

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
Universal Service Reform – Mobility Fund	)	WT Docket No. 10-208

**INFORMAL REQUEST OF THE RURAL WIRELESS ASSOCIATION, INC.  
FOR COMMISSION ACTION**

Pursuant to Section 1.41 of the Federal Communications Commission’s (“FCC” or “Commission”) rules,<sup>1</sup> the Rural Wireless Association, Inc. (“RWA”)<sup>2</sup> files this Informal Request for Commission Action (“Informal Request”) regarding the Mobility Fund Phase II (“MF-II”) Challenge Process. RWA’s members are in the middle of the Challenge Process but are expending enormous time and financial resources in their efforts due to inaccurate data submitted by Verizon. RWA requests that the Commission investigate the 4G LTE coverage claimed by Verizon and require re-filing of Verizon’s data to correct its overstated coverage.

**I. BACKGROUND.**

In August 2017, the Commission decided to implement a new, one-time data collection with specified data parameters tailored to MF-II.<sup>3</sup> The Commission required mobile wireless broadband providers to file propagation maps and model details with the Commission indicating their current 4G LTE coverage, as defined by download speeds of 5 Mbps at the cell

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<sup>1</sup> 47 C.F.R. § 1.41.

<sup>2</sup> RWA is a 501(c)(6) trade association dedicated to promoting wireless opportunities for rural telecommunications companies who serve rural consumers and those consumers traveling to rural America. RWA’s members are small businesses serving or seeking to serve secondary, tertiary, and rural markets. RWA’s members are comprised of both independent wireless carriers and wireless carriers that are affiliated with rural telephone companies. Each of RWA’s member companies serves fewer than 100,000 subscribers.

<sup>3</sup> *Universal Service Reform – Mobility Fund*, [Order on Reconsideration and Second Report and Order](#), WT Docket No. 10-208, at ¶ 7 (rel. Aug. 4, 2017) (“*Second R&O*”).

edge with 80 percent probability and a 30 percent cell loading factor.<sup>4</sup>

The FCC used the 4G LTE coverage information, in conjunction with universal service fund (“USF”) subsidy data, to establish the map of areas presumptively eligible for MF-II support.<sup>5</sup> The FCC released the initial eligible areas map on February 27, 2018.<sup>6</sup> On the same date, the FCC released a Public Notice establishing the procedures to be used in the MF-II challenge process.<sup>7</sup> In that item, the FCC determined that speed test measurements submitted to support and/or respond to a challenge to an area that is initially deemed ineligible for MFII support must be no more than 500 meters apart from one another. The FCC decided to assess challenges using a uniform grid with cells of one square kilometer and a “buffer” with a radius equal to one-half of the maximum distance parameter, i.e., 250 meters. After reviewing detailed data<sup>8</sup> regarding the burden a challenger would experience as a result of these parameters, the FCC reconsidered its procedures and extended the buffer radius from 250 to 400 meters.<sup>9</sup>

The Challenge Process started on March 29, 2018, and was originally scheduled to conclude on August 27, 2018. However, Chairman Pai has directed the FCC to extend the

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<sup>4</sup> *Second R&O* at ¶ 34.

<sup>5</sup> *Second R&O* at ¶¶ 10-11, 34.

<sup>6</sup> *Mobility Fund Phase II Initial Eligible Areas Map Available; Challenge Window Will Open March 29, 2018*, [Public Notice](#), DA 18-187, WT Docket No. 10-208 (rel. Feb. 27, 2018). The FCC made minor changes to the map in late May 2018 to reflect corrected coverage by a single mobile provider and adjustments to underlying coverage and subsidy data. *See Updated Version of Map of Areas Presumptively Eligible for Mobility Fund Phase II Now Available*, [Public Notice](#), DA 18-540, WT Docket No. 10-208 (rel. May 22, 2018).

<sup>7</sup> *Connect America Fund, Universal Service Reform – Mobility Fund*, [Public Notice](#), WC Docket No. 10-90, WT Docket No. 10-208, DA 18-186 (rel. Feb. 27, 2018) (“*Challenge Process PN*”).

<sup>8</sup> *See generally Letter* from Caressa D. Bennet, General Counsel, RWA, and Erin P. Fitzgerald, Regulatory Counsel, RWA, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 10-208 *et al.* (Mar. 21, 2018) (“*RWA Mar. 21, 2018 Ex Parte*”) (focusing on challenges to certain ineligible areas in Alabama, Kansas, Montana, North Dakota, Oklahoma, and Wyoming).

