Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

Connect America Fund ) Docket No. 10-90

OPPOSITION OF
NTCA–THE RURAL BROADBAND ASSOCIATION,
NATIONAL RURAL ELECTRIC COOPERATIVE ASSOCIATION (NRECA)

AND

UTILITIES TECHNOLOGY COUNCIL

TO PETITIONS FOR RECONSIDERATION

November 7, 2018
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EXECUTIVE SUMMARY

NTCA, NRECA and UTC support performance metrics that ensure high standards which are consistent with the statutory mandate for services that are reasonably comparable in quality to those that are available in urban areas. In order to achieve this, latency standards must ensure the provision of quality voice and other services. Public policy, therefore, supports rigorous standards. The latency testing obligations of the measurements order do not suffer from administrative infirmity, and the testing obligations must also apply to recipients of support in the New York CAF Program.

Various aspects of the performance measurements order, including directives that pertain to over-provisioning, on-net testing, and flexibility in composing the sample pool and commencing hourly tests, can be refined to increase effectiveness and efficiency of the rules.
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To the Commission:

I. INTRODUCTION

Pursuant to 47 C.F.R. § 1.429(f), NTCA–The Rural Broadband Association (NTCA), National Rural Electric Cooperative Association (NRECA), and Utilities Technology Council (UTC) submit this opposition to various Petitions for Reconsideration that have been filed in response to the order issued in the above-captioned proceeding on July 6, 2018.¹ NTCA, NRECA and UTC (collectively, the rural associations) were active participants in the underlying proceeding; NTCA filed an application for review of several issues in September 2018.² As set

forth in respective pleadings, the rural associations support testing that reasonably affirms the performance of broadband networks that are supported by the Connect America Fund (CAF). In this filing, the rural associations oppose, *inter alia*, requests of various parties to reduce performance standards in certain respects. At the same time, the rural associations support requests that recognize the administrative burden that certain of the testing protocols might impose upon various providers. In all these regards, the rural associations differentiate between the *goals of the tests*, specifically, to affirm network performance, and *administration of the tests*, *i.e.*, the manner in which each firm executes its obligations.

By way of example, NTCA, NRECA and UTC support the petition for partial reconsideration filed by Micronesian Telecommunications Corporation (MTC). MTC identifies, as did others filing for reconsideration or review, the burden on small companies to obtain customer consent to participate in testing.\(^3\) This is an example of an *administrative* function of testing that does not implicate verification of network performance. Similarly, Viasat argues that currently there are no third-party firms ready and available to conduct testing. NTCA, NRECA and UTC therefore support, just as NTCA did in connection with the development of a marketplace for commercially available testing devices, a reasonable delay to accommodate the development of a third-party market to conduct such testing. By contrast, when examining requirements that are aimed at affirming the performance of networks that are under the reasonable control of providers and simply go to the question of measuring the robustness of services being delivered, the rural associations support affirmative measures that verify carrier compliance with CAF obligations.

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\(^3\) MTC at 1.
II. DISCUSSION

A. PERFORMANCE METRICS SHOULD ENSURE HIGH STANDARDS THAT ARE CONSISTENT WITH THE STATUTORY MANDATE FOR SERVICES THAT ARE REASONABLY COMPARABLE IN QUALITY TO THOSE AVAILABLE IN URBAN AREAS.

1. Latency Standards Must Ensure the Provision of Quality Voice Service.

Since any technology can participate and prevail in the auction, NTCA, NRECA and UTC support testing obligations that affirm the performance of networks in a technology-neutral manner even as certain characteristics of performance are recognized – again on a technologically neutral basis – as delivering greater value. Put another way, customers demand performance without regard to the technological platform beneath the service – and good service should of course be recognized, but a minimal level of performance must be assured. This is especially true for voice telephony, which is a required service under Connect America Fund (CAF) requirements. In these regards, the Commission has ordered performance requirements that ensure delivery of voice telephony which not only meets consumer demands, but which also assures consistent performance for vital emergency and commercial needs. Moreover, latency can frustrate core applications of broadband beyond voice, including video which is foundation of services that support telemedicine, distance education and commercial applications.

