

# SECRETARY'S RECORD, PUBLIC SERVICE COMMISSION

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## BEFORE THE NEBRASKA PUBLIC SERVICE COMMISSION

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| In the Matter of the Nebraska Public    | ) | Application No. NUSF-131 |
| Service Commission, on its own motion,  | ) | Progression Order No. 4  |
| to establish reverse auction procedures | ) |                          |
| and requirements.                       | ) | ORDER ADJUSTING REVERSE  |
|   | ) | AUCTION SPEED            |
|   | ) | TESTING REQUIREMENTS     |
|   | ) |                          |
|   | ) | Entered: August 19, 2025 |

### BY THE COMMISSION:

The Nebraska Public Service Commission ("Commission") initiated this proceeding on June 29, 2021, to establish reverse auction procedures and requirements in order to carry out Neb. Rev. Stat. § 86-330. The Commission has since held three reverse auctions in this program. Awards were issued in August of 2022 for the 2022 Auction, May of 2024 for the First 2024 Auction, and November of 2024 for the Second 2024 Auction. The term of support for each auction was two years. In each of the reverse auctions, two speed tiers were available to participants, the Baseline speed tier and the Gigabit speed tier.<sup>1</sup> Winning bidders are subject to post-buildout speed testing pursuant to the Commission's speed testing requirements as set forth in Commission Docket No. NUSF-133.<sup>2</sup>

On May 13, 2025, the Commission opened the above-captioned Progression Order ("May 13 Order") for the purpose of reviewing speed testing requirements applicable to the Gigabit speed tier awarded to some projects in previous reverse auctions. Specifically, the Commission sought information regarding the adequacy of testing tools currently available for the Gigabit speed tier, and sought to revisit

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<sup>1</sup>The Baseline tier requires service to be delivered at speeds of 100/100 megabits per second (Mbps) (Down/Up) to all eligible locations in the minimum bidding unit ("MBU"). The Gigabit tier requires service to be provided at speeds of 1 gigabit per second (Gbps)/500 Mbps (Down/Up) to all eligible locations in the MBU.

<sup>2</sup> See Commission Docket No. NUSF-133, *In the Matter of the Nebraska Public Service Commission, on its own motion, to implement standards for the verification of broadband service provider coverage and speed data*, Order Setting Speed Test Requirements (Nov. 8, 2022) ("NUSF-133 Nov. 8 Order"); Commission Docket No. NUSF-133, Progression Order No. 1, *In the Matter of the Nebraska Public Service Commission, on its own motion, to implement standards for the verification of broadband service provider coverage and speed data*, Order Revising Speed Testing Requirements (Oct. 8, 2024) ("NUSF-133 P.O. 1 Oct. 8 Order").

what speed testing is necessary to demonstrate that a network is adequately built to meet the standards of the Gigabit speed tier. In the May 13 Order, the Commission sought comments from interested parties, and set a hearing in this matter. Comments were received from the Nebraska Rural Broadband Alliance (“NRBA”) and from Hamilton Long Distance Company, Hamilton Telephone Company, and Nebraska Central Telephone Company (“Hamilton Consortium”).

### H E A R I N G

A hearing in this matter was held on July 1, 2025. Sallie Dietrich appeared on behalf of the Communications and NUSF Department of the Commission. Benjamin Dennis appeared on behalf of the Hamilton Consortium. Andy Pollock appeared on behalf of the Nebraska Rural Broadband Alliance. Kate McNamara appeared on behalf of Lumen Technologies. Paul Schudel appeared on behalf of the Rural Independent Companies. Exhibits 1 – 6 were offered and accepted.

Cullen Robbins, Director of the Commission’s Telecommunications and NUSF Department (“Department”), testified first. Mr. Robbins stated that the reverse auction program sought to bring broadband capability to areas that had not been reached by price cap carriers.<sup>3</sup> The Department identified unserved areas and made them available for bidding by prequalified providers.<sup>4</sup> Bidders were able to bid in two speed tiers: Baseline, requiring speeds of 100 megabits per second (“Mbps”) upload and download, and Gigabit requiring speeds of 1 gigabit per second (“Gbps”) download and 500 Mbps upload.<sup>5</sup>

Mr. Robbins further noted that in October 2024, the Commission approved an order in its speed testing docket which revised existing speed testing requirements and allowed carriers to opt in to a new testing framework, referred to as the Unified speed testing framework.<sup>6</sup> He stated that the goal of the Unified framework is to allow flexibility in meeting speed testing requirements while still providing evidence to the

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<sup>3</sup> Transcript at 14.

