding; prohibiting bidders from switching tiers between rounds; and allowing proxy bidding.

Second, and relatedly, there is consensus in the record that the Commission’s anti-collusion rules may diminish small providers’ participation in particular. The Rural Coalition supports several proposals in the record to modify the anti-collusion rules such that small providers are able to use consultants who can help to navigate the complex Auction procedures.

Third, several commenters have proposed changes to the Commission’s upfront short-form technological and financial review. Any changes to the short-form must be designed to guard against waste, fraud, and abuse. To that end, the Commission should prohibit the use of certain technologies in latency or speed tiers in which the technologies are not commercially available (or, at a minimum, adopt a rebuttable presumption against reliance on such technologies absent further scrutiny); prevent providers from bidding for more locations than they can serve; implement a robust financial screen; adopt a 70% take-rate assumption that providers must use in designing their networks and submitting their bids; and require high-latency providers to follow the International Telecommunication Union (“ITU”) framework and use conversation-opinion tests to validate the performance levels of their proposed service.

Finally, the Rural Coalition urges the Commission not expand the eligible spectrum bands available where doing so could interfere with other ongoing Spectrum Frontiers

proceeding and incentive auction repacking and, therefore, further complicate the CAF Phase II Auction.

I. THE COMMISSION SHOULD TAKE STEPS TO SIMPLIFY THE AUCTION.

As the Commission has recognized, the success of the CAF Phase II Auction depends in part on robust participation by and competition among a variety of providers.² Given that the Auction's purpose is to facilitate broadband development in hard-to-reach areas that remain unserved, small providers are particularly important to the Auction's success.³ Unfortunately, commenters agree that the Auction's complexity could discourage many providers from participating;⁴ given that small providers tend to have fewer resources and less experience with Commission auctions, their participation is particularly sensitive to complexity.⁵ The Rural Coalition thus agrees with other commenters that the Commission should take steps to simplify the Auction.⁶ In particular, the Rural Coalition supports three proposals to reduce the Auction's complexity.

A. The Record Supports the Elimination of Package Bidding.

Several commenters have pointed out that package bidding introduces significant complexity into the CAF Phase II Auction.⁷ As Dr. Peter Cramton notes, there is significant

² See *id.* at 6279 (statement of Chairman Pai); *id.* at 6280 (statement of Comm'r Clyburn); *id.* at 6281 (statement of Comm'r O'Rielly).

³ *Id.* at 6279 (statement of Chairman Pai).

⁴ See Comments of the American Cable Association, WC Docket No. 10-90 et al., at 1–2 (Sept. 18, 2017); Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 26–27 (Sept. 18, 2017); Comments of the Rural Coalition, WC Docket No. 10-90, at 6–7 (Sept. 18, 2017).

⁵ Comments of the Rural Coalition, WC Docket No. 10-90, at 6 (Sept. 18, 2017).

⁶ See, e.g., Comments of the American Cable Association, WC Docket No. 10-90, at 1–2 (Sept. 18, 2017); Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 26–27 (Sept. 18, 2017); see also Comments of the Rural Coalition, WC Docket No. 10-90, at 6–7 (Sept. 18, 2017).

⁷ See Comments of the American Cable Association, WC Docket No. 10-90, at 7 (Sept. 18, 2017); Comments of United States Cellular Corporation, WC Docket No. 10-90, at 5 (Sept. 18, 2017).

“complexity and bias inherent in a package auction.”⁸ This, as U.S. Cellular has explained, is because “[p]ackage bidding ‘drastically increases the number of bid possibilities, which raises the cost for bidders to evaluate their options and probability of success.’”⁹ As we explained in our comments, this increase in costs would disproportionately affect small providers.¹⁰

The Commission itself has acknowledged that package bidding “generally complicate[s] an auction,”¹¹ and declined to use package bidding in the “forward auction” of flexible-use spectrum licenses because of this concern.¹² After citing commenters’ concern that the “decreased participation [would] lead[] to lower auction revenues,”¹³ the Commission decided against package bidding, concluding that “[t]o permit bidders to bid on combinations . . . would considerably complicate the bidding process and the procedures to determine clock prices and winning bids.”¹⁴ The same is true here.

Though USTelecom has advocated in favor of package bidding, and has proposed eliminating or raising the 80% minimum-scale-percentage ceiling,¹⁵ the Rural Coalition disagrees because any benefits of package bidding are far outweighed by the complexity that it adds to this already complicated Auction. USTelecom has argued that bidders cannot take

⁸ Dr. Peter Cramton, On the Design of the Connect American Fund Phase II Auction 4 (2017) (attached to Comments of the American Cable Association, WC Docket No. 10-90 (Sept. 18, 2017)).