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5 Commercial applications in rural areas include livestock operations. Online cattle auctions are quickly enabling performance improvements. In recent years, drastic price swings (in 3Q16, for example, cattle futures prices dropped nearly 33 percent) have cut into rancher earnings and prompted discussions about how pricing might be better guided in the $13B annual market. Although the Department of Agriculture publishes price indices, the delay in disseminating price data reported by traders may result in indices that do not reflect actual market positions. Online cattle auctions direct trading to a cash market that offers near-instant dissemination of pricing
Therefore, the rural associations oppose attempts to weaken the implementation and measurement of latency performance obligations, since these metrics speak directly to the quality of both voice and broadband service.

Requests to reduce latency standards or mask performance through watered-down testing regimes risk undermining the Commission's statutory mandate to ensure reasonably comparable services in rural and urban areas. The Commission has noted satellite services are especially vulnerable to latency, which can compromise the quality of satellite-based voice service and complicate broadband applications such as teleconferencing. NTCA, NRECA and UTC urge the Commission in particular to be wary of arguments that confuse "technological neutrality" with "quality neutrality." The instant proceeding should not be a back-door to reduce those standards and reduce the level of services received by consumers simply to accommodate networks that cannot deliver reasonably comparable services.

information which, when aggregated across hundreds of producers using the broadband-enabled platforms, provides a more current picture of pricing. This, in turn, is proposed to potentially reduce uncertainty in the futures market. Online auctions offer cattlemen three distinct benefits: (1) the ability to participate in a process that is far more economically efficient than traveling to live auctions; (2) the ability to participate in hundreds of distant auctions; (3) an alternative to cattle futures that may be more attractive in certain situations. These broadband-enabled benefits combine to serve greater economic efficiencies and opportunities for the agriculture industry. See, also, Enga, Brian; Thompson, Larry, "Satellite Broadband Remains Inferior to Wireline Broadband," Vantage Point Solutions, Mitchell, South Dakota, at 3-5 (Sep. 2017).


9 See, Measurements Order at n.147 (citing statutory mandate of reasonable comparability).
In a joint petition, USTelecom, ITTA, and the Wireless Internet Service Providers Association (WISPA) (collectively, U/I/W) argue for relief of certain speed and latency obligations. As discussed in the NTCA Application for Review and below, NTCA, NRECA and UTC support certain adjustments relating to the administration of testing, including some of the provisions raised by U/I/W. However, the rural associations do not support changes that would reduce the rigor with which latency standards are ensured. To be sure, the latency testing protocols are rigorous. U/I/W request the Commission to reduce the frequency of latency testing to align it with the frequency of speed testing.\(^{10}\) As a threshold response, the rural associations submit that there is logic in a protocol that tests for latency more frequently than speed. The impact of latency is measured in and discernible by milliseconds: the frequency of testing aims to illuminate whether variables that perforate performance are present. In contrast, speed contemplates a steadier aspect of the network facility, and therefore does not require as frequent testing to demonstrate compliance. Therefore, inasmuch as latency-sensitive services and applications (including but not limited to voice) are affected by millisecond variables, NTCA, NRECA and UTC urge the Commission to maintain its rigorous standards for latency testing.

2. Public Policy and Commission Rules Demand Rigorous Standards to Support Voice Service

The Commission has articulated numerous declarations regarding the central role of voice service in universal service policy. In the 2011 *Transformation Order*,\(^ {11}\) the Commission mandated that recipients of CAF support must offer standalone voice service;\(^ {12}\) more recently,

\(^{10}\) U/I/W at 5, 6.

\(^{11}\) n.4, *supra*.