<sup>9</sup> *Challenge Procedures Reconsideration Order* at ¶ 4.

challenge process deadline by 90 days.<sup>10</sup> RWA members are anxiously awaiting the release of a Public Notice that will officially extend that deadline for an additional 90 day period to allow completion of the challenges. Challengers are currently submitting the results of their speed tests (showing that qualifying 4G LTE service with download speeds of 5 Mbps is not available at a given location) to the Universal Service Administrative Company (“USAC”) challenge process portal. After challengers submit their speed test data, the USAC system will draw a circular “buffer” around each speed test point. If the total buffered area in a grid cell exceeds 75 percent of the cell’s challengeable area, then the system will deem the challenge to be presumptively successful with respect to that square kilometer cell. Challenged carriers will then have the opportunity to submit data rebutting the challenge. RWA continues to receive reports from its members that the cost of participating in the Challenge Process is requiring hundreds of hours of time and hundreds of thousands of dollars to disprove Verizon’s overstated coverage -- time and money that would have been better spent investing in their networks to further deploy LTE in rural America.

## **II. VERIZON’S CLAIMED 4G LTE COVERAGE IS GROSSLY OVERSTATED.**

RWA and others have expressed serious concerns regarding overstated unsubsidized 4G LTE coverage as it relates to eligibility for MF-II funding.<sup>11</sup> In particular, RWA, Panhandle

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<sup>10</sup> [Letter](#) from Ajit Pai, Chairman, FCC to Senator Roger Wicker (May 30, 2018) committing to extend the Challenge Process by 90 days.

<sup>11</sup> See [Letter](#) from Caressa D. Bennet, General Counsel, RWA, and Erin P. Fitzgerald, Regulatory Counsel, RWA, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 10-208 *et al.*, at p. 2 (Mar. 21, 2018) (expressing concern that “the challenge process...will impose significant and unnecessary costs on prospective challengers, and allow overstated mobile wireless coverage to stand unchallenged in most places”) (“*RWA Mar. 21, 2018 Ex Parte*”); Application for Review of the Rural Wireless Association, Inc., WC Docket No. 10-90, WT Docket No. 10-208, at p. 3 (Mar. 29, 2018) (noting that an “inaccurate picture of mobile wireless coverage” will likely stand unchallenged in most places); see also Kendra Chamberlain, FierceWireless, [FCC’s Mobility Fund II Will Primarily Benefit Western Half of U.S.](#), (Feb. 28,

Telecommunications Systems, Inc. (“PTCI”), and a coalition of radio frequency engineering firms (“RF Engineer Coalition”) have expressed serious concerns regarding Verizon’s claimed unsubsidized 4G LTE coverage.<sup>12</sup> The Oklahoma Panhandle has a total area of 14,778.47 square kilometers – almost all of which Verizon claims to cover with 4G LTE coverage.<sup>13</sup>

Concerns regarding Verizon’s overstated 4G LTE coverage are borne out in filings by the RF Engineer Coalition and PTCI. PTCI has stated that, as discussions surrounding MF-II and the accompanying challenge process began in earnest, the company hired a professional engineering firm (Monte R. Lee and Company or “MRL”) to estimate Verizon coverage using data inputs reflecting specific cell site locations, observational estimates of radio height and

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2018) (*quoting* CCA President and CEO Steven Berry: “CCA has been a fervent supporter of Congress’s goal and the Commission’s efforts to use reliable data to determine eligible areas for support in Mobility Fund II based on an efficient challenge process that is robust, targeted, and strikes a reasonable balance without overly burdening small carriers...Unfortunately, that is not possible based on the initial eligible areas map that the FCC released today. It is now clear that the parameters the FCC directed carriers to use in its one-time data collection have failed to produce a credible map of eligible areas, and it is most disappointing that absent significant changes, the Commission will fall short of Congress’s mandate for Universal Service”); *see also* [Reply of United States Cellular Corporation](#), WC docket No 10-90, WT Docket No. 10-208, at p. 4 (May 7, 2018) (stating “[i]f this Commission is serious about accelerating broadband investment to areas that need it most, then it is critically important that areas needing investment are not blocked out due to maps that overstate coverage”); *see also* [Opposition of Smith Bagley, Inc. to Verizon Application for Review](#), WT Docket No. 10-208, WC docket No. 10-90 (July 13, 2018) (recognizing that “if the [challenge process] testing parameters are too rigorous, less challenges will be undertaken” and that “this result must be avoided because it would increase the likelihood that inaccuracies in unsubsidized coverage claims made by incumbent carriers will go undetected”).

<sup>12</sup> *See* [Letter](#) from Caressa D. Bennet, General Counsel, RWA, and Erin P. Fitzgerald, Regulatory Counsel, RWA, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 10-208 *et al.*, at p. 2 and [Attachment C](#) (Apr. 20, 2018) (“*RWA Apr. 20, 2018 Ex Parte*”); *see also* [Letter](#) from RF Engineer Coalition to Marlene H. Dortch, Secretary, FCC, WT Docket No. 10-208 *et al.* (July 5, 2018) (“*RF Engineer Coalition Ex Parte*”); *see also* [Letter](#) from Caressa D. Bennet, Counsel to Panhandle Telecommunication Systems, Inc., to Marlene H. Dortch, Secretary, FCC, WT Docket No. 10-208 *et al.*, at pp. 1-2 and [Attachment](#) (July 13, 2018) (“*PTCI Ex Parte*”).