⁹ Comments of United States Cellular Corporation, WC Docket No. 10-90, at 10 (Sept. 18, 2017) (quoting Reply Comments of United States Cellular Corporation, GN Docket No. 13-85, at 46 (Oct. 28, 2013)).

¹⁰ Comments of the Rural Coalition, WC Docket No. 10-90, at 6–7 (Sept. 18, 2017).

¹¹ Comments of United States Cellular Corporation, WC Docket No. 10-90, at 9 (Sept. 18, 2017) (quoting *Expanding the Economic Innovation Opportunities of Spectrum Through Incentive Auctions*, Notice of Proposed Rulemaking, 27 FCC Rcd 12,357, 12,378 ¶ 62 (2012)).

¹² *Expanding the Economic Innovation Opportunities of Spectrum Through Incentive Auctions*, Report and Order, 29 FCC Rcd 6567, 6777 ¶ 510 (2014).

¹³ *Id.* at 6777 ¶ 510 n.1460 (quoting US Cellular Reply Comments, GN Docket No. 12-268, at 41 (Mar. 12, 2013)).

¹⁴ *Id.* at 6777 ¶ 510.

¹⁵ *See* Comments of the USTelecom Association, WC Docket No. 10-90, at 7–8 (Sept. 18, 2017).

advantage of the cost efficiencies that contiguous networks generate if they cannot enter all-or-nothing package bids.¹⁶ But the Commission already rejected this argument in the spectrum context given the complexity of package bidding and its effects on participation.¹⁷ Moreover, there is no evidence in the record about the size of the purported cost efficiencies that would justify the adoption of package bidding, and many census block groups included in the Auction are geographically scattered. But even if this were not true, nothing would prevent large bidders—who are more likely to have resources to bid strategically—from bidding for and winning support in contiguous census block groups even without package bidding.

Moreover, package bidding would also exacerbate the concern that the CAF Phase II Auction may leave much of the budget unspent.¹⁸ If permitted, package bidding would allow one large entity bidding in multiple census block groups to drive down support levels over a large area, thereby potentially encouraging smaller providers to drop out. This is a significant problem because package bidding would also give the large entity the option to subsequently drop out of the Auction, leaving large amounts of the budget unspent.

To illustrate this point, assume that one entity enters a package bid for six areas with the highest possible minimum scale percentage of 80%. If the entity subsequently drives out all competition in four of those census block groups and the budget clears, those four areas would remain unassigned so long as competitive bidding continues in the other two census block groups; the four census block groups comprise less than 80% of the entity's package bid. If the entity were to drop out of the Auction before winning either of the two remaining census block

¹⁶ *Id.* at 6–8.

¹⁷ *Expanding the Economic Innovation Opportunities of Spectrum Through Incentive Auctions*, 29 FCC Rcd at 6777 ¶ 510 & n.1456.

¹⁸ *See* Comments of the Rural Coalition, WC Docket No. 10-90, at 12 (Sept. 18, 2017).

groups, the four other census block groups would receive no support at all. That result will not advance the goal of rapidly closing the digital divide. Raising the minimum scale percentage as suggested by USTelecom would only exacerbate this problem.

The possibility that a significant amount of the CAF Phase II Auction budget would remain unspent is troubling, as rural communities have waited too long for “reasonably comparable” service.¹⁹ Accordingly, the Rural Coalition urges the Commission to eliminate package bidding, or at least mitigate the complications introduced by package bidding by significantly lowering the minimum scale percentage to something closer to 25%.

B. To Reduce Complexity and Potential Gaming, the Commission Should Eliminate Inter-Round Tier Switching.

The Rural Coalition shares ACA’s concern that allowing bidders to switch speed and latency tiers after they have submitted a bid would make the Auction unnecessarily complex.²⁰ Allowing switching would make it more difficult for bidders to understand the competitive environment and make informed decisions on where to enter bids, potentially deterring less sophisticated providers from participating in the Auction. As the Commission has recognized, limiting flexibility improves auctions by “establish[ing] a simple framework for evaluating options and . . . improv[ing] price predictability.”²¹

Additionally, as Dr. Cramton has pointed out, tier-switching allows for the prospect of “complex gaming strategies” that “undermine price discovery.”²² For example, a bidder that

¹⁹ See Letter from Sen. Claire McCaskill, U.S. Senate, to Chairman Ajit Pai, FCC, at 1 (Aug. 18, 2017); Comments of the Rural Coalition, WC Docket No. 10-90, at 5 (Sept. 18, 2017).