\(^{12}\) *Transformation Order* at para. 80. See, also, 47 C.F.R. § 54.101(b).
the Commission has weighted auction bids based on latency performance.\(^\text{13}\) By definition, voice conversation demands the ability of at least two participants to communicate on an interactive basis. Accordingly, testing aimed at ensuring the capability of a provider to provide this service must ensure that type of dialogue can occur. The Commission itself has recognized the negative impact of latency on voice service.\(^\text{14}\) The Commission has rendered decisions based on its assessment of "inherent limitations of satellite voice service, particularly in rural areas."\(^\text{15}\) Excessive latency which affects the ability to communicate in "real time" can have dangerous implications for public safety and devastating impacts on commercial communications. Latency also implicates the quality of data services, as well, and toward that end the Commission must further ensure that networks supported by the CAF are sufficient to deliver the manifold benefits of broadband.\(^\text{16}\)

3. **The Latency Testing Obligations of the Measurements Order Do Not Suffer Administrative Infirmity**

   (a) **The Order does not "depart" from MBA standards**

   The latency obligations of the *Measurements Order* do not, as alleged by U/I/W, suffer from administrative infirmity. For example, U/I/W note that the testing requirements of the Measurements Order depart from Measuring Broadband America (MBA) practices.\(^\text{17}\) However,

\(^{13}\) *CAF II Auction PN* at para. 217 *et. seq.*

\(^{14}\) *See, i.e.,* *Transformation Order* at paras. 147, 160 and 206 (conditioning Connect America support on the offering of voice service with real-time applications).


\(^{17}\) U/I/W at 8, 9.
the Commission never committed to adopt the MBA practices verbatim in developing testing requirements when seeking comment in the first instance, and it departed from those in other aspects as well where policy considerations warranted. As the Commission explained, the MBA program is aimed at "improv[ing] the availability of information for consumers about their broadband service."\(^\text{18}\) In contrast, the performance measurement obligations are intended to ensure regulatory compliance and the actual delivery of service at specified levels of performance. Therefore, while the Commission's approach to one may be informed by the other, the respective overarching context and focus of each program allows, if not demands, variance. A difference in performance metrics is therefore not a "departure" from MBA practice, since MBA practices were not established as the base testing standard in the first instance. Nor was there ever a reasonable expectation or even a mere proposition that the MBA practices would be adopted whole cloth for purposes of the Commission’s rules here. A difference between the Measurements Order and MBA practices is therefore not a "departure from agency precedent" that would require independent justification.\(^\text{19}\) U/I/W seem to acknowledge this, stating "[t]he purposes of MBA and CAF are very different and while the former can serve as a guide, the Bureaus should not automatically apply the MBA's methods here without considering the unique


\(^{19}\) See, Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 42 (1983) ("An agency changing its course by rescinding a rule is obligated to supply a reasoned analysis for the change beyond that which may be required when an agency does not act in the first instance."); see, also, Atchison, Topeka & Santa Fe Ry. Co. v. Wichita Bd. of Trade, 412 U.S. 800, 808 (1973) (an agency has a duty to "explain its departure from prior norms").
needs of the CAF program." Accordingly, any difference between MBA and performance measurement protocols is not a basis for reconsideration of the Measurements Order.

(b) The Order Meets Administrative Procedure Act Notice Requirements

U/I/W argue that the Commission action does not meet the Administrative Paperwork Act (APA) notice requirement. The parties submit that since the 2017 effort of the Commission to refresh the record referenced a 2014 public notice which itself referred to a 2013 order, the Commission was obliged to provide explicit notice that a different frequency for latency testing than implicated by prior statements was under consideration in the instant proceeding. And, although the parties conclude, "Over the course of five years, the Bureaus . . . never offered a hint they would adopt such radically different testing regimes. . . " they also acknowledge "[t]he 2013 Price Cap Order included no requirements or criteria for the frequency with which ETCs must conduct latency tests." Accordingly, the rural associations submit that the difference in what parties may have expected (based upon their reading of the 2014 Public