<sup>13</sup> [Verizon Wireless Interactive Map](#) (last visited June 28, 2018) (showing 4G LTE coverage throughout nearly all of the Oklahoma Panhandle); *see also* *RF Engineer Coalition Ex Parte* at p. 2 (stating that Verizon’s map is not far removed from the coverage depicted in the portal).

antenna placement on towers, 700 MHz spectrum, and service that reflects the customer experience.<sup>14</sup> MRL, a member of the RF Engineer Coalition, stated that it used publicly-available information and the FCC-adopted 5 Mbps downlink standard to produce a map that estimated that Verizon's coverage area should be approximately 6806.49 square kilometers in the Oklahoma Panhandle – not even half of the LTE coverage area Verizon publicly claims to serve.<sup>15</sup>

Since this estimated propagation map was compiled, PTCI has driven more than 37,000 miles in order to compile data for the MF-II challenge process.<sup>16</sup> PTCI's speed test data collection included a total of 402,573 test points – drive tests taken using Verizon-specified devices that are on plans not subject to network prioritization or throttling.<sup>17</sup> Of the total test points collected, 357,374 (88.8%) tested below 5 Mbps download speed or did not register 4G LTE service at all on Verizon-designated handsets.<sup>18</sup> The results of the speed tests taken by PTCI largely bear out MRL's initial Verizon propagation projections.<sup>19</sup>

RWA echoes the concerns and questions raised by the RF Engineer Coalition relating to Verizon's claimed 4G LTE coverage, and its conformance with standard RF engineering practices and the Commission's filing requirements. In particular, RWA urges attention to LTE

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<sup>14</sup> *PTCI Ex Parte* at p. 1.

<sup>15</sup> *RF Engineer Coalition Ex Parte* at p. 2; see also [Verizon Wireless Interactive Map](#) (last visited June 28, 2018) (showing 4G LTE coverage throughout nearly all of the Oklahoma Panhandle).

<sup>16</sup> *PTCI Ex Parte* at p. 2.

<sup>17</sup> *RF Engineer Coalition Ex Parte* at pp. 2-3.

<sup>18</sup> *PTCI Ex Parte* at p. 2; see also *RF Engineer Coalition Ex Parte* at p. 3.

<sup>19</sup> *PTCI Ex Parte* at p. 2.

RSRP level, propagation model, and clutter factors and how Verizon's inputs could have impacted the accuracy of its coverage data.<sup>20</sup>

**III. THE COMMISSION SHOULD REQUIRE VERIZON TO REFILE ACCURATE 4G LTE COVERAGE MAPS TO ENSURE THAT MF-II SUPPORT IS TARGETED APPROPRIATELY.**

Verizon's overstated coverage has yielded a coverage map that will result in a challenge process that fails to target MF-II support where it is needed. RWA, PTCI, United States Cellular, Smith Bagley, and others have expressed concerns regarding the tremendous costs of MF-II Challenge Process participation. Overstated 4G LTE coverage by a nationwide provider like Verizon has increased those costs significantly, to the detriment of the challengers with whom Verizon competes.

Data submitted to the Commission indicates that Verizon has overstated its coverage by more than 50 percent in the Oklahoma Panhandle. As a result of Verizon claiming this coverage, PTCI has been forced to undertake significant drive-testing of the area – an undertaking that the company estimates will cost close to \$1 million – more than half of which could have been avoided, but for overstated Verizon coverage.<sup>21</sup> \$1 million is a hefty price tag to test an area comprised of only three counties.<sup>22</sup> Other RWA members are seeing similar Challenge Process costs. Pioneer Cellular, also based in Oklahoma, estimates that it will take 20 drivers 75 days to complete testing in the 24,010 drive-testable, challengeable square kilometers of its licensed service territory. Like PTCI, Pioneer expects to spend nearly \$1 million to

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<sup>20</sup> Verizon responded to the *RF Engineer Coalition Ex Parte* on July 27, 2018. See [Letter](#) from Alan Buzacott, Executive Director, Federal Regulatory Affairs, Verizon, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 10-208 *et al.* (July 27, 2018). The *RF Engineer Coalition* has submitted a reply, noting its continued concerns. See Letter from RF Engineer Coalition to Marlene H. Dortch, Secretary, FCC, WT Docket No. 10-208 *et al.* (Aug. 3, 2018).

<sup>21</sup> *PTCI Ex Parte* at p. 5.