²⁰ Comments of the American Cable Association, WC Docket No. 10-90, at 7 (Sept. 18, 2017).

²¹ *In re Broadband Incentive Auction Scheduled to Begin on March 29, 2016*, Public Notice, 30 FCC Rcd 8975, 9010 ¶ 52 (2015).

²² Cramton, *supra* note 4, at 4.

intends to deliver low-speed service might, in initial rounds, bid in a high-speed tier to deter competition from low-speed providers, but then switch into the intended low-speed service as competition dwindles. As the Commission emphasized in the Broadband Incentive Auction, “[c]reating such strategic opportunities” would only “make bidding more complicated.”²³

C. The Commission Should Adopt Its Proposal to Allow Proxy Bidding.

Finally, the Rural Coalition agrees with the Illinois Electric Cooperative that the Commission’s plan to allow proxy bidding could encourage providers of all kinds to participate in the Auction, as they would be able to assess and plan in advance the bids they would be willing to make, reducing the possibility of confusion or mistakes during the Auction.²⁴ Indeed, the Commission has experience with proxy bidding, and has utilized proxy bidding in the past in order to “make it easier for bidders to participate.”²⁵ Nothing in the record indicates that proxy bidding would have a different or detrimental effect in the CAF Phase II Auction.

II. THE COMMISSION SHOULD PROVIDE FURTHER GUIDANCE ON THE ANTI-COLLUSION RULES TO ENCOURAGE PARTICIPATION BY SMALL PROVIDERS.

Although the Commission can reduce the Auction’s complexity by eliminating package bidding and inter-round tier switching and permitting proxy bidding, some complexity is inherent in an auction with the scope and size of the CAF Phase II Auction. The record suggests that third-party advisers, such as consultants, technical specialists, and economists, may be necessary for providers that lack the resources and experience to navigate the Auction

²³ *In re Broadband Incentive Auction Scheduled to Begin on March 29, 2016*, 30 FCC Rcd at 9011 ¶ 52.

²⁴ Comments of Illinois Electric Cooperative, WC Docket No. 10-90, at 5 (Sept. 18, 2017).

²⁵ *In re Broadcast Incentive Auction Scheduled to Begin on March 29, 2016*, 30 FCC Rcd at 8978 ¶ 2.

procedures on their own.²⁶ As local “small competitive providers” play a significant role in the Commission’s effort to bridge the digital divide,²⁷ ensuring that these bidders have access to professional advice will help to ensure that participation is robust and that the Auction is a success.²⁸

Unfortunately, the record also suggests that the Commission’s anti-collusion rules may unduly inhibit providers from using consultants.²⁹ As we explained in our comments, as currently proposed, the Commission’s anti-collusion rules could be interpreted to prohibit providers from sharing consultants.³⁰ As many smaller providers lack the resources to engage consultants on their own, a prohibition against sharing consultants would mean that few if any small providers will participate in the Auction.³¹ Even if the Commission could overlook this concern, there may not be enough qualified consultants and advisers to separately serve all entities interested in bidding.³²

The Rural Coalition has urged the Commission to adopt a more flexible approach to anti-collusion rules that will allow “providers to retain the same individual consultants, experts, or lawyers without risking enforcement under the prohibited communications rule.”³³ For example,

²⁶ Comments of the Rural Wireless Association, Inc., WC Docket No. 10-90, at 3–6 (Sept. 18, 2017); Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at iii (Sept. 18, 2017).

²⁷ See *PN*, 32 FCC Rcd at 6279 (statement of Chairman Pai).

²⁸ Comments of the Rural Coalition, WC Docket No. 10-90, at 7 (Sept. 18, 2017).

²⁹ Comments of the American Cable Association, WC Docket No. 10-90, at 7–8 (Sept. 18, 2017); Comments of the Rural Wireless Association, Inc., WC Docket No. 10-90, at 3–6 (Sept. 18, 2017); Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 4–6 (Sept. 18, 2017).

³⁰ Comments of the Rural Coalition, WC Docket No. 10-90, at 7–12 (Sept. 18, 2017).

³¹ Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at iii, 4–5 (Sept. 18, 2017).

³² Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 10 (Sept. 18, 2017); Comments of the Rural Coalition, WC Docket No. 10-90, 5 (Sept. 18, 2017).

³³ Comments of the Rural Coalition, WC Docket No. 10-90, at 11 (Sept. 18, 2017).

the Commission could allow third-party advisers to assist more than one bidder if the bidders attest that they will not use these advisers to restrict competition.³⁴ The Rural Coalition also supports ACA's proposal that sharing advisers is permissible so long as the advisers agree not to facilitate "prohibited communications."³⁵ Likewise, the Rural Coalition supports WISPA's proposed safe harbor for entities that share advisers but do not bid for support in the same census block group.³⁶ Any of these solutions (or a combination of them) would enable all qualified applicants to participate in the Auction, while still ensuring that bidders do not collude.