20 U/I/W at 7.
24 U/I/W at 8.
25 U/I/W at 8 (emphasis added).
Notice) with regard to the frequency of testing (as opposed to a general requirement to test) does not rise to a violation of the Administrative Procedure Act (APA) notice provisions.\textsuperscript{26}

Section 553 of the APA is intended to abate the quasi-legislative role a rulemaking agency might assume. Section 553 ensures that interested parties can inform and affect the decision-making, and "expose[s] the rulemaking scrutiny to public scrutiny."\textsuperscript{28} The 2017 Public Notice, read either separately or together with its ancestor notices, provided reasonable notice that the parameters of latency testing were under consideration. In support of its argument, U/I/W cite Citizens Telecommunications Company of Minnesota, LLC v FCC\textsuperscript{29} to illustrate the need for proper notice under the APA. That case however, is distinguishable from the instant proceeding. In Citizens, the court upheld the Commission's rulemaking finding that although a 2016 notice stated a goal of "deregulation," many issues on which the Commission sought comment tilted toward increased regulation. Therefore, despite the "somewhat Orwellian approach"\textsuperscript{30} of the Commission in that relevant notice, the court found that the petitioners in fact had adequate notice of the Commission's eventual action.\textsuperscript{31} Similarly, although the instant 2017 Public Notice did not indicate with specificity that the frequency of latency testing was at issue,

\textsuperscript{26} Administrative Procedure Act, Pub. L. 79-404, 60 Stat. 237 (1946).

\textsuperscript{27} See, Citizens Telecommunications Company of Minnesota v. FCC, No. 17-2296 (8th Cir. 2018) (industry expectations of how the Commission may act do not equate to reasonable reliance) (Citizens).


\textsuperscript{29} Citizens, n.27, supra.

\textsuperscript{30} Citizens at 13.

\textsuperscript{31} Citizens at 14.
it did specify that latency testing, overall, would be considered, and noted explicitly its intent to refresh the record of the 2014 Public Notice. Inasmuch as no decision based upon the 2014 Public Notice had ever been rendered, no conclusive decision on the frequency of latency testing could be taken from it. Furthermore, inasmuch as the 2014 Public Notice opened the question as to whether latency testing should be the same or different for other recipients of CAF support, parties were on effective notice that a wide range of questions related to latency testing were under consideration. Therefore, while the outcome of the instant proceeding may indeed have been different than some parties' expectations, there was no defect in the Section 553 notice, and the rules should not be set aside on those grounds.

4. The Prescribed Protocols for Satellite Testing Are Appropriate

(a) Third-party testing is reasonable

The Commission relies upon Mean Opinion Score (MOS) ratings to characterize the impact of latency. MOS scales rate the lowest occurrences of latency as "imperceptible" and the highest as "very annoying." In order to determine service quality, the Measurements Order requires third-party, live conversation testing of satellite service. Viasat argues that the Measurements Order fails to establish that third-party testing, as opposed to self-testing, is necessary to validate MOS criteria. Viasat also argues that the Order establishes an uneven playing field since Viasat is the only CAF II support recipient that would be required to test this

32 2017 Public Notice at para. 7.


34 See, also, Minnesota, at 13, 14, wherein the court differentiates between notice and expectations.

35 Measurements Order at para. 35.
way; all others are permitted to rely on self-testing.\textsuperscript{36} Viasat argues that the self-testing permitted to other providers proves that support recipients, generally, are trusted to verify the performance of their networks, and that the imposition of a third-party testing requirement on satellite providers, only, violates principles of competitive and technology neutrality.

NTCA, NRECA and UTC submit that inasmuch as testing required by non-satellite providers measures empirical, quantifiable evidence, those data can be verified through \textit{post hoc} investigation of processes and results. In contrast, inasmuch as MOS testing relies on subject evaluation, reliance on a third-party benefits both the Commission and the provider by assuring an objective assessment that has no shade of partiality. Moreover, the requirement is hardly targeted toward one provider; it just so happens that no other provider chose the route that Viasat did in bidding for and winning support. Accordingly, the third-party testing is a valid approach for MOS scoring.

