

SECRETARY'S RECORD, PUBLIC SERVICE COMMISSION

BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

In the Matter of the Nebraska)	Application No. NUSF-133
Public Service Commission, on)	
its own motion, to implement)	ORDER OPENING DOCKET AND
standards for the verification)	SEEKING COMMENT
of broadband service provider)	
coverage and speed data.)	Entered: March 15, 2021

BY THE COMMISSION:

The Nebraska Public Service Commission ("Commission") hereby opens this proceeding on its own motion to implement standards for the verification of broadband service provider coverage and speed data. Pursuant to Neb. Rev. Stat. § 86-324.02, enacted in 2021, recipients of ongoing high-cost support from the Nebraska Telecommunications Universal Service Fund ("NUSF") must agree to submit to speed tests as determined by the Commission. Upon the Commission's request, such recipient shall conduct the speed tests and submit the results to the Commission. The Commission hereby opens this proceeding to implement procedures and standards in accordance with Neb. Rev. Stat. § 86-324.02.

By statute, the speed tests must be conducted for one week using a random sample of locations of consumers who subscribe to services provided over infrastructure for which ongoing high-cost support is received. The Commission finds that other Commission programs in which grant funded deployment requires certain speed thresholds be met should also be subject to verification by the Commission to ensure that grant monies are spent appropriately.

Accordingly, the Commission opens this proceeding to seek comment on the process and standards by which speed tests are conducted and the data is filed with the Commission. The Commission invites proposals from interested parties on the standards and methodology for collecting speed test data as well as the number of tests sufficient to meet the criteria in LB 338.

Federal Testing Parameters and Performance Measures

In 2018, the Federal Communications Commission ("FCC") adopted requirements to promote greater accountability for recipients of Connect America Fund ("CAF") high-cost universal service support.¹ In its 2018 Testing Order, the FCC required

¹ In the Matter of Connect America Fund, WC Docket No. 10-90, Order (July 6, 2018) ("2018 Testing Order").

carriers to submit testing results as part of their annual compliance to certification.² The FCC also established general testing parameters, such as the testing method, the timing of the tests, and the number of test locations.³ The performance measures testing was then extended to recipients of CAF II Auction support, A-CAM support, CAF-Broadband Loop Support, and Rural Broadband Experiment fund support. CAF Phase II recipients were required to start pre-testing on January 1, 2020 and start testing on January 1, 2021.⁴

The Universal Service Administrative Company ("USAC") is implementing the performance testing framework using a model called the Performance Measures Model ("PMM"). According to USAC's website, the PMM (1) has carriers identify locations deployed with CAF support that have active subscribers; (2) generates a random sample of those locations for speed and latency testing, along with the speeds to be tested based on the speed tiers reported for those locations in the HUBB compared with the speeds they are required to deliver; (3) collects the speed and latency test results from carriers; and (4) calculates compliance with performance measures standards based on certified test results.⁵

The Commission proposes to adopt this general framework, with some adjustments as set forth below. The Commission seeks comment on this proposal.

1. Selection of Locations

Neb. Rev. Stat. § 86-324.02 requires the provider to conduct the speed tests and submit the results to the Commission using a random sample of locations of consumers who subscribe to services provided over infrastructure for which ongoing high-cost support is received. Since ongoing high-cost support is not earmarked to one location or even determined on an exchange basis, the Commission seeks comment on the parameters of meeting this requirement. The Commission interprets this statutory language to mean that providers that have completed capital improvement projects and are now eligible for ongoing support through the high-cost mechanism must conduct the speed tests and submit the results

² *Id.* at 1.

³ *Id.* at 6.

⁴ In the Matter of the Connect America Fund, WC Docket No. 10-90, *Order on Reconsideration* (October 31, 2019) ("2019 Reconsideration Order"), ¶ 81.

⁵ UNIVERSAL SERV. ADMIN. CO., *Performance Measures Testing*, <https://www.usac.org/high-cost/annual-requirements/performance-measures-testing/>.

SECRETARY'S RECORD, PUBLIC SERVICE COMMISSION

Application No. NUSF-133

Page 3

to the Commission using a random sample of locations. The Commission seeks comment on this interpretation.

The Commission proposes that the sample size for testing should be a Commission-identified statistically valid and unbiased sample of the provider's network. The Commission seeks comment on how to determine locations for testing and how to identify a statistically valid sample for meeting the requirement in Neb. Rev. Stat. § 86-324.02.

First, the Commission seeks comment on whether it should require carriers to file a list of locations with active subscribers. If the Commission requires carriers to file a list of active subscribers, how should this be handled? Should the Commission require carriers to file a list of active subscribers within 3 months after each project completion? Why or why not? Should the Commission require carriers to file a list of active subscribers on a periodic basis? If so, how often should the list of active subscriber locations be updated?

Using this list of active subscribers, the Commission would then need to select a random sample of subscribers for testing. The Commission seeks comment as to what information carriers would need to report to allow the Commission to select a valid random sample. Should the number of customers receiving service be a self-reported number? If this number is not self-reported, how could it be determined?

Additionally, should the size of the random sample selected for testing be determined by the number of subscribers on the provider's network subscribing to any type of broadband service, or should it be based upon subscribers purchasing a certain speed level? How should the Commission account for subscribers who are able to purchase faster service but choose to purchase a lower speed tier? If the sample size is determined by the number of subscribers on the provider's network subscribing to services provided over infrastructure, how should that number be determined?