III. THE COMMISSION SHOULD IMPLEMENT RIGOROUS UPFRONT SCREENS TO AVOID WASTE OR ABUSE OF CAF RESOURCES.

The interest that so many diverse stakeholders have expressed in the CAF Phase II Auction proceedings is an encouraging sign, but also heightens the need for a rigorous upfront review to ensure a fair and efficient auction. Such an upfront review is necessary to ensure that bidders are able to fulfill their performance obligations, thereby avoiding potential waste of scarce CAF funding that would ultimately leave rural areas unserved.

A. The Commission Should Ensure that Bidders Will Meet the Speed and Latency Requirements of the Tiers in which They Bid.

The Commission has a duty to ensure that it makes efficient use of universal service resources.³⁷ The Rural Coalition agrees with ITTA that this duty requires the Commission to

³⁴ *Id.*

³⁵ Comments of the American Cable Association, WC Docket No. 10-90, at 8 (Sept. 18, 2017).

³⁶ Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 5 (Sept. 18, 2017).

³⁷ See *In re Rural Health Care Support Mechanism*, Report and Order, 27 FCC Rcd 16,687, 16,759 ¶ 176 (2012); Comments of the Rural Coalition, WC Docket No. 10-90, 17 (Sept. 18, 2017).

take “reasonable measures” to ensure that applicants can meet their service obligations and to minimize the “risk of defaults.”³⁸

To that end, the Commission should adopt its proposal to “preclude an applicant” from “selecting certain performance tier and latency combinations that are inconsistent” with the technologies the applicant intends to use.³⁹ This approach would streamline the Commission’s review, as it would free the Commission from the burden of considering bids that rely on technical assumptions that are clearly unrealistic.⁴⁰ Moreover, it would also prevent bidders from gaming the CAF Phase II Auction by overpromising on their speed or latency capabilities in order to gain an advantage in the Auction, and then failing to deliver.⁴¹

In particular, the Commission should preclude bidders relying on satellite technology from bidding in the low latency, 100 Mbps, and Gigabit tiers, and preclude bidders relying on unlicensed spectrum technology from bidding in the 100 Mbps and Gigabit tiers. As the Rural Coalition has noted, the Commission’s own data indicate that satellite and unlicensed wireless are not delivering 100 Mbps or Gigabit service, and that high latency always affects satellite-based service.⁴²

³⁸ Comments of ITTA—The Voice of America’s Broadband Providers, WC Docket No. 10-90, at 6 (Sept. 18, 2017).

³⁹ *PN*, 32 FCC Rcd at 6253 ¶ 49.

⁴⁰ Comments of ITTA—The Voice of America’s Broadband Providers, WC Docket No. 10-90, at 6–7 (Sept. 18, 2017).

⁴¹ Comments of the Rural Coalition, WC Docket No. 10-90, at 15–16 (Sept. 18, 2017).

⁴² See Comments of the Rural Coalition, WC Docket 10-90, at 26 (Sept. 18, 2017); *In re Inquiry Concerning the Deployment of Advanced Telecommunication Capability to All Americans*, 2016 Broadband Progress Report, 31 FCC Rcd 699, 720–21 ¶ 48 (2016); Vantage Point Solutions, *Satellite Broadband Remains Inferior to Wireline Broadband* 8 (2017) (attached to Letter from Larry Thompson, CEO, Vantage Point Solutions, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90 (Sept. 5, 2017)).

Some commenters have opposed the Commission’s technology screen on the ground that applicants should be able to rely on “technologies that are in pilot or beta-testing.”⁴³ The Rural Coalition agrees that the Commission should encourage innovation, but after rural America has waited years for the CAF Phase II Auction, the Commission should not risk wasting finite funds on unproven technologies that might fail to deliver on the long-awaited promise of universal service. Indeed, even the most recent technological developments have not solved longstanding problems inherent in some technologies. For example, Vantage Point has observed that despite recent developments, geostationary satellites continue to have “significant capacity constraints.”⁴⁴

At a minimum, the Commission should adopt a rebuttable presumption that bidders may not use technologies that have not reliably delivered the requisite speed or low latency in rural areas. This would include providers using unlicensed spectrum interested in bidding in the 100 Mbps or Gigabit tiers. Due to the risk that even well-intentioned providers relying on technologies “in pilot or beta-testing” could make unrealistic or uninformed assumptions or projections about their technological capabilities, such presumption should be overcome only, if based on further review, the applicant submits additional evidence that clearly demonstrates that the applicant will satisfy the applicable speed and latency requirements for all of the requisite locations in the applicant’s bid area, as the service is actually used in the field.