\textbf{(b) "Live" vs. Laboratory Testing}

Viasat submits that the Commission's requirement to conduct live testing is "fundamentally inconsistent" with the laboratory testing advised by ITU-T Rec. P.800.\textsuperscript{37} It should be noted that ITU-T Rec. P.800 is \textit{guidance} and not a \textit{prescription}. Moreover, the recommendation specifies that laboratory tests are intended to "reproduce, in the laboratory situation, the actual service conditions experienced by customers." And, of course, it is the consumer that is the ultimate interest in considering what benefits flow from CAF support. Therefore, the Commission's order to conduct live testing is entirely consistent with the goals of the ITU-T Rec. P.800 precisely because a live testing \textit{includes} inherently and by definition the

\textsuperscript{36} Viasat at 3.

\textsuperscript{37} Viasat at 4.
qualities that would otherwise be recreated in a lab setting. Viasat's appeal to avoid testing that would include "real world" variables including background noise and latency would itself be contrary to the goals of the ITU-T Rec. P.800 testing; Viasat's interest in factors that would be "controlled under laboratory conditions" is inapposite to the reality of the relatively uncontrolled environment in which live customer use of the service is experienced. The best simulation of live customer service is live customer testing. Therefore, "live" testing is preferable to laboratory testing which at best would simply aim to emulate factors present in the "live" world.38 Put another way, reasonable comparability cannot be assured if the rural consumer’s experience is never actually captured, but only measured by proxy to laboratory conditions within which no consumer resides.

(c) The 95-percent threshold for latency performance is appropriate

The Commission established a 95-percent threshold for latency performance, and an "80/80" standard for speed. U/I/W seek reconsideration of this conclusion and request the Commission lower the latency performance standard to 80/80. But, and as described above, low latency is necessary to support the statutory standard of "reasonably comparable" service, and the 95-percent compliance benchmark is a reasonable standard to achieve this goal. The Commission itself found that latency occasioned by geostationary satellite communications is 20-times greater than the typical terrestrial latency.39 This quality further supports the Commission's decision to

38 See, i.e., Measurements Order at para. 44.

incorporate a 95 percent compliance threshold for speed (which in fact was adopted in 2013)\(^{40}\) while allowing an "80/80" compliance threshold for speed. Variations in speed of up to 20 percent affect satellite and terrestrial providers. This is caused by networking protocols, interference and other variances that affect all providers and whose accommodation is technology neutral. As the Commission noted, this provides a margin within which carriers can operate. Similar factors, however, do not implicate latency, and therefore a 95 percent threshold is supported fully by the record.\(^{41}\) In short, the compliance thresholds for both speed and latency are at once technology neutral and reasonable based upon the record.

5. The Testing Obligations Apply to the NY CAF Program

Hughes alternatively seeks to relax standards for latency by arguing that MOS testing standards should not apply specifically to NY Program CAF recipients because the NY Program is not mentioned in the Measurements Order.\(^{42}\) Hughes argues further that compelling NY Program CAF recipients to adhere to "only a portion of the ITU-T P.800 recommendation . . . would be contrary to the law" and would "constitute retroactive rulemaking." The rural associations submit that NY Program CAF recipients were fully on-notice that performance requirements would attend their receipt of funding.

In the first instance, the NY CAF Program order is replete with expressions that participants in that program will be held to the same standards as other similarly-situated CAF providers. The NY CAF Program is a not a separate program, \textit{per se}, but rather an alternative

\(^{40}\) See, U/I/W at 10, fn.25.

\(^{41}\) See, \textit{i.e.}, Enga, Brian; Thompson, Larry, "Latency Considerations for Satellite Broadband," Vantage Point Solutions, Mitchell, South Dakota (May 2017).