<sup>22</sup> The Oklahoma Panhandle consists of Cimarron County, Texas County and Beaver County.

complete the challenge process. This includes \$600,000 in labor costs, \$247,000 in mileage, \$48,000 for handsets, and \$96,000 for data usage. Sagebrush Cellular, based in Montana, expects to spend more than \$1.5 million to participate in the challenge process. This figure includes \$275,000 for project management and other labor, \$62,000 for mapping and \$1,178,000 for drive testing expenses.

A Commission investigation into the 4G LTE coverage claimed by Verizon, and a determination that Verizon must re-file where coverage data is inaccurate could save prospective challengers *millions* of dollars apiece.<sup>23</sup> More importantly, it will open up the challenge process to numerous additional challengers who are currently deterred from participating in the process by the enormous cost involved. Based on the experience of RWA members, even where carriers choose to participate, many such carriers are forced to pick and choose where to challenge due to the cost of participating. This is not the robust challenge process envisioned by the Commission.

Requiring Verizon to correct its coverage so that it is in conformance with standard RF engineering practices will yield an accurate picture of where qualifying coverage exists and allow funding to be targeted to those areas. In addition, Verizon should not be allowed to abuse the FCC challenge process by filing a sham coverage map as a means of interfering with the ability of rural carriers to continue to receive universal service support in rural areas. Failure by the Commission to enforce its coverage map requirements against Verizon will undermine the Challenge Process which, in turn, will harm rural carriers, and the customers they serve, who are reliant on receiving support in areas where unsubsidized carriers like Verizon do not serve.<sup>24</sup>

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<sup>23</sup> It could also reduce risks faced by those doing the testing. *See PTCI Ex Parte* at p. 5 (noting that drive testers must protect themselves from rattlesnakes, feral hogs, bobcats, and other dangers).

<sup>24</sup> *See* House of Representatives Energy & Commerce Committee Hearing, [Oversight of the Federal Communications Commission 2018](#), Opening Statement of Mike Doyle (D-PA) (stating

#### IV. CONCLUSION

For the reasons discussed above, RWA urges the Commission to investigate the 4G LTE coverage claimed by Verizon and require re-filing of Verizon's data to correct its claimed coverage. In particular, RWA encourages the Commission to consider issues raised by the RF Engineer Coalition relating to LTE RSRP level, propagation model, and clutter factors. RWA looks forward to its continued work with the Chairman, Commissioners, and Commission staff in this proceeding.

Respectfully submitted,

**RURAL WIRELESS ASSOCIATION, INC.**

By: /s/ Caressa D. Bennet  
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August 6, 2018

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“Chairman [Pai] has claimed that he cares about rural broadband deployment, but the Commission in its zeal not to burden major wireless carriers with reporting where they have wireless service deployed imposed as part of Mobility Fund II a bizarre and onerous challenge process that requires rural providers to hire people to walk through cornfields and backyards trying to prove that communities don't have wireless service. And if those companies can't afford to send people up, the Commission will assume these communities are connected. Now tell me, how does that help the 24 million Americans without access to high-speed broadband?”).



**DECLARATION OF JANA WALLACE**

I, Jana Wallace, do hereby declare under penalty of perjury the following:

1. I am the Chief Operations Officer of Panhandle Telecommunication Systems, Inc.
2. I have personal knowledge of the facts set forth in the foregoing Informal Request of the Rural Wireless Association, Inc. for Commission Action and believe them to be true and correct.

Jana Wallace

Jana Wallace

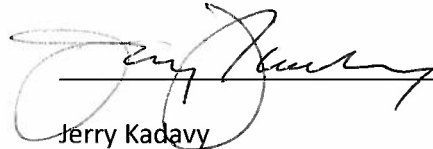
8/3/18

Date

**DECLARATION OF Jerry Kadavy**

I, **Jerry Kadavy**, do hereby declare under penalty of perjury the following:

1. I am the Vice President of Network Operations of Cellular Network Partnership d/b/a Pioneer Cellular.
2. I have personal knowledge of the facts set forth in the foregoing Informal Request of the Rural Wireless Association, Inc. for Commission Action and believe them to be true and correct.

  
Jerry Kadavy

7/30/18

Date

**DECLARATION OF JERRY D. TILLEY**

I, Jerry D. Tilley, do hereby declare under penalty of perjury the following:

1. I am the Chief Operating Officer of Nemont Telephone Cooperative, Inc. ("Nemont"). Sagebrush Cellular, Inc. ("Sagebrush") is a wholly owned subsidiary of Nemont.
2. I have personal knowledge of the facts set forth in the foregoing Informal Request of the Rural Wireless Association, Inc. for Commission Action and believe them to be true and correct.



Jerry D. Tilley

8/6/2018

Date