This minimum level of additional scrutiny is particularly necessary given NTCA’s members’ experience with the challenge processes for rate-of-return areas. During that process, NTCA’s members discovered inaccuracies with the Form 477 data, particularly for unlicensed

⁴³ Comments of ADTRAN, Inc., WC Docket No. 10-90 at 2 (Sept. 18, 2017).

⁴⁴ Vantage Point Solutions, *supra* note 42, at 8 (2017).

providers, and realized that certain providers' own information from their websites confirmed that service at minimum speeds reported on the Form 477 was not in fact commercially available in the relevant census blocks.⁴⁵ To ensure that entities are able to deliver the requisite speed and capacity to all applicable locations, the Commission should take additional steps, such as requiring bidders relying on unlicensed spectrum to submit propagation maps, and, if applicable, evaluate publicly available terms and conditions of service, to ensure that providers can meet the speed and capacity requirements; being able to offer the service to a few households for part of the time is not sufficient, and it is not universal service.⁴⁶

B. The Commission Should Preclude Providers from Bidding for More Locations in the Auction than They Have Capacity to Serve.

No provider in the CAF Phase II Auction should be permitted to bid for more locations than it has the capacity to serve.⁴⁷ Any auction in which the bidder can effectively call for a “do-over” after winning due to a lack of capability or resources cannot function as an efficient or effective process.

One commenter has posited that bidders should be permitted to demonstrate that they can engineer networks to serve all locations in which they win support, not in which they bid for support.⁴⁸ But a key assumption of the CAF Phase II Auction is that winning bidders will be able to serve the locations that they win; a bid in the Auction functions as a commitment to serve

⁴⁵ See Comments of ENMR Telephone Cooperative, WC Docket No. 10-90, at 1–2 (Apr. 28, 2016); Comments of Haviland Telephone Company Inc., WC Docket No. 10-90, at 1–3 (Apr. 28, 2016); Comments of Choctaw Telephone Co., WC Docket No. 10-90, at 1–2 (Apr. 26, 2016).

⁴⁶ In WISPA's Form 477 Comments, WISPA acknowledged that its members are not able “to determine with any certainty what potential customers will be or would be readily served using fixed wireless technology until an on-site technical assessment is made.” Comments of the Wireless Internet Service Providers Association, WC Docket No. 11-10, at 11 (Oct. 10, 2017). This underscores the importance of rigorous upfront screens in the CAF Phase II Auction.

⁴⁷ Comments of the Rural Coalition, WC Docket No. 10-90, at 20 (Sept. 18, 2017).

⁴⁸ Comments of Hughes Network Systems, WC Docket No. 10-90, at 6 (Sept. 18, 2017).

the relevant census block group for the support amount.⁴⁹ A contrary rule would encourage all providers to overbid and then default on their obligations, requiring the Commission to reallocate support in numerous census blocks after the Auction has completed. This result would not only be inefficient and resource-intensive, but would also delay the delivery of “reasonably comparable” service in rural areas that have already waited far too long for broadband.⁵⁰

Ultimately, this approach would invite risk of default because providers who overbid cannot know prior to the Auction how many locations they will ultimately win. Notably, because the CAF Phase II Auction is the Commission’s first descending-clock auction to distribute federal universal-service support, it may be difficult to predict with accuracy which entities will ultimately win support and in which areas. If a provider miscalculates and bids for too many locations, the Commission would be in the position of “awarding support to an applicant that the Commission staff believe is likely to default,” which is precisely the opposite of the Commission’s stated goals.⁵¹ To safeguard the integrity of the Auction, every bidder must be willing and able to serve every location in which it bids, and must live up to—and be held to—that commitment upon prevailing in the Auction.

C. The Commission Should Ensure Bidders Are Financially Qualified.

Potential bidders must have the financial resources to construct a broadband network and deliver reasonably comparable service at reasonably comparable rates thereafter. Financially unstable entities might be unable to finance or generate sufficient cash flows to satisfy the full extent of their CAF Phase II Auction obligations. If such entities prevail in the Auction but are

⁴⁹ Comments of the Rural Coalition, WC Docket No. 10-90, at 20 (Sept. 18, 2017).

⁵⁰ Letter from Sen. Claire McCaskill, U.S. Senate, to Chairman Ajit Pai, FCC, at 1 (Aug. 18, 2017).