2. Acceptable End Points for Testing

The FCC selected acceptable end points for testing, requiring that high-cost support recipients that service fixed locations must perform speed and latency tests from the customer premises of an active subscriber to a remote service located at or reached by

passing through an FCC-designated internet exchange point ("IXP").⁶ The FCC stated that the speed and latency should be measured on each ETC's access network from the end-user interface to the nearest Internet access point, which is the closest peering point between the broadband provider and the public Internet for a given consumer connection.⁷ We seek comment on whether to use the same acceptable end points for testing, or whether we should accept alternative testing parameters. If we should accept alternative testing parameters, what should they be? Are there any testing parameters that should be ruled out? If so, why?

3. Daily Test Period and Testing Intervals

The FCC also established a daily testing period requiring carriers to conduct tests between 6:00 p.m. and 12:00 a.m. local time, including weekends.⁸ We seek comment as to whether the Commission should utilize the same daily test period. In the alternative, should we consider an expanded test period which would include daytime hours such as 9:00 a.m. to 12:00 p.m. local time, in order to capture broadband performance when families may be working or attending school from home? Please explain.

In terms of test intervals, we seek comment on requiring a minimum of one download test and one upload test per testing hour at each subscriber test location.⁹ Are these intervals appropriate? Consistent with Neb. Rev. Stat. § 86-324.02, we seek comment on requiring carriers to conduct one week of testing using the test intervals described above.

4. Consumer Input and Validation

The Commission believes the consumer experience is one of the most significant indicators as to whether we have achieved the legislative goals of the NUSF Act.¹⁰ Specifically, we seek comment as to how consumer-initiated speed testing might be encouraged and incorporated. There are a number of ways in which providers can inform and encourage consumers to conduct speed tests on their

⁶ 2019 Reconsideration Order, at ¶ 12.

⁷ *Id.*

⁸ *Id.* at ¶ 20.

⁹ See 2018 Testing Order, ¶ 28.

¹⁰ See Neb. Rev. Stat. § 86-317 ("The purpose of the Nebraska Telecommunications Universal Service Fund Act is to authorize the commission to establish a funding mechanism which supplements federal universal service support mechanisms and ensures that all Nebraskans, without regard to their location, have comparable accessibility to telecommunications services at affordable prices.").

SECRETARY'S RECORD, PUBLIC SERVICE COMMISSION

Application No. NUSF-133

Page 5

network. We seek comment on a requirement that providers disseminate information to their subscribers about how they can test their broadband speeds and provide that information to the FCC and to the Commission. We further seek comment on whether and how to incentivize providers to initiate programs which would encourage consumer-initiated testing.

We also seek comment on whether to encourage, as additional validation, testing from the customers' premises. Such testing could either utilize devices placed on the customer side of network equipment, or via the customer's modem. Should we incentivize providers to offer equipment that can conduct speed tests in a manner that meets the Commission's standards? In addition, how can the Commission incentivize the use of pilot programs such as the one brought forth by researchers from the University of Nebraska-Kearney related to pilot testing devices which measure data from inside a subscriber's premise but on the provider side of the router?¹¹ How many tests should be conducted in order for the data to be considered statistically valid?

The FCC has also established a process by which consumers, government, and third-party challengers could submit a valid challenge to FCC speed test and coverage data. As mentioned above, we think that it is extremely important for consumers to have a voice and the ability to share how their broadband services are or are not performing as promised. We seek comment on ways to inform consumers about broadband performance testing and how they can participate in the process.

If consumer-initiated tests are conducted and results are submitted to the Commission, what minimum criteria for validity of data should be adopted? How can the Commission safeguard individual subscriber data? Once collected by the Commission, is this information that should be shared both publicly with the FCC and other entities considering funding broadband infrastructure projects? What level of aggregation would be appropriate to protect any specific consumer level information?

In addition, the Commission seeks comment on using other subscription-based or publicly collected speed test resources, such as Ookla data, to validate speed test information collected from carriers. Should the Commission utilize other sources or contract with a third-party vendor to conduct randomized testing? If so, what vendors should the Commission consider?

¹¹ See Hearing Transcript, LB 498(February 9, 2021).

SECRETARY'S RECORD, PUBLIC SERVICE COMMISSION

Application No. NUSF-133

Page 6

Finally, the Commission seeks comment as to the extent to which provider-initiated speed tests may be required. Is it feasible for a provider to automatically conduct speed testing from the provider's own premises? If not, why not? What barriers exist to prevent providers from conducting tests at the provider's nodes, offices, or directly outside a subscriber's home? At what locations can provider-initiated tests feasibly be conducted?

Comments and Reply Comments

The Commission requests that interested parties provide comments responsive to the issues raised above on or before **April 15, 2022 at 5:00 p.m. Central Time**. Reply comments may be filed on or before **May 4, 2022 at 5:00 p.m. Central Time**. Commenters should be filed electronically, with copies sent to Cullen.Robbins@nebraska.gov and Brandy.Zierott@nebraska.gov.

A hearing on these issues may be scheduled after the Commission receives comments and reply comments.

O R D E R





IT IS THEREFORE ORDERED by the Nebraska Public Service Commission that the above-captioned docket be, and is hereby, opened.


IT IS FURTHER ORDERED that comments and reply comments may be filed on or before April 15, 2022 and May 4, 2022 as prescribed herein.

ENTERED AND MADE EFFECTIVE at Lincoln, Nebraska, this 15th day of March, 2022.

NEBRASKA PUBLIC SERVICE COMMISSION

COMMISSIONERS CONCURRING:


Chair

ATTEST:


Executive Director