\(^{42}\) Hughes at 2.
avenue by which providers could participate in the overall CAF program. This is clear from the many statements in the NY CAF Order. At the outset, the Commission warned that "the Bureau will closely review the winning bidders to ensure that they have met the technical eligibility requirements . . . and that they are technically and financially qualified to meet the terms and conditions of Connect America support." And, the Commission noted that New York committed significant resources to design its program to "be compatible with and achieve the goals of Connect America Phase II." The Commission was clear that participants in the NY CAF Program would be required to "comply with the same level of oversight as all other Connect America Phase II recipients" and that they would be subject to the same non-compliance measures if they do not comply. Hughes cannot argue now that participants in the NY CAF Program should be subject to any different standard; the lack of any specific mention of the NY CAF Program in the Measurement Order is wholly irrelevant because the NY CAF Program is simply a pathway for participation in the CAF Phase II program, generally. It is not, nor was it ever designed or intended to be, a separate CAF program. Therefore, there is neither need nor reason to make specific mention of the NY CAF Program in the Measurement Order.

The Commission was clear that winning bidders would be reviewed to "ensure that they have met the eligibility requirements we have adopted below and that they are technically and financially qualified to meet the terms and conditions of Connect America support." It would

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44 NY Order at para. 14.


46 NY Order at para. 12.
be illogical for the Commission to demand pre-support fitness of applicants and to then set aside performance obligations. Moreover, the Commission provided that it "adopt[ed] conditions . . . to ensure that this partnership with New York achieves our Connect America objectives" and specified that those include "requiring recipients to comply with the same level of oversight as all other Connect America Phase II recipients, and . . . by subjecting the recipients to non-compliance measures if they do not comply [with] the program requirements." And, the Commission specified "to ensure New York consumers receive a level of service that is comparable to the service those consumers would have received through the Connect America Phase II auction, we clarify that the public service obligations that we have adopted for Connect America Phase II auction recipients will also be applicable to recipients of Connect America Phase II support that is allocated in partnership with New York."  

B. ASPECTS OF THE PERFORMANCE MEASUREMENTS ORDER CAN BE REFINED TO INCREASE EFFECTIVENESS AND EFFICIENCY

1. Conformance of Latency and Speed Compliance Thresholds.

U/I/W ask the Commission to reconsider the penalties for non-compliance with speed and latency testing. To illustrate its position, U/I/W note that non-compliance with certain performance measures triggers a loss of high-cost support, while larger margins of non-compliance with build-out obligations triggers reporting obligations. NTCA, NRECA and UTC support reconsideration of the final rule. As NTCA noted in initial comments, non-compliance should serve as a trigger for the provider to defend non-compliance, which may be the result of

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47 NY Order at para. 19. See, also, paras. 52 and 53, outlining service obligations; para. 59, requiring ETC status; para. 60, financial and technical capability requirements.

48 U/I/W at 12.
"climate, labor or other exogenous event . . . ." Stated differently, non-compliance (especially if relatively minor in degree) should impose upon the provider the burden of proof to demonstrate a justifiable reason for non-compliance and an avenue toward remediation; it should not eliminate automatically support upon which the provider relies for deployment and operation. U/I/W state, "withholding of CAF funds . . . in already challenging high-cost areas - could hinder a provider's ability to come into full compliance." This assessment echoes NTCA's concerns that automatic reductions "could affect a provider's ability to deploy." For these reasons, NTCA, NRECA and UTC support reconsideration and modification of the immediate rule impacts of non-compliance, at the very least with respect to minor degrees of non-compliance.