⁵¹ *PN*, 32 FCC Red at 6255 ¶ 53 n.87.

ultimately unable to perform, rural America will suffer the consequences and scarce universal service resources awarded will be wasted (or, at the very least, their use will be substantially delayed). It is therefore critical that a reasonable, but rigorous, financial review is in place to screen applicants upfront in order to discern their qualifications.

The Commission proposed to use a screen as part of the short-form application that would not disqualify an applicant from participating in the Auction, but would flag for additional review certain applicants based upon a five-part scoring test:⁵²

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

Several parties have expressed concerns about discrete parts of the list,⁵³ and a few parties appear to generally object to the notion of a screen that would refer applicants for additional review.⁵⁴ While the Rural Coalition believes some minor modifications to the five-part scale may be appropriate in light of the capital-intensive nature of building broadband networks, the Commission should not, as some commenters urge, abandon this approach “in its entirety.”⁵⁵

⁵² *Id.* at 6256–57 ¶ 59.

⁵³ Comments of BEK Communications, WC Docket No. 10-90, at 2 (Sept. 18, 2017); Comments of Sacred Wind Communications, Inc., WC Docket No. 10-90, at 8 (Sept. 18, 2017).

⁵⁴ Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 24–25 (Sept. 18, 2017); *see also* Comments of the USTelecom Association, WC Docket No. 10-90, at 5 (Sept. 18, 2017).

⁵⁵ Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 21 (Sept. 18, 2017) (emphasis in original); *see also* Comments of the USTelecom Association, WC Docket No. 10-90, at 3–5 (Sept. 18, 2017) (effectively recommending replacement of a data-driven screen with a simple certification form as to operating margin and cash flows).

As the Commission appropriately acknowledges, the Rural Broadband Experiments demonstrate the importance of such a screening measure,⁵⁶ and it is more than appropriate to use “common and simple financial metrics to evaluate the financial position of the types of applicants that we anticipate will seek to participate in the auction.”⁵⁷ Although WISPA suggests an alternative test that looks only to a bidder’s EBITDA margin,⁵⁸ this is not a meaningful or sufficient substitute for a more robust screen that takes into account not only current margins but also some other measures of debt obligations and access to capital. As WISPA itself has acknowledged, the business of building broadband networks is a capital-intensive business,⁵⁹ and, while some adjustment might be warranted, to ignore entirely a bidder’s debt load or service in evaluating the financial capabilities and well-being of a firm would be to ignore a crucial part of the picture.⁶⁰

Nor has USTelecom shown that its proposed test—which relies upon a certification that an entity will not bid for annual CAF support that is more than 50 percent of its average annual GAAP operating cash flow from the prior two fiscal years⁶¹—sufficiently capture the level of scrutiny needed to ensure the sustainability of a firm in a capital-intensive business.

This being said, the Rural Coalition believes that there is merit to adjusting some of the metrics proposed by the Commission to strike an appropriate balance between applying a robust

⁵⁶ *PN*, 32 FCC Rcd at 6256 ¶ 58.

⁵⁷ *Id.* at 6257 ¶ 60.

⁵⁸ Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 24 (Sept. 18, 2017).

⁵⁹ *Id.* at 23.

⁶⁰ For similar reasons, the Rural Coalition opposes the WISPA proposal to allow post-application changes of control prior to the start of the Auction. Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 6–7 (Sept. 18, 2017). A change of control could materially alter an applicant’s financial status, particularly if acquisition debt and pledging of assets were part of the transaction. Any change of control should itself trigger a renewed review and apply the same review adopted by the Commission in the short form.

⁶¹ Comments of the USTelecom Association, WC Docket No. 10-90, at 4–5 (Sept. 18, 2017).

screen and avoiding the inadvertent trigger of a further review for financially healthy and qualified providers. Specifically, the Rural Coalition recommends adjusting the Commission's proposed scale in two discrete ways.

First, as suggested by BEK Communications,⁶² the use of a current assets-to-liabilities ratio is not the most useful metric given the capital-intensive nature of the broadband network deployment business, particularly for smaller entities that are actively deploying and updating their networks in high-cost rural areas. The Rural Coalition therefore recommends that the Commission not employ this metric, and instead employ a modified four-point test that does not include it.

Second, the Rural Coalition concurs with comments expressing concern about the *level* of the ratio of total equity to total capital,⁶³ although the Rural Coalition opposes other commenters' calls for the Commission to discard such a test altogether. Here again, firms that have leveraged debt to construct networks in high-cost rural areas may be unable to meet a ratio of 0.50. Based upon the experience of the Rural Coalition members, a ratio of 0.25 is more reflective of a proper balance between fiscal discipline and the challenges of investing in rural broadband networks.