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*

<sup>6</sup> *Id.* See Commission Docket No. NUSF-133, In the Matter of the Nebraska Public Service Commission, on its own motion, to implement standards for the verification of broadband service provider coverage and speed data, Progression Order No. 1, Order Revising Speed Testing Requirements (Oct. 8, 2024) (“NUSF-133 PO #1 Order”).

Commission that a broadband capable network is in place.<sup>7</sup> Mr. Robbins further noted that under the Unified framework, speed tests would meet the requirements if eighty percent of test could meet eighty percent of speed requirements, as long as at least one test per tested location met or exceeded the minimum requirements of the program.<sup>8</sup> Because of this, in the reverse auction Gigabit speed tier, at least one test per location would be required to show 1 Gbps by 500 Mbps in order to meet the speed testing requirements.<sup>9</sup>

Mr. Robbins testified that he had heard from multiple parties that due to equipment limitations, it may not be practical for fiber networks capable of gigabit speeds to actually show that result in speed testing.<sup>10</sup> He stated that his understanding is that carriers may not be able to meet 1 Gbps in testing because of overhead or bandwidth issues due to the testing process, even if the network is capable of 1 Gbps speeds.<sup>11</sup> Mr. Robbins stated that based on the comments submitted by Hamilton, these requirements result in costs and customer inconveniences which make the requirements impractical, and stated that the Department has no reason to dispute that assertion.<sup>12</sup>

Mr. Robbins noted that while Hamilton had provided a potential alternative mechanism for speed testing, he was concerned about introducing an additional speed testing pathway in an already complicated speed testing process.<sup>13</sup> He also expressed that the Department would prefer to see a higher speed capability shown at the customer premise, and that he would like clarification from Hamilton as to what speeds could actually be shown from a customer premise test with existing equipment.<sup>14</sup>

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<sup>7</sup> Transcript at 14.

<sup>8</sup> *Id.* at 14-15.

<sup>9</sup> *Id.* at 15.

<sup>10</sup> *Id.* at 15, 20.

<sup>11</sup> *Id.* at 18-19.

<sup>12</sup> *Id.* at 15-16.

<sup>13</sup> *Id.* at 16.

<sup>14</sup> *Id.* at 19-20.

Mr. Robbins stated that he would recommend allowing tests for the Gigabit speed tier to be considered passing by meeting a slightly lower threshold, such as 900 Mbps download and 450 Mbps upload.<sup>15</sup> Mr. Robbins stated that this proposal would allow carriers to demonstrate that the network has been built and is capable of delivering the required speeds.<sup>16</sup> Mr. Robbins clarified that he only suggests this approach for purposes of the reverse auction program, and that speed testing in other Commission programs would not be affected.<sup>17</sup>

Following Mr. Robbins' testimony, Benjamin Dennis offered comments on behalf of the Hamilton Consortium. Mr. Dennis noted that between November of 2022 and October of 2024, a number of issues have become apparent in the speed testing process.<sup>18</sup> He suggested that because the issue presented in this docket is limited in scope, a revision to the Unified framework may not be necessary.<sup>19</sup> However, he requested that the Commission consider the alternative framework proposed by Hamilton anyway.<sup>20</sup> He then called Wayne Hahn, network administrator at Hamilton Telecommunications, to testify regarding Hamilton's proposal.<sup>21</sup>

Mr. Hahn testified that he has been with Hamilton Telecommunications for 36 years and has been involved with various speed testing programs in that capacity.<sup>22</sup> He stated that Nebraska Central Telephone Company ("NCTC") has been conducting speed tests with the FCC since 2022 and 2023, and Hamilton has been conducting them since 2023 and 2024.<sup>23</sup> Mr. Hahn stated that he monitors the Hamilton network for speeds, as well as network outages and other service issues that exist.<sup>24</sup> He stated

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<sup>15</sup> *Id.* at 16.

<sup>16</sup> *Id.* at 19.

<sup>17</sup> *Id.* at 16-17.

<sup>18</sup> *Id.* at 28.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *Id.* at 29.

<sup>22</sup> *Id.* at 29-30.

<sup>23</sup> *Id.* at 30-31.