2. Over-Provisioning

U/I/W request the Commission to clarify that compliance will be measured against the CAF-mandated minimum service speed, rather than the advertised speed. The rural associations support the U/I/W position and agrees that the purpose of the testing framework is to verify compliance with deployment obligations, only. NTCA raised related concerns in its Application for Review, seeking clarification of the relationship between advertised and subscribed speeds, as opposed to speeds required under CAF obligations. NTCA stated there its request for the Commission to clarify that "the USF recipient's ultimate compliance will

49 Comments of NTCA at 15, 16.
50 U/I/W at 13.
51 Comments of NTCA at 16.
52 U/I/W at 16.
53 Application for Review of NTCA at 19.
always be measured against the 10/1 Mbps requirement," and warned that "[a]ny other interpretation would have the ironic consequence of deterring recipients from . . . build[ing] networks that are even more capable than the required baseline . . . ."\(^{54}\)

U/I/W agrees, stating, "If left in place, such a policy will strangely penalize any provider that in fact does better than required for its customers." And, as U/I/W notes, in the proper absence of any requirement to report advertised speeds, there is a fundamental weakness in any requirement that would seek to calibrate performance outcomes with speeds other than those required under CAF obligations.\(^{55}\) Likewise, the rural associations support U/I/W's request that the Commission reconsider the decision to automatically exclude speeds above certain thresholds.\(^{56}\) This, too, is an approach that is inconsistent with industry practices to over-provision where the deployment of a more-capable network can be obtained in an economically sensible and efficient manner.

3. **Same Subscribers for Speed Testing and Latency Testing**

NTCA, NRECA and UTC support the U/I/W request that CAF recipients be permitted to use the same sample pool for both latency and speed testing.\(^{57}\) As developed extensively in NTCA's initial comments and subsequent pleadings, the task of obtaining customer consent, delivering and installing testing equipment, and maintaining contact with the customers to prevent attrition will implicate substantial costs for providers;\(^{58}\) these concerns are amplified

\(^{54}\) Application for Review of NTCA at 20.

\(^{55}\) U/I/W at 17.

\(^{56}\) U.S. Telecom et al. at 18.

\(^{57}\) U.S. Telecom et. al. at 21.

\(^{58}\) NTCA Comments at 6-9.
given the relatively large number of subscribers required for each pool.\textsuperscript{59} Using the same panel of subscribers for both testing protocols (even if tests may be conducted then at different frequencies) will avoid unnecessary costs and excessive administrative burdens. These savings are especially salient in light of the fact that there is no discernible reason to support the use of separate panels. Accordingly, Commission clarification on this point is warranted.

4. \textbf{Flexibility in Commencing Hourly Tests}

U/I/W requests the Commission to reconsider the discrete and specific times at which testing is to be conducted within each hour.\textsuperscript{60} NTCA, NRECA and UTC support this request, noting that if the frequency requirement is satisfied, there should be no practical difference as to whether testing occurs at the top, middle, or closer to end of a testing window. To the extent that a later testing in any window does not enable permitted "retesting," NTCA, NRECA and UTC submit that parties encountering that type of situation can determine whether a retiming of testing is feasible and proceed accordingly. If recalibrating the time is not possible and performance compliance cannot be verified through testing results, then providers, consistent with the positions NTCA has advocated above and in the underlying proceeding, would be required to demonstrate the cause of failure to the Commission and be accorded sufficient time without penalty to remediate the situation.

III. \textbf{CONCLUSION}

WHEREFORE the reasons stated above and herein, NTCA, NRECA and UTC urge the Commission to ensure that performance metrics ensure standards that are consistent with the

\textsuperscript{59} NTCA Comments at 8-9; Application for Review at 13-18.

\textsuperscript{60} U/I/W at 23.
statutory mandate to provide services in rural areas that are reasonably comparable to those that
are available in urban areas. These standards include protocols that ensure low-latency service
that supports voice and other critical applications. Certain aspects of the performance
measurements protocols, however, can be refined to increase effectiveness and efficiency.
Collectively, this proper approach will meet the aims of the Commission to ensure that recipients
of high-cost support are providing services consistent with their obligations.

Respectfully submitted,

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November 7, 2018
CERTIFICATE OF SERVICE

I, Joshua Seidemann, do hereby certify that on this 7th day of November 2018, I caused a copy of the foregoing Opposition to be served upon the following individuals by United States Postal Service or electronically where consent was received such for service.

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