The Rural Coalition otherwise supports the Commission's proposals but believes these minor modifications will more appropriately assess financially healthy entities that are deploying in high-cost areas.

⁶² Comments of BEK Communications, WC Docket No. 10-90, at 1–2 (Sept. 18, 2017).

⁶³ *See, e.g.*, Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 24 (Sept. 18, 2017).

D. The Commission Should Reject Suggestions to Adopt a Take-Rate of Less Than 70%.

The Rural Coalition reiterates its support for the Commission’s proposal to adopt a take-rate assumption of at least 70%. Although two commenters have asked the Commission to consider lowering the take-rate assumption,⁶⁴ these commenters appear to conflate the take-rate *assumption* for the purpose of designing a capable network with an actual take-rate *requirement* that must be achieved. The take-rate assumption is not an adoption requirement. On the contrary, it is an engineering specification that requires providers to design networks capable of actually serving 70% of connected locations. Accordingly, WISPA’s argument that 70% of networks “will [not] subscribe on Day One” misses the point.⁶⁵

In any event, the commenters seeking a relaxation of the 70% take-rate assumption have failed to address the asymmetry that would result if providers could assume lower take-rates. Because model-based support is calculated using a 70% take-rate assumption, if winning providers could design their networks to serve fewer locations, they risk failing to be able to serve unserved locations and/or could collect far more support than is necessary to construct and maintain their networks.⁶⁶

More importantly, in light of the Commission’s decision to grant price cap incumbent local exchange carriers forbearance from their federal eligible telecommunications carrier service obligations in census blocks that receive CAF Phase II Auction funding, winning bidders must be prepared to serve effectively as the carrier of last resort—it is unlikely that other providers

⁶⁴ Comments of Illinois Electric Cooperative, WC Docket No. 10-90, at 4 (Sept. 18, 2017); Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 13–14 (Sept. 18, 2017).

⁶⁵ Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 13 (Sept. 18, 2017).

⁶⁶ Comments of the Rural Coalition, WC Docket No. 10-90, at 21–22 (Sept. 18, 2017).

will serve those customers for whom the network is deficient.⁶⁷ As the Rural Coalition has previously noted, its members have seen actual take-rates of upwards of 70% in rural areas; if the assumed take-rate merely for purposes of network design is any lower, winning bidders may not be able to serve all locations, leaving certain locations stranded and, paradoxically, worse off than they were prior to the Auction.⁶⁸ The problem could be even worse if the Commission permits bidders to make their own “assumptions” about the “number (or percentage) of subscribers” because in that case, providers could face competitive pressure to lower take-rate assumptions in order to win support, leading to a race to the bottom.⁶⁹

E. The Commission Should Adopt Conversation-Opinion Tests in Lieu of Listening-Opinion Tests.

The Commission previously determined that applicants bidding in the high-latency tier must demonstrate a score of 4 or higher using the Mean Opinion Score (“MOS”) and “laboratory testing consistent with [ITU] recommendation P.800.”⁷⁰ In its comments, ADTRAN notes that ITU Recommendation P.800 references both conversation-opinion tests and listening-opinion tests, and urges the Commission to clarify that high-latency bidders should use conversation-opinion tests.⁷¹

⁶⁷ See *In re Connect America Fund*, Report and Order, 29 FCC Rcd 15,644, 15,663–71 ¶¶ 50–70 (2014). Although the Rural Coalition continues to maintain that winning bidders must be able to serve all actual locations, the Rural Coalition agrees with Vantage Point that there may be a small “locations gap” in certain census blocks. Comments of Vantage Point Solutions, WC Docket No. 10-90, at 6 (Sept. 18, 2017). Accordingly, the Rural Coalition does not oppose some flexibility to account for the possibility that the actual number of locations may be lower than that predicted by the model. However, the Commission should discourage any intentional effort to avoid serving all actual locations, and should reduce the support of defaulting bidders in accordance with 47 C.F.R. §54.310(c)(2).

⁶⁸ Comments of the Rural Coalition, WC Docket No. 10-90, at 22–23 (Sept. 18, 2017).

⁶⁹ *Id.* at 23.

⁷⁰ *In re Connect America Fund*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 5949, 5961 ¶ 30 & n.62 (2016).

⁷¹ Comments of ADTRAN, Inc., WC Docket No. 10-90, at 3–4 (Sept. 18, 2017).