<sup>24</sup> *Id.* at 31.

that as the network manager, he also designs, engineers, and oversees the construction of the entire Hamilton fiber network.<sup>25</sup>

Mr. Hahn then testified regarding Exhibit 5, stating that this exhibit consisted of a written document prepared by the artificial intelligence Perplexity.<sup>26</sup> Mr. Hahn explained that Exhibit 5 demonstrates that the downloading of data in speed testing may show speeds of 928 to 947 Mbps rather than 1 Gbps speeds, even if the network is capable of 1 Gbps.<sup>27</sup>

Mr. Hahn stated that the comments submitted by Hamilton and marked as Exhibit 3 discuss two issues in the speed testing process, one with regard to provisioning and one with regard to speed testing equipment at the customer premise.<sup>28</sup> He stated that the provisioning issue referred to overhead issues with a network constructed to 1 Gbps, and in order to eliminate that issue, the network would need to be built to 10 Gbps.<sup>29</sup>

Mr. Hahn then discussed Exhibit 6, which he described as an overall picture of the Hamilton network and its connectivity to the backbone, and to the test server.<sup>30</sup> Mr. Hahn stated that the test servers are in Denver, so speed tests come through Hamilton routers taking various routes to Denver and that traffic flows from Denver and back.<sup>31</sup> He described how a speed test for a customer in Hordville would go from the customer's premise equipment optical network terminals ("ONTs") to Denver to record the speeds.<sup>32</sup> Mr. Hahn testified that the ONTs currently used by Hamilton do not have a processor fast enough to capture 960 Mbps.<sup>33</sup> He stated, however, that

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<sup>25</sup> *Id.* at 32.

<sup>26</sup> *Id.* at 33-34.

<sup>27</sup> *Id.*

<sup>28</sup> *Id.* at 34.

<sup>29</sup> *Id.* at 35.

<sup>30</sup> *Id.* at 36.

<sup>31</sup> *Id.*

<sup>32</sup> *Id.* at 37-38.

<sup>33</sup> *Id.* at 38.

Hamilton can adjunct another box behind the ONT to capture speeds of 928 to 940 Mbps.<sup>34</sup>

Mr. Hahn testified that his preference would be to run speed tests without inconveniencing customers, and described a speed testing method which would run on a parallel port to the customer's equipment.<sup>35</sup> He testified that it can be difficult to reach customers, especially once the customer is connected to the network and is happy with the service.<sup>36</sup> Mr. Hahn stated that as ONTs evolve, they will be able to test at 1 Gbps, but currently the ones Hamilton has deployed are not able to do that.<sup>37</sup> He noted that there is time and expense involved with switching ONTs and redesigning networks for new equipment, as well as testing new equipment.<sup>38</sup> Mr. Hahn testified that the solution Hamilton proposed in comments would demonstrate that the customer who has been assigned to be speed tested could receive speeds of 1 Gbps / 500 Mbps.<sup>39</sup>

On questioning, Mr. Hahn testified that neither of the testing frameworks currently offered by the Commission would work for Hamilton without deploying additional equipment at the customer premise, which would be a significant expense.<sup>40</sup> He clarified that the requirement to show at least one test with download speeds of 1 Gbps was the issue.<sup>41</sup> Mr. Hahn stated that while Hamilton's network can reach 500 Mbps upload, he did not have an issue with solution proposed by the Department to require speeds of at least 900 Mbps download and 450 Mbps upload.<sup>42</sup>

Mr. Hahn further testified that he would not be concerned about reaching minimum speeds of 900 Mbps, but that it would require going onto customer

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<sup>34</sup> *Id.*

<sup>35</sup> *Id.* at 41.

<sup>36</sup> *Id.* at 43.

<sup>37</sup> *Id.* at 45.

<sup>38</sup> *Id.* at 46.

<sup>39</sup> *Id.* at 47.

<sup>40</sup> *Id.* at 49.

<sup>41</sup> *Id.* at 50.

<sup>42</sup> *Id.* at 51-52.

premises to adjunct an ONT on the customer's equipment.<sup>43</sup> He stated that without going onto customer premises, speed test results might show 300 to 400 Mbps download due to the ONT equipment.<sup>44</sup> Mr. Hahn further clarified that these would not be the speeds experienced by the customer, but would be what was shown in testing by the ONTs.<sup>45</sup>

Following Mr. Hahn's testimony, Andy Pollock then offered comments on behalf of the NRBA. Mr. Pollock stated that he supported the staff proposal, but had no objection to Hamilton's proposal.<sup>46</sup> No further testimony or exhibits were offered following Mr. Pollock's comments, and the hearing was adjourned.