The Rural Coalition supports ADTRAN’s recommendation that applicants bidding in the high-latency tier must use conversation-opinion tests, rather than listening-opinion tests, to demonstrate compliance with the Commission’s MOS requirement. Unlike a listening-opinion test, which involves only one participant who “passively listens to some audio samples,” conversation-opinion tests involve “two subjects [who] are actively participating in a conversation.”⁷² “The advantage of a conversation-opinion test is that it is similar to a real conversation and all its characteristics,” and can more accurately reveal talking and conversation degradations.⁷³ As many rural consumers are likely to use broadband for two-way voice communication, a conversation-opinion test will provide the Commission with a more accurate picture of how a provider’s latency will affect rural consumers. In order to improve the transparency of the Auction, the Commission should also make the results of the tests available for public review.

IV. THE COMMISSION SHOULD USE CAUTION AND NOT PREMATURELY EXPAND THE AVAILABLE SPECTRUM BANDS.

In the *Public Notice*, the Commission proposes a spectrum chart identifying several spectrum bands that it anticipates “could be used for the last mile in order to meet Phase II obligations.”⁷⁴ In response, WISPA urged the Commission to include additional bands to Appendix B, including TV White Spaces, 902-928 MHz Band, 5250-5350 MHz and 5470-5725

⁷² Manuel Rösch, Quality-of-Experience Measurement Setup 13 (2014), *available at* <https://files.ifi.uzh.ch/stiller/BA-M-Roesch.pdf> (last visited Oct. 10, 2017).

⁷³ *Id.*; *see also* Tom Bäckström, Speech Coding 225 (2017); Comments of ADTRAN, WC Docket No. 10-90, at 3–4 (Sept. 18, 2017).

⁷⁴ *PN* at 6251 ¶ 40.

MHz Bands, 37-37.6 GHz Band, 57-71 GHz Band, and the 70/80/90 GHz Bands.⁷⁵ Microsoft similarly proposed including TV White Spaces.⁷⁶

The Rural Coalition agrees with the Commission's proposed spectrum bands for the Auction and urges the Commission not to expand the potential bands in situations where doing so could unnecessarily complicate or potentially delay the Auction. The spectrum bands identified by the Commission provide sufficient bandwidth to support the wireless technologies an applicant may choose to use to meet Phase II obligations and neither WISPA nor Microsoft provide evidence to the contrary. In addition, by proposing a mix of licensed and unlicensed low-, mid-, and high-band spectrum, the Commission identifies a substantial range of the spectrum available today for wireless broadband service, which likely will satisfy the various technological needs of a diverse pool of applicants. Further, the bands proposed by the Commission are currently being used by service providers who are likely to bid in the Auction, which will reduce administrative burdens and allow for the efficient and expedited delivery of voice and broadband service to underserved communities.

Moreover, several of the spectrum bands proposed by WISPA and Microsoft are the subject of ongoing Commission proceedings. For instance, many of the millimeter wave bands proposed by WISPA are currently under consideration in the Spectrum Frontiers proceeding,⁷⁷ and including them here could prejudice the outcome of that proceeding. Similarly, the location and availability of TV White Spaces will not be known until the completion of the post-incentive

⁷⁵ Comments of the Wireless Internet Service Providers Association, WC Docket No. 10-90, at 17-18 (Sept. 18, 2017).

⁷⁶ Comments of Microsoft Corporation, WC Docket No. 10-90, at 5 (Sept. 17, 2017).

⁷⁷ See *In re Use of Spectrum Bands Above 24 GHz For Mobile Radio Services*, Report and Order and Further Notice of Proposed Rulemaking, 31 FCC Rcd 8014 (2016).

auction repacking of the TV bands now underway.⁷⁸ Although these bands offer promise for future deployment once their status is settled, their current status is sufficiently contingent that the Commission should not add additional complications during this transition. For these reasons, the Commission should not expand upon the potential spectrum bands particularly where doing so could unnecessarily complicate and interfere with other pending proceedings.

V. CONCLUSION

The Rural Coalition is encouraged by the number of comments in these CAF Phase II proceedings and lauds the Commission's progress in this context on bridging the digital divide. As the Commission has noted, providers of all kinds and sizes, including price cap carriers, competitors, wireless service providers, utilities, and electric cooperatives, all have the potential to make significant progress in ensuring that rural Americans are not left behind. Provided that the Commission continues to take steps to simplify the Auction, and to ensure that the Auction is conducted in a fair and open manner, the Rural Coalition expects that many of its members will be interested in participating and helping to bring broadband to previously unserved areas.

Respectfully submitted,

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⁷⁸ See *Incentive Auction Task Force and Media Bureau Adopt a Post-Incentive Auction Transition Scheduling Plan*, Public Notice, 32 FCC Rcd 2786, 2807 ¶ 68 (2017).

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