## O P I N I O N   A N D   F I N D I N G S

Winning bidders in the reverse auction program are subject to post-buildout speed testing pursuant to the Commission's speed testing requirements as set forth in Commission Docket No. NUSF-133.<sup>47</sup> Specific speed testing requirements are set forth in Commission Docket No. NUSF-133, with the original requirements issued on Nov. 8, 2022, and the Unified framework set out in an order dated Oct. 8, 2024.<sup>48</sup>

The Commission finds that based upon the evidence presented, significant challenges exist for carriers testing a 1 Gbps network under the Unified Framework. In particular, existing equipment, including optical network terminals, may not be capable of demonstrating that a network can reach 1 Gbps of download speed. At present, this issue only affects awardees in the Gigabit speed tier of the Commission's reverse auction program. The Commission therefore limits the modification to the "one test per tested location" requirement only to Gigabit awards in the reverse auction program. Other provisions of this order, including administrative flexibility

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<sup>43</sup> *Id.* at 53-54.

<sup>44</sup> *Id.* at 54-55.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.* at 68.

<sup>47</sup> See Commission Docket No. NUSF-131, Progression Order No. 2, *Order Revising Reverse Auction Procedures and Issuing 2024 Reverse Auction Schedule* (Nov. 7, 2023) ("Nov. 7 Order"), at 6-7; Commission Docket No. NUSF-131, Progression Order No. 3, *Order Issuing Procedures for Second 2024 Reverse Auction and Announcing Qualified Bidders* (June 25, 2024) ("June 25 Order"), at 6-7.

<sup>48</sup> See note 2, *supra*.



in addressing speed testing issues, apply to all tiers of the reverse auction program. Speed testing conducted pursuant to other Commission grant programs, or for the purpose of receiving ongoing NUSF support, will not be modified by the terms of this order.

The evidence presented in this matter demonstrates that there are multiple possible approaches available to solve this issue. The Commission recognizes, however, that speed testing requirements can be a significant administrative burden for the Department and for carriers alike. Therefore, the Commission finds that the appropriate solution in this instance is one which provides necessary flexibility while maintaining the integrity of program requirements. The Commission finds that the 80/80 standard established in Commission Docket No. NUSF-133 will continue to apply, requiring that at least 80% of speed tests meet or exceed 80% of the original speed requirements for each tier, that is, 1 Gbps download and 500 Mbps upload for the Gigabit tier, and 100 Mbps download and 100 Mbps upload for the Standard tier. However, for Gigabit tier testing in the reverse auction program, and solely with regard to the requirement that at least one test per tested location meet or exceed the established minimum speed thresholds, the Department may accept results which demonstrate speeds of at least 900 Mbps download and 450 Mbps upload instead of the current requirement that at least one test must show speeds of at least 1 Gbps download and 500 Mbps upload.

The Commission further finds that the Department should be granted administrative flexibility to address individual speed testing issues across all tiers of the reverse auction program. The Department may accept speed testing results provided through non-traditional or alternative means, provided that based upon the information submitted, the Department is able to determine that the network has been built to the specifications required by the relevant tier of the reverse auction program. Conversely, the Department is granted administrative flexibility to require additional information from participants on a case-by-case basis to ensure that the requisite network standards have been met. The changes set forth in this order shall apply retroactively to all grants issued under the reverse auction program.

As an administrative note, the Commission cautions all interested parties to ensure that their speed testing equipment is sufficient to capture speeds required by the Commission's various programs. As the need for higher capability networks grows, so will the need for carriers to "future-proof" their networks and accompanying speed testing equipment. The Commission has a duty to ensure that



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networks built with public funds through NUSF and other grant programs can demonstrate the minimum speed requirements of those programs. Carriers therefore should be advised to ensure that they have the equipment necessary to demonstrate the full capability of networks built with public funds when agreeing to the terms of these programs.

### O R D E R

IT IS THEREFORE ORDERED by the Nebraska Public Service Commission that the above-listed adjustments to speed testing for the reverse auction program shall be, and are hereby, adopted, and shall apply to all grants previously issued within the reverse auction program.

IT IS FURTHER ORDERED that all other speed testing requirements previously set forth in this docket shall continue without modification.

ENTERED AND MADE EFFECTIVE at Lincoln, Nebraska this 19th day of August, 2025.

NEBRASKA PUBLIC SERVICE COMMISSION

COMMISSIONERS CONCURRING:

*Eric M. Hamler*  
*[Signature]*  
*Kevin Stacker*  
*Don Watson*

*Tim Schram*  
Chair

ATTEST:

*Joyanne Hyman*  
Deputy Director